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Maria Helena NOVAIS, Saúl BLANCO, Manuela
MORAIS, Lucien HOFFMANN & Luc ECTOR

Catalogue of continental diatoms
from Portugal, including the Archipelagos
of Azores and Madeira: updated nomenclature,
distribution and bibliography



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ABSTRACT

This catalogue aims to compile the information available on continental (recent and fossil) diatoms in Portugal, including the Archipelagos of Madeira and Azores, since the early beginnings of the diatom studies in Portugal at the middle of the XIXth century until 2010.

The diatom taxa are presented following an updated taxonomy; nevertheless, in order to provide a historical overview, the nomenclatural synonyms found in the literature from Portugal are also included. For the 1381 taxa the following information is presented: basionym, nomenclatural synonyms, citations (with the precise indication of the sampling sites), frequent taxonomical synonyms and a distribution map.

RESUMO

Este catálogo tem como objectivo compilar a informação disponível sobre diatomáceas continentais (recentes e fósseis) de Portugal, incluindo os Arquipélagos da Madeira e dos Açores, desde que se iniciaram estes estudos em meados do século XIX até 2010.

Os táxones de diatomáceas são ordenados alfabeticamente e seguindo uma taxonomia actualizada, apesar de serem incluídos também os sinónimos nomenclaturais e taxonómicos mencionados na literatura consultada sobre Portugal. Para os 1381 táxones é apresentada a seguinte informação: basiónimo, sinónimos nomenclaturais, citações (com indicação exacta do local de amostragem), sinónimos taxonómicos mais comuns e um mapa de distribuição a nível de concelho.

1. INTRODUCTION

1.1. Objective and scope of the catalogue

This catalogue aims to compile the information available regarding the knowledge on continental (recent and fossil) diatoms in Portugal, including the Archipelagos of Azores and Madeira. It comprises information from diatom studies since the early beginnings of this subject in Portugal at the middle of the XIXth century until 2010.

Only non-marine diatoms were taken into account; therefore, only information regarding streams, rivers, fountains, sources, reservoirs, lakes, lagoons, ponds and upper reach of estuaries, where freshwater diatoms can be found, was included.

In this catalogue all kinds of diatom studies were considered, including reports, scientific papers, PhD theses and post-doc studies. Works such as degree and master dissertations were excluded, due to the uncertainty of the identifications provided. Unfortunately, few documents, especially old scientific works with restricted distribution, could not be found although we were aware of their existence.

Although some of the information has already been presented in Aboal et al. (2003) about Mainland Portugal inside the Iberian Peninsula, we aimed to provide, whenever possible, the most precise information about the sampling site, as well as the information regarding the Archipelagos of Azores and Madeira. In addition, the known distribution of each taxon is documented by maps. Furthermore, more than 120 additional references were included in this work.

1.2. Regions and subregions of Portugal

The ordination of the territory, according to the Nomenclature of Territorial Units for Statistics (NUTS), divides Portugal in the three units I, II and III. The first subdivision of Portugal (NUTS I) separates Mainland Portugal from the two autonomous regions of the Azores and Madeira Archipelagos. The second subdivision of Portugal (NUTS II) divides the country into five regions, administered by the Commissions for Coordination and Regional Development (*Comissões de Cooperação e Desenvolvimento Regional*) in mainland Portugal, plus the two autonomous regions that correspond to NUTS II regions. These 7 regions are subdivided into 30 subregions (*subregiões*, singular: *subregião*) (NUTS III). All regions (from the north to the south) with their subregions are listed alphabetically below.

1) REGION: NORTE

- Alto Trás-os-Montes (1)
- Ave (2)
- Cávado (3)
- Douro (4)
- Entre Douro e Vouga (5)
- Grande Porto (6)
- Minho-Lima (7)
- Tâmega (8)

2) REGION: CENTRO

- Baixo Mondego (9)
- Baixo Vouga (10)
- Beira Interior Norte (11)
- Beira Interior Sul (12)
- Cova da Beira (13)
- Dão-Lafões (14)
- Médio Tejo (15)
- Oeste (16)
- Pinhal Interior Norte (17)
- Pinhal Interior Sul (18)
- Pinhal Litoral (19)
- Serra da Estrela (20)

3) REGION: LISBOA

- Grande Lisboa (21)
- Península de Setúbal (22)

4) REGION: ALENTEJO

- Alentejo Central (23)
- Alentejo Litoral (24)
- Alto Alentejo (25)
- Baixo Alentejo (26)
- Lezíria do Tejo (27)

5) REGION: ALGARVE

- Algarve (28)

6) REGION: AUTONOMOUS REGION OF AZORES

- Autonomous Region of Azores (29)

7) REGION: AUTONOMOUS REGION OF MADEIRA

- Autonomous Region of Madeira (30)

The maps with the location of Mainland Portugal and the Archipelagos of Madeira and Azores, including the regions and subregions of the country, are presented in Figs 1 and 2.

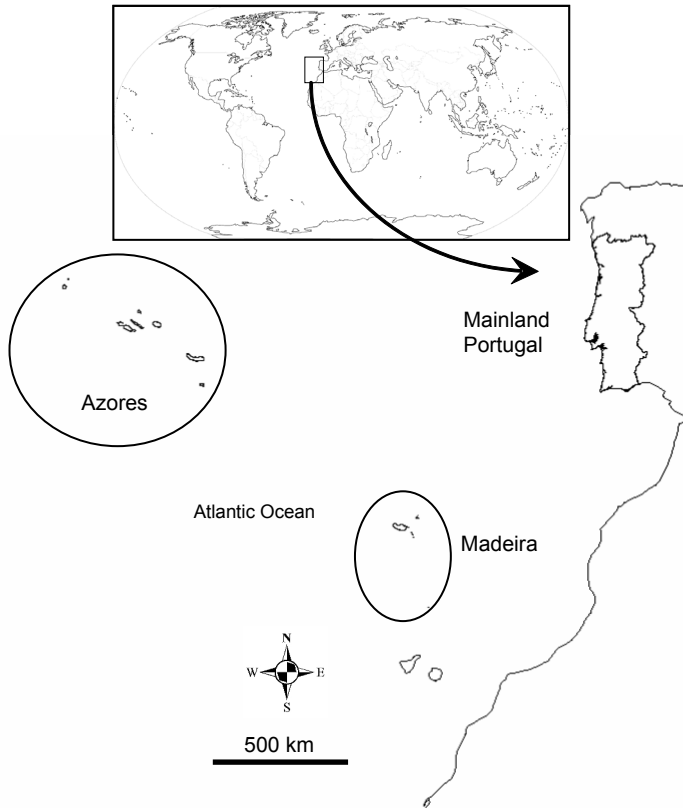


Fig. 1. Location of Mainland Portugal and the Archipelagos of Azores and Madeira.

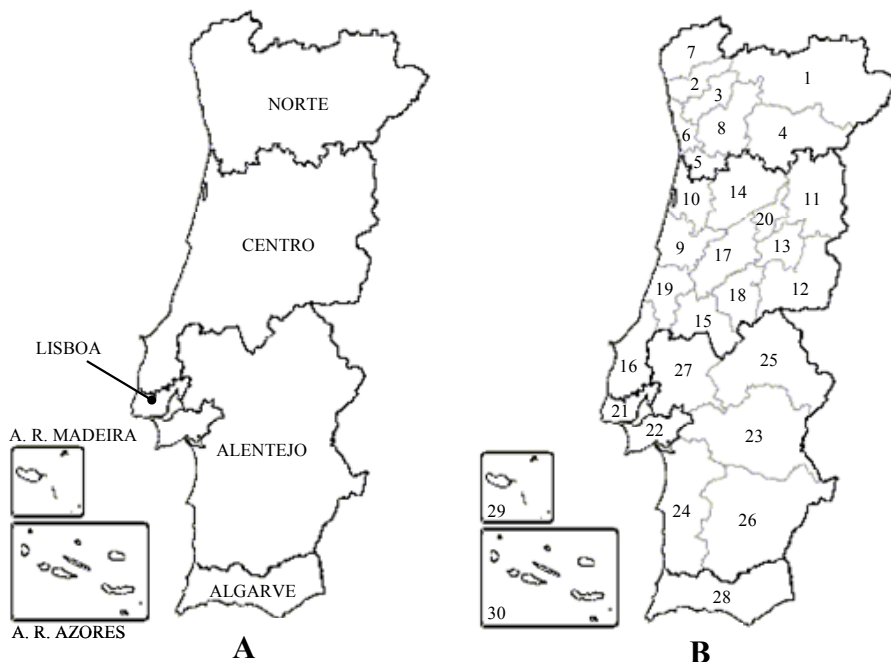


Fig. 2. Regions (A) and subregions (B) of Portugal. See number codes in the text.

1.3. Historical overview

1.3.1. Mainland Portugal

To our knowledge, the first records of freshwater diatoms from Portugal have been published by Ehrenberg in 1845a and consist in few diatoms identified from material collected in the riverbanks of Tagus river. Afterwards, Colmeiro in 1867 and 1889 also mentioned a few diatom species collected in Coimbra and Porto in his major work including the whole Iberian Peninsula.

Therefore, the first studies considering only Portugal have started at the end of the XIXth century, due to the initiatives promoted by Dr. Júlio Henriques, at that time director of the Botanical Garden of Coimbra and of the Sociedade Broteriana. The latter is a Society created in honour of Brotero (a notable Portuguese botanist) that still exists nowadays and produces the Boletim da Sociedade Broteriana. It has first been published in 1880 and has embraced the first published studies on diatoms in Portugal.

The Sociedade Broteriana promoted phycological studies at the turn of the XIXth century by encouraging the collection and interchange of botanical specimens that were later identified by international experts as Hauck and Kützing (Santos et al. 2002). Most of these diatoms were collected by Moller (supervisor of the Coimbra Botanical Garden at that time) and by Newton (administrator of the Sociedade de Instrução do Porto).

At the beginning of the XXth century, several important contributions to the knowledge of diatoms in Portugal were made. Zimmermann, for example, published the *Catálogo das Diatomáceas Portuguesas* subdivided in several Centurias (Zimmermann 1906, 1909b, 1910, 1914), as well as the *Algumas diatomáceas novas ou curiosas* (Zimmermann 1915a, 1917). At that time, the studies were mainly taxonomical and the sampling was indiscriminately performed in every type of substrate or water body, by the researcher, his friends or collaborators. Fausto Lopo de Carvalho published a more detailed study about the *Diatomáceas da Guarda* (Carvalho 1913), with samples collected in rivers, springs and fountains in the central region of Portugal.

In the middle of the XXth century, Alfredo Andrade Silva, working at the Botany Institute Dr. Gonçalo Sampaio (University of Porto) also significantly contributed to the knowledge of diatoms in the country. His works included the study of fossil and recent freshwater diatoms collected in Rio Maior, Alpiarça and Óbidos deposits (Silva 1945, 1946b), Serra do Gerês (Silva 1950a), and Porto (Silva 1950b).

Afterwards, in the beginning of the second half of the XXth century several studies on algae were made, although not only focused on diatoms, but including the total phytoplankton. Arnold Nauwerck published the results about a survey of planktonic algae, including diatoms, from several reservoirs from the whole country (Nauwerck 1959, 1962). Maria do Rosário Oliveira followed this trend, publishing several studies about phytoplankton in different rivers and reservoirs from the whole country (Azores included). There was not any particular attention given to diatoms although this group is present in the floristic lists presented (Oliveira 1971a, 1971b, 1975, 1976, 1981, 1982a, 1982b, 1982c, 1984a, 1984b, 1984c, 1985, 1987, 1989, 1991, 1992, 1996; Oliveira & Caldas 1970, 1971; Oliveira et al. 1985, 1989; Oliveira & Coutinho 1992; Oliveira & Monteiro 1992, 1993a, 1993b, 1995).

Since the end of the XXth century, due to contributions by the researchers from the University of Aveiro, several works about the freshwater diatoms of the central region of Portugal have been published (Almeida 1998, 2001; Almeida & Gil 2000, 2001; Feio et al. 2009; Gil 1988, 1989, 1993; Gil et al. 1989-1990, 1991; Gil & Almeida 1993; Nunes 2007; Nunes et al. 2002, 2003; Rino & Gil 1989). These works are focused not only on floristic and taxonomy, but also on ecology and the use of diatoms as bioindicators.

The evolution of the number of studies and their annual accumulation from 1845 to 2010 made in Mainland Portugal is graphically represented in Figs 3 and 4, respectively. Furthermore, the increase of total taxa cited for the country is presented in Fig. 5.

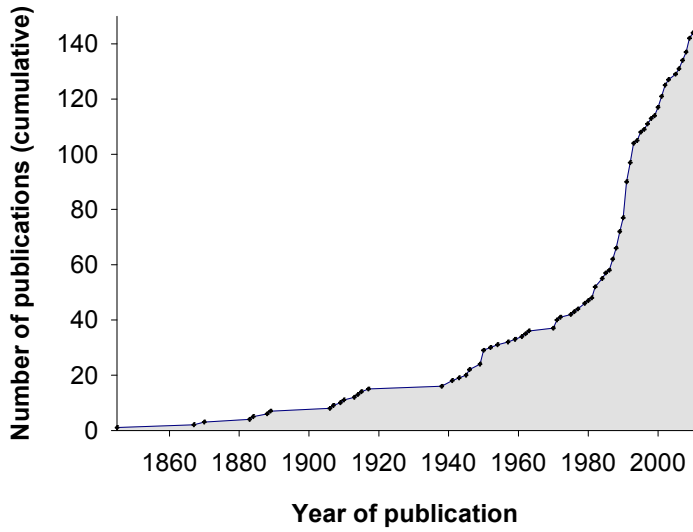


Fig. 3. Evolution of the number of publications with diatoms for Mainland Portugal.

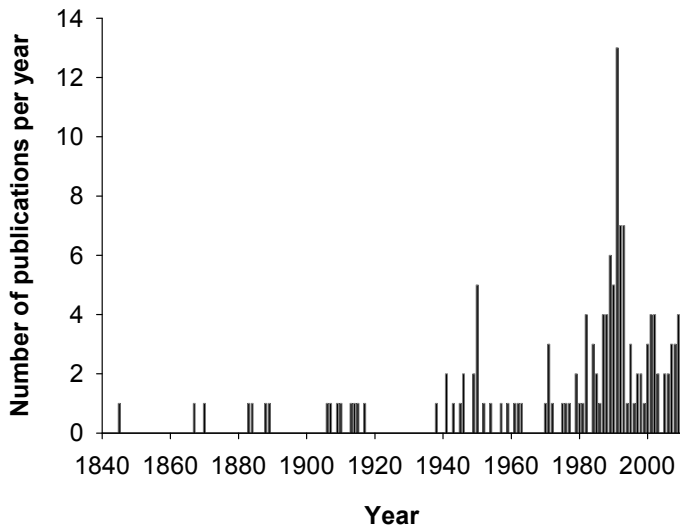


Fig. 4. Number of publications with diatoms for Mainland Portugal per year.

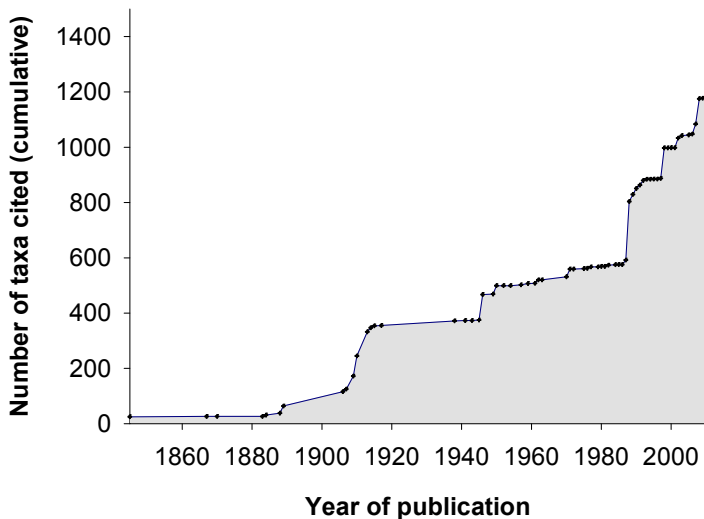


Fig. 5. Evolution of the total number of diatom taxa cited for Mainland Portugal.

1.3.2. Madeira and Azores Archipelagos

As regards the Madeira Archipelago, very few references about diatoms exist. The first works known date back to the beginning of the XXth century. These studies were mainly realized by Zimmermann (1909a, 1910-1911). However, some references about diatoms from the Madeira Archipelago can also be found in the compilation made by Tempère & Peragallo (1907-1915). Later, Schodduyn (1927) published his *Contribution pour l'hydrobiologie des Îles de Funchal et Porto Santo*, based on samples collected by Carlos Menezes. Subsequently, Mölder (1947) also mentioned some freshwater diatom species from Madeira in his work about algae from the Azores. In the last decades, no reports about freshwater algae from this Archipelago have been published. Consequently, only a few diatom records are available from this period, presented in general books, such as Krammer & Lange-Bertalot (1986, 1991b).

The Azores Archipelago has become an area of scientific interest at the end of the XIXth century, when several renowned North American and European naturalists visited the Archipelago during their scientific expeditions. Nevertheless, the majority of these pioneering works were limited in scope and only included few species of freshwater algae (e.g. Archer 1874; Moseley 1874; O'Meara 1874), excepting the work of Holmboe (1901), which was the first deep study of the freshwater diatoms of the archipelago. In the decades of 1930 and 1940, more exhaustive studies were published, such as those of Krieger (1931), Manguin (1942), Bourrelly & Manguin (1946a, 1946b) and Mölder (1947). More recently, a number of works were published from expeditions of University of Azores researchers to several islands (Gonçalves 1996; Azevedo et al. 2005). Nevertheless, it is important

to mention that the majority of the available works obviously refer to the natural lakes, which are the most important and emblematic freshwater resources of the Archipelago (Oliveira 1989; Gonçalves 1996, 1997; Gonçalves & Rodrigues 1999; Gonçalves 2008). Recently a compilation of the diatoms cited for the Archipelago has been published and these results are also here included (Gonçalves et al. 2010). The evolution in the number of publications including diatoms from the Azores Archipelago is graphically represented in Fig. 6. Furthermore, the increase of total taxa cited for the archipelago is presented in Fig. 7.

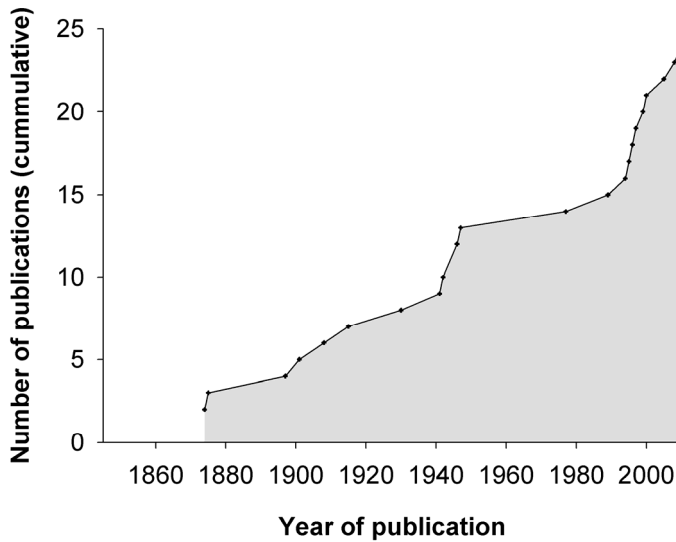


Fig. 6. Evolution of the number of publications with diatoms for the Azores Archipelago.

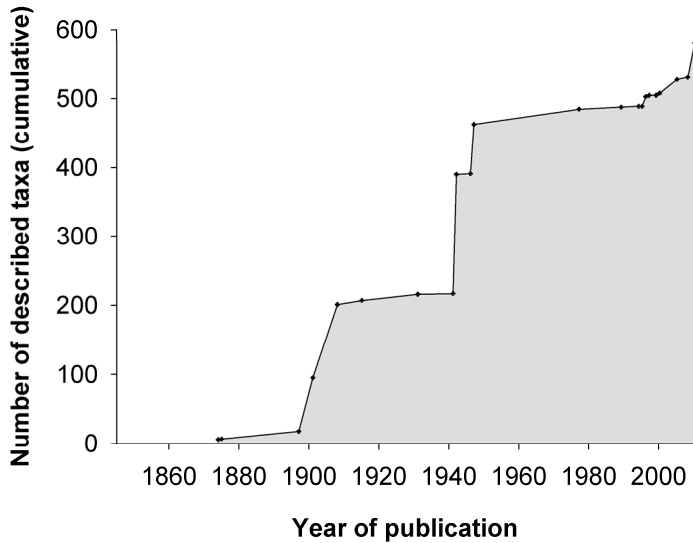


Fig. 7. Evolution of the total number of diatom taxa cited for the Azores Archipelago.

1.4. Geographic overview

To provide information about the geographic areas which have been deeper studied regarding diatoms, a map with the number of records for each municipality is presented in Fig. 8. From the analysis of the map it is evident that more than 50% of the territory is unexplored, which shows the lack of studies about diatoms in the country. Despite the efforts done within the implementation of the Water Framework Directive in Portugal, which covered the entire territory, these results are not observable here. Until now, the only published work with these results for the whole country was INAG (2008), which is a sampling protocol without precise indication on the distribution of the species.

This lack of diatom studies in the country can also be seen in the distribution maps for each species. Therefore, the fact that some species present a more restricted distribution does not always mean that they are not present in other regions, but also that there are no thorough studies done in those areas.

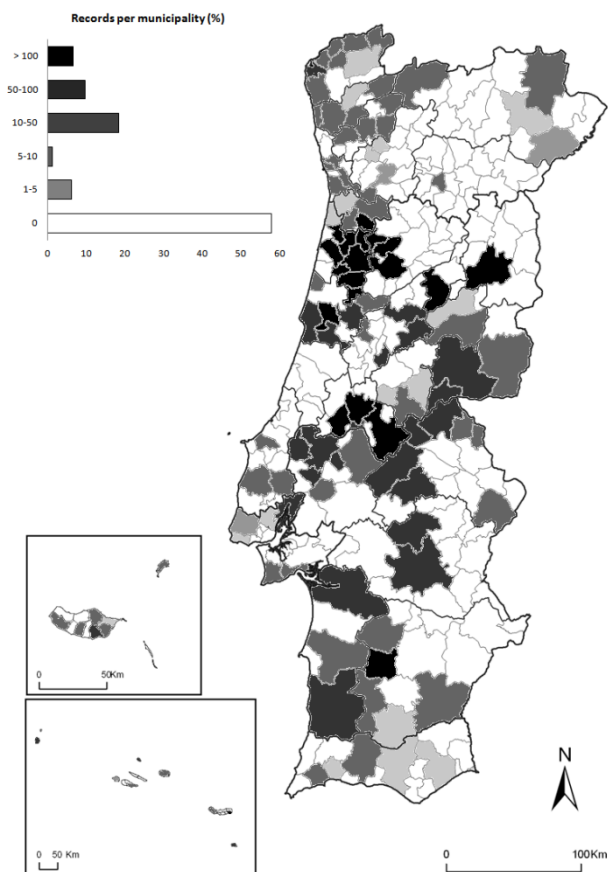


Fig. 8. Number of records per municipality (%).

2. ACKNOWLEDGEMENTS

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We gratefully acknowledge all the colleagues and staff of several libraries for the valuable assistance in gathering the publications analyzed.

Sara Leitão is thanked for her assistance in finding several useful publications, Mauricio Montañó Garcés and Núria Martínez-Carreras are thanked for text revision and editing and Olatz Aizpurua for GIS assistance.

3. CATALOGUE

The total number of taxa listed in this catalogue is of 1381, compiled from the 173 publications considered. For the accepted diatom names, the information provided in the Catalogue of Diatom Names (2010) by the California Academy of Sciences: <http://research.calacademy.org/research/diatoms/names/> is followed. This aims to avoid the repetition of taxa under different synonyms. In addition to these names, the **basionym** and the **nomenclatural synonyms** mentioned in the publications checked are provided. Nevertheless, to avoid the loss of important information and to allow also an historical overview, the literal name used for each species in the original publication is placed after the authors of the publication. The **taxonomical synonyms** are presented according to the most common bibliographic references, such as Krammer & Lange-Bertalot (1986, 1988, 1991a, 1991b) and Krammer (1997a, 1997b, 2000). Nevertheless these synonyms are kept separately, since there is still a need of further studies to confirm the validity of this synonymy.

The taxa are listed alphabetically rather than following a systematic ordination in order to facilitate the search, especially due to the huge number of pages.

Each taxon is presented, whenever possible, by the exact sampling site mentioned in the literature. The information about the **distribution** of each species follows the following scheme:

REGION

Subregion

Municipality (District)

Site

Reference

The information about the District is also included, because it is still a well-known and easily recognizable geographical division in Portugal. Each site also refers to the watercourse and the hydrographical basin to which it belongs to ease the understanding of the information provided, and moreover because this information can be useful for the main international basins, as Tagus/Tajo, Douro/Duero, Minho/Miño, Lima/Limia, Tâmega/Tâmega and Guadiana.

Maps with the municipalities where every taxon has been cited, showing the geographical distribution of each taxon in Mainland Portugal and the Madeira and Azores Archipelagos are included, and their respective figure numbers are presented together with the distribution.

***Acanthoceras* Honigmann 1910**, p. 76
[CAS ref. 000487]

***Acanthoceras zachariasii* (Brun) Simonsen 1979**, p. 55 [CAS ref. 003160]

Basionym: *Attheya zachariasii* Brun 1894 [CAS ref. 002403]

Distribution (Fig. 9):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Aveiro (District: Aveiro)

Site: Pano, Largo River (Vouga Basin)

Reference: Almeida 1998 (as *Acanthoceras zachariasii* (Brun) Simonsen)

***Achnanthes* Bory 1822**, p. 79, 593 (vol. 1)
[CAS ref. 000145]

***Achnanthes andicola* (Cleve) Hustedt 1911**, p. 279; pl. 2, fig. 23, 24
[CAS ref. 000492]

Distribution:

REGION: CENTRO

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Calado 1990 (as *Achnanthes andicola* (Cleve) Hustedt)

***Achnanthes brevipes* C. Agardh 1824**, p. 1 [CAS ref. 000102]

Distribution (Fig. 10):

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Achnanthes brevipes*)

***Achnanthes brevipes* var. *intermedia* (Kützing) Cleve 1895**, p. 193
[CAS ref. 000949]

Basionym: *Achnanthes intermedia* Kützing 1833a [CAS ref. 000594]

Distribution (Fig. 11):

REGION: NORTE

Subregion: Grande Porto

Municipality: Porto (District: Porto)

Site: Not specified

Reference: Colmeiro 1889 (as *Achnanthes intermedia* Kg.)

***Achnanthes brevipes* var. *minor* H. Peragallo in Peragallo & Peragallo 1897**, pl. 1, fig. 16-18 [CAS ref. 001052]

Distribution (Fig. 12):

REGION: NORTE

Subregion: Minho-Lima

Municipality: Viana do Castelo (District: Viana do Castelo)

Site: Viana do Castelo

Reference: Zimmermann 1910 (as *Achnanthes brevipes* Ag. var. *minor* Per.)

***Achnanthes coarctata* (Brébisson ex W. Smith) Grunow in Cleve & Grunow 1880**, p. 20 [CAS ref. 000241]

Basionym: *Achnanthidium coarctatum* Brébisson ex W. Smith 1855 [CAS ref. 000864]

Distribution (Fig. 13):

REGION: NORTE

Subregion: Grande Porto

Municipality: Matosinhos (District: Porto)

Site: Not specified

Reference: Zimmermann 1910 (as *Achnanthes coarctata* (Bréb.) Grun.)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Achnanthes coarctata* (Brébisson) Grunow)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes coarctata* Brébisson)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes coarctata* Brébisson)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

References: Gil 1988 (as *Achnanthes coarctata* Brébisson); Gil et al. 1989-1990 (as *Achnanthes coarctata*)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes coarctata* Brébisson)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes coarctata* Brébisson)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes coarctata* Brébisson)

Municipality: Anadia (District: Aveiro)

Site: São João da Azenha, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Achnanthes coarctata*)

Site: Tamengos, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Achnanthes coarctata*)

Municipality: Aveiro (District: Aveiro)

Site: Aveiro, lake in the municipal park (artificial substrate)

Reference: Gil & Almeida 1993 (as *Achnanthes coarctata* de Brébisson)

Site: Requeixo, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Achnanthes coarctata* (Brébisson) Grunow)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes coarctata* Brébisson)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes coarctata* Brébisson)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Canha, Casal Estevão, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Achnanthes coarctata*)

Site: Perrães, Levira River (Vouga Basin)

Reference: Almeida 1998 (as *Achnanthes coarctata* (Brébisson) Grunow)

Site: Repolão, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Achnanthes coarctata*)

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Mondego River (Mondego Basin)

References: Carvalho 1913 (as *Achnanthes coarctata* (Bréb.) Grun.); Santos & Carvalho 2001 (as *Achnanthes coarctata* (Bréb.) Grun.)

Site: Vila Patrício
Reference: Carvalho 1913 (as *Achnanthes coarctata* (Bréb.) Grun.)

Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes coarctata* Brébisson)
Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes coarctata* Brébisson)
Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes coarctata* Brébisson)
Site: In the proximity of Tondela, Criz River (Mondego Basin)
Reference: Santos et al. 2002 (as *Achnanthes coarctata* (Brébisson) Grunow)
Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes coarctata* Brébisson)
Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes coarctata* Brébisson)

Subregion: Médio Tejo
Municipality: Torres Novas (District: Santarém)
Site: Renova, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Achnanthes coarctata* (Bréb.) Grun.)

Subregion: Pinhal Interior Norte
Municipality: Pampilhosa da Serra (District: Coimbra)
Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)
Reference: Santos et al. 2002 (as *Achnanthes coarctata* (Brébisson) Grunow)

Subregion: Serra da Estrela
Municipality: Seia (District: Guarda)
Site: Sabugueiro, Vale do Rossim Reservoir
Reference: Santos et al. 2002 (as *Achnanthes coarctata* (Brébisson) Grunow)

Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Gil et al. 1991 (as *Achnanthes coarctata*)

REGION: LISBOA
Subregion: Península de Setúbal
Municipality: Setúbal (District: Setúbal)
Site: Comenda
Reference: Zimmermann 1910 (as *Achnanthes coarctata* (Bréb.) Grun.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Achnanthes coarctata* Bréb.)

Municipality: Santa Cruz da Graciosa (Graciosa Island)

Site: Barreiro

Reference: Azevedo et al. 2005 (as *Achnanthes coarctata*)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Achnanthes coarctata* (Brébisson) Grunow)

Site: Graciosa Island

Reference: Gonçalves et al. 2010 (as *Achnanthes coarctata* (Brébisson) Grunow)

Site: Santa Maria Island

Reference: Gonçalves et al. 2010 (as *Achnanthes coarctata* (Brébisson) Grunow)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Achnanthes coarctata* (Brébisson) Grunow)

Site: Not specified

Reference: Gonçalves 2008 (as *Achnanthes coarctata* (Brébisson) Grunow)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Porto Santo (Porto Santo Island)

Site: Ponte do Espírito Santo

Reference: Zimmermann 1910-1911 (as *Achnanthes coarctata* (Bréb.) Grun.)

Municipality: Santa Cruz (Madeira Island)

Site: Fonte do Mestre Henrique, Caniço

Reference: Zimmermann 1909a (as *Achnanthes coarctata* (Bréb.) Grun.)

***Achnanthes coarctata* var. *elliptica* Krasske 1929**, p. 351; fig. 20 c
[CAS ref. 000582]

Distribution (Fig. 14):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Vila do Porto (Santa Maria Island)

Site: Not specified

References: Manguin 1942 (as *Achnanthes coarctata* (Bréb.) Grun. var. *elliptica* Krasske); Bourrelly & Manguin 1946a (as *Achnanthes coarctata* (Bréb.) Grun. var. *elliptica* Krasske)

Achnanthes conspicua var. *brevistriata* Hustedt 1930, p. 202; fig. 292 [CAS ref. 000502]

Distribution (Fig. 15):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Horta (Faial Island)

Site: Not specified

Reference: Johansson 1977 (as *Achnanthes conspicua* v. *brevistriata* Hust.)

Municipality: Not specified

Site: Pico Island

Reference: Johansson 1977 (as *Achnanthes conspicua* v. *brevistriata* Hust.)

Achnanthes crucifera Østrup 1910, p. 130; pl. 4, fig. 84 [CAS ref. 000706]

Distribution (Fig. 16):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Achnanthes crucifera* (?))

Achnanthes elata (Leuduger-Fortmorel) H.P. Gandhi 1960, p. 82; fig. 3-7, 10 [CAS ref. 000377]

Basionym: *Navicula elata* Leuduger-Fortmorel 1879 [CAS ref. 000606]

Nomenclatural synonym: *Achnanthes inflata* var. *elata* (Leuduger-Fortmorel) Hustedt 1937a [CAS ref. 001012]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

References: Lange-Bertalot & Krammer 1989 (as *Achnanthes inflata* var. *elata* Leuduger-Fortmorel); Krammer & Lange-Bertalot 1991b (as *Achnanthes elata* (Leuduger-Fortmorel) Gandhi); INAG 2008 (as

Achnanthes inflata (Kutzing) Grunow var. *elata* (Leud.-Fortmorel)
Hustedt)

***Achnanthes exigua* var. *elliptica* Hustedt 1937a**, p. 197; pl. 9, fig. 8,
9 [CAS ref. 001012]

Distribution:

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Achnanthes exigua* var. *elliptica* Hustedt)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Achnanthes exigua* Grunow var. *elliptica*
Hustedt)

***Achnanthes gibberula* Grunow in Cleve & Grunow 1880**, p. 22
[CAS ref. 000241]

Distribution (Fig. 17):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes gibberula* Grunow)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes gibberula* Grunow)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes gibberula* Grunow)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes gibberula* Grunow)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers
(Vouga Basin)

Reference: Gil 1988 (as *Achnanthes gibberula* Grunow)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Achnanthes gibberula* Grunow); Gil et al. 1989-
1990 (as *Achnanthes gibberula*)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes gibberula* Grunow)

- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes gibberula* Grunow)
- Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes gibberula* Grunow)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes gibberula* Grunow)
- Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Achnanthes gibberula* Grunow); Gil et al. 1989-1990 (as *Achnanthes gibberula*)
- Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes gibberula* Grunow)
- Site: Varzielas, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes gibberula* Grunow)
- Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes gibberula* Grunow)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes gibberula* Grunow)
- Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: Gil et al. 1991 (as *Achnanthes gibberula*)

***Achnanthes grimmei* Krasske 1925**, p. 30; pl. 1, fig. 10 [CAS ref. 000580]

Synonym: *Achnanthes thermalis* (Rabenhorst) Schönfeldt 1907 [CAS ref. 000808], according to Krammer & Lange-Bertalot 1991b, p. 52

Distribution (Fig. 18):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Torres Novas (District: Santarém)

Site: Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1970 (*Achnanthes grimmei* Krasske)

***Achnanthes inflata* (Kützing) Grunow 1867, p. 7 [CAS ref. 000432]**

Basionym: *Stauroneis inflata* Kützing 1844 [CAS ref. 000595]

Distribution (Fig. 19):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Achnanthes inflata* (Kützing) Grunow)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Achnanthes inflata* (Kützing) Grunow)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Achnanthes inflata* (Kütz.) Grun.);

Bourrelly & Manguin 1946a (as *Achnanthes inflata* (Kütz.) Grun.)

Municipality: Povoação (São Miguel Island)

Site: Inferno Grote near Lagoa das Furnas (São Miguel Island)

Reference: Holmboe 1901 (as *Achnanthes inflata* Kütz.)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Achnanthes inflata* (Kützing) Grunow)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Achnanthes inflata* (Kützing) Grunow)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Levada do Bom Sucesso

Reference: Zimmermann 1910-1911 (as *Achnanthes inflata* (Kuetz.) Grun.)

Site: Ribeira de São João, Sítio da Pena

Reference: Zimmermann 1909a (as *Achnanthes inflata* (Kuetz.) Grun.)

Municipality: Porto Santo (Porto Santo Island)

Site: Faial Stream

Reference: Zimmermann 1910-1911 (as *Achnanthes inflata* (Kuetz.) Grun.)

***Achnanthes lanceolata* var. *capitata* O. Müller 1909**, p. 8; pl. 1, fig. 6-7 [CAS ref. 001777]

Distribution (Fig. 20):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes lanceolata* (Bréb.) Grunow v. *capitata* O. Müll.)

Site: Raivo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Achnanthes lanceolata* (Bréb.) Grunow v. *capitata* O. Müll.); Gil et al. 1989-1990 (as *Achnanthes lanceolata* v. *capitata*)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil et al. 1989-1990 (as *Achnanthes lanceolata* v. *capitata*)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil et al. 1989-1990 (as *Achnanthes lanceolata* v. *capitata*)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes lanceolata* (Bréb.) Grunow v. *capitata* O. Müll.)

Municipality: Vouzela (District: Viseu)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes lanceolata* (Bréb.) Grunow v. *capitata* O. Müll.)

***Achnanthes lanceolata* var. *omissa* Reimer in Patrick & Reimer 1966**, p. 272; pl. 18, fig. 16, 17 [CAS ref. 003167]

Synonym: *Planothidium joursacense* (Héribaud) Lange-Bertalot 1999 [CAS ref. 0012674], according to Lange-Bertalot 1999, p. 283

Distribution (Fig. 21):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Achnanthes lanceolata omissa*)

Achnanthes lanceolata var. *ventricosa* Hustedt 1914, p. 64; pl. 2, fig. 32 [CAS ref. 000493]

Distribution (Fig. 22):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes lanceolata* (Bréb.) Grunow var. *ventricosa* Hustedt)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes lanceolata* (Bréb.) Grunow var. *ventricosa* Hustedt)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes lanceolata* (Bréb.) Grunow var. *ventricosa* Hustedt)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes lanceolata* (Bréb.) Grunow var. *ventricosa* Hustedt)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes lanceolata* (Bréb.) Grunow var. *ventricosa* Hustedt)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes lanceolata* (Bréb.) Grunow var. *ventricosa* Hustedt)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Achnanthes lanceolata* (Bréb.) Grunow var. *ventricosa* Hustedt); Gil et al. 1989-1990 (as *Achnanthes lanceolata* v. *ventricosa*)

Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes lanceolata* (Bréb.) Grunow var. *ventricosa* Hustedt)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes lanceolata* (Bréb.) Grunow var. *ventricosa* Hustedt)

***Achnanthes lineariformis* Lange-Bertalot 1993**, p. 7 [CAS ref. 008467]

Nomenclatural synonym: *Achnanthes linearioides* Lange-Bertalot in Lange-Bertalot & Moser 1994 [CAS ref. 006662]

Distribution (Fig. 23):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Corvo Island

Reference: Gonçalves et al. 2010 (as *Achnanthes linearioides* Lange-Bertalot)

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Achnanthes linearioides* Lange-Bertalot)

Site: São Jorge Island

Reference: Gonçalves et al. 2010 (as *Achnanthes linearioides* Lange-Bertalot)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Achnanthes linearioides* Lange-Bertalot)

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Achnanthes linearioides* Lange-Bertalot)

***Achnanthes longipes* C. Agardh 1824**, p. 1 [CAS ref. 000102]

Distribution (Fig. 24):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Achnanthes longipes*)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Achnanthes longipes*)

***Achnanthes longipes f. lata* C. Zimmermann 1910**, p. 99 [CAS ref. 010980]

Distribution (Fig. 25):

REGION: NORTE

Subregion: Minho-Lima

Municipality: Viana do Castelo (District: Viana do Castelo)

Site: Viana do Castelo

Reference: Zimmermann 1910 (as *Achnanthes longipes* Ag. forma *lata*)

***Achnanthes lutheri* Hustedt 1933**, p. 405; fig. 858 [CAS ref. 000507]

Distribution (Fig. 26):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Achnanthes lutheri* Hustedt)

***Achnanthes minima* J.R. Carter 1961**, p. 21; fig. 65, 66 [CAS ref. 003620]

Distribution (Fig. 27):

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Achnanthes minimum*)

***Achnanthes minutissima* var. *cryptocephala* Grunow in Van Heurck 1880**, pl. 27, fig. 41-44 [CAS ref. 000895]

Synonym: *Achnanthes minutissima* Kützing 1833a [CAS ref. 000594], according to Krammer & Lange-Bertalot 1991b, p. 56

Distribution (Fig. 28):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

- Site: Águeda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes minutissima* Kützing v. *cryptocephala* Grunow)
- Site: Avelal de Baixo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes minutissima* Kützing v. *cryptocephala* Grunow)
- Site: Bolfiar, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes minutissima* Kützing v. *cryptocephala* Grunow)
- Site: Redonda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes minutissima* Kützing v. *cryptocephala* Grunow)
- Municipality: Aveiro (District: Aveiro)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes minutissima* Kützing v. *cryptocephala* Grunow)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes minutissima* Kützing v. *cryptocephala* Grunow)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes minutissima* Kützing v. *cryptocephala* Grunow)
- Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes minutissima* Kützing v. *cryptocephala* Grunow)
- Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes minutissima* Kützing v. *cryptocephala* Grunow)
- Municipality: Vouzela (District: Viseu)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes minutissima* Kützing v. *cryptocephala* Grunow)
- Subregion: Not specified
- Municipality: Not specified
- Site: Not specified
Reference: Gil et al. 1991 (as *Achnanthes minutissima* v. *cryptocephala*)
- REGION: AUTONOMOUS REGION OF AZORES
- Municipality: Horta (Faial Island)
- Site: Not specified
Reference: Johansson 1977 (as *Achnanthes minutissima* v. *cryptocephala* Grun.)

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa do Canário

Reference: Mölder 1947 (as *Achnanthes minutissima* Kütz. *cryptocephala* Grun.)

Site: Lagoa Grande

Reference: Mölder 1947 (as *Achnanthes minutissima* Kütz. *cryptocephala* Grun.)

Site: Lagoa das Sete Cidades

Reference: Mölder 1947 (as *Achnanthes minutissima* Kütz. *cryptocephala* Grun.)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

References: Manguin 1942 (as *Achnanthes minutissima* Kütz. *cryptocephala* Grun.); Bourrelly & Manguin 1946a (as *Achnanthes minutissima* Kütz. *cryptocephala* Grun.); Mölder 1947 (as *Achnanthes minutissima* Kütz. *cryptocephala* Grun.)

Site: Pico Verde

References: Manguin 1942 (as *Achnanthes minutissima* Kütz. *cryptocephala* Grun.); Bourrelly & Manguin 1946a (as *Achnanthes minutissima* Kütz. *cryptocephala* Grun.)

Site: Ribeira Quente

References: Manguin 1942 (as *Achnanthes minutissima* Kütz. *cryptocephala* Grun.); Bourrelly & Manguin 1946a (as *Achnanthes minutissima* Kütz. *cryptocephala* Grun.)

Municipality: Vila do Porto (Santa Maria Island)

Site: Not specified

References: Manguin 1942 (as *Achnanthes minutissima* Kütz. *cryptocephala* Grun.); Bourrelly & Manguin 1946a (as *Achnanthes minutissima* Kütz. *cryptocephala* Grun.)

***Achnanthes parvula* Kützing 1844**, p. 76; pl. 21, fig. 5 [CAS ref. 000595]

Distribution (Fig. 29):

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Porto Santo (Porto Santo Island)

Site: Serra de Dentro Stream

Reference: Zimmermann 1910-1911 (as *Achnanthes parvula* Kuetz.)

***Achnanthes rupestoides* M.H. Hohn 1961**, p. 154; pl. 1, fig. 3-4
[CAS ref. 000485]

Distribution (Fig. 30):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Achnanthes rupestoides* Hohn)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Achnanthes rupestoides* Hohn)

Site: Vessada, Fontão Creek (Vouga Basin)

Reference: Almeida 1998 (as *Achnanthes rupestoides* Hohn)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Achnanthes rupestoides* Hohn)

Site: Perrães, Levira River (Vouga Basin)

Reference: Almeida 1998 (as *Achnanthes rupestoides* Hohn)

Site: Perrães, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Achnanthes rupestoides* Hohn)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Achnanthes rupestoides* Hohn)

Site: São Jorge Island

Reference: Gonçalves et al. 2010 (as *Achnanthes rupestoides* Hohn)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Achnanthes rupestoides* Hohn)

***Achnanthes saxonica* Krasske in Hustedt 1933**, p. 403; fig. 854B
[CAS ref. 000507]

Synonym: *Karayevia oblongella* (Østrup) Aboal in Aboal et al. 2003 [CAS ref. 012666], according to Lange-Bertalot & Krammer 1989, p. 135

Distribution (Fig. 31):

REGION: NORTE

Subregion: Grande Porto

Municipality: Vila Nova de Gaia (District: Porto)

Site: Febros River (Douro Basin)

Reference: Cerqueira da Silva 1993 (as *Achnanthes saxonica*)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes saxonica* Krasske); Gil et al. 1989-1990 (as *Achnanthes saxonica*)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes saxonica* Krasske); Gil et al. 1989-1990 (as *Achnanthes saxonica*)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes saxonica* Krasske); Gil et al. 1989-1990 (as *Achnanthes saxonica*)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes saxonica* Krasske); Gil et al. 1989-1990 (as *Achnanthes saxonica*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes saxonica* Krasske); Gil et al. 1989-1990 (as *Achnanthes saxonica*)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Achnanthes saxonica*)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes saxonica* Krasske); Gil et al. 1989-1990 (as *Achnanthes saxonica*)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes saxonica* Krasske); Gil et al. 1989-1990 (as *Achnanthes saxonica*)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes saxonica* Krasske)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes saxonica* Krasske); Gil et al. 1989-1990 (as *Achnanthes saxonica*)

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Achnanthes saxonica*)

Site: Espairo, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Achnanthes saxonica*)

Site: Mogofores, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Achnanthes saxonica*)

Site: São João da Azenha, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Achnanthes saxonica*)

Site: Tamengos, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Achnanthes saxonica*)

Municipality: Aveiro (District: Aveiro)

- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Achnanthes saxonica* Krasske); Gil et al. 1989-1990 (as *Achnanthes saxonica*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Achnanthes saxonica* Krasske); Gil et al. 1989-1990 (as *Achnanthes saxonica*)
- Municipality: Mealhada (District: Aveiro)
Site: Pampilhosa, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Achnanthes saxonica*)
- Site: Viadouros, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Achnanthes saxonica*)
- Municipality: Oliveira do Bairro (District: Aveiro)
Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Achnanthes saxonica*)
- Site: Perrães, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Achnanthes saxonica*)
- Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Achnanthes saxonica*)
- Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Achnanthes saxonica* Krasske)
- Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes saxonica* Krasske); Gil et al. 1989-1990 (as *Achnanthes saxonica*)
- Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes saxonica* Krasske); Gil et al. 1989-1990 (as *Achnanthes saxonica*)
- Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes saxonica* Krasske); Gil et al. 1989-1990 (as *Achnanthes saxonica*)
- Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes saxonica* Krasske); Gil et al. 1989-1990 (as *Achnanthes saxonica*)
- Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil et al. 1989-1990 (as *Achnanthes saxonica*)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes saxonica* Krasske)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes saxonica* Krasske); Gil et al. 1989-1990 (as *Achnanthes saxonica*)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Calado 1990 (as *Achnanthes saxonica* Krasske); Gil et al. 1991 (as *Achnanthes saxonica*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Furnas

Reference: Mölder 1947 (as *Achnanthes saxonica* Krasske)

Site: Lagoa das Furnas

Reference: Mölder 1947 (as *Achnanthes saxonica* Krasske)

Site: Ribeira Quente

Reference: Mölder 1947 (as *Achnanthes saxonica* Krasske)

Site: Pico da Vara

Reference: Mölder 1947 (as *Achnanthes saxonica* Krasske)

***Achnanthes sphacelata* J.R. Carter 1970**, p. 611; pl. 1, fig. 41-44
[CAS ref. 003967]

Distribution (Fig. 32):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes sphacelata* Carter)

***Achnanthes subsessilis* Kützing 1833a**, p. 576, fig. 55 [CAS ref. 000594]

Distribution (Fig. 33):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Achnanthes subsessilis*)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Porto Santo (Porto Santo Island)

Site: Serra de Dentro Stream

Reference: Zimmermann 1910-1911 (as *Achnanthes subsessilis* Kuetz.)

***Achnanthes* sp.**

Distribution (Fig. 34):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Montalegre (District: Vila Real)

Site: Alto Rabagão Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira et al. 1985 (as *Achnanthes* spp.)

Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1985 (as *Achnanthes* spp.)

Subregion: Ave

Municipality: Vieira do Minho (District: Braga)

Site: Salamonde Reservoir, Cávado River (Cávado Basin)

Reference: Oliveira 1985 (as *Achnanthes* spp.)

Subregion: Minho-Lima

Site: Ínsua do Ranhão, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Achnanthes* sp.)

Municipality: Caminha (District: Viana do Castelo)

Site: Seixas, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Achnanthes* sp.)

Municipality: Monção (District: Viana do Castelo)

Site: Monção, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Achnanthes* sp.)

Municipality: Valença (District: Viana do Castelo)

Site: Valença, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Achnanthes* sp.)

Municipality: Vila Nova de Cerveira (District: Viana do Castelo)

Site: Barragem de Covas, Coura River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Achnanthes* sp.)

REGION: CENTRO

Subregion: Beira Interior Sul

Municipality: Vila Velha de Ródão (District: Castelo Branco)

Site: downstream of Cedilho Reservoir, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Achnanthes* spp.)

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Tramagal, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Achnanthes* spp.)

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Achnanthes* spp.)

Municipality: Vila Nova da Barquinha (District: Santarém)

Site: Almourol, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Achnanthes* spp.)

Subregion: Not specified
Municipality: Not specified
Site: Paiva River (Douro Basin)
References: Cerqueira da Silva 1991 (as *Achnanthes* sp.); Cerqueira da Silva et al. 1993 (as *Achnanthes* sp.); Cerqueira da Silva 1994 (as *Achnanthes* sp.)

REGION: ALENTEJO

Subregion: Alentejo Central
Municipality: Évora (District: Évora)
Site: Monte Novo Reservoir, Degebe River (Guadiana Basin)
Reference: Andrade & Brito 1995 (as *Achnanthes* sp.)

Subregion: Alto Alentejo
Municipality: Gavião (District: Portalegre)
Site: Belver Reservoir, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Achnanthes* spp.)

Municipality: Nisa (District: Portalegre)
Site: Barca da Amieira, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Achnanthes* spp.)

Subregion: Baixo Alentejo
Municipality: Aljustrel (District: Beja)
Site: Roxo Reservoir, Roxo Stream (Sado Basin)
Reference: Oliveira 1976 (as *Achnanthes* sp.)
Municipality: Almodôvar (District: Beja)
Site: Monte da Vinha, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Achnanthes* spp.)

Subregion: Lezíria do Tejo
Municipality: Cartaxo (District: Santarém)
Site: Valada, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Achnanthes* spp.)
Municipality: Chamusca (District: Santarém)
Site: Chamusca, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Achnanthes* spp.)
Municipality: Santarém (District: Santarém)
Site: Ómnias, Tagus River (Tagus Basin)
References: Fernandes et al. 1987 (as *Achnanthes* spp.); Brito & Andrade 1992 (as *Achnanthes* spp.)

Subregion: Not specified
Municipality: Not specified
Site: Rocha da Galé, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Achnanthes* sp.)

REGION: LISBOA

Subregion: Grande Lisboa
Municipality: Vila Franca de Xira (District: Lisboa)
Site: Vila Franca de Xira, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Achnanthes* spp.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Achnanthes* sp.)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Machico (District: Funchal)

Site: Fonte de São Roque, Machico Stream

Reference: Schodduyn 1927 (as *Achnanthes* spp.)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Reservoirs in the North and Centre of Portugal

Reference: Cabecinha et al. 2009 (as *Achnanthes* sp.)

Site: Not specified

Reference: INAG 2008 (as *Achnanthes* sp.)

***Achnanthidium* Kützing 1844, p. 75**
[CAS ref. 000595]

***Achnanthidium biasolettianum* (Grunow in Cleve & Grunow)
Lange-Bertalot 1999, p. 276 [CAS ref. 012674]**

Basionym: *Achnanthes biasolettiana* Grunow in Cleve & Grunow 1880 [CAS ref. 000241]

Distribution (Fig. 35):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Sernada do Vouga, Vouga River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes biasolettiana* Grunow var. *biasolettiana* Grunow in Cleve & Grun.)

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes biasolettiana* Grunow var. *biasolettiana* Grunow in Cleve & Grun.)

Site: Ribeira de Fráguas, Coval da Mó Mine, Coval da Mó Stream (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes biasolettiana* Grunow var. *biasolettiana* Grunow in Cleve & Grun.)

Site: Ribeira de Fráguas (Palhal Mine) Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes biasolettiana* Grunow var. *biasolettiana* Grunow in Cleve & Grun.)

Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)

References: Nunes et al. 2003 (as *Achnanthes biasolettiana* Grunow);
Nunes 2007 (as *Achnanthes biasolettiana* Grunow var. *biasolettiana* Grunow in Cleve & Grun.)

Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)

Reference: Nunes et al. 2003 (as *Achnanthes biasolettiana* Grunow)

Site: Santo António, Valmaior, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes biasolettiana* Grunow var. *biasolettiana* Grunow in Cleve & Grun.)

Site: Valmaior (downstream of the mouth of Filvida River), Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes biasolettiana* Grunow var. *biasolettiana* Grunow in Cleve & Grun.)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Feio et al. 2007 (as *Achnanthes biasolettiana*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)

Site: Lagoa da Achada

Reference: Mölder 1947 (as *Achnanthes biasolettiana* Kütz.)

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa do Canário

Reference: Mölder 1947 (as *Achnanthes biasolettiana* Kütz.)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Mölder 1947 (as *Achnanthes biasolettiana* Kütz.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Achnantheidium biasolettianum* (Grunow) Lange-Bertalot)

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Achnantheidium biasolettianum* (Grunow) Lange-Bertalot)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Ponta do Sol (Madeira Island)

Site: Rabaçal (Madeira Island)

Reference: Mölder 1947 (as *Achnanthes biasolettiana* Kütz.)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Alto-Douro Rivers

Reference: Morais et al. 2009 (as *Achnanthes biasolettiana* Grunow var. *biasolettiana* Grunow)

Site: North-South Transition Rivers and Mountain Rivers in the South

Reference: Morais et al. 2009 (as *Achnanthes biasolettiana* Grunow var. *biasolettiana* Grunow)

Site: Rivers in the North

Reference: Morais et al. 2009 (as *Achnanthes biasolettiana* Grunow var. *biasolettiana* Grunow)

Site: Not specified

Reference: INAG 2008 (as *Achnanthes biasolettiana* Grunow var. *biasolettiana* Grunow in Cleve & Grun.)

***Achnanthidium bioretii* (H. Germain) O. Monnier, Lange-Bertalot & Ector in Monnier et al. 2007**, p. 155 [CAS ref. 012949]

Basionym: *Achnanthes bioretii* H. Germain 1957 [CAS ref. 000382]

Nomenclatural synonym: *Psammothidium bioretii* (H. Germain) Bukhtiyarova & Round 1996 [CAS ref. 006789]

Distribution (Fig. 36):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Arouca (District: Aveiro)

Site: Serra da Freita, Arões, Caima River (Vouga Basin)

References: Nunes 2007 (as *Psammothidium bioretii* (Germain) Bukhtiyarova & Round); Ferreira da Silva et al. 2009 (as *Psammothidium bioretii* (Germain) Bukhtiyarova et Round)

Municipality: Oliveira de Azeméis (District: Aveiro)

Site: Bustelo do Caima, Ossela, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Psammothidium bioretii* (Germain) Bukhtiyarova & Round)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Achnanthes bioretii* Germain)

Municipality: Albergaria-a-Velha (District: Aveiro)
Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Psammothidium bioretii* (Germain) Bukhtiyarova & Round)
Site: Santo António, Valmaior, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Psammothidium bioretii* (Germain) Bukhtiyarova & Round)
Municipality: Sever do Vouga (District: Aveiro)
Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)
Reference: Nunes 2007 (as *Psammothidium bioretii* (Germain) Bukhtiyarova & Round)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Achnanthydium bioretii* (Germain) Edlund)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified
Site: Alto-Douro Rivers
Reference: Morais et al. 2009 (as *Achnanthes bioretii* Germain (= *Psammothidium*))
Site: Not specified
Reference: INAG 2008 (as *Achnanthes bioretii* Germain (= *Psammothidium*))

***Achnanthydium catenatum* (J. Bílý & Marvan) Lange-Bertalot 1999, p. 277 [CAS ref. 012674]**

Basionym: *Achnanthes catenata* J. Bílý & Marvan 1959 [CAS ref. 000141]

Distribution (Fig. 37):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Oliveira do Bairro (District: Aveiro)
Site: Vila Verde, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Achnanthes catenata* Bily & Marvan)

***Achnantheidium exiguum* (Grunow) Czarnecki 1994**, p. 157 [CAS ref. 008152]

Basionym: *Achnanthes exigua* Grunow in Cleve & Grunow 1880 [CAS ref. 000241]

Distribution (Fig. 38):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Achnanthes exigua* Grunow)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Achnanthes exigua* Grunow)

Municipality: Aveiro (District: Aveiro)

Site: Pano, Largo River (Vouga Basin)

Reference: Almeida 1998 (as *Achnanthes exigua* Grunow)

Site: Requeixo, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Achnanthes exigua* Grunow)

Site: Vessada, Fontão Creek (Vouga Basin)

Reference: Almeida 1998 (as *Achnanthes exigua* Grunow)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Perrães, Levira River (Vouga Basin)

Reference: Almeida 1998 (as *Achnanthes exigua* Grunow)

Site: Perrães, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Achnanthes exigua* Grunow)

Municipality: Not specified

Site: Pateira de Fermentelos (District: Aveiro)

Reference: Calado 1991 (as *Achnanthes exigua* Grunow)

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Achnanthes exigua*)

Site: Forno Novo, Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Achnanthes exigua*)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: São Romão, Lagoa do Covão do Curral

Reference: Santos et al. 2002 (as *Achnanthes exigua* Grunow)

Subregion: Not specified

Municipality: Not specified

Site: Impacted site after BKME discharge, Vouga River (Vouga Basin)

Reference: Ferreira et al. 2002 (as *Achnanthes exigua*)

Site: Not specified

Reference: Calado 1990 (as *Achnanthes exigua* Grunow)

REGION: ALENTEJO

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Água Forte, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Achnanthes exigua* Grunow)

Site: Porto de Beja, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Achnanthes exigua* Grunow)

Site: Porto Ferreira, Roxo Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Achnanthes exigua* Grunow)

Subregion: Lezíria do Tejo

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Achnanthes exigua* (?))

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Horta (Faial Island)

Site: Not specified

Reference: Johansson 1977 (as *Achnanthes exigua* Grun.)

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa do Canário

Reference: Mölder 1947 (as *Achnanthes exigua* Grun.)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

References: Manguin 1942 (as *Achnanthes exigua* Grunow); Bourrelly & Manguin 1946a (as *Achnanthes exigua* Grun.); Mölder 1947 (as *Achnanthes exigua* Grun.)

Site: Ribeira Quente

References: Manguin 1942 (as *Achnanthes exigua* Grunow); Bourrelly & Manguin 1946a (as *Achnanthes exigua* Grun.)

Municipality: Not specified

Site: Faial Island

Reference: Gonçalves et al. 2010 (as *Achnanthidium exiguum* (Grunow) Czarnecki)

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Achnanthidium exiguum* (Grunow) Czarnecki)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Achnanthidium exiguum* (Grunow) Czarnecki)

Site: Not specified

Reference: Gonçalves 2008 (as *Achnanthidium exiguum* (Grunow) Czarnecki)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Achnanthes exigua* Grunow in Cl. & Grun. var. *exigua*)

***Achnantheidium exiguum* var. *constrictum* (Grunow) N.A. Andresen, Stoermer & R.G. Kreis 2000**, p. 413 [CAS ref. 009394]

Basionym: *Stauroneis exilis* var. *constricta* Grunow 1867 [CAS ref. 000432]

Nomenclatural synonym: *Achnanthes exigua* var. *constricta* (Torka) Hustedt 1930 [CAS ref. 000502]

Distribution (Fig. 39):

REGION: AUTONOMOUS REGION OF MADEIRA
Municipality: Ponta do Sol (Madeira Island)
Site: Rabaçal
Reference: Mölder 1947 (as *Achnanthes exigua* Grun. var. *constricta* Torka)

***Achnantheidium exiguum* var. *heterovalvum* (Kraske) Czarnecki 1994**, p. 157 [CAS ref. 008152]

Basionym: *Achnanthes exigua* var. *heterovalvata* Kraske 1923 [CAS ref. 000579]

Distribution (Fig. 40):

REGION: CENTRO
Subregion: Baixo Vouga
Municipality: Águeda (District: Aveiro)
Site: Agadão, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes exigua* Grunow v. *heterovalvata* Kraske)
Site: Águeda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes exigua* Grunow v. *heterovalvata* Kraske)
Site: Avelal de Baixo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Achnanthes exigua* Grunow v. *heterovalvata* Kraske)
Site: Bolfiar, Águeda River (Vouga Basin)

- Reference: Gil 1988 (as *Achnanthes exigua* Grunow v. *heterovalvata* Krasske)
- Municipality: Anadia (District: Aveiro)
 Site: Mogofores, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Achnanthes exigua* v. *heterovalvata*)
- Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes exigua* Grunow v. *heterovalvata* Krasske)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes exigua* Grunow v. *heterovalvata* Krasske)
- Municipality: Mealhada (District: Aveiro)
 Site: Pampilhosa, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Achnanthes exigua* v. *heterovalvata*)
- Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Perrães, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Achnanthes exigua* v. *heterovalvata*)
 Site: Repolão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Achnanthes exigua* v. *heterovalvata*)
- Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes exigua* Grunow v. *heterovalvata* Krasske)
 Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes exigua* Grunow v. *heterovalvata* Krasske)
- Municipality: Vouzela (District: Viseu)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes exigua* Grunow v. *heterovalvata* Krasske)
- Subregion: Médio Tejo
 Municipality: Abrantes (District: Santarém)
 Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Achnanthes exigua heterovalva*)
- Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: Calado 1990 (as *Achnanthes exigua* Grunow v. *heterovalvata* Krasske)

***Achnantheridium exile* (Kützing) Round & Bukhtiyarova 1996, p. 350 [CAS ref. 006778]**

Basionym: *Achnanthes exilis* Kützing 1833a [CAS ref. 000594]

Distribution (Fig. 41):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Coimbra (District: Coimbra)

Site: Not specified

Reference: Colmeiro 1889 (as *Achnanthes exilis* Kg.)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes exilis* Kützing)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Achnanthes exilis* Kützing); Gil et al. 1989-1990 (as *Achnanthes exilis*)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Achnanthes exilis* Kützing); Gil et al. 1989-1990 (as *Achnanthes exilis*)

Site: Bolfiar, Águeda River (Vouga Basin)

References: Gil 1988 (as *Achnanthes exilis* Kützing); Gil et al. 1989-1990 (as *Achnanthes exilis*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

References: Gil 1988 (as *Achnanthes exilis* Kützing); Gil et al. 1989-1990 (as *Achnanthes exilis*)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Achnanthes exilis*)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Achnanthes exilis* Kützing); Gil et al. 1989-1990 (as *Achnanthes exilis*)

Site: Raivo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Achnanthes exilis* Kützing); Gil et al. 1989-1990 (as *Achnanthes exilis*)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes exilis* Kützing); Gil et al. 1989-1990 (as *Achnanthes exilis*)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Achnanthes exilis* Kützing); Gil et al. 1989-1990 (as *Achnanthes exilis*)

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)

- Reference: Nunes 2007 (as *Achnanthes exilis* Kützing)
- Municipality: Anadia (District: Aveiro)
- Site: Espairo, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Achnanthes exilis*)
- Site: Tamengos, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Achnanthes exilis*)
- Municipality: Aveiro (District: Aveiro)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
- References: Gil 1988 (as *Achnanthes exilis* Kützing); Gil et al. 1989-1990 (as *Achnanthes exilis*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
- References: Gil 1988 (as *Achnanthes exilis* Kützing); Gil et al. 1989-1990 (as *Achnanthes exilis*)
- Municipality: Mealhada (District: Aveiro)
- Site: Viadouros, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Achnanthes exilis*)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Repolão, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Achnanthes exilis*)
- Municipality: Sever do Vouga (District: Aveiro)
- Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
- Reference: Nunes 2007 (as *Achnanthes exilis* Kützing)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Achnanthes exilis* Kützing); Gil et al. 1989-1990 (as *Achnanthes exilis*)
- Site: São João do Monte, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Achnanthes exilis* Kützing)
- Site: Varzielas, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Achnanthes exilis* Kützing)
- Municipality: Tondela (District: Viseu)
- Site: Boi, Agadão River (Vouga Basin)
- Reference: Gil 1988 (as *Achnanthes exilis* Kützing)
- Municipality: Vouzela (District: Viseu)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
- Reference: Gil et al. 1989-1990 (as *Achnanthes exilis*)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Achnanthes exilis* Kützing)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Achnanthes exilis* Kützing); Gil et al. 1989-1990 (as *Achnanthes exilis*)
- Subregion: Médio Tejo

Municipality: Torres Novas (District: Santarém)
Site: Casal da Pinheira, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Achnanthes exilis* Kütz.)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Gil et al. 1991 (as *Achnanthes exilis*)

REGION: ALENTEJO

Subregion: Alentejo Litoral
Municipality: Santiago do Cacém (District: Setúbal)
Site: Campilhas Reservoir, Campilhas Stream (Sado Basin)
Reference: Oliveira 1984a (as *Achnanthes exilis*)
Subregion: Lezíria do Tejo
Municipality: Rio Maior (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Achnanthes exilis* Kütz., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
Reference: Chaves 1908 (as *Achnantes exilis* Ktz.)
Site: Ribeira Quente
Reference: Bourrelly & Manguin 1946a (as *Achnanthes exilis* Kütz.)
Site: Pico da Vara
Reference: Manguin 1942 (as *Achnanthes exilis* Kütz.)
Municipality: Vila Franca do Campo (São Miguel Island)
Site: Lagoa do Congro
References: Manguin 1942 (as *Achnanthes exilis* Kütz.); Bourrelly & Manguin 1946a (as *Achnanthes exilis* Kütz.)
Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Achnanthes exilis* Kützing)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)
Site: Ribeira de João Gomes
Reference: Schodduyn 1927 (as *Achnanthes exilis* Kg.)

REGION: Not specified

Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Achnanthes exilis* Kützing)

***Achnantheidium gracillimum* (F. Meister) Lange-Bertalot in Krammer & Lange-Bertalot 2004**, p. 430 [CAS ref. 013110]

Basionym: *Microneis gracillima* F. Meister 1912 [CAS ref. 000642]

Nomenclatural synonym: *Achnantheidium altergracillima* (Lange-Bertalot) Round & Bukhtiyarova 1996 [CAS ref. 006778]

Distribution:

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

References: Gonçalves 2008 (as *Achnantheidium altergracillima* (Lange-Bertalot) Round & Bukhtiyarova); Gonçalves et al. 2010 (as *Achnantheidium gracillimum* (Meister) Lange-Bertalot, fossil)

***Achnantheidium helveticum* (Hustedt) O. Monnier, Lange-Bertalot & Ector in Monnier et al. 2007**, p. 155 [CAS ref. 012949]

Basionym: *Achnanthes austriaca* var. *helvetica* Hustedt 1933 [CAS ref. 000507]

Nomenclatural synonyms: *Achnanthes helvetica* (Hustedt) Lange-Bertalot in Lange-Bertalot & Krammer 1989 [CAS ref. 006174]

Psammothidium helveticum (Hustedt) Bukhtiyarova & Round 1996 [CAS ref. 006789]

Distribution (Fig. 42):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Arouca (District: Aveiro)

Site: Serra da Freita, Arões, Caima River (Vouga Basin)

References: Nunes 2007 (as *Psammothidium helveticum* (Hustedt) Bukhtiyarova & Round); Ferreira da Silva et al. 2009 (as *Psammothidium helveticum* (Hustedt) Bukhtiyarova et Round)

Municipality: Oliveira de Azeméis (District: Aveiro)

Site: Bustelo do Caima, Ossela, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Psammothidium helveticum* (Hustedt) Bukhtiyarova & Round)

Municipality: Vale de Cambra (District: Aveiro)

Site: São Pedro de Castelões, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Psammothidium helveticum* (Hustedt) Bukhtiyarova & Round)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes helvetica* (Hustedt) Lange-Bertalot)

Site: Santo António, Valmaior, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Psammothidium helveticum* (Hustedt) Bukhtiyarova & Round)

Site: Valmaior (downstream of the mouth of Filvida River), Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes helvetica* (Hustedt) Lange-Bertalot)

Municipality: Sever do Vouga (District: Aveiro)

Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)

Reference: Nunes 2007 (as *Psammothidium helveticum* (Hustedt) Bukhtiyarova & Round)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Almeida 1998 (as *Achnanthes helvetica* (Hustedt) Lange-Bertalot)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Achnanthidium helveticum* (Hustedt) Monnier, Lange-Bertalot & Ector)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Alto-Douro Rivers

Reference: Morais et al. 2009 (as *Achnanthes helvetica* (Hustedt) Lange-Bertalot, Kusber & Metzeltin)

Site: Not specified

Reference: INAG 2008 (as *Achnanthes helvetica* (Hustedt) Lange-Bertalot, Kusber & Metzeltin)

***Achnanthidium jackii* Rabenhorst 1861a**, no. 1003 [CAS ref. 011621]

Nomenclatural synonym: *Achnanthes minutissima* var. *jackii* (Rabenhorst) Lange-Bertalot & Ruppel 1980 [CAS ref. 008475]

Distribution (Fig. 43):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Oliveira de Azeméis (District: Aveiro)

Site: Bustelo do Caima, Ossela, Caima River (Vouga Basin)

Reference: Nunes et al. 2003 (as *Achnanthes minutissimum* Kützing var. *jackii* (Rabenhorst) Lange-Bertalot)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Bosturenga, Ribeira de Fráguas, Coval da Mó Stream (Vouga Basin)

References: Nunes et al. 2003 (as *Achnanthes minutissimum* Kützing var. *jackii* (Rabenhorst) Lange-Bertalot); Nunes 2007 (as *Achnanthidium minutissimum* Kützing var. *jackii* (Rabenhorst) Lange-Bertalot); Ferreira da Silva et al. 2009 (as *Achnanthidium minutissimum* Kützing var. *jackii* (Rabenhorst) Lange-Bertalot)

Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthidium minutissimum* Kützing var. *jackii* (Rabenhorst) Lange-Bertalot)

Site: Valmaior, mouth of Filvida River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthidium minutissimum* Kützing var. *jackii* (Rabenhorst) Lange-Bertalot)

***Achnanthidium lineare* W. Smith 1855**, p. 8; pl. 1, fig. 9 [CAS ref. 000864]

Nomenclatural synonym: *Achnanthes linearis* (W. Smith) Grunow in Cleve & Grunow 1880 [CAS ref. 000241]

Distribution (Fig. 44):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Bragança (District: Bragança)

Site: Izeda

Reference: Zimmermann 1910 (as *Achnanthes linearis* (W. Sm.) Grun.)

- Subregion: Entre Douro e Vouga
Municipality: Vale de Cambra (District: Aveiro)
Site: Vale de Cambra, Caima River (Vouga Basin)
Reference: Almeida 1998 (as *Achnanthes linearis* (W. Smith) Grunow)
- Subregion: Grande Porto
Municipality: Matosinhos (District: Porto)
Site: Not specified
Reference: Zimmermann 1910 (as *Achnanthes linearis* (W. Sm.) Grun.)

REGION: CENTRO

- Subregion: Baixo Vouga
Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Achnanthes linearis* W. Smith)
- Subregion: Beira Interior Norte
Municipality: Guarda (District: Guarda)
Site: Mondego River (Mondego Basin)
References: Carvalho 1913 (as *Achnanthes linearis* W. Sm.); Santos & Carvalho 2001 (as *Achnanthes linearis* W. Sm.)

REGION: AUTONOMOUS REGION OF AZORES

- Municipality: Lajes das Flores (Flores Island)
Site: Lagoinha, Fajãzinha
References: Manguin 1942 (as *Achnanthes linearis* (W. Sm.) Grun.); Bourrelly & Manguin 1946a (as *Achnanthes linearis* (W. Sm.) Grun.)
- Municipality: Ponta Delgada (São Miguel Island)
Site: Lagoa Grande
Reference: Mölder 1947 (as *Achnanthes linearis* (W. Sm.) Grun.)
Site: Lagoa das Sete Cidades
Reference: Mölder 1947 (as *Achnanthes linearis* (W. Sm.) Grun.)
- Municipality: Povoação (São Miguel Island)
Site: Furnas
Reference: Mölder 1947 (as *Achnanthes linearis* (W. Sm.) Grun.)
Site: Lagoa das Furnas
References: Chaves 1908 (as *Achnantidium linearis* Sm.); Mölder 1947 (as *Achnanthes linearis* (W. Sm.) Grun.)
- Site: Pico da Vara
Reference: Mölder 1947 (as *Achnanthes linearis* (W. Sm.) Grun.)
Site: Ribeira Quente
Reference: Mölder 1947 (as *Achnanthes linearis* (W. Sm.) Grun.)
- Municipality: Santa Cruz das Flores (Flores Island)
Site: Not specified
Reference: Mölder 1947 (as *Achnanthes linearis* (W. Sm.) Grun.)
- Municipality: Not specified
Site: Terceira Island
Reference: Johansson 1977 (as *Achnanthes linearis* W. Smith)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Ponta do Sol (Madeira Island)

Site: Rabaçal (Madeira Island)

Reference: Mölder 1947 (as *Achnanthes linearis* (W. Sm.) Grun.)

Municipality: Ribeira Brava (Madeira Island)

Site: Ribeira Brava

Reference: Mölder 1947 (as *Achnanthes linearis* (W. Sm.) Grun.)

Municipality: Santana (Madeira Island)

Site: Ribeiro Frio

Reference: Mölder 1947 (as *Achnanthes linearis* (W. Sm.) Grun.)

***Achnantheidium macrocephalum* (Hustedt) Round & Bukhtiyarova
1996, p. 349 [CAS ref. 006778]**

Basionym: *Achnanthes minutissima* var. *macrocephala* Hustedt 1937a [CAS ref. 001012]

Distribution (Fig. 45):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Achnantheidium minutissimum* Kützing var. *macrocephala* Hustedt)

***Achnantheidium minutissimum* (Kützing) Czarnecki 1994, p. 157
[CAS ref. 008152]**

Basionym: *Achnanthes minutissima* Kützing 1833a [CAS ref. 000594]

Distribution (Fig. 46):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Montalegre (District: Vila Real)

Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1982a (as *Achnanthes minutissima*)

Subregion: Ave

Municipality: Vieira do Minho (District: Braga)

Site: Salamonde Reservoir, Cávado River (Cávado Basin)

Reference: Oliveira 1982a (as *Achnanthes minutissima*)

Subregion: Cávado

Municipality: Barcelos (District: Braga)

Site: Manhente, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Achnanthes minutissima*)

Municipality: Braga (District: Braga)

Site: Padim da Graça, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Achnanthes minutissima*)

Municipality: Esposende (District: Braga)

Site: Marachão, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Achnanthes minutissima*)

Subregion: Entre Douro e Vouga

Municipality: Arouca (District: Aveiro)

Site: Serra da Freita, Arões, Caima River (Vouga Basin)

References: Nunes et al. 2003 (as *Achnanthes minutissima* Kützing);

Nunes 2007 (as *Achnanthidium minutissimum* (Kützing) Czarnecki);

Ferreira da Silva et al. 2009 (as *Achnanthidium minutissimum* (Kütz.)

Czarnecki)

Municipality: Oliveira de Azeméis (District: Aveiro)

Site: Bustelo do Caima, Ossela, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthidium minutissimum* (Kützing)

Czarnecki)

Municipality: São João da Madeira (District: Aveiro)

Site: Ui River (Vouga Basin)

Reference: Resende et al. 2010 (as *Achnanthidium minutissimum*

(Kützing) Czarnecki)

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

References: Almeida 1998 (as *Achnanthes minutissima* Kützing);

Almeida 2001 (as *Achnanthes minutissima* Kützing); Nunes 2007 (as

Achnanthidium minutissimum (Kützing) Czarnecki)

Site: São Pedro de Castelões, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthidium minutissimum* (Kützing)

Czarnecki)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Achnanthes minutissima* Kützing)

Subregion: Grande Porto

Municipality: Vila Nova de Gaia (District: Porto)

Site: Febros River (Douro Basin)

Reference: Cerqueira da Silva 1993 (as *Achnanthes minutissima*)

Subregion: Minho-Lima

Municipality: Caminha (District: Viana do Castelo)

Site: Gondar Stream (Âncora Basin)

Reference: Formigo et al. 1993 (as *Achnanthes minutissima*)

Site: Sains, Âncora River (Âncora Basin)

Reference: Formigo et al. 1993 (as *Achnanthes minutissima*)

Site: Tourim, Âncora River (Âncora Basin)

Reference: Formigo et al. 1993 (as *Achnanthes minutissima*)
Municipality: Viana do Castelo (District: Viana do Castelo)
Site: Alhada, Âncora River (Âncora Basin)
Reference: Formigo et al. 1993 (as *Achnanthes minutissima*)
Site: São Lourenço da Montaria, Âncora River (Âncora Basin)
Reference: Formigo et al. 1993 (as *Achnanthes minutissima*)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Arganil (District: Coimbra)
Site: Fronhas Reservoir, Alva River (Mondego Basin)
Reference: Santos et al. 2002 (as *Achnanthes minutissima* Kützing)
Municipality: Figueira da Foz (District: Coimbra)
Site: Lagoa da Vela, Quiaios
References: Abrantes et al. 2006 (as *Achnanthes minutissima*); de Figueiredo et al. 2006 (as *Achnanthes minutissima* Kützing)
Municipality: Montemor-o-Velho (District: Coimbra)
Site: Irrigation channel near Montemor-o-Velho
Reference: Santos et al. 2002 (as *Achnanthes minutissima* Kützing)
Site: Marsh near Montemor-o-Velho
Reference: Santos et al. 2002 (as *Achnanthes minutissima* Kützing)
Municipality: Soure (District: Coimbra)
Site: Irrigation channel near Soure
Reference: Santos et al. 2002 (as *Achnanthes minutissima* Kützing)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)
Site: Agadão, Agadão River (Vouga Basin)
References: Gil 1988 (as *Achnanthes minutissima* Kützing); Gil et al. 1989-1990 (as *Achnanthes minutissima*)
Site: Águeda, Águeda River (Vouga Basin)
References: Gil 1988 (as *Achnanthes minutissima* Kützing); Gil et al. 1989-1990 (as *Achnanthes minutissima*); Almeida 1998 (as *Achnanthes minutissima* Kützing)
Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)
Reference: Almeida 1998 (as *Achnanthes minutissima* Kützing)
Site: Aldeia, Segadães, Vouga River (Vouga Basin)
Reference: Almeida 1998 (as *Achnanthes minutissima* Kützing)
Site: Avelal de Baixo, Águeda River (Vouga Basin)
References: Gil 1988 (as *Achnanthes minutissima* Kützing); Gil et al. 1989-1990 (as *Achnanthes minutissima*)
Site: Bolfiar, Águeda River (Vouga Basin)
References: Gil 1988 (as *Achnanthes minutissima* Kützing); Gil et al. 1989-1990 (as *Achnanthes minutissima*)
Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

- References: Gil 1988 (as *Achnanthes minutissima* Kützing); Gil et al. 1989-1990 (as *Achnanthes minutissima*)
- Site: Murta, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Achnanthes minutissima*)
- Site: Óis da Ribeira, Águeda River (Vouga Basin)
Reference: Almeida 1998 (as *Achnanthes minutissima* Kützing)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Achnanthes minutissima* Kützing); Gil et al. 1989-1990 (as *Achnanthes minutissima*)
- Site: Raivo, Águeda River (Vouga Basin)
References: Gil 1988 (as *Achnanthes minutissima* Kützing); Gil et al. 1989-1990 (as *Achnanthes minutissima*)
- Site: Redonda, Águeda River (Vouga Basin)
References: Gil 1988 (as *Achnanthes minutissima* Kützing); Gil et al. 1989-1990 (as *Achnanthes minutissima*)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Achnanthes minutissima* Kützing); Gil et al. 1989-1990 (as *Achnanthes minutissima*)
- Site: Sernada do Vouga, Vouga River (Vouga Basin)
References: Nunes 2007 (as *Achnanthidium minutissimum* (Kütz.) Czarnecki); Ferreira da Silva et al. 2009 (as *Achnanthidium minutissimum* (Kütz.) Czarnecki)
- Municipality: Albergaria-a-Velha (District: Aveiro)
- Site: Bosturenga, Ribeira de Fráguas, Coval da Mó Stream (Vouga Basin)
References: Nunes et al. 2003 (as *Achnanthes minutissima* Kützing); Nunes 2007 (as *Achnanthidium minutissimum* (Kützing) Czarnecki); Ferreira da Silva et al. 2009 (as *Achnanthidium minutissimum* (Kütz.) Czarnecki)
- Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)
References: Nunes et al. 2003 (as *Achnanthes minutissima* Kützing); Nunes 2007 (as *Achnanthidium minutissimum* (Kützing) Czarnecki)
- Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Achnanthes minutissima* Kützing)
- Site: Ribeira de Fráguas, Coval da Mó Mine, Coval da Mó Stream (Vouga Basin)
References: Nunes 2007 (as *Achnanthidium minutissimum* (Kützing) Czarnecki); Ferreira da Silva et al. 2009 (as *Achnanthidium minutissimum* (Kütz.) Czarnecki)
- Site: Ribeira de Fráguas, Palhal Mine, Caima River (Vouga Basin)
References: Nunes et al. 2003 (as *Achnanthes minutissima* Kützing); Nunes 2007 (as *Achnanthidium minutissimum* (Kützing) Czarnecki)
- Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)
References: Nunes et al. 2003 (as *Achnanthes minutissima* Kützing); Nunes 2007 (as *Achnanthidium minutissimum* (Kützing) Czarnecki)

- Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)
 Reference: Nunes et al. 2003 (as *Achnanthes minutissima* Kützing);
 Nunes 2007 (as *Achnanthidium minutissimum* (Kützing) Czarnecki)
- Site: Santo António, Valmaior, Caima River (Vouga Basin)
 Reference: Nunes et al. 2003 (as *Achnanthes minutissima* Kützing)
- Site: Santo António, Valmaior, Caima River (Vouga Basin)
 Reference: Nunes 2007 (as *Achnanthidium minutissimum* (Kützing) Czarnecki)
- Site: Valmaior, mouth of Filvida River (Vouga Basin)
 References: Nunes et al. 2002 (as *Achnanthidium minutissimum* (Kützing) Czarnecki); Nunes et al. 2003 (as *Achnanthes minutissima* Kützing);
 Nunes 2007 (as *Achnanthidium minutissimum* (Kützing) Czarnecki);
 Ferreira da Silva et al. 2009 (as *Achnanthidium minutissimum* (Kütz.) Czarnecki)
- Site: Valmaior (downstream of the mouth of Filvida River), Caima River (Vouga Basin)
 References: Nunes et al. 2003 (as *Achnanthes minutissima* Kützing);
 Nunes 2007 (as *Achnanthidium minutissimum* (Kützing) Czarnecki);
 Nunes 2007 *Achnanthidium minutissimum* (Kützing) Czarnecki, teratological form);
 Ferreira da Silva et al. 2009 (as *Achnanthidium minutissimum* (Kütz.) Czarnecki)
- Municipality: Anadia (District: Aveiro)
- Site: Curia, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Achnanthes minutissima*)
- Site: Espairo, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Achnanthes minutissima*)
- Site: Mogofores, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Achnanthes minutissima*)
- Site: São João da Azenha, Cértima River (Vouga Basin)
 References: Rino & Gil 1989 (as *Achnanthes minutissima*); Almeida 1998
 (as *Achnanthes minutissima* Kützing)
- Site: Tamengos, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Achnanthes minutissima*)
- Municipality: Aveiro (District: Aveiro)
- Site: Aveiro, lake in the municipal park (artificial substrate)
 Reference: Gil & Almeida 1993 (as *Achnanthes minutissima* Kützing)
- Site: Eixo, Horta Stream (Vouga Basin)
 Reference: Almeida 1998 (as *Achnanthes minutissima* Kützing)
- Site: Pano, Largo River (Vouga Basin)
 Reference: Almeida 1998 (as *Achnanthes minutissima* Kützing)
- Site: Requeixo, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Achnanthes minutissima* Kützing)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

- References: Gil 1988 (as *Achnanthes minutissima* Kützing); Gil et al. 1989-1990 (as *Achnanthes minutissima*)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Achnanthes minutissima* Kützing); Gil et al. 1989-1990 (as *Achnanthes minutissima*)
 Site: Vessada, Fontão Creek (Vouga Basin)
 Reference: Almeida 1998 (as *Achnanthes minutissima* Kützing)
 Municipality: Estarreja (District: Aveiro)
 Site: Estarreja, Antuã River (Vouga Basin)
 Reference: Almeida 1998 (as *Achnanthes minutissima* Kützing)
 Site: Minhoteira, Antuã River (Vouga Basin)
 Reference: Almeida 1998 (as *Achnanthes minutissima* Kützing)
 Municipality: Mealhada (District: Aveiro)
 Site: Pampilhosa, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Achnanthes minutissima*)
 Site: Viadouros, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Achnanthes minutissima*)
 Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Achnanthes minutissima*)
 Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Achnanthes minutissima* Kützing)
 Site: Perrães, Levira River (Vouga Basin)
 Reference: Almeida 1998 (as *Achnanthes minutissima* Kützing)
 Site: Perrães, Cértima River (Vouga Basin)
 References: Rino & Gil 1989 (as *Achnanthes minutissima*); Almeida 1998 (as *Achnanthes minutissima* Kützing)
 Site: Repolão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Achnanthes minutissima*)
 Site: Vila Verde, Levira River (Vouga Basin)
 References: Almeida 1998 (as *Achnanthes minutissima* Kützing); Almeida 2001 (as *Achnanthes minutissima* Kützing)
 Municipality: Sever do Vouga (District: Aveiro)
 Site: Pessegueiro do Vouga (mouth of Mau River), Vouga River (Vouga Basin)
 References: Nunes et al. 2003 (as *Achnanthes minutissima* Kützing); Nunes 2007 (as *Achnanthidium minutissimum* (Kützing) Czarnecki)
 Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
 Reference: Nunes 2007 (as *Achnanthidium minutissimum* (Kützing) Czarnecki)
 Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)
 References: Nunes et al. 2003 (as *Achnanthes minutissima* Kützing); Nunes 2007 (as *Achnanthidium minutissimum* (Kützing) Czarnecki)
 Site: Silva Escura (upstream of the Braçal Mine), Mau River (Vouga Basin)

- References: Nunes et al. 2003 (as *Achnanthes minutissima* Kützing)
 Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)
- References: Nunes et al. 2003 (as *Achnanthes minutissima* Kützing);
 Nunes 2007 (as *Achnanthidium minutissimum* (Kützing) Czarnecki)
- Municipality: Not specified
 Site: Pateira de Fermentelos (District: Aveiro)
 Reference: Calado 1991 (as *Achnanthes minutissima* Kützing)
- Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Achnanthes minutissima* Kützing); Gil et al. 1989-1990 (as *Achnanthes minutissima*)
 Site: São João do Monte, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Achnanthes minutissima* Kützing); Gil et al. 1989-1990 (as *Achnanthes minutissima*)
 Site: Varzielas, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Achnanthes minutissima* Kützing); Gil et al. 1989-1990 (as *Achnanthes minutissima*)
- Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 References: Gil 1988 (as *Achnanthes minutissima* Kützing); Gil et al. 1989-1990 (as *Achnanthes minutissima*)
 Site: In the proximity of Tondela, Criz River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Achnanthes minutissima* Kützing)
- Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil et al. 1989-1990 (as *Achnanthes minutissima*)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes minutissima* Kützing)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Achnanthes minutissima* Kützing); Gil et al. 1989-1990 (as *Achnanthes minutissima*)
- Subregion: Médio Tejo
 Municipality: Abrantes (District: Santarém)
 Site: Tramagal, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Achnanthes minutissima*)
- Municipality: Tomar (District: Santarém)
 Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
 References: Cabeçadas et al. 1980 (as *Achnanthes minutissima*); Ferreira 1986 (as *Achnanthes minutissima*); Brito & Andrade 1992 (as *Achnanthes minutissima*)
- Subregion: Pinhal Interior Norte
 Municipality: Pampilhosa da Serra (District: Coimbra)
 Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Achnanthes minutissima* Kützing)

- Site: Santa Luzia Reservoir, Unhais River (Tagus Basin)
Reference: Oliveira 1982b (as *Achnanthes minutissima*)
- Municipality: Pedrógão Grande (District: Leiria)
Site: Bouçã Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Achnanthes minutissima*)
- Site: Cabril Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Achnanthes minutissima*)
- Subregion: Pinhal Interior Sul
Municipality: Mação (District: Santarém)
Site: Pracana Reservoir, Ocreza River (Tagus Basin)
Reference: Oliveira 1982b (as *Achnanthes minutissima*)
- Subregion: Serra da Estrela
Municipality: Seia (District: Guarda)
Site: Lagoa Comprida Reservoir, Lagoa Stream (Mondego Basin)
Reference: Santos et al. 2002 (as *Achnanthes minutissima* Kützing)
- Site: Sabugueiro, Vale do Rossim Reservoir
Reference: Santos et al. 2002 (as *Achnanthes minutissima* Kützing)
- Site: São Romão, Lagoa do Covão do Curral
Reference: Santos et al. 2002 (as *Achnanthes minutissima* Kützing)
- Subregion: Not specified
Municipality: Not specified
Site: Paiva River (Douro Basin)
References: Cerqueira da Silva 1994 (as *Achnanthes minutissima*);
Cerqueira da Silva et al. 1993 (as *Achnanthes minutissima*)
- Site: Not specified
References: Calado 1990 (as *Achnanthes minutissima* Kützing); Gil et al.
1991 (as *Achnanthes minutissima*); Feio et al. 2007 (as *Achnanthidium
minutissimum*)
- REGION: ALENTEJO
- Subregion: Alentejo Litoral
Municipality: Alcácer do Sal (District: Setúbal)
Site: São Romão, Sado River (Sado Basin)
Reference: Coutinho 2003 (as *Achnanthes minutissima* Kützing)
- Municipality: Odemira (District: Beja)
Site: Santa Clara Reservoir, Mira River (Mira Basin)
Reference: Oliveira 1987 (as *Achnanthes minutissima* Kz.)
- Municipality: Santiago do Cacém (District: Setúbal)
Site: Campilhas Reservoir, Campilhas Stream (Sado Basin)
Reference: Oliveira 1984a (as *Achnanthes minutissima*)
- Municipality: Not specified
Site: Sado River (Sado Basin)
Reference: Monteiro et al. 1995 (as *Achnanthes minutissima*)
- Subregion: Alto Alentejo
Municipality: Avis (District: Portalegre)
Site: Maranhão Reservoir, Raia Stream (Tagus Basin)

Reference: Oliveira 1984c (as *Achnanthes minutissima*)

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Água Azeda, Água Azeda Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Achnanthidium minutissimum* (Kützing) Czarnecki)

Site: Jungeiros, Roxo Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Achnanthidium minutissimum* (Kützing) Czarnecki)

Municipality: Mértola (District: Beja)

Site: Acid mine drainage of the São Domingos mine

Reference: Gerhardt et al. 2008 (as *Achnanthes minutissima* Kützing var. *min.*)

Site: Reservoir in the abandoned São Domingos mine

Reference: Gerhardt et al. 2008 (as *Achnanthes minutissima* Kützing var. *min.*)

Subregion: Lezíria do Tejo

Municipality: Rio Maior (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Achnanthes minutissima* Kütz., fossil)

Subregion: Not specified

Municipality: Not specified

Site: Vascão River (in the edge of the Guadiana Nature Reserve), (Guadiana Basin)

Reference: Gerhardt et al. 2008 (as *Achnanthes minutissima* Kützing var. *min.*)

REGION: LISBOA

Subregion: Península de Setúbal

Municipality: Sesimbra (District: Setúbal)

Site: Alfarim diatomite

Reference: Ferreira & Castelo 1957 (as *Achnanthes minutissima* Kütz., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)

Site: Lagoa da Achada

Reference: Mölder 1947 (as *Achnanthes minutissima* Kütz.)

Municipality: Corvo (Corvo Island)

Site: Caldeira

Reference: Mölder 1947 (as *Achnanthes minutissima* Kütz.)

Municipality: Povoação (São Miguel Island)

Site: Furnas

References: Holmboe 1901 (as *Achnanthes minutissima* Kütz.); Mölder 1947 (as *Achnanthes minutissima* Kütz.)

Site: Lagoa das Furnas

- References: Holmboe 1901 (as *Achnanthes minutissima* Kütz.); Chaves 1908 (as *Achnantes minutissima* Ehr.); Manguin 1942 (as *Achnanthes minutissima* Kütz.); Bourrelly & Manguin 1946a (as *Achnanthes minutissima* Kütz.); Mölder 1947 (as *Achnanthes minutissima* Kütz.)
- Site: Lagoa Grande
Reference: Mölder 1947 (as *Achnanthes minutissima* Kütz.)
- Site: Lagoa Pequena
Reference: Holmboe 1901 (as *Achnanthes minutissima* Kütz.)
- Site: Pico da Vara
References: Manguin 1942 (as *Achnanthes minutissima* Kütz.); Bourrelly & Manguin 1946a (as *Achnanthes minutissima* Kütz.); Mölder 1947 (as *Achnanthes minutissima* Kütz.)
- Municipality: Ponta Delgada (São Miguel Island)
Site: Lagoa das Sete Cidades
References: Holmboe 1901 (as *Achnanthes minutissima* Kütz.); Mölder
- Municipality: Santa Cruz das Flores (Flores Island)
Site: Not specified
Reference: Mölder 1947 (as *Achnanthes minutissima* Kütz.)
- Municipality: Santa Cruz da Graciosa (Graciosa Island)
Site: Barreiro
Reference: Azevedo et al. 2005 (as *Achnanthes minutissima*)
- Site: Fundão, Caldeira
Reference: Azevedo et al. 2005 (as *Achnanthes minutissima*)
- Site: Tanque
Reference: Azevedo et al. 2005 (as *Achnanthes minutissima*)
1947 (as *Achnanthes minutissima* Kütz.)
- Municipality: Not specified
Site: Corvo Island
Reference: Gonçalves et al. 2010 (as *Achnanthidium minutissimum* (Kützing) Czarnecki)
- Site: Faial Island
Reference: Gonçalves et al. 2010 (as *Achnanthidium minutissimum* (Kützing) Czarnecki)
- Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Achnanthidium minutissimum* (Kützing) Czarnecki)
- Site: Graciosa Island
Reference: Gonçalves et al. 2010 (as *Achnanthidium minutissimum* (Kützing) Czarnecki)
- Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Achnanthidium minutissimum* (Kützing) Czarnecki)
- Site: Santa Maria Island
Reference: Gonçalves et al. 2010 (as *Achnanthidium minutissimum* (Kützing) Czarnecki)
- Site: São Jorge Island

References: Johansson 1977 (as *Achnanthes minutissima* Kütz.);
Gonçalves et al. 2010 (as *Achnanthidium minutissimum* (Kützing)
Czarnecki)

Site: São Miguel Island (upstream sites)

Reference: Gonçalves et al. 2008 (as *Achnanthidium minutissimum*)

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Achnanthidium minutissimum*
(Kützing) Czarnecki)

Site: Not specified

Reference: Gonçalves 2008 (as *Achnanthidium minutissimum* (Kützing)
Czarnecki)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Santana (Madeira Island)

Site: Ribeiro Frio

Reference: Mölder 1947 (as *Achnanthes minutissima* Kütz.)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Alto-Douro Rivers

Reference: Morais et al. 2009 (as *Achnanthes minutissima* Kützing v.
minutissima Kützing (= *Achnanthidium*))

Site: Mountain Rivers in the North

Reference: Morais et al. 2009 (as *Achnanthes minutissima* Kützing v.
minutissima Kützing (= *Achnanthidium*))

Site: North-South Transition Rivers and Mountain Rivers in the South

Reference: Morais et al. 2009 (as *Achnanthes minutissima* Kützing v.
minutissima Kützing (= *Achnanthidium*))

Site: Rivers in the North

Reference: Morais et al. 2009 (as *Achnanthes minutissima* Kützing v.
minutissima Kützing (= *Achnanthidium*))

Site: Rivers in the South

Reference: Morais et al. 2009 (as *Achnanthes minutissima* Kützing v.
minutissima Kützing (= *Achnanthidium*))

Site: Tagus and Sado Sedimentary Deposits

Reference: Morais et al. 2009 (as *Achnanthes minutissima* Kützing v.
minutissima Kützing (= *Achnanthidium*))

Site: Tagus riverbanks (Tagus Basin)

Reference: Ehrenberg 1845a (as *Achnanthes minutissima*)

Site: Not specified

Reference: INAG 2008 (as *Achnanthes minutissima* Kützing v.
minutissima Kützing (= *Achnanthidium*))

***Achnanthidium minutissimum* var. *affinis* (Grunow) Bukhtiyarova
1995, p. 420 [CAS ref. 008000]**

Basionym: *Achnanthes affinis* Grunow in Cleve & Grunow 1880 [CAS ref. 000241]

Distribution (Fig. 47):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Oliveira de Azeméis (District: Aveiro)

Site: Bustelo do Caima, Ossela, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthidium minutissimum* (Kützing)

Czarnecki var. *affinis* (Grunow) Bukhtiyarova)

Subregion: Grande Porto

Municipality: Vila Nova de Gaia (District: Porto)

Site: Febros River (Douro Basin)

Reference: Cerqueira da Silva 1993 (as *Achnanthes affinis*)

Subregion: Minho-Lima

Municipality: Not specified

Site: Minho River, international section (Minho Basin)

Reference: Vasconcelos & Cerqueira 2001 (as *Achnanthes affinis*)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Achnanthes minutissima* var. *affinis*
(Grunow) Lange-Bertalot)

Subregion: Baixo Vouga

Site: Pateira de Fermentelos (District: Aveiro)

Reference: Calado 1991 (as *Achnanthes affinis* Grunow)

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes affinis* Grunow)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes affinis* Grunow)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes affinis* Grunow)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes affinis* Grunow)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers
(Vouga Basin)

Reference: Gil 1988 (as *Achnanthes affinis* Grunow)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes affinis* Grunow)

Site: Raivo, Águeda River (Vouga Basin)

- Reference: Gil 1988 (as *Achnanthes affinis* Grunow)
 Site: Redonda, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes affinis* Grunow)
 Site: Ribeiro, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes affinis* Grunow)
 Municipality: Albergaria-a-Velha (District: Aveiro)
 Site: Ribeira de Frágoas, Bosturenga, Coval da Mó Stream (Vouga Basin)
 Reference: Nunes 2007 (as *Achnanthidium minutissimum* (Kützing)
 Czarnecki var. *affinis* (Grunow) Bukhtiyarova)
 Site: Valmaior, River Filvida (Vouga Basin)
 Reference: Nunes 2007 (as *Achnanthidium minutissimum* (Kützing)
 Czarnecki var. *affinis* (Grunow) Bukhtiyarova)
 Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima
 River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes affinis* Grunow)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima
 River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes affinis* Grunow)
 Municipality: Sever do Vouga (District: Aveiro)
 Site: Pessegueiro do Vouga, upstream of the mouth of Mau River (Vouga
 Basin)
 Reference: Nunes 2007 (as *Achnanthidium minutissimum* (Kützing)
 Czarnecki var. *affinis* (Grunow) Bukhtiyarova)
 Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)
 Reference: Nunes 2007 (as *Achnanthidium minutissimum* (Kützing)
 Czarnecki var. *affinis* (Grunow) Bukhtiyarova)
 Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes affinis* Grunow)
 Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes affinis* Grunow)
 Site: Varzuelas, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes affinis* Grunow)
 Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes affinis* Grunow)
 Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes affinis* Grunow)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Achnanthes affinis* Grunow)
 Subregion: Médio Tejo
 Municipality: Abrantes (District: Santarém)
 Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Achnanthes affinis*)
Site: Forno Novo, Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Achnanthes affinis*)
Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
Reference: Brito & Andrade 1992 (as *Achnanthes affinis*)
Subregion: Serra da Estrela
Municipality: Seia (District: Guarda)
Site: Sabugueiro, Vale do Rossim Reservoir
Reference: Santos et al. 2002 (as *Achnanthes minutissima* var. *affinis*
(Grunow) Lange-Bertalot)
Subregion: Not specified
Municipality: Not specified
Site: Paiva River (Douro Basin)
References: Cerqueira da Silva 1991 (as *Achnanthes affinis*); Cerqueira
da Silva et al. 1993 (as *Achnanthes affinis*)
Site: Not specified
Reference: Calado 1990 (as *Achnanthes affinis* Grunow)

REGION: LISBOA

Subregion: Grande Lisboa
Municipality: Mafra (District: Lisboa)
Site: Tapada de Mafra, Sobral da Abelheira
Reference: Oliveira 1971b (as *Achnanthes affinis*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)
Site: Lagoa Rasa
References: Manguin 1942 (as *Achnanthes affinis* Grunow); Bourrelly &
Manguin 1946a (as *Achnanthes affinis* Grunow)
Municipality: Not specified
Site: São Jorge Island
Reference: Johansson 1977 (as *Achnanthes affinis* Grunow)

***Achnanthidium minutissimum* f. *inconspicuum* (Østrup) Compère
& Riaux-Gobin 2009, p. 40 [CAS ref. 013363]**

Basionym: *Achnanthes minutissima* var. *inconspicua* Østrup 1910 [CAS ref.
000706]

Distribution (Fig. 48):

REGION: CENTRO
Subregion: Baixo Vouga
Municipality: Águeda (District: Aveiro)

- Site: Sernada do Vouga, Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Achnanthidium minutissimum* Kützing var. *inconspicua* Oestrup)
- Municipality: Albergaria-a-Velha (District: Aveiro)
Site: Ribeira de Fráguas, Palhal Mine, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Achnanthidium minutissimum* Kützing var. *inconspicua* Oestrup)
- Site: Santo António, Valmaior, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Achnanthidium minutissimum* Kützing var. *inconspicua* Oestrup)
- Site: Valmaior, mouth of Filvida River (Vouga Basin)
References: Nunes et al. 2002 (as *Achnanthes (Achnanthidium) minutissima* Kützing var. *inconspicua* Oestrup); Nunes 2007 (as *Achnanthidium minutissimum* Kützing var. *inconspicua* Oestrup); Ferreira da Silva et al. 2009 (as *Achnanthidium minutissimum* var. *inconspicua* Oestrup)

***Achnanthidium rosenstockii* (Lange-Bertalot) Lange-Bertalot in Krammer & Lange-Bertalot 2004, p. 433 [CAS ref. 013110]**

Basionym: *Achnanthes rosenstockii* Lange-Bertalot in Lange-Bertalot & Krammer 1989 [CAS ref. 006174]

Distribution (Fig. 49):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Psammothidium rosenstockii* (Lange-Bertalot) Lange-Bertalot)

Site: Not specified

Reference: Gonçalves 2008 (as *Psammothidium rosenstockii* (Lange-Bertalot) Lange-Bertalot)

***Achnanthidium saprophilum* (H. Kobayasi & Mayama) Round & Bukhtiyarova 1996, p. 349 [CAS ref. 006778]**

Basionym: *Achnanthes minutissima* var. *saprophila* H. Kobayasi & Mayama 1982 [CAS ref. 008434]

Distribution (Fig. 50):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Oliveira de Azeméis (District: Aveiro)
Site: Bustelo do Caima, Ossela, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Achnanthidium saprophila* (Kobayasi & Mayama) Round & Bukhtiyarova)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)
Site: Sernada do Vouga, Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Achnanthidium saprophila* (Kobayasi & Mayama) Round & Bukhtiyarova)

Municipality: Albergaria-a-Velha (District: Aveiro)
Site: Bosturenga, Ribeira de Fráguas, Coval da Mó Stream (Vouga Basin)
References: Nunes 2007 (as *Achnanthidium saprophila* (Kobayasi & Mayama) Round & Bukhtiyarova); Ferreira da Silva et al. 2009 (as *Achnanthidium saprophilum* (Kobayasi et Mayama) Round & Bukhtiyarova)

Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Achnanthidium saprophila* (Kobayasi & Mayama) Round & Bukhtiyarova)

Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Achnanthidium saprophila* (Kobayasi & Mayama) Round & Bukhtiyarova)

Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)
References: Nunes et al. 2003 (as *Achnanthes minutissima* Kützing var. *saprophila* Kobayasi et Mayama); Nunes 2007 (as *Achnanthidium saprophila* (Kobayasi & Mayama) Round & Bukhtiyarova)

Site: Santo António, Valmaior, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Achnanthidium saprophila* (Kobayasi & Mayama) Round & Bukhtiyarova)

Site: Valmaior, mouth of Filvida River (Vouga Basin)
References: Nunes et al. 2003 (as *Achnanthes minutissima* Kützing var. *saprophila* Kobayasi et Mayama); Nunes 2007 (as *Achnanthidium saprophila* (Kobayasi & Mayama) Round & Bukhtiyarova); Ferreira da Silva et al. 2009 (as *Achnanthidium saprophilum* (Kobayasi et Mayama) Round & Bukhtiyarova)

Site: Valmaior (downstream of the mouth of Filvida River), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Achnanthidium saprophila* (Kobayasi & Mayama) Round & Bukhtiyarova)

Municipality: Sever do Vouga (District: Aveiro)
Site: Silva Escura (upstream of the Braçal Mine), Mau River (Vouga Basin)
Reference: Nunes et al. 2003 (as *Achnanthes minutissima* Kützing var. *saprophila* Kobayasi et Mayama)

Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)

Reference: Nunes 2007 (as *Achnantheidium saprophila* (Kobayasi & Mayama) Round & Bukhtiyarova)

Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)

Reference: Nunes et al. 2003 (as *Achnanthes minutissima* Kützing var. *saprophila* Kobayasi et Mayama)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Achnantheidium saprophilum* (H. Kobayasi & S. Mayama) F.E. Round & L. Bukhtiyarova)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Achnantheidium saprophilum* (H. Kobayasi & S. Mayama) F.E. Round & L. Bukhtiyarova)

Site: Not specified

Reference: Gonçalves 2008 (as *Achnantheidium saprophila* (Kobayasi et Mayama) Round & Bukhtiyarova)

***Achnantheidium subatomoides* (Hustedt) O. Monnier, Lange-Bertalot & Ector in Monnier et al. 2007, p. 155 [CAS ref. 012949]**

Basionym: *Navicula subatomoides* Hustedt in Schmidt et al. 1936 [CAS ref. 012519]

Nomenclatural synonyms: *Achnanthes subatomoides* (Hustedt in Schmidt et al. 1936) Lange-Bertalot & R.E.M. Archibald in Krammer & Lange-Bertalot 1985 [CAS ref. 006263]

Psammothidium subatomoides (Hustedt) Bukhtiyarova & Round 1996 [CAS ref. 006778]

Distribution (Fig. 51):

REGION: NORTE

Subregion: Cávado

Municipality: Barcelos (District: Braga)

Site: Barcelos, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Achnanthes subatomoides*)

Municipality: Esposende (District: Braga)

Site: Marachão, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Achnanthes subatomoides*)

Municipality: Not specified

Site: Entrepontes, Cávado River (Cávado Basin)

- Reference: Cerqueira da Silva 1992 (as *Achnanthes subatomoides*)
 Site: Homem River (Cávado Basin)
 Reference: Cerqueira da Silva 1992 (as *Achnanthes subatomoides*)
- Subregion: Entre Douro e Vouga
 Municipality: Arouca (District: Aveiro)
 Site: Serra da Freita, Arões, Caima River (Vouga Basin)
 References: Nunes et al. 2003 (as *Achnanthes subatomoides* (Hustedt) Lange-Bertalot et Archibald); Nunes 2007 (as *Psammothidium subatomoides* (Hustedt) Bukhtiyarova & Round); Ferreira da Silva et al. 2009 (as *Psammothidium subatomoides* (Hustedt) Bukht. et Round)
- Municipality: Oliveira de Azeméis (District: Aveiro)
 Site: Bustelo do Caima, Ossela, Caima River (Vouga Basin)
 Reference: Nunes 2007 (as *Psammothidium subatomoides* (Hustedt) Bukhtiyarova & Round)
- Municipality: São João da Madeira (District: Aveiro)
 Site: Ui River (Vouga Basin)
 Reference: Resende et al. 2010 (as *Achnanthes subatomoides* (Hustedt) Lange-Bertalot)
- Municipality: Vale de Cambra (District: Aveiro)
 Site: Barbeito, Caima River (Vouga Basin)
 References: Almeida 1998 (as *Achnanthes subatomoides* (Hust.) L.-B. & Arch.); Almeida 2001 (as *Achnanthes subatomoides* (Hust.) L.-B. & Arch.); Nunes 2007 (as *Psammothidium subatomoides* (Hustedt) Bukhtiyarova & Round)
- Site: São Pedro de Castelões, Caima River (Vouga Basin)
 Reference: Nunes 2007 (as *Psammothidium subatomoides* (Hustedt) Bukhtiyarova & Round)
- Site: Vale de Cambra, Caima River (Vouga Basin)
 Reference: Almeida 1998 (as *Achnanthes subatomoides* (Hust.) L.-B. & Arch.)

REGION: CENTRO

- Subregion: Baixo Mondego
 Municipality: Arganil (District: Coimbra)
 Site: Fronhas Reservoir, Alva River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Achnanthes subatomoides* (Hustedt) Lange-Bertalot)
- Municipality: Montemor-o-Velho (District: Coimbra)
 Site: Marsh near Montemor-o-Velho
 Reference: Santos et al. 2002 (as *Achnanthes subatomoides* (Hustedt) Lange-Bertalot)
- Subregion: Baixo Vouga
 Municipality: Águeda (District: Aveiro)
 Site: Agadão, Agadão River (Vouga Basin)
 References: Gil 1988 (as *Achnanthes subatomoides* (Hust.) Lange-Bertalot); Gil et al. 1989-1990 (as *Achnanthes subatomoides*)

- Site: Águeda, Águeda River (Vouga Basin)
References: Gil 1988 (as *Achnanthes subatomoides* (Hust.) Lange-Bertalot); Gil et al. 1989-1990 (as *Achnanthes subatomoides*); Almeida 1998 (as *Achnanthes subatomoides* (Hust.) L.-B. & Arch.)
- Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)
Reference: Almeida 1998 (as *Achnanthes subatomoides* (Hust.) L.-B. & Arch.)
- Site: Aldeia, Segadães, Vouga River (Vouga Basin)
Reference: Almeida 1998 (as *Achnanthes subatomoides* (Hust.) L.-B. & Arch.)
- Site: Avelal de Baixo, Águeda River (Vouga Basin)
References: Gil 1988 (as *Achnanthes subatomoides* (Hust.) Lange-Bertalot); Gil et al. 1989-1990 (as *Achnanthes subatomoides*)
- Site: Bolfiar, Águeda River (Vouga Basin)
References: Gil 1988 (as *Achnanthes subatomoides* (Hust.) Lange-Bertalot); Gil et al. 1989-1990 (as *Achnanthes subatomoides*)
- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
References: Gil 1988 (as *Achnanthes subatomoides* (Hust.) Lange-Bertalot); Gil et al. 1989-1990 (as *Achnanthes subatomoides*)
- Site: Óis da Ribeira, Águeda River (Vouga Basin)
Reference: Almeida 1998 (as *Achnanthes subatomoides* (Hust.) L.-B. & Arch.)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Achnanthes subatomoides* (Hust.) Lange-Bertalot); Gil et al. 1989-1990 (as *Achnanthes subatomoides*)
- Site: Raivo, Águeda River (Vouga Basin)
References: Gil 1988 (as *Achnanthes subatomoides* (Hust.) Lange-Bertalot); Gil et al. 1989-1990 (as *Achnanthes subatomoides*)
- Site: Redonda, Águeda River (Vouga Basin)
References: Gil 1988 (as *Achnanthes subatomoides* (Hust.) Lange-Bertalot); Gil et al. 1989-1990 (as *Achnanthes subatomoides*)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Achnanthes subatomoides* (Hust.) Lange-Bertalot); Gil et al. 1989-1990 (as *Achnanthes subatomoides*)
- Site: Sernada do Vouga, Vouga River (Vouga Basin)
References: Nunes 2007 (as *Psammothidium subatomoides* (Hustedt) Bukhtiyarova & Round); Ferreira da Silva et al. 2009 (as *Psammothidium subatomoides* (Hustedt) Bukht. et Round)
- Municipality: Albergaria-a-Velha (District: Aveiro)
- Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Psammothidium subatomoides* (Hustedt) Bukhtiyarova & Round)
- Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Achnanthes subatomoides* (Hust.) L.-B. & Arch.)

- Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)
 References: Nunes et al. 2003 (as *Achnanthes subatomoides* (Hustedt) Lange-Bertalot et Archibald); Nunes 2007 (as *Psammothidium subatomoides* (Hustedt) Bukhtiyarova & Round)
- Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)
 Reference: Nunes 2007 (as *Psammothidium subatomoides* (Hustedt) Bukhtiyarova & Round)
- Site: Santo António, Valmaior, Caima River (Vouga Basin)
 Reference: Nunes 2007 (as *Psammothidium subatomoides* (Hustedt) Bukhtiyarova & Round)
- Site: Valmaior (downstream of the mouth of Filvida River), Caima River (Vouga Basin)
 References: Nunes 2007 (as *Psammothidium subatomoides* (Hustedt) Bukhtiyarova & Round); Ferreira da Silva et al. 2009 (as *Psammothidium subatomoides* (Hustedt) Bukht. et Round)
- Site: Valmaior, mouth of Filvida River (Vouga Basin)
 Reference: Nunes 2007 (as *Psammothidium subatomoides* (Hustedt) Bukhtiyarova & Round)
- Municipality: Anadia (District: Aveiro)
 Site: São João de Azenha, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Achnanthes subatomoides* (Hust.) L.-B. & Arch.)
- Municipality: Aveiro (District: Aveiro)
 Site: Requeixo, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Achnanthes subatomoides* (Hust.) L.-B. & Arch.)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Achnanthes subatomoides* (Hust.) Lange-Bertalot); Gil et al. 1989-1990 (as *Achnanthes subatomoides*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Achnanthes subatomoides* (Hust.) Lange-Bertalot); Gil et al. 1989-1990 (as *Achnanthes subatomoides*)
- Municipality: Estarreja (District: Aveiro)
 Site: Estarreja, Antuã River (Vouga Basin)
 Reference: Almeida 1998 (as *Achnanthes subatomoides* (Hust.) L.-B. & Arch.)
- Site: Minhoteira, Antuã River (Vouga Basin)
 Reference: Almeida 1998 (as *Achnanthes subatomoides* (Hust.) L.-B. & Arch.)
- Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)

- Reference: Almeida 1998 (as *Achnanthes subatomoides* (Hust.) L.-B. & Arch.)
- Municipality: Sever do Vouga (District: Aveiro)
- Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
- Reference: Nunes 2007 (as *Psammothidium subatomoides* (Hustedt) Bukhtiyarova & Round)
- Site: Pessegueiro do Vouga (mouth of Mau River), Vouga River (Vouga Basin)
- Reference: Nunes 2007 (as *Psammothidium subatomoides* (Hustedt) Bukhtiyarova & Round)
- Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)
- Reference: Nunes 2007 (as *Psammothidium subatomoides* (Hustedt) Bukhtiyarova & Round)
- Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)
- Reference: Nunes 2007 (as *Psammothidium subatomoides* (Hustedt) Bukhtiyarova & Round)
- Site: Silva Escura (upstream of Braçal Mine), Mau River (Vouga Basin)
- Reference: Nunes 2007 (as *Psammothidium subatomoides* (Hustedt) Bukhtiyarova & Round)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Achnanthes subatomoides* (Hust.) Lange-Bertalot); Gil et al. 1989-1990 (as *Achnanthes subatomoides*)
- Site: Varzielas, Águeda River (Vouga Basin)
- References: Gil 1988 (as *Achnanthes subatomoides* (Hust.) Lange-Bertalot); Gil et al. 1989-1990 (as *Achnanthes subatomoides*)
- Site: São João do Monte, Águeda River (Vouga Basin)
- References: Gil 1988 (as *Achnanthes subatomoides* (Hust.) Lange-Bertalot); Gil et al. 1989-1990 (as *Achnanthes subatomoides*)
- Municipality: Tondela (District: Viseu)
- Site: Boi, Agadão River (Vouga Basin)
- References: Gil 1988 (as *Achnanthes subatomoides* (Hust.) Lange-Bertalot); Gil et al. 1989-1990 (as *Achnanthes subatomoides*)
- Site: In the proximity of Tondela, Criz River (Mondego Basin)
- Reference: Santos et al. 2002 (as *Achnanthes subatomoides* (Hustedt) Lange-Bertalot)
- Municipality: Vouzela (District: Viseu)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
- Reference: Gil et al. 1989-1990 (as *Achnanthes subatomoides*)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Achnanthes subatomoides* (Hust.) Lange-Bertalot)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes subatomoides* (Hust.) Lange-Bertalot)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: Sabugueiro, Vale do Rossim Reservoir

Reference: Santos et al. 2002 (as *Achnanthes subatomoides* (Hustedt) Lange-Bertalot)

Subregion: Not specified

Municipality: Not specified

Site: Águeda, Agadão and Alfusqueiro Rivers

Reference: Gil 1989 (as *Achnanthes subatomoides* (Hustedt) Lange-Bertalot)

Site: Paiva River (Douro Basin)

Reference: Cerqueira da Silva 1994 (as *Achnanthes subatomoides*)

Site: Not specified

References: Gil et al. 1991 (as *Achnanthes subatomoides*); Feio et al. 2007 (as *Achnanthes subatomoides*)

Site: Not specified

References: Calado 1990 (as *Achnanthes subatomoides* (Hustedt) Lange-Bertalot); Almeida & Gil 2001 (as *Achnanthes subatomoides* (Hust.) L.-B. & Arch.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Achnanthidium subatomoides* (Hustedt) Monnier, Lange-Bertalot & Ector)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Achnanthidium subatomoides* (Hustedt) Monnier, Lange-Bertalot & Ector)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Achnanthidium subatomoides* (Hustedt) Monnier, Lange-Bertalot & Ector)

Site: Not specified

Reference: Gonçalves 2008 (as *Psammothidium subatomoides* (Hustedt) Bukhtiyarova & Round)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Alto-Douro Rivers

Reference: Morais et al. 2009 (as *Achnanthes subatomoides* (Hustedt) Lange-Bertalot & Archibald)

Site: Mountain Rivers in the North

Reference: Morais et al. 2009 (as *Achnanthes subatomoides* (Hustedt) Lange-Bertalot et Archibald)

Site: Rivers in the North

Reference: Morais et al. 2009 (as *Achnanthes subatomoides* (Hustedt) Lange-Bertalot et Archibald)

Site: Not specified

Reference: INAG 2008 (as *Achnanthes subatomoides* (Hustedt) Lange-Bertalot et Archibald)

***Achnantheidium subatomus* (Hustedt) Lange-Bertalot 1999**, p. 279
[CAS ref. 012674]

Basionym: *Achnanthes subatomus* Hustedt 1939 [CAS ref. 000514]

Nomenclatural synonym: *Achnanthes biasoletiana* var. *subatomus* Lange-Bertalot in Lange-Bertalot & Krammer 1989 [CAS ref. 006174]

Distribution (Fig. 52):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Sernada do Vouga, Vouga River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes biasoletiana* Grunow var. *subatomus* Lange-Bertalot)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Achnanthes biasoletiana* Grunow var. *subatomus* Lange-Bertalot)

***Achnantheidium subhudsonis* (Hustedt) H. Kobayasi in Kobayasi et al. 2006**, p. 13, 129 [CAS ref. 012998]

Basionym: *Achnanthes subhudsonis* Hustedt 1921 [CAS ref. 000495]

Distribution (Fig. 53):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes subhudsonis* Hustedt)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Sernada do Vouga, Vouga River (Vouga Basin)

References: Nunes 2007 (as *Achnanthes subhudsonis* Hustedt); Ferreira da Silva et al. 2009 (as *Achnanthes subhudsonis* Hustedt)

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes subhudsonis* Hustedt)

Site: Ribeira de Fráguas, Coval da Mó Mine, Coval da Mó Stream (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes subhudsonis* Hustedt)

Site: Ribeira de Fráguas, Palhal Mine, Caima River (Vouga Basin)

References: Nunes et al. 2003 (as *Achnanthes subhudsonis* Hustedt); Nunes 2007 (as *Achnanthes subhudsonis* Hustedt)

Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes subhudsonis* Hustedt)

Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)

References: Nunes et al. 2003 (as *Achnanthes subhudsonis* Hustedt); Nunes 2007 (as *Achnanthes subhudsonis* Hustedt)

Site: Santo António, Valmaior, Caima River (Vouga Basin)

References: Nunes et al. 2003 (as *Achnanthes subhudsonis* Hustedt); Nunes 2007 (as *Achnanthes subhudsonis* Hustedt)

Site: Valmaior, mouth of Filvida River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes subhudsonis* Hustedt)

Site: Valmaior (downstream of the mouth of Filvida River), Caima River (Vouga Basin)

References: Nunes 2007 (as *Achnanthes subhudsonis* Hustedt); Ferreira da Silva et al. 2009 (as *Achnanthes subhudsonis* Hustedt)

Municipality: Sever do Vouga (District: Aveiro)

Site: Pessegueiro do Vouga (mouth of Mau River), Vouga River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes subhudsonis* Hustedt)

Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes subhudsonis* Hustedt)

Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes subhudsonis* Hustedt)

Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes subhudsonis* Hustedt)

Site: Silva Escura (upstream of the Braçal Mine), Mau River (Vouga Basin)

Reference: Nunes 2007 (as *Achnanthes subhudsonis* Hustedt)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Feio et al. 2007 (as *Achnanthes subhudsonis*)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Tagus River (Tagus Basin)

Reference: Sabater et al. 2009 (as *Achnanthes subhudsonis*)

Site: Not specified

Reference: INAG 2008 (as *Achnanthes subhudsonis* Hustedt)

***Achnantheidium thermale* Rabenhorst 1864**, p. 107 [CAS ref. 000775]

Distribution (Fig. 54):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Achnantheidium thermale* Rabenhorst)

Actinocyclus Ehrenberg 1837a, p. 61
[CAS ref. 006909]

***Actinocyclus normanii* (W. Gregory ex Greville) Hustedt 1957**, p. 218; pl. 1, fig. 5-6 10 [CAS ref. 000532]

Basionym: *Coscinodiscus normanii* W. Gregory ex Greville 1859 [CAS ref. 000405]

Distribution (Fig. 55):

REGION: ALENTEJO

Subregion: Alto Alentejo

Municipality: Gavião (District: Portalegre)

Site: Belver Reservoir, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Actinocyclus normanii*)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Actinocyclus normanii* (Greg. Ex Grev.)

Hustedt morphotype *normanii*)

***Actinocyclus subtilis* (W. Gregory) Ralfs in Pritchard 1861, p. 835**
[CAS ref. 001063]

Basionym: *Eupodiscus subtilis* W. Gregory 1857 [CAS ref. 000399]

Distribution (Fig. 56):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Sever do Vouga (District: Aveiro)

Site: Pessegueiro do Vouga (mouth of Mau River), Vouga River (Vouga Basin)

Reference: Nunes 2007 (as *Actinocyclus subtilis* (Gregory) Lange-Bertalot)

Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)

Reference: Nunes 2007 (as *Actinocyclus subtilis* (Gregory) Lange-Bertalot)

Actinoptychus Ehrenberg 1843, p. 400
[CAS ref. 000294]

***Actinoptychus undulatus* (Kützing) Ralfs in Pritchard 1861, p. 839;**
pl. 5, fig. 88 [CAS ref. 001063]

Basionym: *Actinocyclus undulatus* Kützing 1844 [CAS ref. 000595]

Distribution (Fig. 57):

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Vouga River (Impacted site after BKME discharge) (Vouga Basin)

Reference: Ferreira et al. 2002 (as *Actinoptychus undulatus*)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Funchal

Reference: Tempère & Peragallo 1907-1915 (as *Actinoptychus undulatus* Eh.)

***Actinoptychus* sp.**

Distribution (Fig. 58):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Frossos, Carreira Creek (Mondego Basin)

Reference: Almeida 1998 (as *Actinoptychus* sp.)

***Adlafia* Gerd Moser, Lange-Bertalot & Metzeltin 1998, p. 87 [CAS ref. 007020]**

***Adlafia bryophila* (J.B. Petersen) Gerd Moser, Lange-Bertalot & Metzeltin 1998, p. 89 [CAS ref. 007020]**

Basionym: *Navicula bryophila* J.B. Petersen 1928a [CAS ref. 000742]

Distribution (Fig. 59):

REGION: CENTRO

Subregion: Dão-Lafões

Municipality: Tondela (District: Viseu)

Site: In the proximity of Tondela, Criz River (Mondego Basin)

Reference: Santos et al. 2002 (as *Navicula bryophila* Petersen)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Almeida 1998 (as *Navicula bryophila* B. Petersen)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Adlafia bryophila* (Petersen) Moser, Lange-Bertalot & Metzeltin)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Adlafia bryophila* (Petersen) Moser, Lange-Bertalot & Metzeltin)

Site: Not specified

Reference: Gonçalves 2008 (as *Adlafia bryophila* (Petersen) Moser, Lange-Bertalot & Metzeltin)

***Adlafia minuscula* (Grunow) Lange-Bertalot in Lange-Bertalot & Genkal 1999, p. 32 [CAS ref. 009014]**

Basionym: *Navicula minuscula* Grunow in Van Heurck 1880 [CAS ref. 000895]

Distribution (Fig. 60):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula minuscula* Grunow)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula minuscula* Grunow)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Navicula minuscula* Grunow)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula minuscula* Grunow)

Site: Sernada do Vouga, Vouga River (Vouga Basin)

Reference: Nunes 2007 (as *Navicula minuscula* Grunow in Van Heurck 1880)

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Bosturenga, Ribeira de Fráguas, Coval da Mó Stream (Vouga Basin)

Reference: Nunes 2007 (as *Navicula minuscula* Grunow in Van Heurck 1880)

Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Navicula minuscula* Grunow in Van Heurck 1880)

Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Navicula minuscula* Grunow in Van Heurck 1880)

Site: Valmaior, mouth of Filvida River (Vouga Basin)

Reference: Nunes 2007 (as *Navicula minuscula* Grunow in Van Heurck 1880)

Municipality: Anadia (District: Aveiro)

Site: São João de Azenha, Cértima River (Vouga Basin)

- Reference: Almeida 1998 (as *Navicula minuscula* Grunow)
Municipality: Aveiro (District: Aveiro)
Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Navicula minuscula* Grunow)
Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula minuscula* Grunow)
Site: Vessada, Fontão Creek (Vouga Basin)
Reference: Almeida 1998 (as *Navicula minuscula* Grunow)
Municipality: Estarreja (District: Aveiro)
Site: Estarreja, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula minuscula* Grunow)
Site: Minhoteira, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula minuscula* Grunow)
Municipality: Oliveira do Bairro (District: Aveiro)
Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula minuscula* Grunow)
Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula minuscula* Grunow)
Site: Vila Verde, Levira River (Vouga Basin)
References: Almeida 1998 (as *Navicula minuscula* Grunow); Almeida 2001 (as *Navicula minuscula* Grunow)
Municipality: Sever do Vouga (District: Aveiro)
Site: Pessegueiro do Vouga (mouth of Mau River), Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Navicula minuscula* Grunow in Van Heurck 1880)
Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Navicula minuscula* Grunow in Van Heurck 1880)

REGION: AUTONOMOUS REGION OF AZORES

- Municipality: Santa Cruz da Graciosa (Graciosa Island)
Site: Barreiro
Reference: Azevedo et al. 2005 (as *Navicula minuscula*)
Site: Fundão, Caldeira
Reference: Azevedo et al. 2005 (as *Navicula minuscula*)
Municipality: Santa Cruz das Flores (Flores Island)
Site: Not specified
Reference: Mölder 1947 (as *Navicula minuscula* Grun.)
Municipality: Not specified
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Adlafia minuscula* (Grunow) Lange-Bertalot)
Site: Graciosa Island

Reference: Gonçalves et al. 2010 (as *Adlafia minuscula* (Grunow) Lange-Bertalot)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Adlafia minuscula* (Grunow) Lange-Bertalot)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Adlafia minuscula* (Grunow) Lange-Bertalot)

Site: Not specified

Reference: Gonçalves 2008 (as *Adlafia minuscula* (Grunow) Lange-Bertalot)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Navicula minuscula* Grunow in Van Heurck 1880)

***Adlafia minuscula* var. *muralis* (Grunow) Lange-Bertalot in Lange-Bertalot & Genkal 1999, p. 32 [CAS ref. 009014]**

Basionym: *Navicula muralis* Grunow in Van Heurck 1880 [CAS ref. 000895]

Nomenclatural synonyms: *Navicula minuscula* var. *muralis* (Grunow) Lange-Bertalot in Lange-Bertalot & Rumrich 1981 [CAS ref. 008474]

Distribution (Fig. 61):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Navicula minuscula* Grunow var. *muralis* (Grunow) Lange-Bertalot)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Anadia (District: Aveiro)

Site: São João de Azenha, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula minuscula* Grunow var. *muralis* (Grunow) Lange-Bertalot)

Municipality: Aveiro (District: Aveiro)

Site: Aveiro, lake in the municipal park (artificial substrate)

Reference: Gil & Almeida 1993 (as *Navicula muralis* Grunow)

- Site: Vessada, Fontão Creek (Vouga Basin)
 Reference: Almeida 1998 (as *Navicula minuscula* Grunow var. *muralis* (Grunow) Lange-Bertalot)
- Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Perrães, Levira River (Vouga Basin)
 Reference: Almeida 1998 (as *Navicula minuscula* Grunow var. *muralis* (Grunow) Lange-Bertalot)
- Site: Perrães, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Navicula minuscula* Grunow var. *muralis* (Grunow) Lange-Bertalot)
- Municipality: Sever do Vouga (District: Aveiro)
 Site: Silva Escura, upstream of the Braçal Mine, Mau River (Vouga Basin)
 Reference: Nunes 2007 (as *Navicula minuscula* Grunow var. *muralis* (Grunow) Lange-Bertalot)
- Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: Almeida & Gil 2001 (as *Navicula minuscula* Grunow var. *muralis* (Grunow) Lange-Bertalot)

REGION: AUTONOMOUS REGION OF AZORES

- Municipality: Angra do Heroísmo (Terceira Island)
 Site: Lagoa da Achada
 Reference: Mölder 1947 (as *Navicula muralis* Grun.)
- Municipality: Corvo (Corvo Island)
 Site: Not specified
 Reference: Mölder 1947 (as *Navicula muralis* Grun.)
- Municipality: Santa Cruz das Flores (Flores Island)
 Site: Not specified
 Reference: Mölder 1947 (as *Navicula muralis* Grun.)
- Municipality: Santa Cruz da Graciosa (Graciosa Island)
 Site: Barreiro
 Reference: Azevedo et al. 2005 (as *Navicula minuscula* var. *muralis*)
- Municipality: Not specified
 Site: Corvo Island
 Reference: Gonçalves et al. 2010 (as *Adlafia muralis* (Grunow) Monnier & Ector)
- Site: Flores Island
 Reference: Gonçalves et al. 2010 (as *Adlafia muralis* (Grunow) Monnier & Ector)
- Site: Graciosa Island
 Reference: Gonçalves et al. 2010 (as *Adlafia muralis* (Grunow) Monnier & Ector)
- Site: São Miguel Island
 Reference: Gonçalves et al. 2010 (as *Adlafia muralis* (Grunow) Monnier & Ector)

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Adlafia muralis* (Grunow) Monnier & Ector)

Site: Not specified

Reference: Gonçalves 2008 (as *Adlafia minuscula* var. *muralis* (Grunow) Lange-Bertalot)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Santana (Madeira Island)

Site: Ribeiro Frio

Reference: Mölder 1947 (as *Navicula muralis* Grun.)

***Amphipleura* Kützing 1844, p. 103**
[CAS ref. 000595]

***Amphipleura kriegeriana* (Krasske) Hustedt 1954, p. 272; fig. 25-27**
[CAS ref. 000528]

Basionym: *Fragilaria kriegeriana* Krasske 1943 [CAS ref. 000589]

Distribution:

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

References: Gonçalves 2008 (as *Amphipleura kriegeriana* (Krasske) Hustedt); Gonçalves et al. 2010 (as *Amphipleura kriegeriana* (Krasske) Hustedt, fossil)

***Amphipleura lindheimeri* Grunow 1862, p. 155 (469); pl. 11, fig. 11**
[CAS ref. 000428]

Distribution (Fig. 62):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Amphipleura lindheimeri* Grunow)

REGION: CENTRO

Subregion: Baixo Vouga

- Municipality: Águeda (District: Aveiro)
 Site: Agadão, Agadão River (Vouga Basin)
 References: Gil 1988 (as *Amphipleura lindheimeri* Grunow); Gil et al. 1989-1990 (as *Amphipleura lindheimeri*)
- Site: Águeda, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Amphipleura lindheimeri* Grunow)
- Site: Avelal de Baixo, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Amphipleura lindheimeri* Grunow)
- Site: Bolfiar, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Amphipleura lindheimeri* Grunow); Gil et al. 1989-1990 (as *Amphipleura lindheimeri*)
- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
 References: Gil 1988 (as *Amphipleura lindheimeri* Grunow); Gil et al. 1989-1990 (as *Amphipleura lindheimeri*)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Amphipleura lindheimeri* Grunow)
- Site: Raivo, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Amphipleura lindheimeri* Grunow)
- Site: Redonda, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Amphipleura lindheimeri* Grunow); Gil et al. 1989-1990 (as *Amphipleura lindheimeri*)
- Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Amphipleura lindheimeri* Grunow)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Amphipleura lindheimeri* Grunow)
- Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Amphipleura lindheimeri* Grunow)
- Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 Reference: Gil 1988 (as *Amphipleura lindheimeri* Grunow)
- Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Amphipleura lindheimeri* Grunow)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Amphipleura lindheimeri* Grunow)
- Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: Gil et al. 1991 (as *Amphipleura lindheimeri*)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Amphipleura lindheimeri* Grunow)

***Amphipleura pellucida* (Kützing) Kützing 1844**, p. 103; pl. 3, fig. 52, pl. 30, fig. 84 [CAS ref. 000595]

Basionym: *Frustulia pellucida* Kützing 1833a [CAS ref. 000594]

Distribution (Fig. 63):

REGION: CENTRO
Subregion: Baixo Mondego
Municipality: Montemor-o-Velho (District: Coimbra)
Site: Irrigation channel near Montemor-o-Velho
Reference: Santos et al. 2002 (as *Amphipleura pellucida* (Kützing) Kützing)
Site: Marsh near Montemor-o-Velho
Reference: Santos et al. 2002 (as *Amphipleura pellucida* (Kützing) Kützing)
Municipality: Soure (District: Coimbra)
Site: Irrigation channel near Soure
Reference: Santos et al. 2002 (as *Amphipleura pellucida* (Kützing) Kützing)
Subregion: Baixo Vouga
Municipality: Águeda (District: Aveiro)
Site: Agadão, Agadão River (Vouga Basin)
References: Gil 1988 (as *Amphipleura pellucida* Kütz.); Gil et al. 1989-1990 (as *Amphipleura pellucida*)
Site: Avelal de Baixo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Amphipleura pellucida* Kütz.)
Site: Raivo, Águeda River (Vouga Basin)
References: Gil 1988 (as *Amphipleura pellucida* Kütz.); Gil et al. 1989-1990 (as *Amphipleura pellucida*)
Site: Ribeiro, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Amphipleura pellucida* Kütz.)
Municipality: Anadia (District: Aveiro)
Site: Mogofores, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Amphipleura pellucida*)
Site: São João da Azenha, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Amphipleura pellucida*)
Municipality: Aveiro (District: Aveiro)
Site: Pano, Largo River (Vouga Basin)

- Reference: Almeida 1998 (as *Amphipleura pellucida* (Kützing) Kützing)
 Site: Requeixo, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Amphipleura pellucida* (Kützing) Kützing)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Amphipleura pellucida* Kütz.)
 Site: Vessada, Fontão Creek (Vouga Basin)
 Reference: Almeida 1998 (as *Amphipleura pellucida* (Kützing) Kützing)
 Municipality: Mealhada (District: Aveiro)
 Site: Viadouros, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Amphipleura pellucida*)
 Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Amphipleura pellucida*)
 Site: Perrães, Levira River (Vouga Basin)
 Reference: Almeida 1998 (as *Amphipleura pellucida* (Kützing) Kützing)
 Site: Perrães, Cértima River (Vouga Basin)
 References: Rino & Gil 1989 (as *Amphipleura pellucida*); Almeida 1998 (as *Amphipleura pellucida* (Kützing) Kützing)
 Site: Repolão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Amphipleura pellucida*)
 Municipality: Not specified
 Site: Pateira de Fermentelos (District: Aveiro)
 Reference: Calado 1991 (as *Amphipleura pellucida* Kützing)
 Subregion: Beira Interior Sul
 Municipality: Castelo Branco (District: Castelo Branco)
 Site: São Fiel, Ocreza River (Tagus Basin)
 Reference: Zimmermann 1909b (as *Amphipleura pellucida* (Ehr.) Kütz.)
 Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Amphipleura pellucida* Kütz.)
 Subregion: Médio Tejo
 Municipality: Torres Novas (District: Santarém)
 Site: Casal da Pinheira, Almonda River (Tagus Basin)
 Reference: Oliveira & Caldas 1971 (as *Amphipleura pellucida* Kütz.)
 Site: Ribeira Branca, Almonda River (Tagus Basin)
 Reference: Oliveira & Caldas 1971 (as *Amphipleura pellucida* Kütz.)
 Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 References: Calado 1990 (as *Amphipleura pellucida* Kütz.); Almeida & Gil 2001 (as *Amphipleura pellucida* (Kützing) Kützing)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Mafra (District: Lisboa)
Site: Tapada de Mafra, Sobral da Abelheira
Reference: Oliveira 1971b (as *Amphipleura pellucida*)

Amphora Ehrenberg ex Kützing 1844, p. 107
[CAS ref. 000595]

***Amphora birugula* M.H. Hohn 1961**, p. 155; pl. 1, fig. 17, 18 [CAS ref. 000485]

Distribution (Fig. 64):

REGION: CENTRO
Subregion: Médio Tejo
Municipality: Abrantes (District: Santarém)
Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Amphora birugula*)
Site: Forno Novo, Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Amphora birugula*)

***Amphora coffeaeformis* var. *acutiuscula* (Kützing) Hustedt 1930**, p. 346 [CAS ref. 000502]

Basionym: *Amphora acutiuscula* Kützing 1844 [CAS ref. 000595]

Distribution (Fig. 65):

REGION: AUTONOMOUS REGION OF MADEIRA
Municipality: Porto Santo (Porto Santo Island)
Site: Serra de Dentro Stream
Reference: Zimmermann 1910-1911 (as *Amphora acutiuscula* Kuetz.)

***Amphora copulata* (Kützing) Schoeman & R.E.M. Archibald 1986**, p. 429; fig. 11-13, 30-34 [CAS ref. 005425]

Basionym: *Frustulia copulata* Kützing 1833a [CAS ref. 000594]

Distribution (Fig. 66):

REGION: CENTRO

Subregion: Baixo Vouga
Municipality: Sever do Vouga (District: Aveiro)
Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)
Reference: Nunes 2007 (as *Amphora copulata* (Kützing) Schoeman & Archibald)

***Amphora delicatissima* Krasske in Hustedt 1930**, p. 346; fig. 635
[CAS ref. 000502]

Distribution (Fig. 67):

REGION: NORTE
Subregion: Grande Porto
Municipality: Porto (District: Porto)
Site: Prelada
Reference: Silva 1950b (as *Amphora delicatissima* Krasske)

***Amphora dubia* W. Gregory 1857**, p. 514; pl. 13, fig. 76 [CAS ref. 000399]

Distribution (Fig. 68):

REGION: ALENTEJO
Subregion: Lezíria do Tejo
Municipality: Rio Maior (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Amphora dubia* Greg., fossil)

***Amphora exigua* W. Gregory 1857**, p. 514; pl. 12, fig. 75 [CAS ref. 000399]

Distribution (Fig. 69):

REGION: LISBOA
Subregion: Grande Lisboa
Municipality: Vila Franca de Xira (District: Lisboa)
Site: Vila Franca de Xira, Tagus River (Tagus Basin)
Reference: Rodrigues & Moita 1979b (as *Amphora exigua*)

***Amphora fogediana* Krammer in Krammer & Lange-Bertalot 1985**, p. 9; pl. 10, fig. 1-3 [CAS ref. 006263]

Distribution (Fig. 70):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Soure (District: Coimbra)

Site: Irrigation channel near Soure

Reference: Santos et al. 2002 (as *Amphora fogediana* Krammer)

***Amphora inariensis* Krammer 1980a**, p. 211; pl. 4, fig. 21-24, pl. 6, fig. 36, 37, 43-45 [CAS ref. 008971]

Distribution (Fig. 71):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Amphora inariensis* Krammer)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Amphora inariensis* Krammer)

***Amphora libyca* Ehrenberg 1840a**, p. 205 [CAS ref. 000293]

Distribution (Fig. 72):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Figueira da Foz (District: Coimbra)

Site: Lagoa da Vela, Quiaios

Reference: de Figueiredo et al. 2006 (as *Amphora libyca* Ehrenberg)

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Amphora libyca* Ehrenberg)

Subregion: Baixo Vouga

Municipality: Sever do Vouga (District: Aveiro)

Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)

Reference: Nunes 2007 (as *Amphora libyca* Ehrenberg)
Subregion: Pinhal Interior Norte
Municipality: Pampilhosa da Serra (District: Coimbra)
Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)
Reference: Santos et al. 2002 (as *Amphora libyca* Ehrenberg)
Subregion: Serra da Estrela
Municipality: Seia (District: Guarda)
Site: Sabugueiro, Vale do Rossim Reservoir
Reference: Santos et al. 2002 (as *Amphora libyca* Ehrenberg)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Amphora libyca* Ehrenberg)
Site: Santa Maria Island
Reference: Gonçalves et al. 2010 (as *Amphora libyca* Ehrenberg)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Amphora libyca* Ehrenberg)
Site: Not specified
Reference: Gonçalves 2008 (as *Amphora libyca* Ehrenberg)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Amphora libyca* Ehr.)

***Amphora lineolata* Ehrenberg 1838, p. 189 [CAS ref. 000288]**

Distribution (Fig. 73):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)
Site: Furnas
Reference: Mölder 1947 (as *Amphora lineolata* Ehr.)
Site: Ribeira Quente
Reference: Mölder 1947 (as *Amphora lineolata* Ehr.)
Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Amphora lineolata* Ehrenberg)

***Amphora ovalis* (Kützing) Kützing 1844**, p. 107; pl. 5, fig. 35, 39
[CAS ref. 000595]

Basionym: *Frustulia ovalis* Kützing 1833a [CAS ref. 000594]

Distribution (Fig. 74):

REGION: NORTE

Subregion: Cávado

Municipality: Barcelos (District: Braga)

Site: Barcelos, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Amphora ovalis*)

Site: Manhente, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Amphora ovalis*)

Municipality: Braga (District: Braga)

Site: Padim da Graça, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Amphora ovalis*)

Municipality: Esposende (District: Braga)

Site: Marachão, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Amphora ovalis*)

Municipality: Not specified

Site: Entrepontes, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Amphora ovalis*)

Site: Homem River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Amphora ovalis*)

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Amphora ovalis* (Kützing) Kützing)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Amphora ovalis* (Kützing) Kützing)

Subregion: Grande Porto

Municipality: Vila Nova de Gaia (District: Porto)

Site: Febros River (Douro Basin)

Reference: Cerqueira da Silva 1993 (as *Amphora ovalis*)

Subregion: Minho-Lima

Municipality: Caminha (District: Viana do Castelo)

Site: Gondar Stream (Âncora Basin)

Reference: Formigo et al. 1993 (as *Amphora ovalis*)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Figueira da Foz (District: Coimbra)

Site: Lagoa da Vela, Quiaios

Reference: de Figueiredo et al. 2006 (as *Amphora ovalis* (Kützing) Kützing)

- Municipality: Mira (District: Coimbra)
 Site: Lagoa de Mira
 Reference: Oliveira 1971a (as *Amphora ovalis*)
- Municipality: Montemor-o-Velho (District: Coimbra)
 Site: Irrigation channel near Montemor-o-Velho
 Reference: Santos et al. 2002 (as *Amphora ovalis* (Kützing) Kützing)
- Municipality: Soure (District: Coimbra)
 Site: Irrigation channel near Soure
 Reference: Santos et al. 2002 (as *Amphora ovalis* (Kützing) Kützing)
- Subregion: Baixo Vouga
- Municipality: Águeda (District: Aveiro)
 Site: Agadão, Agadão River (Vouga Basin)
 References: Gil 1988 (as *Amphora ovalis* Kützing); Gil et al. 1989-1990 (as *Amphora ovalis*)
- Site: Águeda, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Amphora ovalis* Kützing); Gil et al. 1989-1990 (as *Amphora ovalis*); Almeida 1998 (as *Amphora ovalis* (Kützing) Kützing)
- Site: Aldeia, Segadães, Vouga River (Vouga Basin)
 Reference: Almeida 1998 (as *Amphora ovalis* (Kützing) Kützing)
- Site: Avelal de Baixo, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Amphora ovalis* Kützing)
- Site: Bolfiar, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Amphora ovalis* Kützing)
- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
 References: Gil 1988 (as *Amphora ovalis* Kützing); Gil et al. 1989-1990 (as *Amphora ovalis*)
- Site: Murta, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Amphora ovalis*)
- Site: Óis da Ribeira, Águeda River (Vouga Basin)
 Reference: Almeida 1998 (as *Amphora ovalis* (Kützing) Kützing)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Amphora ovalis* Kützing); Gil et al. 1989-1990 (as *Amphora ovalis*)
- Site: Raivo, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Amphora ovalis* Kützing); Gil et al. 1989-1990 (as *Amphora ovalis*)
- Site: Redonda, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Amphora ovalis* Kützing); Gil et al. 1989-1990 (as *Amphora ovalis*)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Amphora ovalis* Kützing); Gil et al. 1989-1990 (as *Amphora ovalis*)
- Municipality: Albergaria-a-Velha (District: Aveiro)
 Site: Frossos, Carreira Creek (Mondego Basin)

- Reference: Almeida 1998 (as *Amphora ovalis* (Kützing) Kützing)
Municipality: Anadia (District: Aveiro)
Site: Curia, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Amphora ovalis*)
Site: Espairo, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Amphora ovalis*)
Site: Mogofores, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Amphora ovalis*)
Site: São João de Azenha, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Amphora ovalis* (Kützing) Kützing)
Site: Tamengos, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Amphora ovalis*)
Municipality: Aveiro (District: Aveiro)
Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Amphora ovalis* (Kützing) Kützing)
Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Amphora ovalis* (Kützing) Kützing)
Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Amphora ovalis* Kützing); Gil et al. 1989-1990 (as *Amphora ovalis*)
Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Amphora ovalis* Kützing); Gil et al. 1989-1990 (as *Amphora ovalis*)
Site: Vessada, Fontão Creek (Vouga Basin)
Reference: Almeida 1998 (as *Amphora ovalis* (Kützing) Kützing)
Municipality: Estarreja (District: Aveiro)
Site: Estarreja, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Amphora ovalis* (Kützing) Kützing)
Site: Minhoteira, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Amphora ovalis* (Kützing) Kützing)
Municipality: Mealhada (District: Aveiro)
Site: Pampilhosa, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Amphora ovalis*)
Site: Viadouros, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Amphora ovalis*)
Municipality: Oliveira do Bairro (District: Aveiro)
Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Amphora ovalis*)
Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Amphora ovalis* (Kützing) Kützing)
Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Amphora ovalis* (Kützing) Kützing)
Site: Perrães, Cértima River (Vouga Basin)

- Reference: Rino & Gil 1989 (as *Amphora ovalis*); Almeida 1998 (as *Amphora ovalis* (Kützing) Kützing)
- Site: Repolão, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Amphora ovalis*)
- Site: Vila Verde, Levira River (Vouga Basin)
- Reference: Almeida 1998 (as *Amphora ovalis* (Kützing) Kützing)
- Municipality: Not specified
- Site: Pateira de Fermentelos (District: Aveiro)
- Reference: Calado 1991 (as *Amphora ovalis* Kützing)
- Subregion: Beira Interior Norte
- Municipality: Guarda (District: Guarda)
- Site: Lameirinhas
- Reference: Carvalho 1913 (as *Amphora ovalis* (Bréb.) Kuetz.)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Amphora ovalis* Kützing); Gil et al. 1989-1990 (as *Amphora ovalis*)
- Site: São João do Monte, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Amphora ovalis* Kützing)
- Site: Varzielas, Águeda River (Vouga Basin)
- References: Gil 1988 (as *Amphora ovalis* Kützing); Gil et al. 1989-1990 (as *Amphora ovalis*)
- Municipality: Tondela (District: Viseu)
- Site: Boi, Agadão River (Vouga Basin)
- Reference: Gil 1988 (as *Amphora ovalis* Kützing)
- Site: In the proximity of Tondela, Criz River (Mondego Basin)
- Reference: Santos et al. 2002 (as *Amphora ovalis* (Kützing) Kützing)
- Municipality: Vouzela (District: Viseu)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Amphora ovalis* Kützing)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Amphora ovalis* Kützing); Gil et al. 1989-1990 (as *Amphora ovalis*)
- Subregion: Médio Tejo
- Municipality: Abrantes (District: Santarém)
- Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
- Reference: Caldas 1988 (as *Amphora ovalis*)
- Site: Forno Novo, Tagus River (Tagus Basin)
- Reference: Caldas 1988 (as *Amphora ovalis*)
- Municipality: Tomar (District: Santarém)
- Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
- Reference: Brito & Andrade 1992 (as *Amphora ovalis*)
- Municipality: Torres Novas (District: Santarém)
- Site: Almonda River (Tagus Basin)

References: Zimmermann 1906 (as *Amphora ovalis* (Bréb.) Kuetz.);
Oliveira & Caldas 1970 (as *Amphora ovalis* Kütz)
Site: Casal do Feijão, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Amphora ovalis* Kütz.)
Site: Casal da Pinheira, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Amphora ovalis* Kütz.)
Site: Renova, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Amphora ovalis* Kütz.)
Site: Ribeira Branca, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Amphora ovalis* Kütz.)
Municipality: Vila Nova da Barquinha (District: Santarém)
Site: Almourol, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Amphora ovalis*)
Subregion: Pinhal Interior Norte
Municipality: Pedrógão Grande (District: Leiria)
Site: Cabril Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Amphora ovalis*)
Subregion: Not specified
Municipality: Not specified
Site: Paiva River (Douro Basin)
Reference: Cerqueira da Silva 1994 (as *Amphora ovalis*)
Site: Not specified
References: Calado 1990 (as *Amphora ovalis* Kützing); Gil et al. 1991 (as
Amphora ovalis)

REGION: LISBOA

Subregion: Grande Lisboa
Municipality: Mafra (District: Lisboa)
Site: Tapada de Mafra, Sobral da Abelheira
Reference: Oliveira 1971b (as *Amphora ovalis*)

REGION: ALENTEJO

Subregion: Alto Alentejo
Municipality: Gavião (District: Portalegre)
Site: Belver Reservoir, Tagus River (Tagus Basin)
References: INIP 1977 (as *Amphora ovalis* Kütz.); Fernandes et al. 1987
(as *Amphora ovalis*)
Municipality: Marvão (District: Portalegre)
Site: Sever River (Tagus Basin)
Reference: Oliveira 1975 (as *Amphora ovalis*)
Municipality: Nisa (District: Portalegre)
Site: Barca da Amieira, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Amphora ovalis*)
Site: Fratel Reservoir, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Amphora ovalis*)
Subregion: Baixo Alentejo

- Municipality: Aljustrel (District: Beja)
 Site: Roxo Reservoir, Roxo Stream (Sado Basin)
 Reference: Oliveira 1976 (as *Amphora ovalis* Kütz.)
- Municipality: Almodôvar (District: Beja)
 Site: Monte da Vinha, Guadiana River (Guadiana Basin)
 Reference: Andrade & Brito 1991 (as *Amphora ovalis*)
- Municipality: Ourique (District: Beja)
 Site: Monte da Rocha Reservoir, Sado River (Sado Basin)
 Reference: Oliveira 1984a (as *Amphora ovalis*)
- Subregion: Lezíria do Tejo
- Municipality: Cartaxo (District: Santarém)
 Site: Valada, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Amphora ovalis*)
- Municipality: Chamusca (District: Santarém)
 Site: Chamusca, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Amphora ovalis*)
- Municipality: Salvaterra de Magos (District: Santarém)
 Site: Magos Reservoir, Magos Stream (Tagus Basin)
 Reference: Oliveira 1984a (as *Amphora ovalis*)
- Municipality: Santarém (District: Santarém)
 Site: Ómnias, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Amphora ovalis*)
- REGION: AUTONOMOUS REGION OF AZORES
- Municipality: Angra do Heroísmo (Terceira Island)
 Site: Not specified
 Reference: Trelease 1897 (as *Amphora ovalis* Kütz.)
- Municipality: Povoação
- Site: Ferruginous springs, Furnas
 Reference: Chaves 1908 (as *Amphora ovalis* Ktz.)
- Site: Inferno Grote near Lagoa das Furnas (São Miguel Island)
 Reference: Holmboe 1901 (as *Amphora ovalis* (Bréb.) Kütz.)
- Site: Lagoa das Furnas
 References: Holmboe 1901 (as *Amphora ovalis* (Bréb.) Kütz.); Chaves 1908 (as *Amphora ovalis* Ktz.); Manguin 1942 (as *Amphora ovalis* Kütz.); Bourrelly & Manguin 1946a (as *Amphora ovalis* Kütz.)
- Site: Salto do Bargado, Furnas
 Reference: Chaves 1908 (as *Amphora ovalis* Ktz., fossil)
- Site: Tambores, Furnas
 Reference: Chaves 1908 (as *Amphora ovalis* Ktz., fossil)
- Municipality: Santa Cruz das Flores (Flores Island)
 Site: Ribeira Grande
 References: Manguin 1942 (as *Amphora ovalis* Kütz.); Bourrelly & Manguin 1946a (as *Amphora ovalis* Kütz.)
- Municipality: Vila Franca do Campo (São Miguel Island)
 Site: Lagoa do Congro

References: Manguin 1942 (as *Amphora ovalis* Kütz.); Bourrelly & Manguin 1946a (as *Amphora ovalis* Kütz.)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Amphora ovalis* (Kützing) Kützing)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Amphora ovalis* (Kützing) Kützing)

Site: Terceira Island

References: Holmboe 1901 (as *Amphora ovalis* (Bréb.) Kütz.); Gonçalves et al. 2010 (as *Amphora ovalis* (Kützing) Kützing)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Ribeira de João Gomes

Reference: Schodduyn 1927 (as *Amphora ovalis* Kg.)

Site: Tanque nos Estanquinhos

Reference: Zimmermann 1910-1911 (as *Amphora ovalis* (Bréb.) Kuetz.)

Municipality: Porto Santo (Porto Santo Island)

Site: Porto Santo

Reference: Zimmermann 1910-1911 (as *Amphora ovalis* (Bréb.) Kuetz.)

Site: Serra de Dentro Stream

Reference: Zimmermann 1910-1911 (as *Amphora ovalis* (Bréb.) Kuetz.)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Amphora ovalis* (Kützing) Kützing)

***Amphora ovalis* var. *affinis* (Kützing) Pero 1893**, p. 271 [CAS ref. 002339]

Basionym: *Amphora affinis* Kützing 1844 [CAS ref. 000595]

Distribution (Fig. 75):

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Diz River

Reference: Carvalho 1913 (as *Amphora ovalis* (Bréb.) Kuetz. var. *affinis* Kuetz.)

Site: Gonçalo

Reference: Carvalho 1913 (as *Amphora ovalis* (Bréb.) Kuetz. var. *affinis* Kuetz.)

Site: Vila Patrício

Reference: Carvalho 1913 (as *Amphora ovalis* (Bréb.) Kuetz. var. *affinis* Kuetz.)

Subregion: Médio Tejo

Municipality: Torres Novas (District: Santarém)

Site: Almonda River (Tagus Basin)

Reference: Zimmermann 1909b (as *Amphora ovalis* (Bréb.) Kuetz. var. *affinis* (Kuetz.) Van Heurck)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Amphora affinis* Ktz.)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Porto Santo

Reference: Zimmermann 1910-1911 (as *Amphora ovalis* (Bréb.) Kuetz. var. *affinis* (Kuetz.) V.H.)

***Amphora ovalis* f. *minor* (Grunow in Van Heurck) Van Heurck 1885**, p. 59; (pl. 1, fig. 4-5) [CAS ref. 001040]
as *Amphora ovalis* ‘gamma’ *affinis* Kütz. forma *minor*

Basionym: *Amphora affinis* f. *minor* Grunow in Van Heurck 1880 [CAS ref. 000895]

Distribution (Fig. 76):

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda

Site: Gonçalo

Reference: Carvalho 1913 (as *Amphora ovalis* (Bréb.) Kuetz. var. *affinis* Kuetz. forma *minor*)

***Amphora ovalis* var. *gracilis* (Ehrenberg) Van Heurck 1885**, p. 59
[CAS ref. 000895]

Basionym: *Amphora gracilis* Ehrenberg 1843 [CAS ref. 000294]

Distribution (Fig. 77):

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Porto Santo (Porto Santo Island)

Site: Ponte do Espírito Santo

Reference: Zimmermann 1910-1911 (as *Amphora ovalis* (Bréb.) Kuetz. var. *gracilis* (Ehr.) V.H.)

***Amphora ovalis* var. *minor* Rabenhorst 1864**, p. 92 [CAS ref. 000775]

Distribution (Fig. 78):

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Not specified

Reference: Zimmermann 1910 (as *Amphora ovalis* (Bréb.) Kuetz. var. *minor* Grun.)

***Amphora pediculus* (Kützing) Grunow in Schmidt et al. 1875a**, pl. 26, fig. 99 [CAS ref. 012447]

Basionym: *Cymbella pediculus* Kützing 1844 [CAS ref. 000595]

Nomenclatural synonym: *Amphora ovalis* var. *pediculus* (Kützing) Van Heurck 1885 [CAS ref. 001040]

Synonym: *Amphora perpusilla* Grunow 1884 [CAS ref. 000444], according to Krammer & Lange-Bertalot 1986, p. 346

Distribution (Fig. 79):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Amphora pediculus* (Kützing) Grunow)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Amphora pediculus* (Kützing) Grunow)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Amphora pediculus* (Kützing) Grunow)

- Site: Marsh near Montemor-o-Velho
Reference: Santos et al. 2002 (as *Amphora pediculus* (Kützing) Grunow)
- Municipality: Soure (District: Coimbra)
Site: Irrigation channel near Soure
Reference: Santos et al. 2002 (as *Amphora pediculus* (Kützing) Grunow)
- Subregion: Baixo Vouga
Municipality: Águeda (District: Aveiro)
Site: Águeda, Águeda River (Vouga Basin)
References: Gil 1988 (as *Amphora pediculus* Kützing); Almeida 1998 (as *Amphora pediculus* (Kützing) Grunow)
- Site: Aldeia, Segadães, Vouga River (Vouga Basin)
Reference: Almeida 1998 (as *Amphora pediculus* (Kützing) Grunow)
- Site: Avelal de Baixo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Amphora pediculus* Kützing)
- Site: Bolfiar, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Amphora pediculus* Kützing)
- Site: Murta, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Amphora pediculus*)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Amphora pediculus* Kützing)
- Site: Raivo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Amphora pediculus* Kützing)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Amphora pediculus* Kützing)
- Municipality: Anadia (District: Aveiro)
Site: Curia, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Amphora pediculus*)
- Site: Espairo, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Amphora pediculus*)
- Site: Mogofores, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Amphora pediculus*)
- Site: São João da Azenha, Cértima River (Vouga Basin)
References: Rino & Gil 1989 (as *Amphora pediculus*); Almeida 1998 (as *Amphora pediculus* (Kützing) Grunow)
- Site: Tamengos, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Amphora pediculus*)
- Municipality: Aveiro (District: Aveiro)
Site: Aveiro, lake in the municipal park (artificial substrate)
Reference: Gil & Almeida 1993 (as *Amphora pediculus* Kützing)
- Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Amphora pediculus* (Kützing) Grunow)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Amphora pediculus* (Kützing) Grunow)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Amphora pediculus* Kützing)

- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Amphora pediculus* Kützing); Gil et al. 1989-1990 (as *Amphora pediculus*)
- Site: Vessada, Fontão Creek (Vouga Basin)
 Reference: Almeida 1998 (as *Amphora pediculus* (Kützing) Grunow)
- Municipality: Mealhada (District: Aveiro)
 Site: Pampilhosa, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Amphora pediculus*)
- Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Amphora pediculus*)
- Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Amphora pediculus* (Kützing) Grunow)
- Site: Perrães, Levira River (Vouga Basin)
 Reference: Almeida 1998 (as *Amphora pediculus* (Kützing) Grunow)
- Site: Perrães, Cértima River (Vouga Basin)
 References: Rino & Gil 1989 (as *Amphora pediculus*); Almeida 1998 (as *Amphora pediculus* (Kützing) Grunow)
- Site: Repolão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Amphora pediculus*)
- Site: Vila Verde, Levira River (Vouga Basin)
 Reference: Almeida 1998 (as *Amphora pediculus* (Kützing) Grunow)
- Municipality: Not specified
 Site: Pateira de Fermentelos (District: Aveiro)
 Reference: Calado 1991 (as *Amphora pediculus* Kützing)
- Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Amphora pediculus* Kützing)
- Site: São João do Monte, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Amphora pediculus* Kützing); Gil et al. 1989-1990 (as *Amphora pediculus*)
- Municipality: Tondela (District: Viseu)
 Site: In the proximity of Tondela, Criz River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Amphora pediculus* (Kützing) Grunow)
- Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Amphora pediculus* Kützing)
- Subregion: Médio Tejo
 Municipality: Abrantes (District: Santarém)
 Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Amphora pediculus*)
- Site: Forno Novo, Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Amphora pediculus*)
- Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: São Romão, Lagoa do Covão do Curral

Reference: Santos et al. 2002 (as *Amphora pediculus* (Kützing) Grunow)

Subregion: Not specified

Municipality: Not specified

Site: Vouga Basin

Reference: Almeida & Gil 2000 (as *Amphora pediculus* (Kützing) Grunow)

Site: Not specified

References: Calado 1990 (as *Amphora pediculus* Kützing); Almeida & Gil 2001 (as *Amphora pediculus* (Kützing) Grunow)

REGION: ALENTEJO

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Água Forte, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Amphora pediculus* (Kützing) Grunow)

Site: Porto de Beja, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Amphora pediculus* (Kützing) Grunow)

Site: Porto Ferreira, Roxo Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Amphora pediculus* (Kützing) Grunow)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Inferno Grote near Lagoa das Furnas

Reference: Holmboe 1901 (as *Amphora ovalis* (Bréb.) Kütz. var. *pediculus* (Kütz.) V.H.)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Amphora pediculus* Grun.)

Site: Salto do Bargado, Furnas

Reference: Chaves 1908 (as *Amphora pediculus* Grun., fossil)

Site: Tambores, Furnas

Reference: Chaves 1908 (as *Amphora pediculus* Grun., fossil)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Ribeira Grande

References: Manguin 1942 (as *Amphora ovalis* Kütz. var. *pediculus* Kütz.); Bourrelly & Manguin 1946a (as *Amphora ovalis* Kütz. var. *pediculus* Kütz.)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Amphora pediculus* (Kützing) Grunow)

Site: Santa Maria Island

Reference: Gonçalves et al. 2010 (as *Amphora pediculus* (Kützing) Grunow)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Amphora pediculus* (Kützing) Grunow)

Site: São Miguel Island (upstream sites)

Reference: Gonçalves et al. 2008 (as *Amphora pediculus*)

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Amphora pediculus* (Kützing) Grunow)

Site: Not specified

Reference: Gonçalves 2008 (as *Amphora pediculus* (Kützing) Grunow)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Ponta do Sol (Madeira Island)

Site: Rabaçal (Madeira Island)

Reference: Mölder 1947 (as *Amphora ovalis* Kütz. var. *pediculus* Kütz.)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Alto-Douro Rivers

Reference: Morais et al. 2009 (as *Amphora pediculus* (Kützing) Grunow)

Site: Rivers in the South

Reference: Morais et al. 2009 (as *Amphora pediculus* (Kützing) Grunow)

Site: Not specified

Reference: INAG 2008 (as *Amphora pediculus* (Kützing) Grunow)

***Amphora perpusilla* Grunow 1884**, p. 50 (102); pl. 1 (A), fig. 6 [CAS ref. 000444]

Synonym: *Amphora pediculus* (Kützing) Grunow in Schmidt et al. 1875a [CAS ref. 012447], according to Krammer & Lange-Bertalot 1986, p. 346

Distribution (Fig. 80):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Praia da Vitória (Terceira Island)

Site: Fonduras

Reference: Mölder 1947 (as *Amphora perpusilla* Grun.)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Santana (Madeira Island)

Site: Ribeiro Frio

Reference: Mölder 1947 (as *Amphora perpusilla* Grun.)

***Amphora* sp.**

Distribution (Fig. 81):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Bragança (District: Bragança)

Site: São Serrada Reservoir, Andorinhas Stream (Douro Basin)

Reference: Geraldès & Boavida 2005 (as *Amphora* sp.)

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Amphora* sp.)

Municipality: Vila Nova da Barquinha (District: Santarém)

Site: Almourol, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Amphora* sp.)

Site: Vila Nova da Barquinha, Tagus River (Tagus Basin)

Reference: Oliveira et al. 1989 (as *Amphora* sp.)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Vila Franca de Xira (District: Lisboa)

Site: Vila Franca de Xira, Tagus River (Tagus Basin)

Reference: Rodrigues & Moita 1979b (as *Amphora* spp.)

REGION: ALENTEJO

Subregion: Alentejo Central

Municipality: Évora (District: Évora)

Site: Monte Novo Reservoir, Degebe River (Guadiana Basin)

References: Oliveira & Monteiro 1995 (as *Amphora* sp.); Oliveira 1996
(as *Amphora* sp.)

Subregion: Alentejo Litoral

Municipality: Odemira (District: Beja)

Site: Santa Clara Reservoir, Mira River (Mira Basin)

Reference: Oliveira 1987 (as *Amphora* sp.)

Subregion: Alto Alentejo

Municipality: Avis (District: Portalegre)

Site: Maranhão Reservoir, Raia Stream (Tagus Basin)

Reference: Oliveira 1984c (as *Amphora* sp.)

Municipality: Ponte de Sôr (District: Portalegre)

Site: Montargil Reservoir, Sôr Stream (Tagus Basin)

Reference: Coutinho 1990a (as *Amphora* sp.)

Subregion: Lezíria do Tejo

Municipality: Chamusca (District: Santarém)

Site: Chamusca, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Amphora* sp.)

REGION: AUTONOMOUS REGION OF AZORES
Municipality: Not specified
Site: Not specified
Reference: Gonçalves 2008 (as *Amphora* sp.)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Amphora* species)

***Anaulus Ehrenberg 1844*, p. 197
[CAS ref. 001184]**

***Anaulus balticus Simonsen 1959*, p. 74; pl. 10, fig. 1-3 [CAS ref. 000823]**

Distribution:

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Anaulus balticus* Simonsen)

***Aneumastus D.G. Mann & Stickle in Round, Crawford
& Mann 1990*, p. 663 [CAS ref. 003245]**

***Aneumastus laetus (Ant. Mayer) Lange-Bertalot in Lange-Bertalot
& Metzeltin 1996*, p. 29; pl. 110, fig. 1 [CAS ref. 007048]**

Basionym: *Navicula laeta* Ant. Mayer 1919 [CAS ref. 000637]

Distribution (Fig. 82):

REGION: ALENTEJO
Subregion: Lezíria do Tejo

Municipality: Rio Maior (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Navicula laeta* A. Mayer, fossil)

***Aneumastus minor* Lange-Bertalot 1993**, p. 9; pl. 39, fig. 8, pl. 40, fig. 1-4 [CAS ref. 008467]

Nomenclatural synonym: *Navicula tuscula* f. *minor* Hustedt 1930 [CAS ref. 000502]

Distribution (Fig. 83):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Perrães, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula tuscula* fo. *minor*)

Site: Repolão, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula tuscula* fo. *minor*)

***Aneumastus tuscula* (Ehrenberg) D.G. Mann & Stickle in Round, Crawford & Mann 1990**, p. 663 [CAS ref. 003245]

Basionym: *Navicula tuscula* Ehrenberg 1840a [CAS ref. 000293]

Distribution (Fig. 84):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula tuscula* Grunow)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Navicula tuscula* Grunow)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula tuscula* Grunow)

Municipality: Anadia (District: Aveiro)

Site: Tamengos, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula tuscula*)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Navicula tuscula* Grunow)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Navicula tuscula* Grunow)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Perrães, Levira River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula tuscula* Ehrenberg)

Site: Repolão, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula tuscula*)

Subregion: Médio Tejo

Municipality: Torres Novas (District: Santarém)

Site: Almonda River (Tagus Basin)

Reference: Zimmermann 1906 (as *Navicula tuscula* Ehr.)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Calado 1990 (as *Navicula tuscula* Grunow)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Aneumastus tusculos* (Ehrenberg) Mann & Stickle, fossil)

***Anomoeoneis* Pfitzer 1871, p. 77**
[CAS ref. 000754]

Note: All these varieties of *Anomoeoneis* should be transferred to the genus *Brachysira* Kützing 1836 in the future.

***Anomoeoneis exilis* var. *azorica* Manguin 1942, p. 134; pl. 2, fig. 27**
[CAS ref. 000623]

Distribution (Fig. 85):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Horta (Faial Island)

Site: Not specified

Reference: Johansson 1977 (as *Anomoeoneis exilis* (Kütz.) Cleve var. *azorica* Manguin)

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Anomoeoneis exilis* (Kütz.) Cleve var. *azorica* Manguin); Bourrelly & Manguin 1946a (as *Anomoeoneis exilis* (Kütz.) Cleve var. *azorica* Manguin)

Municipality: Povoação (São Miguel Island)

Site: Pico da Vara

References: Manguin 1942 (as *Anomoeoneis exilis* (Kütz.) Cleve var. *azorica* Manguin); Bourrelly & Manguin 1946a (as *Anomoeoneis exilis* (Kütz.) Cleve var. *azorica* Manguin)

Site: Pico Verde

References: Manguin 1942 (as *Anomoeoneis exilis* (Kütz.) Cleve var. *azorica* Manguin); Bourrelly & Manguin 1946a (as *Anomoeoneis exilis* (Kütz.) Cleve var. *azorica* Manguin)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Ribeira Grande

References: Manguin 1942 (as *Anomoeoneis exilis* (Kütz.) Cleve var. *azorica* Manguin); Bourrelly & Manguin 1946a (as *Anomoeoneis exilis* (Kütz.) Cleve var. *azorica* Manguin)

***Anomoeoneis exilis* var. *lanceolata* Ant. Mayer 1919, p. 202; pl. 7, fig. 12-14 [CAS ref. 000637]**

Distribution (Fig. 86):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Anomoeoneis exilis* (Kütz.) Cleve var. *lanceolata* A. Mayer); Bourrelly & Manguin 1946a (as *Anomoeoneis exilis* (Kütz.) Cleve var. *lanceolata* A. Mayer)

Municipality: Nordeste (São Miguel Island)

Site: Serra Tronqueira

References: Manguin 1942 (as *Anomoeoneis exilis* (Kütz.) Cleve var. *lanceolata* A. Mayer); Bourrelly & Manguin 1946a (as *Anomoeoneis exilis* (Kütz.) Cleve var. *lanceolata* A. Mayer)

Municipality: Povoação (São Miguel Island)

Site: Pico da Vara

References: Manguin 1942 (as *Anomoeoneis exilis* (Kütz.) Cleve var. *lanceolata* A. Mayer); Bourrelly & Manguin 1946a (as *Anomoeoneis exilis* (Kütz.) Cleve var. *lanceolata* A. Mayer)

Site: Pico Verde

References: Manguin 1942 (as *Anomoeoneis exilis* (Kütz.) Cleve var. *lanceolata* A. Mayer); Bourrelly & Manguin 1946a (as *Anomoeoneis exilis* (Kütz.) Cleve var. *lanceolata* A. Mayer)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Ribeira Grande

References: Manguin 1942 (as *Anomoeoneis exilis* (Kütz.) Cleve var. *lanceolata* A. Mayer); Bourrelly & Manguin 1946a (as *Anomoeoneis exilis* (Kütz.) Cleve var. *lanceolata* A. Mayer)

Municipality: Vila Franca do Campo (São Miguel Island)

Site: Lagoa do Congro

References: Manguin 1942 (as *Anomoeoneis exilis* (Kütz.) Cleve var. *lanceolata* A. Mayer); Bourrelly & Manguin 1946a (as *Anomoeoneis exilis* (Kütz.) Cleve var. *lanceolata* A. Mayer)

Municipality: Not specified

Site: Lagoa de Cazador (São Miguel Island)

References: Manguin 1942 (as *Anomoeoneis exilis* (Kütz.) Cleve var. *lanceolata* A. Mayer); Bourrelly & Manguin 1946a (as *Anomoeoneis exilis* (Kütz.) Cleve var. *lanceolata* A. Mayer)

***Anomoeoneis sculpta* (Ehrenberg) Cleve 1895**, p. 6 [CAS ref. 000949]

Basionym: *Navicula sculpta* Ehrenberg 1854a [CAS ref. 000966]

Nomenclatural synonyms: *Anomoeoneis sphaerophora* var. *sculpta* (Ehrenberg) O. Müller 1900 [CAS ref. 000674]

Anomoeoneis sphaerophora f. *sculpta* (Ehrenberg) Krammer in Krammer & Lange-Bertalot 1985 [CAS ref. 006263]

Distribution (Fig. 87):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 Santos et al. 2002 (as *Anomoeoneis sphaerophora* var. *sculpta* Ö. Muller)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 Santos et al. 2002 (as *Anomoeoneis sphaerophora* var. *sculpta* Ö. Muller)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: Sabugueiro, Lagoacho Reservoir

Reference: Santos et al. 2002 (as *Anomoeoneis sphaerophora* var. *sculpta* Ö. Muller)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Almeida 1998 (as *Anomoeoneis sphaerophora* (Ehrenberg) Pfitzer f. *sculpta* (Ehrenberg) Krammer)

***Anomoeoneis sphaerophora* Pfitzer 1871**, p. 77; pl. 3, fig. 10 [CAS ref. 000754]

Basionym: *Navicula sphaerophora* Kützing 1844 [CAS ref. 000595]

Distribution (Fig. 88):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Anomoeoneis sphaerophora* (Ehr.) Pfitzer)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis sphaerophora* (Kütz.) Pfitz.)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis sphaerophora* (Kütz.) Pfitz.)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis sphaerophora* (Kütz.) Pfitz.)

Site: Bolfiãr, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis sphaerophora* (Kütz.) Pfitz.)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis sphaerophora* (Kütz.) Pfitz.)

Site: Óis da Ribeira, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Anomoeoneis sphaerophora* (Ehrenberg) Pfitzer)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis sphaerophora* (Kütz.) Pfitz.)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis sphaerophora* (Kütz.) Pfitz.)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis sphaerophora* (Kütz.) Pfitz.)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis sphaerophora* (Kütz.) Pfitz.)

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Anomoeoneis sphaerophora*)

Site: Espairo, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Anomoeoneis sphaerophora*)

Municipality: Aveiro (District: Aveiro)

Site: Eixo, Horta Stream (Vouga Basin)

Reference: Almeida 1998 (as *Anomoeoneis sphaerophora* (Ehrenberg) Pfitzer)

- Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Anomoeoneis sphaerophora* (Ehrenberg) Pfitzer)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Anomoeoneis sphaerophora* (Ehrenberg) Pfitzer)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Anomoeoneis sphaerophora* (Kütz.) Pfitz.)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Anomoeoneis sphaerophora* (Kütz.) Pfitz.)
- Municipality: Not specified
- Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Anomoeoneis sphaerophora* (Ehrenberg) Pfitzer)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Anomoeoneis sphaerophora* (Kütz.) Pfitz.)
- Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Anomoeoneis sphaerophora* (Kütz.) Pfitz.)
- Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Anomoeoneis sphaerophora* (Kütz.) Pfitz.)
- Municipality: Tondela (District: Viseu)
- Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Anomoeoneis sphaerophora* (Kütz.) Pfitz.)
- Municipality: Vouzela (District: Viseu)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Anomoeoneis sphaerophora* (Kütz.) Pfitz.)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Anomoeoneis sphaerophora* (Kütz.) Pfitz.)
- Subregion: Oeste
- Municipality: Óbidos (District: Leiria)
- Site: Not specified
Reference: Silva 1946b (as *Anomoeneis sphaerophora* (Kütz.) Pfitz., fossil)
- Subregion: Not specified
- Municipality: Not specified
- Site: Not specified
Reference: Calado 1990 (as *Anomoeoneis sphaerophora* (Ehrenberg) Pfitzer)
- REGION: LISBOA
- Subregion: Grande Lisboa
- Municipality: Mafra (District: Lisboa)

Site: Tapada de Mafra, Sobral da Abelheira
Reference: Oliveira 1971b (as *Navicula sphaerophora*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Navicula sphaerophora* Ktz.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Anomoeoneis sphaerophora* (Ehrenberg) Pfitzer)

***Anomoeoneis* sp.**

Distribution (Fig. 89):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Torres Novas (District: Santarém)

Site: Casal do Feijão, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Anomoeoneis* sp.)

REGION: ALENTEJO

Subregion: Alto Alentejo

Municipality: Ponte de Sôr (District: Portalegre)

Site: Montargil Reservoir, Sôr Stream (Tagus Basin)

Reference: Coutinho 1990a (as *Anomoeoneis* sp.)

***Asterionella* Hassall 1850, pl. 2 (lower half) [CAS ref. 000470]**

***Asterionella formosa* Hassall 1850, p. 10; pl. 2/lower Fig., fig. 5
[CAS ref. 000470]**

Synonym: *Asterionella gracillima* (Hantzsch in Rabenhorst) Heiberg 1863 [CAS ref. 000471], according to Krammer & Lange-Bertalot 1991b, p. 103

Distribution (Fig. 90):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Macedo de Cavaleiros (District: Bragança)

- Site: Azibo Reservoir, Azibo River (Douro Basin)
Reference: Vasconcelos 1991 (as *Asterionella formosa*)
Municipality: Mogadouro (District: Bragança)
- Site: Bemposta Reservoir, Douro River (Douro Basin)
Reference: Galhano et al. 1991 (as *Asterionella formosa*)
Municipality: Montalegre (District: Vila Real)
- Site: Alto Rabagão Reservoir, Rabagão River (Cávado Basin)
Reference: Oliveira 1982a (as *Asterionella formosa*); Oliveira et al. 1985 (as *Asterionella formosa*)
- Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)
Reference: Oliveira 1982a (as *Asterionella formosa*); Oliveira et al. 1985 (as *Asterionella formosa*)
- Subregion: Ave
- Municipality: Fafe (District: Braga)
- Site: Travassós, Vizela River (Ave Basin)
Reference: Fidalgo 1990 (as *Asterionella formosa*)
- Municipality: Vieira do Minho (District: Braga)
- Site: Guilhofrei Reservoir, Ave River (Ave Basin)
Reference: Nauwerck 1962 (as *Asterionella formosa* Hassal)
- Site: Salamonde Reservoir, Cávado River (Cávado Basin)
Reference: Oliveira 1982a (as *Asterionella formosa*); Oliveira et al. 1985 (as *Asterionella formosa*); Oliveira 1985 (as *Asterionella formosa*)
- Subregion: Cávado
- Municipality: Terras de Bouro (District: Braga)
- Site: Borrageira (Serra do Gerês)
Reference: González-Guerrero 1949 (as *Asterionella formosa* Hass.)
- Site: Pico de Borrageira (Serra do Gerês)
Reference: González-Guerrero 1949 (as *Asterionella formosa* Hass.)
- Municipality: Not specified
- Site: Cávado River (Cávado Basin)
Reference: González-Guerrero 1949 (as *Asterionella formosa* Hass.); González-Guerrero 1950a (as *Asterionella formosa* Hass.)
- Site: Gerês River (Cávado Basin)
Reference: González-Guerrero 1949 (as *Asterionella formosa* Hass.)
- Site: Homem River (Cávado Basin)
Reference: González-Guerrero 1949 (as *Asterionella formosa* Hass.); González-Guerrero 1950a (as *Asterionella formosa* Hass.)
- Site: Leonte River (Cávado Basin)
Reference: González-Guerrero 1950a (as *Asterionella formosa* Hass.)
- Subregion: Douro
- Municipality: Armamar (District: Viseu)
- Site: Queimadela, Vizela River (Ave Basin)
Reference: Fidalgo 1990 (as *Asterionella formosa*)
- Subregion: Minho-Lima
- Municipality: Arcos de Valdevez (District: Viana do Castelo)
- Site: Abrótegas (Serra do Gerês)

- Reference: González-Guerrero 1950a (as *Asterionella formosa* Hass.)
 Site: Altar de Cabrões (Serra do Gerês)
 Reference: González-Guerrero 1949 (as *Asterionella formosa* Hass.);
 González-Guerrero 1950a (as *Asterionella formosa* Hass.)
 Site: Malhadoiro (Serra do Gerês)
 Reference: González-Guerrero 1950a (as *Asterionella formosa* Hass.)
 Municipality: Caminha (District: Viana do Castelo)
 Site: Seixas, Minho River (Minho Basin)
 Reference: Vasconcelos et al. 2000 (as *Asterionella formosa*)
 Municipality: Melgaço (District: Viana do Castelo)
 Site: Melgaço, Minho River (Minho Basin)
 Reference: Vasconcelos et al. 2000 (as *Asterionella formosa*)
 Site: São Gregório, Minho River (Minho Basin)
 Reference: Vasconcelos et al. 2000 (as *Asterionella formosa*)
 Municipality: Monção (District: Viana do Castelo)
 Site: Monção, Minho River (Minho Basin)
 Reference: Vasconcelos et al. 2000 (as *Asterionella formosa*)
 Municipality: Valença (District: Viana do Castelo)
 Site: Valença, Minho River (Minho Basin)
 Reference: Vasconcelos et al. 2000 (as *Asterionella formosa*)
 Municipality: Not specified
 Site: Ínsua do Ranhão, Minho River (Minho Basin)
 Reference: Vasconcelos et al. 2000 (as *Asterionella formosa*)
 Site: Lima River (Lima Basin)
 Reference: Cerqueira da Silva 1990 (as *Asterionella formosa*)
 Site: Minho River (Minho Basin)
 Reference: Cerqueira da Silva & Cunha 1992 (as *Asterionella formosa*)
 Site: Minho River, international section (Minho Basin)
 Reference: Vasconcelos & Cerqueira 2001 (as *Asterionella formosa*)
 Subregion: Tâmega
 Municipality: Marco de Canavezes (District: Porto)
 Site: Torrão Reservoir, Tâmega River (Douro Basin)
 Reference: Branco & Guimarães 1991 (as *Asterionella formosa*)
 Subregion: Not specified
 Municipality: Not specified
 Site: Ave River (Ave Basin)
 Reference: Cerqueira da Silva 1991 (as *Asterionella formosa*)
- REGION: CENTRO
 Subregion: Baixo Mondego
 Municipality: Coimbra (District: Coimbra)
 Site: Coimbra Reservoir, Mondego River (Mondego Basin)
 References: Craveiro & Santos 1997 (as *Asterionella formosa* Hassal);
 Craveiro & Santos 1998 (as *Asterionella formosa*)
 Municipality: Montemor-o-Velho (District: Coimbra)
 Site: Marsh near Montemor-o-Velho

- Reference: Santos et al. 2002 (as *Asterionella formosa* Hassal)
- Municipality: Penacova (District: Coimbra)
- Site: Aguieira Reservoir, Mondego River (Mondego Basin)
- Reference: Oliveira & Monteiro 1992 (as *Asterionella formosa*)
- Subregion: Baixo Vouga
- Municipality: Aveiro (District: Aveiro)
- Site: Vessada, Fontão Creek (Vouga Basin)
- Reference: Almeida 1998 (as *Asterionella formosa*)
- Subregion: Beira Interior Norte
- Municipality: Guarda (District: Guarda)
- Site: Caldeirão Reservoir, Caldeirão Stream
- Reference: MAOT 2002 (as *Asterionella formosa*)
- Subregion: Beira Interior Sul
- Municipality: Idanha-a-Nova (District: Castelo Branco)
- Site: Idanha Reservoir, Ponsul River (Tagus Basin)
- Reference: Oliveira 1982c (as *Asterionella formosa*)
- Municipality: Vila Velha de Ródão (District: Castelo Branco)
- Site: downstream of Cedilho Reservoir, Tagus River (Tagus Basin)
- Reference: Fernandes et al. 1987 (as *Asterionella formosa*)
- Site: Fratel, Tagus River (Tagus Basin)
- Reference: Oliveira et al. 1989 (as *Asterionella formosa*)
- Subregion: Médio Tejo
- Municipality: Abrantes (District: Santarém)
- Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
- Reference: Caldas 1988 (as *Asterionella formosa*)
- Site: Forno Novo, Tagus River (Tagus Basin)
- Reference: Caldas 1988 (as *Asterionella formosa*)
- Site: Pego, Tagus River (Tagus Basin)
- Reference: Cerqueira da Silva 1989 (as *Asterionella formosa*)
- Site: Tramagal, Tagus River (Tagus Basin)
- Reference: Fernandes et al. 1987 (as *Asterionella formosa*)
- Municipality: Tomar (District: Santarém)
- Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
- Reference: Cabeçadas et al. 1980 (as *Asterionella formosa*); Brito & Andrade 1992 (as *Asterionella formosa*)
- Municipality: Vila Nova da Barquinha (District: Santarém)
- Site: Almourol, Tagus River (Tagus Basin)
- Reference: Fernandes et al. 1987 (as *Asterionella formosa*)
- Site: Vila Nova da Barquinha, Tagus River (Tagus Basin)
- Reference: Oliveira et al. 1989 (as *Asterionella formosa*)
- Subregion: Pinhal Interior Norte
- Municipality: Arganil (District: Coimbra)
- Site: Fronhas Reservoir, Alva River (Mondego Basin)
- Reference: Santos et al. 2002 (as *Asterionella formosa* Hassal)
- Municipality: Pampilhosa da Serra (District: Coimbra)
- Site: Santa Luzia Reservoir, Unhais River (Tagus Basin)

Reference: Oliveira 1982b (as *Asterionella formosa*)
Municipality: Pedrógão Grande (District: Leiria)
Site: Bouçã Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Asterionella formosa*)
Municipality: Pedrógão Grande (District: Leiria)
Site: Cabril Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Asterionella formosa*)
Subregion: Pinhal Interior Sul
Municipality: Mação (District: Santarém)
Site: Pracana Reservoir, Ocreza River (Tagus Basin)
Reference: Oliveira 1982b (as *Asterionella formosa*)
Subregion: Serra da Estrela
Municipality: Seia District: Guarda
Site: São Romão, Lagoa do Covão do Curral
Reference: Santos et al. 2002 (as *Asterionella formosa* Hassal)
Subregion: Not specified
References: Calado 1990 (as *Asterionella formosa* Hassal); Almeida 1998
(as *Asterionella formosa* Hassal);
Feio et al. 2007 (as *Asterionella formosa*)
Site: Paiva River (Douro Basin)
References: Cerqueira da Silva 1991 (as *Asterionella formosa*); Cerqueira
da Silva et al. 1993 (as *Asterionella formosa*)

REGION: LISBOA

Subregion: Grande Lisboa
Municipality: Vila Franca de Xira (District: Lisboa)
Site: Vila Franca de Xira, Tagus River (Tagus Basin)
References: Rodrigues & Moita 1979a (as *Asterionella formosa*);
Rodrigues & Moita 1979b (as *Asterionella formosa*); Fernandes et al.
1987 (as *Asterionella formosa*)

REGION: ALENTEJO

Subregion: Alentejo Central
Municipality: Arraiolos (District: Évora)
Site: Divor Reservoir, Divor Stream (Tagus Basin)
References: Oliveira 1984a (as *Asterionella formosa*); Oliveira 1984b (as
Asterionella formosa); Oliveira 1987 (as *Asterionella formosa* Hassal)
Municipality: Évora (District: Évora)
Site: Monte Novo Reservoir, Degebe River (Guadiana Basin)
References: Andrade & Brito 1995 (as *Asterionella formosa*); Oliveira &
Monteiro 1995 (as *Asterionella formosa*); Oliveira 1996 (as *Asterionella
formosa*)
Subregion: Alentejo Litoral
Municipality: Alcácer do Sal (District: Setúbal)
Site: Pêgo do Altar Reservoir, Alcáçovas Stream (Sado Basin)
Reference: Oliveira 1984a (as *Asterionella formosa*)

- Site: São Romão, Sado River (Sado Basin)
Reference: Coutinho 2003 (as *Asterionella formosa* Hassal)
- Municipality: Odemira (District: Beja)
Site: Santa Clara Reservoir, Mira River (Mira Basin)
Reference: Oliveira 1987 (as *Asterionella formosa* Hassal)
- Subregion: Alto Alentejo
- Municipality: Avis (District: Portalegre)
Site: Maranhão Reservoir, Raia Stream (Tagus Basin)
Reference: Oliveira 1984c (as *Asterionella formosa* Hassal)
- Municipality: Castelo de Vide (District: Portalegre)
Site: Póvoa e Meadas Reservoir, Nisa Stream (Tagus Basin)
Reference: Oliveira 1984a (as *Asterionella formosa*)
- Municipality: Elvas, Portalegre (District: Portalegre)
Site: Caia Reservoir, Caia River (Guadiana Basin)
Reference: Oliveira 1984a (as *Asterionella formosa*)
- Municipality: Gavião (District: Portalegre)
Site: Belver Reservoir, Tagus River (Tagus Basin)
Reference: INIP 1977 (as *Asterionella formosa* Hassal); Fernandes et al. 1987 (as *Asterionella formosa*)
- Municipality: Nisa (District: Portalegre)
Site: Barca da Amieira, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Asterionella formosa*)
- Site: Fratel Reservoir, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Asterionella formosa*)
- Municipality: Ponte de Sôr (District: Portalegre)
Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
Reference: Oliveira 1984a (as *Asterionella formosa*); Coutinho 1990a (as *Asterionella formosa*)
- Subregion: Baixo Alentejo
- Municipality: Almodôvar (District: Beja)
Site: Monte da Vinha, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Asterionella formosa*)
- Municipality: Ferreira do Alentejo (District: Beja)
Site: Odiveiras Reservoir, Odiveiras Stream (Sado Basin)
Reference: Oliveira 1984a (as *Asterionella formosa*)
- Subregion: Lezíria do Tejo
- Municipality: Cartaxo (District: Santarém)
Site: Valada, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Asterionella formosa*); Oliveira et al. 1989 (as *Asterionella formosa*)
- Municipality: Chamusca (District: Santarém)
Site: Chamusca, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Asterionella formosa*)
- Municipality: Salvaterra de Magos (District: Santarém)
Site: Magos Reservoir, Magos Stream (Tagus Basin)
Reference: Oliveira 1984a (as *Asterionella formosa*)

Municipality: Santarém (District: Santarém)
Site: Ómnias, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Asterionella formosa*); Brito & Andrade 1992 (as *Asterionella formosa*)

Subregion: Not specified

Municipality: Not specified
Site: Guadiana River (Guadiana Basin)
Reference: Oliveira 1991 (as *Asterionella formosa*)
Site: Rocha da Galé, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Asterionella formosa*)

REGION: ALGARVE

Subregion: Algarve

Municipality: Silves (District: Faro)
Site: Arade Reservoir, Arade River (Ribeiras do Algarve Basin)
Reference: Oliveira 1984a (as *Asterionella formosa*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa Grande
Reference: Mölder 1947 (as *Asterionella formosa* Hassal)

Site: Lagoa das Sete Cidades
References: Mölder 1947 (as *Asterionella formosa* Hassal); Oliveira 1989 (as *Asterionella formosa*)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas
Reference: Gonçalves 1997 (as *Asterionella formosa*); Gonçalves & Rodrigues 1999 (as *Asterionella formosa*)

Municipality: Santa Cruz da Graciosa (Graciosa Island)

Site: Barreiro
Reference: Azevedo et al. 2005 (as *Asterionella formosa*)

Municipality: Not specified

Site: Graciosa Island
Reference: Gonçalves et al. 2010 (as *Asterionella formosa* Hassal)

Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Asterionella formosa* Hassal)

Site: Not specified
Reference: Gonçalves 2008 (as *Asterionella formosa* Hassal)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified
Site: Reservoirs in the North and Centre of Portugal
Reference: Cabecinha et al. 2009 (as *Asterionella formosa*)
Site: Not specified
Reference: INAG 2008 (as *Asterionella formosa* Hassal)

***Asterionella gracillima* (Hantzsch in Rabenhorst) Heiberg 1863**, p. 68; pl. 6, fig. 19 [CAS ref. 000471]

Basionym: *Diatoma gracillimum* Hantzsch in Rabenhorst 1861b [CAS ref. 011624]

Synonym: *Asterionella formosa* Hassall 1850 [CAS ref. 000470], according to Krammer & Lange-Bertalot 1991b, p. 103

Distribution (Fig. 91):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

References: Nauwerck 1962 (as *Asterionella gracillima* (Hantzsch) Heib.); Frade 1963 (as *Asterionella gracillima* (Hantzsch) Heib.); Cabeçadas et al. 1980 (as *Asterionella gracillima*); Brito & Andrade 1992 (as *Asterionella gracillima*)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: Covão do Vidoal Reservoir (Mondego Basin)

Reference: Nauwerck 1962 (as *Asterionella gracillima* (Hantzsch) Heib.); Santos & Carvalho 2001 (as *Asterionella gracillima* (Hantz.) Heiberg)

REGION: ALENTEJO

Subregion: Alto Alentejo

Municipality: Gavião (District: Portalegre)

Site: Belver Reservoir, Tagus River (Tagus Basin)

Reference: INIP 1977 (as *Asterionella gracillima* (Hantzsch) Heib.)

Municipality: Nisa (District: Portalegre)

Site: Fratel Reservoir, Tagus River (Tagus Basin)

Reference: INIP 1977 (as *Asterionella gracillima* (Hantzsch) Heib.)

Site: Poio Reservoir, Nisa Stream (Tagus Basin)

Reference: Nauwerck 1962 (as *Asterionella gracillima* (Hantzsch) Heib.)

Subregion: Lezíria do Tejo

Municipality: Salvaterra de Magos (District: Santarém)

Site: Magos Reservoir, Magos Stream (Tagus Basin)

Reference: Nauwerck 1962 (as *Asterionella gracillima* (Hantzsch) Heib.)

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Asterionella gracillima*)

REGION: ALGARVE

Subregion: Algarve

Municipality: Silves (District: Faro)

Site: Arade Reservoir, Arade River (Ribeiras do Algarve Basin)

Reference: Nauwerck 1962 (as *Asterionella gracillima* (Hantzsch) Heib.)

***Asterionella* sp.**

Distribution (Fig. 92):

REGION: NORTE

Subregion: Not specified

Municipality: Not specified

Site: Serra do Gerês

Reference: González-Guerrero 1950b (as *Asterionella* sp.)

REGION: CENTRO

Subregion: Oeste

Municipality: Alenquer (District: Lisboa)

Site: Alenquer, Alenquer River (Tagus Basin)

Reference: Frade 1941a (as *Asterionella* sp.)

***Aulacoseira* Thwaites 1848, p. 167**

[CAS ref. 000886]

***Aulacoseira alpigena* (Grunow) Krammer 1991, p. 93; fig. 1-15**

[CAS ref. 006893]

Basionym: *Melosira distans* var. *alpigena* Grunow in Van Heurck 1882 [CAS ref. 001036]

Distribution (Fig. 93):

REGION: CENTRO

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: Covão do Vidoal Reservoir (Mondego Basin)

Reference: Nauwerck 1962 (as *Melosira distans* v. *alpigena* Grunow);
Santos & Carvalho 2001 (as *Melosira distans* (E.) Kg. var. *alpigena*
Grun.)

Site: Lagoa Comprida Reservoir, Lagoa Stream (Mondego Basin)

Reference: Nauwerck 1962 (as *Melosira distans* v. *alpigena* Grunow);
Santos & Carvalho 2001 (as *Melosira distans* (E.) Kg. var. *alpigena*
Grun.)

REGION: ALENTEJO

Subregion: Alto Alentejo
Municipality: Nisa (District: Portalegre)
Site: Poio Reservoir, Nisa Stream (Tagus Basin)
Reference: Nauwerck 1962 (as *Melosira distans* v. *alpigena* Grunow)

***Aulacoseira ambigua* (Grunow) Simonsen 1979**, p. 56 [CAS ref. 003160]

Basionym: *Melosira crenulata* var. *ambigua* Grunow in Van Heurck 1882 [CAS ref. 001036]

Nomenclatural synonym: *Melosira ambigua* (Grunow in Van Heurck) O. Müller 1903 [CAS ref. 002097]

Distribution (Fig. 94):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Mogadouro (District: Bragança)
Site: Bemposta Reservoir, Douro River (Douro Basin)
Reference: Galhano et al. 1991 (as *Melosira ambigua*)

Municipality: Montalegre (District: Vila Real)
Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)
Reference: Oliveira 1982a (as *Melosira ambigua*)

Subregion: Ave

Municipality: Fafe (District: Braga)
Site: Travassós, Vizela River (Ave Basin)
Reference: Fidalgo 1990 (as *Melosira ambigua*)

Subregion: Douro

Site: Vilar Reservoir, Távora River (Douro Basin)
Reference: Oliveira 1981 (as *Melosira ambigua*)

Municipality: Armamar (District: Viseu)
Site: Queimadela, Vizela River (Ave Basin)
Reference: Fidalgo 1990 (as *Melosira ambigua*)

Subregion: Minho-Lima

Municipality: Caminha (District: Viana do Castelo)
Site: Tourim, Âncora River (Âncora Basin)
Reference: Formigo et al. 1993 (as *Melosira ambigua*)
Site: Seixas, Minho River (Minho Basin)
Reference: Vasconcelos et al. 2000 (as *Melosira ambigua*)

Municipality: Melgaço (District: Viana do Castelo)
Site: São Gregório, Minho River (Minho Basin)
Reference: Vasconcelos et al. 2000 (as *Melosira ambigua*)

Municipality: Monção (District: Viana do Castelo)
Site: Monção, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Melosira ambigua*)
Municipality: Valença (District: Viana do Castelo)
Site: Valença, Minho River (Minho Basin)
Reference: Vasconcelos et al. 2000 (as *Melosira ambigua*)
Municipality: Viana do Castelo (District: Viana do Castelo)
Site: Alhada, Âncora River (Âncora Basin)
Reference: Formigo et al. 1993 (as *Melosira ambigua*)
Site: São Lourenço da Montaria, Âncora River (Âncora Basin)
Reference: Formigo et al. 1993 (as *Melosira ambigua*)
Municipality: Not specified
Site: Ínsua do Ranhão, Minho River (Minho Basin)
Reference: Vasconcelos et al. 2000 (as *Melosira ambigua*)
Site: Lima River (Lima Basin)
Reference: Cerqueira da Silva 1990 (as *Melosira ambigua*)
Site: Minho River (Minho Basin)
Reference: Cerqueira da Silva & Cunha 1992 (as *Melosira ambigua*)
Site: Minho River, international section (Minho Basin)
Reference: Vasconcelos & Cerqueira 2001 (as *Aulacoseira ambigua*)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Coimbra (District: Coimbra)
Site: Coimbra Reservoir, Mondego River (Mondego Basin)
References: Craveiro & Santos 1997 (as *Aulacoseira ambigua* (Grunow) Simonsen); Craveiro & Santos 1998 (as *Aulacoseira ambigua*)
Municipality: Figueira da Foz (District: Coimbra)
Site: Lagoa da Vela, Quiaios
Reference: de Figueiredo et al. 2006 (as *Aulacoseira ambigua* (Grunow) Simonsen)
Municipality: Penacova (District: Coimbra)
Site: Aguieira Reservoir, Mondego River (Mondego Basin)
Reference: Oliveira & Monteiro 1992 (as *Melosira ambigua*)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)
Site: Sernada do Vouga, Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Aulacoseira ambigua* (Grun.) Simonsen)
Municipality: Albergaria-a-Velha (District: Aveiro)
Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Aulacoseira ambigua* (Grunow) Simonsen)
Site: Santo António, Valmaior, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Aulacoseira ambigua* (Grun.) Simonsen)
Site: Valmaior (downstream of the mouth of River Filvida), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Aulacoseira ambigua* (Grun.) Simonsen)

Subregion: Beira Interior Sul

Municipality: Idanha-a-Nova (District: Castelo Branco)

- Site: Idanha Reservoir, Ponsul River (Tagus Basin)
Reference: Oliveira 1982c (as *Melosira ambigua*)
- Municipality: Vila Velha de Ródão (District: Castelo Branco)
Site: downstream of Cedilho Reservoir, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Melosira ambigua*)
- Site: Fratel, Tagus River (Tagus Basin)
Reference: Oliveira et al. 1989 (as *Melosira ambigua*)
- Subregion: Médio Tejo
- Municipality: Abrantes (District: Santarém)
Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Melosira ambigua*)
- Site: Forno Novo, Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Melosira ambigua*)
- Site: Tramagal, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Melosira ambigua*)
- Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
References: Andrade et al. 1988 (as *Melosira ambigua*); Brito & Andrade 1991 (as *Melosira ambigua*); Brito & Andrade 1992 (as *Melosira ambigua*); Cabeçadas et al. 1980 (as *Melosira ambigua*); Ferreira 1986 (as *Melosira ambigua*)
- Site: Pego, Tagus River (Tagus Basin)
Reference: Cerqueira da Silva 1989 (as *Melosira ambigua*)
- Municipality: Vila Nova da Barquinha (District: Santarém)
Site: Almourol, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Melosira ambigua*)
- Site: Vila Nova da Barquinha, Tagus River (Tagus Basin)
Reference: Oliveira et al. 1989 (as *Melosira ambigua*)
- Subregion: Pinhal Interior Norte
- Municipality: Pampilhosa da Serra (District: Coimbra)
Site: Santa Luzia Reservoir, Unhais River (Tagus Basin)
Reference: Oliveira 1982b (as *Melosira ambigua*)
- Municipality: Pedrógão Grande (District: Leiria)
Site: Bouçã Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Melosira ambigua*)
- Site: Cabril Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Melosira ambigua*)
- Subregion: Pinhal Interior Sul
- Municipality: Mação (District: Santarém)
Site: Pracana Reservoir, Ocreza River (Tagus Basin)
Reference: Oliveira 1982b (as *Melosira ambigua*)
- Subregion: Not specified
- Municipality: Not specified
- Site: Paiva River (Douro Basin)
References: Cerqueira da Silva 1991 (as *Melosira ambigua*); Cerqueira da Silva et al. 1993 (as *Melosira ambigua*)

Site: Not specified

References: Calado 1990 (as *Melosira ambigua* O. Müller); Feio et al. 2007 (as *Aulacoseira ambigua*)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Vila Franca de Xira (District: Lisboa)

Site: Vila Franca de Xira, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Melosira ambigua*)

REGION: ALENTEJO

Subregion: Alentejo Central

Municipality: Arraiolos (District: Évora)

Site: Divor Reservoir, Divor Stream (Tagus Basin)

References: Oliveira 1984a (as *Melosira ambigua*); Oliveira 1984b (as *Melosira ambigua*)

Municipality: Avis (District: Portalegre)

Site: Maranhão Reservoir, Raia Stream (Tagus Basin)

Reference: Oliveira 1984c (as *Melosira ambigua*)

Municipality: Castelo de Vide (District: Portalegre)

Site: Póvoa e Meadas Reservoir, Nisa Stream (Tagus Basin)

Reference: Oliveira 1984a (as *Melosira ambigua*)

Municipality: Elvas, Portalegre (District: Portalegre)

Site: Caia Reservoir, Caia River (Guadiana Basin)

Reference: Oliveira 1984a (as *Melosira ambigua*)

Municipality: Évora (District: Évora)

Site: Monte Novo Reservoir, Degebe River (Guadiana Basin)

References: Oliveira & Monteiro 1995 (as *Melosira ambigua*); Oliveira 1996 (as *Melosira ambigua*)

Municipality: Ponte de Sôr (District: Portalegre)

Site: Montargil Reservoir, Sôr Stream (Tagus Basin)

References: Oliveira 1984a (as *Melosira ambigua*); Coutinho 1990a (as *Melosira ambigua*)

Subregion: Alentejo Litoral

Site: Sado Estuary (Sado Basin)

Reference: Oliveira & Coutinho 1992 (as *Melosira ambigua*)

Municipality: Alcácer do Sal (District: Setúbal)

Site: Pêgo do Altar Reservoir, Alcáçovas Stream (Sado Basin)

Reference: Oliveira 1984a (as *Melosira ambigua*)

Site: São Romão, Sado River (Sado Basin)

Reference: Coutinho 2003 (as *Aulacoseira ambigua* (Grunow) O. Müller)

Site: Vale do Gaio Reservoir, Xarrama River (Sado Basin)

Reference: Oliveira 1984a (as *Melosira ambigua*)

Municipality: Odemira (District: Beja)

Site: Santa Clara Reservoir, Mira River (Mira Basin)

- References: Oliveira 1984a (as *Melosira ambigua*); Oliveira 1992 (as *Melosira ambigua* (Grun.) O. Müller)
- Subregion: Alto Alentejo
- Municipality: Gavião (District: Portalegre)
- Site: Belver Reservoir, Tagus River (Tagus Basin)
- References: INIP 1977 (as *Melosira ambigua* (Grun.) O. Müll);
Fernandes et al. 1987 (as *Melosira ambigua*)
- Municipality: Marvão (District: Portalegre)
- Site: Sever River (Tagus Basin)
- Reference: Oliveira 1975 (as *Melosira ambigua*)
- Municipality: Nisa (District: Portalegre)
- Site: Fratel Reservoir, Tagus River (Tagus Basin)
- Reference: Fernandes et al. 1987 (as *Melosira ambigua*); INIP 1977 (as *Melosira ambigua* (Grun.) O. Müll.)
- Site: Barca da Amieira, Tagus River (Tagus Basin)
- Reference: Fernandes et al. 1987 (as *Melosira ambigua*)
- Site: Poio Reservoir, Nisa Stream (Tagus Basin)
- Reference: Nauwerck 1962 (as *Melosira ambigua* (Grun.) O. Muell.)
- Subregion: Baixo Alentejo
- Municipality: Almodôvar (District: Beja)
- Site: Monte da Vinha, Guadiana River (Guadiana Basin)
- Reference: Andrade & Brito 1991 (as *Melosira ambigua*)
- Municipality: Ferreira do Alentejo (District: Beja)
- Site: Odivelas Reservoir, Odivelas Stream (Sado Basin)
- Reference: Oliveira 1984a (as *Melosira ambigua*)
- Subregion: Lezíria do Tejo
- Municipality: Cartaxo (District: Santarém)
- Site: Valada, Tagus River (Tagus Basin)
- References: Fernandes et al. 1987 (as *Melosira ambigua*); Oliveira et al. 1989 (as *Melosira ambigua*)
- Municipality: Chamusca (District: Santarém)
- Site: Chamusca, Tagus River (Tagus Basin)
- Reference: Fernandes et al. 1987 (as *Melosira ambigua*)
- Municipality: Salvaterra de Magos (District: Santarém)
- Site: Magos Reservoir, Magos Stream (Tagus Basin)
- Reference: Oliveira 1984a (as *Melosira ambigua*)
- Municipality: Santarém (District: Santarém)
- Site: Ómnias, Tagus River (Tagus Basin)
- References: Fernandes et al. 1987 (as *Melosira ambigua*); Brito & Andrade 1992 (as *Melosira ambigua*)
- Subregion: Not specified
- Municipality: Not specified
- Site: Guadiana River (Guadiana Basin)
- Reference: Oliveira 1991 (as *Melosira ambigua*)
- Site: Rocha da Galé, Guadiana River (Guadiana Basin)
- Reference: Andrade & Brito 1991 (as *Melosira ambigua*)

REGION: ALGARVE

Subregion: Algarve

Municipality: Lagos (District: Faro)

Site: Bravura Reservoir, Odiáxere Stream (Ribeiras do Algarve Basin)

Reference: Oliveira 1984a (as *Melosira ambigua*)

Municipality: Silves (District: Faro)

Site: Arade Reservoir, Arade River (Ribeiras do Algarve Basin)

Reference: Oliveira 1984a (as *Melosira ambigua*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa das Sete Cidades

Reference: Oliveira 1989 (as *Melosira ambigua*)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

References: Krieger 1931 (as *Melosira ambigua*); Rodrigues et al. 1995

(as *Melosira ambigua*); Gonçalves 1997 (as *Aulacoseira ambigua*);

Gonçalves & Rodrigues 1999 (as *Melosira ambigua*)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Aulacoseira ambigua* (Grunow) Simonsen)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Aulacoseira ambigua* (Grunow) Simonsen)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Aulacoseira ambigua* (Grunow) Simonsen)

Site: Not specified

Reference: Gonçalves 2008 (as *Aulacoseira ambigua* (Grunow) Simonsen)

REGION: Not specified

Municipality: Not specified

Site: Reservoirs in the North and Centre of Portugal

Reference: Cabecinha et al. 2009 (as *Melosira ambigua*)

Site: Not specified

Reference: INAG 2008 (as *Aulacoseira ambigua* (Grun.) Simonsen)

***Aulacoseira crenulata* (Ehrenberg) Thwaites 1848**, p. 168 [CAS ref. 000886]

Basionym: *Gaillonella crenulata* Ehrenberg 1843 [CAS ref. 000294]

Nomenclatural synonym: *Melosira crenulata* (Ehrenberg) Kützing 1844 [CAS ref. 000595]

Distribution (Fig. 95):

REGION: CENTRO

Subregion: Cova da Beira

Municipality: Fundão (District: Castelo Branco)

Site: Outeiro do Bispo

Reference: Zimmermann 1909b (as *Melosira crenulata* (Ehr.) Kuetz.)

Subregion: Oeste

Municipality: Óbidos (District: Leiria)

Site: Not specified

Reference: Silva 1946b (as *Melosira crenulata* (Ehr.) Kütz., fossil)

REGION: LISBOA

Subregion: Península de Setúbal

Municipality: Sesimbra (District: Setúbal)

Site: Alfarim diatomite

Reference: Ferreira & Castelo 1957 (as *Melosira crenulata* (Ehr.) Kütz., fossil)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Alpiarça (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Melosira crenulata* (Ehr.) Kütz., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Furnas

Reference: Holmboe 1901 (as *Melosira crenulata* (Ehr.) Kütz.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Aulacoseira crenulata* (Ehrenberg) Krammer)

***Aulacoseira distans* (Ehrenberg) Simonsen 1979**, p. 57 [CAS ref. 003160]

Basionym: *Gaillonella distans* Ehrenberg 1837b [CAS ref. 000286]

Nomenclatural synonym: *Melosira distans* (Ehrenberg) Kützing 1844 [CAS ref. 000595]

Distribution (Fig. 96):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Montalegre (District: Vila Real)

Site: Alto Rabagão Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira et al. 1985 (as *Melosira distans*)

Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)

References: Oliveira 1982a (as *Melosira distans*); Oliveira et al. 1985 (as *Melosira distans*)

Subregion: Ave

Municipality: Vieira do Minho (District: Braga)

Site: Guilhofrei Reservoir, Ave River (Ave Basin)

Reference: Nauwerck 1962 (as *Melosira distans* (Ehrenberg) Kützing)

Site: Salamonde Reservoir, Cávado River (Cávado Basin)

References: Oliveira 1982a (as *Melosira distans*); Oliveira 1985 (as *Melosira distans*); Oliveira et al. 1985 (as *Melosira distans*)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Cabeçadas & Brogueira 1987 (as *Melosira distans*)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Mira (District: Coimbra)

Site: Lagoa de Mira

Reference: Oliveira 1971a (as *Melosira distans*)

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Aulacoseira distans* (Ehrenberg) Simonsen)

Municipality: Penacova (District: Coimbra)

Site: Aguieira Reservoir, Mondego River (Mondego Basin)

Reference: Oliveira & Monteiro 1992 (as *Melosira distans*)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Melosira distans* (Ehr.) Kützing)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Melosira distans* (Ehr.) Kützing)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Melosira distans* (Ehr.) Kützing)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Melosira distans* (Ehr.) Kützing)

Site: Murta, Cértima River (Vouga Basin)

- Reference: Rino & Gil 1989 (as *Melosira distans*)
 Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Melosira distans* (Ehr.) Kützing)
 Site: Raivo, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Melosira distans* (Ehr.) Kützing)
 Site: Ribeiro, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Melosira distans* (Ehr.) Kützing)
 Municipality: Albergaria-a-Velha (District: Aveiro)
 Site: Frossos, Carreira Creek (Mondego Basin)
 Reference: Almeida 1998 (as *Aulacoseira distans* (Ehrenberg) Simonsen)
 Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)
 Reference: Nunes 2007 (as *Aulacoseira distans* (Ehrenberg) Simonsen)
 Municipality: Anadia (District: Aveiro)
 Site: Mogofores, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Melosira distans*)
 Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Melosira distans* (Ehr.) Kützing)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Melosira distans* (Ehr.) Kützing)
 Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Perrães, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Melosira distans*)
 Municipality: Vale de Cambra (District: Aveiro)
 Site: São Pedro de Castelões, Caima River (Vouga Basin)
 Reference: Nunes 2007 (as *Aulacoseira distans* (Ehrenberg) Simonsen)
 Municipality: Not specified
 Site: Pateira de Fermentelos (District: Aveiro)
 Reference: Calado 1991 (as *Melosira distans* (Ehrenberg) Kützing)
 Subregion: Beira Interior Sul
 Municipality: Castelo Branco (District: Castelo Branco)
 Site: São Fiel (Tagus Basin)
 Reference: Zimmermann 1906 (as *Melosira distans* Kuetz.)
 Municipality: Idanha-a-Nova (District: Castelo Branco)
 Site: Idanha Reservoir, Ponsul River (Tagus Basin)
 Reference: Oliveira 1982c (as *Melosira distans*)
 Municipality: Vila Velha de Ródão (District: Castelo Branco)
 Site: downstream of Cedilho Reservoir, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Melosira distans*)
 Site: Fratel, Tagus River (Tagus Basin)
 Reference: Oliveira et al. 1989 (as *Melosira distans*)
 Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)

- Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Melosira distans* (Ehr.) Kützing)
- Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Melosira distans* (Ehr.) Kützing)
- Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Melosira distans* (Ehr.) Kützing)
- Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Melosira distans* (Ehr.) Kützing)
- Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Melosira distans* (Ehr.) Kützing)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Melosira distans* (Ehr.) Kützing)
- Subregion: Médio Tejo
Municipality: Abrantes (District: Santarém)
Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Melosira distans*)
- Site: Forno Novo, Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Melosira distans*)
- Site: Tramagal, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Melosira distans*)
- Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
References: Cabeçadas et al. 1980 (as *Melosira distans*); Andrade et al. 1988 (as *Melosira distans*); Brito & Andrade 1992 (as *Melosira distans*)
- Municipality: Torres Novas (District: Santarém)
Site: Almonda River (Tagus Basin)
Reference: Zimmermann 1906 (as *Melosira distans* Kuetz.)
- Municipality: Vila Nova da Barquinha (District: Santarém)
Site: Almourol, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Melosira distans*)
- Site: Vila Nova da Barquinha, Tagus River (Tagus Basin)
Reference: Oliveira et al. 1989 (as *Melosira distans*)
- Subregion: Serra da Estrela
Municipality: Seia (District: Guarda)
Site: São Romão, Lagoa do Covão do Curral
Reference: Santos et al. 2002 (as *Aulacoseira distans* (Ehrenberg) Simonsen)
- Subregion: Pinhal Interior Sul
Municipality: Mação (District: Santarém)
Site: Pracana Reservoir, Ocreza River (Tagus Basin)
Reference: Oliveira 1982b (as *Melosira distans*)
- Subregion: Not specified
Municipality: Not specified
Site: Not specified

References: Calado 1990 (as *Melosira distans*); Gil et al. 1991 (as *Melosira distans*)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Vila Franca de Xira (District: Lisboa)

Site: Vila Franca de Xira, Tagus River (Tagus Basin)

References: Rodrigues & Moita 1979b (as *Melosira distans*); Fernandes et al. 1987 (as *Melosira distans*);

Subregion: Península de Setúbal

Municipality: Sesimbra (District: Setúbal)

Site: Lagoa de Albufeira

Reference: Nauwerck 1962 (as *Melosira distans* (Ehrenberg) Kützing)

Subregion: Not specified

Municipality: Not specified

Site: Upper Tagus Estuary (Tagus Basin)

Reference: Brogueira et al. 2007 (as *Aulacoseira distans*)

REGION: ALENTEJO

Subregion: Alentejo Central

Municipality: Arraiolos (District: Évora)

Site: Divor Reservoir, Divor Stream (Tagus Basin)

Reference: Oliveira 1984b (as *Melosira distans*)

Municipality: Elvas, Portalegre (District: Portalegre)

Site: Caia Reservoir, Caia River (Guadiana Basin)

Reference: Oliveira 1984a (as *Melosira distans*)

Municipality: Nisa (District: Portalegre)

Site: Poio Reservoir, Nisa Stream (Tagus Basin)

Reference: Nauwerck 1962 (as *Melosira distans*)

Municipality: Ponte de Sôr (District: Portalegre)

Site: Montargil Reservoir, Sôr Stream (Tagus Basin)

Reference: Coutinho 1990a (as *Melosira distans*)

Subregion: Alentejo Litoral

Site: Sado Estuary (Sado Basin)

Reference: Oliveira & Coutinho 1992 (as *Melosira distans*)

Municipality: Alcácer do Sal (District: Setúbal)

Site: São Romão, Sado River (Sado Basin)

Reference: Coutinho 2003 (as *Aulacoseira distans* (Ehrenberg) Kützing)

Municipality: Santiago do Cacém (District: Setúbal)

Site: Campilhas Reservoir, Campilhas Stream (Sado Basin)

Reference: Oliveira 1984a (as *Melosira distans*)

Subregion: Alto Alentejo

Municipality: Avis (District: Portalegre)

Site: Maranhão Reservoir, Raia Stream (Tagus Basin)

Reference: Oliveira 1984c (as *Melosira distans* (Ehrenberg) Kützing)

Municipality: Gavião (District: Portalegre)

- Site: Belver Reservoir, Tagus River (Tagus Basin)
References: INIP 1977 (as *Melosira distans* (E.) Kg.); Fernandes et al. 1987 (as *Melosira distans*)
- Municipality: Nisa (District: Portalegre)
Site: Barca da Amieira, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Melosira distans*)
- Site: Fratel Reservoir, Tagus River (Tagus Basin)
References: INIP 1977 (as *Melosira distans* (E.) Kg.); Fernandes et al. 1987 (as *Melosira distans*)
- Subregion: Lezíria do Tejo
- Municipality: Cartaxo (District: Santarém)
Site: Valada, Tagus River (Tagus Basin)
References: Fernandes et al. 1987 (as *Melosira distans*); Oliveira et al. 1989 (as *Melosira distans*)
- Municipality: Chamusca (District: Santarém)
Site: Chamusca, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Melosira distans*)
- Municipality: Rio Maior (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Melosira distans* (Ehr.) Kütz., fossil)
- Municipality: Salvaterra de Magos (District: Santarém)
Site: Magos Reservoir, Magos Stream (Tagus Basin)
Reference: Oliveira 1984a (as *Melosira distans*)
- Municipality: Santarém (District: Santarém)
Site: Ómnias, Tagus River (Tagus Basin)
References: Fernandes et al. 1987 (as *Melosira distans*); Brito & Andrade 1992 (as *Melosira distans*);
- Subregion: Not specified
- Municipality: Not specified
Site: Guadiana River (Guadiana Basin)
Reference: Oliveira 1991 (as *Melosira distans*)
- Site: Rocha da Galé, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Melosira distans*)

REGION: ALGARVE

Subregion: Algarve

Municipality: Lagos (District: Faro)

Site: Bravura Reservoir, Odiáxere Stream (Ribeiras do Algarve Basin)

Reference: Oliveira 1984a (as *Melosira distans*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)

Site: Lagoa da Falca (Terceira Island)

Reference: Gonçalves 1996 (as *Aulacoseira distans* (Ehrenberg) Simonsen)

Site: Lagoa da Joaninha

- Reference: Gonçalves 1996 (as *Aulacoseira distans* (Ehrenberg) Simonsen)
Municipality: Lajes do Pico (Pico Island)
Site: Lagoa do Caiado
Reference: Mölder 1947 (as *Melosira ambigua*)
Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
Reference: Chaves 1908 (as *Melosira distans* Ehr.)
Municipality: Praia da Vitória (Terceira Island)
Site: Lagoa do Boi
Reference: Gonçalves 1996 (as *Aulacoseira distans* (Ehrenberg) Simonsen)
Site: Lagoa do Negro
Reference: Gonçalves 1996 (as *Aulacoseira distans* (Ehrenberg) Simonsen)
Municipality: Not specified
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Aulacoseira distans* (Ehrenberg) Simonsen)
Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Aulacoseira distans* (Ehrenberg) Simonsen)
Site: Terceira Island
Reference: Gonçalves et al. 2010 (as *Aulacoseira distans* (Ehrenberg) Simonsen)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Aulacoseira distans* (Ehrenberg) Simonsen)
Site: Not specified
Reference: Gonçalves 2008 (as *Aulacoseira distans* (Ehrenberg) Simonsen)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Reservoirs in the North and Centre of Portugal

Reference: Cabecinha et al. 2009 (as *Melosira distans*)

Site: Not specified

Reference: INAG 2008 (as *Aulacoseira distans* (Ehr.) Simonsen)

***Aulacoseira distans* var. *africana* (O. Müller) Simonsen 1979, p. 57**
[CAS ref. 003160]

Basionym: *Melosira distans* var. *africana* O. Müller 1904 [CAS ref. 001400]

Distribution (Fig. 97):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa do Canário

Reference: Krieger 1931 (as *Melosira distans africana* Müll.)

***Aulacoseira distans* var. *nivalis* (W. Smith) E.Y. Haworth 1990**, p. 195 [CAS ref. 008332]

Basionym: *Melosira nivalis* W. Smith 1856 [CAS ref. 001007]

Nomenclatural synonym: *Melosira distans* var. *nivalis* (W. Smith) Kirchner 1878 [CAS ref. 000561]

Distribution (Fig. 98):

REGION: NORTE

Subregion: Ave

Municipality: Vila Nova de Famalicão (District: Braga)

Site: Ribeirão de Famalicão

Reference: Zimmermann 1914 (as *Melosira distans* (Ehr.) Kuetz. var. *nivalis* (W. Sm.) Grun.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Melosira distans* var. *nivalis* Sm.)

***Aulacoseira granulata* (Ehrenberg) Simonsen 1979**, p. 58 [CAS ref. 003160]

Basionym: *Gaillonella granulata* Ehrenberg 1843 [CAS ref. 000294]

Nomenclatural synonym: *Melosira granulata* (Ehrenberg) Ralfs in Pritchard 1861 [CAS ref. 001063]

Distribution (Fig. 99):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Macedo de Cavaleiros (District: Bragança)

Site: Azibo Reservoir, Azibo River (Douro Basin)

Reference: Vasconcelos 1991 (as *Melosira granulata* (E.) Ralfs)

- Municipality: Mogadouro (District: Bragança)
 Site: Bemposta Reservoir, Douro River (Douro Basin)
 Reference: Galhano et al. 1991 (as *Melosira granulata*)
- Municipality: Montalegre (District: Vila Real)
 Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)
 Reference: Oliveira 1982a (as *Melosira granulata*)
- Subregion: Minho-Lima
 Site: Ínsua do Ranhão, Minho River (Minho Basin)
 Reference: Vasconcelos et al. 2000 (as *Melosira granulata*)
 Site: Minho River, international section (Minho Basin)
 Reference: Vasconcelos & Cerqueira 2001 (as *Aulacoseira granulata*)
 Site: Minho River (Minho Basin)
 Reference: Cerqueira da Silva & Cunha 1992 (as *Melosira granulata*)
- Municipality: Caminha (District: Viana do Castelo)
 Site: Seixas, Minho River (Minho Basin)
 Reference: Vasconcelos et al. 2000 (as *Melosira granulata*)
- Municipality: Melgaço (District: Viana do Castelo)
 Site: Melgaço, Minho River (Minho Basin)
 Reference: Vasconcelos et al. 2000 (as *Melosira granulata*)
 Site: São Gregório, Minho River (Minho Basin)
 Reference: Vasconcelos et al. 2000 (as *Melosira granulata*)
- Municipality: Monção (District: Viana do Castelo)
 Site: Monção, Minho River (Minho Basin)
 Reference: Vasconcelos et al. 2000 (as *Melosira granulata*)
- Municipality: Valença (District: Viana do Castelo)
 Site: Valença, Minho River (Minho Basin)
 Reference: Vasconcelos et al. 2000 (as *Melosira granulata*)
- Subregion: Tâmega
 Municipality: Marco de Canavezes (District: Porto)
 Site: Torrão Reservoir, Tâmega River (Douro Basin)
 Reference: Branco & Guimarães 1991 (as *Melosira granulata*)
- Subregion: Not specified
 Municipality: Not specified
 Site: Ave Reservoirs, Ave River (Ave Basin)
 References: Branco et al. 1991a (as *Melosira granulata*); Branco et al. 1991b (as *Melosira granulata*)
- REGION: CENTRO
 Subregion: Baixo Mondego
 Municipality: Coimbra (District: Coimbra)
 Site: Coimbra Reservoir, Mondego River (Mondego Basin)
 Reference: Craveiro & Santos 1997 (as *Aulacoseira granulata* (Ehrenberg) Simonsen)
- Municipality: Figueira da Foz (District: Coimbra)
 Site: Lagoa da Vela, Quiaios

- Reference: de Figueiredo et al. 2006 (as *Aulacoseira granulata* (Ehrenberg) Simonsen)
- Municipality: Montemor-o-Velho (District: Coimbra)
- Site: Irrigation channel near Montemor-o-Velho
Reference: Santos et al. 2002 (as *Aulacoseira granulata* (Ehrenberg) Simonsen)
- Site: Marsh near Montemor-o-Velho
Reference: Santos et al. 2002 (as *Aulacoseira granulata* (Ehrenberg) Simonsen)
- Municipality: Penacova (District: Coimbra)
- Site: Agueira Reservoir, Mondego River (Mondego Basin)
Reference: Oliveira & Monteiro 1992 (as *Melosira granulata*)
- Subregion: Baixo Vouga
- Municipality: Águeda (District: Aveiro)
- Site: Agadão, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Melosira granulata* (Ehr.) Ralfs)
- Site: Águeda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Melosira granulata* (Ehr.) Ralfs)
- Site: Avelal de Baixo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Melosira granulata* (Ehr.) Ralfs)
- Site: Bolfiar, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Melosira granulata* (Ehr.) Ralfs)
- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
Reference: Gil 1988 (as *Melosira granulata* (Ehr.) Ralfs)
- Site: Murta, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Melosira granulata*)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Melosira granulata* (Ehr.) Ralfs)
- Site: Raivo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Melosira granulata* (Ehr.) Ralfs)
- Site: Redonda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Melosira granulata* (Ehr.) Ralfs)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Melosira granulata* (Ehr.) Ralfs)
- Municipality: Albergaria-a-Velha
- Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Aulacoseira granulata* (Ehrenberg) Simonsen)
- Municipality: Anadia (District: Aveiro)
- Site: Espairo, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Melosira granulata*)
- Site: Mogofões, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Melosira granulata*)
- Site: São João de Azenha, Cértima River (Vouga Basin)

- References: Rino & Gil 1989 (as *Melosira granulata*); Almeida 1998 (as *Aulacoseira granulata* (Ehrenberg) Simonsen)
- Site: Tamengos, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Melosira granulata*)
- Municipality: Aveiro (District: Aveiro)
Site: Aveiro, lake in the municipal park (artificial substrate)
Reference: Gil & Almeida 1993 (as *Melosira granulata*)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Melosira granulata* (Ehr.) Ralfs)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Melosira granulata* (Ehr.) Ralfs)
- Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Aulacoseira granulata* (Ehrenberg) Simonsen)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Aulacoseira granulata* (Ehrenberg) Simonsen)
- Site: Vagueira, Canal de Mira
Reference: Mendes et al. 2009 (as *Aulacoseira granulata*)
- Municipality: Oliveira do Bairro (District: Aveiro)
Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Aulacoseira granulata* (Ehrenberg) Simonsen)
- Site: Perrães, Cértima River (Vouga Basin)
References: Rino & Gil 1989 (as *Melosira granulata*); Almeida 1998 (as *Aulacoseira granulata* (Ehrenberg) Simonsen)
- Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Melosira granulata*)
- Site: Vila Verde, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Aulacoseira granulata* (Ehrenberg) Simonsen)
- Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Melosira granulata* (Ehrenberg) Ralfs)
- Subregion: Beira Interior Sul
Municipality: Idanha-a-Nova (District: Castelo Branco)
Site: Idanha Reservoir, Ponsul River (Tagus Basin)
Reference: Oliveira 1982c (as *Melosira granulata*)
- Municipality: Vila Velha de Ródão (District: Castelo Branco)
Site: downstream of Cedilho Reservoir, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Melosira granulata*)
- Site: Fratel, Tagus River (Tagus Basin)
Reference: Oliveira et al. 1989 (as *Melosira granulata*)
- Subregion: Dão-Lafões

- Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Melosira granulata* (Ehr.) Ralfs)
- Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Melosira granulata* (Ehr.) Ralfs)
- Site: Varzuelas, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Melosira granulata* (Ehr.) Ralfs)
- Municipality: Tondela District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 Reference: Gil 1988 (as *Melosira granulata* (Ehr.) Ralfs)
- Site: In the proximity of Tondela, Criz River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Aulacoseira granulata* (Ehrenberg) Simonsen)
- Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Melosira granulata* (Ehr.) Ralfs)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Melosira granulata* (Ehr.) Ralfs)
- Subregion: Médio Tejo
- Municipality: Abrantes (District: Santarém)
 Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Melosira granulata*)
- Site: Forno Novo, Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Melosira granulata*)
- Site: Pego, Tagus River (Tagus Basin)
 Reference: Cerqueira da Silva 1989 (as *Melosira granulata*)
- Site: Tramagal, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Melosira granulata*)
- Municipality: Tomar (District: Santarém)
 Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
 References: Frade 1961 (as *Melosira granulata*); Cabeçadas et al. 1980 (as *Melosira granulata*); Brito & Andrade 1992 (as *Melosira granulata*)
- Municipality: Torres Novas (District: Santarém)
 Site: Almonda River (Tagus Basin)
 Reference: Oliveira & Caldas 1970 (*Melosira granulata* (E.) Ralfs)
- Site: Renova, Almonda River (Tagus Basin)
 Reference: Oliveira & Caldas 1971 (as *Melosira granulata* (Ehrenberg) Ralfs)
- Municipality: Vila Nova da Barquinha (District: Santarém)
 Site: Almourol, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Melosira granulata*)
- Site: Vila Nova da Barquinha, Tagus River (Tagus Basin)
 Reference: Oliveira et al. 1989 (as *Melosira granulata*)
- Subregion: Pinhal Interior Norte
- Municipality: Arganil (District: Coimbra)
 Site: Fronhas Reservoir, Alva River (Mondego Basin)

Reference: Santos et al. 2002 (as *Aulacoseira granulata* (Ehrenberg) Simonsen)

Municipality: Pampilhosa da Serra (District: Coimbra)

Site: Santa Luzia Reservoir, Unhais River (Tagus Basin)

Reference: Oliveira 1982b (as *Melosira granulata*)

Municipality: Pedrógão Grande (District: Leiria)

Site: Bouçã Reservoir, Zêzere River (Tagus Basin)

Reference: Oliveira 1982b (as *Melosira granulata*)

Site: Cabril Reservoir, Zêzere River (Tagus Basin)

Reference: Oliveira 1982b (as *Melosira granulata*)

Subregion: Pinhal Interior Sul

Municipality: Mação (District: Santarém)

Site: Pracana Reservoir, Ocreza River (Tagus Basin)

Reference: Oliveira 1982b (as *Melosira granulata*)

Subregion: Not specified

Municipality: Not specified

Site: Paiva River (Douro Basin)

References: Cerqueira da Silva 1991 (as *Melosira granulata*); Cerqueira da Silva et al. 1993 (as *Melosira granulata*)

Site: Not specified

Reference: Calado 1990 (as *Melosira granulata* (Ehrenberg) Ralfs)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Sintra (District: Lisboa)

Site: Mula Reservoir, Mula Stream (Western Streams Basin)

Reference: Ferreira 1986 (as *Melosira granulata*)

Municipality: Vila Franca de Xira (District: Lisboa)

Site: Vila Franca de Xira, Tagus River (Tagus Basin)

Reference: Rodrigues & Moita 1979a (as *Melosira granulata*); Rodrigues & Moita 1979b (as *Melosira granulata*); Fernandes et al. 1987 (as *Melosira granulata*)

Subregion: Península de Setúbal

Municipality: Sesimbra (District: Setúbal)

Site: Alfarim diatomite

Reference: Ferreira & Castelo 1957 (as *Melosira granulata* (Ehr.) Ralfs, fossil)

Site: Lagoa de Albufeira

Reference: Nauwerck 1962 (as *Melosira granulata* (Ehrenberg) Ralfs)

Subregion: Not specified

Municipality: Not specified

Site: Upper Tagus Estuary (Tagus Basin)

Reference: Brogueira et al. 2007 (as *Aulacoseira granulata*)

REGION: ALENTEJO

Subregion: Alentejo Central

- Municipality: Arraiolos (District: Évora)
 Site: Divor Reservoir, Divor Stream (Tagus Basin)
 References: Oliveira 1984a (as *Melosira granulata*); Oliveira 1984b (as *Melosira granulata*); Andrade & Brito 1995 (as *Melosira granulata*)
- Municipality: Évora (District: Évora)
 Site: Monte Novo Reservoir, Degebe River (Gadiana Basin)
 References: Oliveira & Monteiro 1993a (as *Melosira granulata*); Oliveira & Monteiro 1993b (as *Melosira granulata*); Andrade & Brito 1995 (as *Melosira granulata*); Oliveira & Monteiro 1995 (as *Melosira granulata*); Oliveira 1996 (as *Melosira granulata*)
- Subregion: Alentejo Litoral
 Site: Sado Estuary (Sado Basin)
 Reference: Oliveira & Coutinho 1992 (as *Melosira granulata*)
- Municipality: Alcácer do Sal (District: Setúbal)
 Site: Pêgo do Altar Reservoir, Alcáçovas Stream (Sado Basin)
 References: Oliveira 1984a (as *Melosira granulata*); Ferreira 1986 (as *Melosira granulata*); Coutinho 1990b (as *Melosira granulata*)
- Site: Trigo de Morais Reservoir, Xarrama River (Sado Basin)
 Reference: Nauwerck 1962 (as *Melosira granulata* (Ehrenberg) Ralfs)
- Site: Vale do Gaio Reservoir, Xarrama River (Sado Basin)
 Reference: Oliveira 1984a (as *Melosira granulata*)
- Municipality: Odemira (District: Beja)
 Site: Santa Clara Reservoir, Mira River (Mira Basin)
 Reference: Oliveira 1984a (as *Melosira granulata*)
- Municipality: Santiago do Cacém (District: Setúbal)
 Site: Campilhas Reservoir, Campilhas Stream (Sado Basin)
 Reference: Oliveira 1984a (as *Melosira granulata*)
- Subregion: Alto Alentejo
 Municipality: Avis (District: Portalegre)
 Site: Maranhão Reservoir, Raia Stream (Tagus Basin)
 Reference: Oliveira 1984c (as *Melosira granulata*)
- Municipality: Elvas, Portalegre (District: Portalegre)
 Site: Caia Reservoir, Caia River (Gadiana Basin)
 Reference: Oliveira 1984a (as *Melosira granulata*)
- Municipality: Gavião (District: Portalegre)
 Site: Belver Reservoir, Tagus River (Tagus Basin)
 References: INIP 1977 (as *Melosira granulata* (E.) Ralfs); Fernandes et al. 1987 (as *Melosira granulata*)
- Municipality: Marvão (District: Portalegre)
 Site: Sever River (Tagus Basin)
 Reference: Oliveira 1975 (as *Melosira granulata*)
- Municipality: Nisa (District: Portalegre)
 Site: Barca da Amieira, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Melosira granulata*)
- Site: Fratel Reservoir, Tagus River (Tagus Basin)

- References: INIP 1977 (as *Melosira granulata* (E.) Ralfs); Fernandes et al. 1987 (as *Melosira granulata*)
- Municipality: Ponte de Sôr (District: Portalegre)
 Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
 Reference: Coutinho 1990a (as *Melosira granulata*)
- Subregion: Baixo Alentejo
- Municipality: Aljustrel (District: Beja)
 Site: Roxo Reservoir, Roxo Stream (Sado Basin)
 Reference: Oliveira 1976 (as *Melosira granulata* (E.) Ralfs)
- Municipality: Almodôvar (District: Beja)
 Site: Monte da Vinha, Guadiana River (Guadiana Basin)
 Reference: Andrade & Brito 1991 (as *Melosira granulata*)
- Municipality: Ferreira do Alentejo (District: Beja)
 Site: Odivelas Reservoir, Odivelas Stream (Sado Basin)
 Reference: Oliveira 1984a (as *Melosira granulata*)
- Subregion: Lezíria do Tejo
- Municipality: Cartaxo (District: Santarém)
 Site: Valada, Tagus River (Tagus Basin)
 References: Fernandes et al. 1987 (as *Melosira granulata*); Oliveira et al. 1989 (as *Melosira granulata*)
- Municipality: Chamusca (District: Santarém)
 Site: Chamusca, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Melosira granulata*)
- Municipality: Rio Maior (District: Santarém)
 Site: Espanadal diatomite
 Reference: Zbyszewski 1943 (as *Melosira granulata* Ehr., fossil)
 Site: Rio Maior diatomite
 Reference: Lefébure 1938 (as *Melosira granulata* Ehr., fossil)
 Site: Not specified
 Reference: Silva 1946b (as *Melosira granulata* (Ehr.) Ralfs, fossil)
- Municipality: Salvaterra de Magos (District: Santarém)
 Site: Magos Reservoir, Magos Stream (Tagus Basin)
 References: Nauwerck 1962 (as *Melosira granulata* (Ehrenberg) Ralfs); Oliveira 1984a (as *Melosira granulata*)
- Municipality: Santarém (District: Santarém)
 Site: Ómnias, Tagus River (Tagus Basin)
 References: Fernandes et al. 1987 (as *Melosira granulata*); Brito & Andrade 1992 (as *Melosira granulata*)
- Subregion: Not specified
- Municipality: Not specified
 Site: Guadiana Estuary (Guadiana Basin)
 Reference: Gouveia et al. 1999 (as *Melosira granulata*)
 Site: Guadiana River (Guadiana Basin)
 Reference: Oliveira 1991 (as *Melosira granulata*)
 Site: Rocha da Galé, Guadiana River (Guadiana Basin)
 Reference: Andrade & Brito 1991 (as *Melosira granulata*)

REGION: ALGARVE

Subregion: Algarve

Municipality: Lagos (District: Faro)

Site: Bravura Reservoir, Odiáxere Stream (Ribeiras do Algarve Basin)

Reference: Oliveira 1984a (as *Melosira granulata*)

Municipality: Silves (District: Faro)

Site: Arade Reservoir, Arade River (Ribeiras do Algarve Basin)

Reference: Oliveira 1984a (as *Melosira granulata*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Melosira granulata* (Ehrenberg) Ralfs);

Bourrelly & Manguin 1946a (as *Melosira granulata* (Ehrenberg) Ralfs)

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa do Canário

Reference: Mölder 1947 (as *Melosira granulata* (Ehrenberg) Ralfs)

Site: Lagoa Grande

Reference: Mölder 1947 (as *Melosira granulata* (Ehrenberg) Ralfs)

Site: Lagoa das Sete Cidades

Reference: Mölder 1947 (as *Melosira granulata* (Ehrenberg) Ralfs)

Site: Pico da Cruz

Reference: Holmboe 1901 (as *Melosira granulata* (Ehrenberg) Ralfs)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

References: Mölder 1947 (as *Melosira granulata* (Ehrenberg) Ralfs);

Rodrigues et al. 1995 (as *Melosira granulata*); Gonçalves 1997 (as

Aulacoseira granulata); Gonçalves & Rodrigues 1999 (as *Aulacoseira granulata*)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Aulacoseira granulata* (Ehrenberg) Simonsen)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Aulacoseira granulata* (Ehrenberg) Simonsen)

Site: Not specified

Reference: Gonçalves 2008 (as *Aulacoseira granulata* (Ehrenberg) Simonsen)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Funchal

Reference: Tempère & Peragallo 1907-1915 (as *Melosira granulata* Ralfs)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Reservoirs in the North and Centre of Portugal
Reference: Cabecinha et al. 2009 (as *Melosira granulata*)
Site: Not specified
Reference: INAG 2008 (as *Aulacoseira granulata* (Ehr.) Simonsen)

***Aulacoseira granulata* var. *angustissima* (O. Müller) Simonsen 1979, p. 58 [CAS ref. 003160]**

Basionym: *Melosira granulata* var. *angustissima* O. Müller 1900 [CAS ref. 000674]

Distribution (Fig. 100):

REGION: CENTRO
Subregion: Baixo Mondego
Municipality: Coimbra (District: Coimbra)
Site: Poço do Almegue
Reference: Nauwerck 1959 (as *Melosira granulata* v. *angustissima* O. Muell)
Municipality: Figueira da Foz (District: Coimbra)
Site: Lagoa da Vela, Quiaios
References: Abrantes et al. 2006 (as *Aulacoseira granulata* var. *angustissima*); de Figueiredo et al. 2006 (as *Aulacoseira granulata* (Ehrenberg) Simonsen var. *angustissima* (O. Müller) Simonsen)
Subregion: Baixo Vouga
Municipality: Águeda (District: Aveiro)
Site: Agadão, Agadão River (Vouga Basin)
References: Gil 1988 (as *Melosira granulata* (Ehr.) v. *angustissima* O. Müller); Gil et al. 1989-1990 (as *Melosira granulata* v. *angustissima*)
Site: Águeda, Águeda River (Vouga Basin)
References: Gil 1988 (as *Melosira granulata* (Ehr.) v. *angustissima* O. Müller); Gil et al. 1989-1990 (as *Melosira granulata* v. *angustissima*)
Site: Avelal de Baixo, Águeda River (Vouga Basin)
References: Gil 1988 (as *Melosira granulata* (Ehr.) v. *angustissima* O. Müller); Gil et al. 1989-1990 (as *Melosira granulata* v. *angustissima*)
Site: Bolfiar, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Melosira granulata* (Ehr.) v. *angustissima* O. Müller)
Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

- References: Gil 1988 (as *Melosira granulata* (Ehr.) v. *angustissima* O. Müller); Gil et al. 1989-1990 (as *Melosira granulata* v. *angustissima*)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Melosira granulata* (Ehr.) v. *angustissima* O. Müller); Gil et al. 1989-1990 (as *Melosira granulata* v. *angustissima*)
- Site: Raivo, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Melosira granulata* (Ehr.) v. *angustissima* O. Müller)
- Site: Redonda, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Melosira granulata* (Ehr.) v. *angustissima* O. Müller)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Melosira granulata* (Ehr.) v. *angustissima* O. Müller); Gil et al. 1989-1990 (as *Melosira granulata* v. *angustissima*)
- Municipality: Aveiro (District: Aveiro)
- Site: Eixo, Horta Stream (Vouga Basin)
- Reference: Almeida 1998 (as *Aulacoseira granulata* (Ehr.) Simonsen var. *angustissima* (O. Müller) Simonsen)
- Site: Aveiro, lake in the municipal park (artificial substrate)
- Reference: Gil & Almeida 1993 (as *Melosira granulata* v. *angustissima*)
- Site: Requeixo, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Aulacoseira granulata* (Ehr.) Simonsen var. *angustissima* (O. Müller) Simonsen)
- Site: Requeixo 1, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
- Reference: Gil 1988 (as *Melosira granulata* (Ehr.) v. *angustissima* O. Müller)
- Municipality: Mealhada (District: Aveiro)
- Site: Pampilhosa, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Melosira granulata* v. *angustissima*)
- Site: Viadouros, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Melosira granulata* v. *angustissima*)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Melosira granulata* v. *angustissima*)
- Site: Perrães, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Melosira granulata* v. *angustissima*)
- Site: Repolão, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Melosira granulata* v. *angustissima*)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Melosira granulata* (Ehr.) v. *angustissima* O. Müller); Gil et al. 1989-1990 (as *Melosira granulata* v. *angustissima*)
- Site: São João do Monte, Águeda River (Vouga Basin)

- References: Gil 1988 (as *Melosira granulata* (Ehr.) v. *angustissima* O. Müller); Gil et al. 1989-1990 (as *Melosira granulata* v. *angustissima*)
 Site: Varzielas, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Melosira granulata* (Ehr.) v. *angustissima* O. Müller); Gil et al. 1989-1990 (as *Melosira granulata* v. *angustissima*)
 Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 References: Gil 1988 (as *Melosira granulata* (Ehr.) v. *angustissima* O. Müller); Gil et al. 1989-1990 (as *Melosira granulata* v. *angustissima*)
 Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Melosira granulata* (Ehr.) v. *angustissima* O. Müller)
- Subregion: Médio Tejo
 Municipality: Abrantes (District: Santarém)
 Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Melosira granulata angustissima*)
 Site: Forno Novo, Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Melosira granulata angustissima*)
 Municipality: Tomar (District: Santarém)
 Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
 Reference: Brito & Andrade 1992 (as *Melosira granulata* var. *angustissima*)
- Subregion: Pinhal Interior Norte
 Municipality: Arganil (District: Coimbra)
 Site: Fronhas Reservoir, Alva River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Aulacoseira granulata* var. *angustissima* (O. Müller) Simonsen)
 Municipality: Montemor-o-Velho (District: Coimbra)
 Site: Marsh near Montemor-o-Velho
 Reference: Santos et al. 2002 (as *Aulacoseira granulata* var. *angustissima* (O. Müller) Simonsen)
- Subregion: Not specified
 Municipality: Not specified
 Site: Paiva River (Douro Basin)
 References: Cerqueira da Silva 1991 (as *Melosira granulata angustissima*); Cerqueira da Silva et al. 1993 (as *Melosira granulata angustissima*)
 Site: Not specified
 Reference: Calado 1990 (as *Melosira granulata* (Ehr.) Ralfs var. *angustissima* O. Müller)
- REGION: ALENTEJO
 Subregion: Alentejo Central
 Municipality: Arraiolos (District: Évora)
 Site: Divor Reservoir, Divor Stream (Tagus Basin)

- Reference: Oliveira 1984a (as *Melosira granulata* v. *angustissima*)
 Subregion: Alentejo Litoral
 Municipality: Alcácer do Sal (District: Setúbal)
 Site: São Romão, Sado River (Sado Basin)
 Reference: Coutinho 2003 (as *Aulacoseira granulata* var. *angustissima* (Otto Müller) Simonsen)
 Site: Vale do Gaio Reservoir, Xarrama River (Sado Basin)
 Reference: Oliveira 1984a (as *Melosira granulata* v. *angustissima*)
 Municipality: Odemira (District: Beja)
 Site: Santa Clara Reservoir, Mira River (Mira Basin)
 Reference: Oliveira 1984a (as *Melosira granulata* v. *angustissima*)
 Subregion: Alto Alentejo
 Municipality: Avis (District: Portalegre)
 Site: Maranhão Reservoir, Raia Stream (Tagus Basin)
 Reference: Oliveira 1984c (as *Melosira granulata* v. *angustissima*)
 Subregion: Baixo Alentejo
 Municipality: Aljustrel (District: Beja)
 Site: Roxo Reservoir, Roxo Stream (Sado Basin)
 Reference: Oliveira 1976 (as *Melosira granulata* var. *angustissima* O.M.)
 Municipality: Almodôvar (District: Beja)
 Site: Monte da Vinha, Guadiana River (Guadiana Basin)
 Reference: Andrade & Brito 1991 (as *Melosira granulata* var. *angustissima*)
 Site: Rocha da Galé, Guadiana River (Guadiana Basin)
 Reference: Andrade & Brito 1991 (as *Melosira granulata* var. *angustissima*)
 Subregion: Lezíria do Tejo
 Municipality: Salvaterra de Magos (District: Santarém)
 Site: Magos Reservoir, Magos Stream (Tagus Basin)
 Reference: Nauwerck 1962 (as *Melosira granulata* v. *angustissima* O. Muell)
 Municipality: Santarém (District: Santarém)
 Site: Ómnias, Tagus River (Tagus Basin)
 Reference: Brito & Andrade 1992 (as *Melosira granulata* var. *angustissima*)

REGION: ALGARVE

- Subregion: Algarve
 Municipality: Lagos (District: Faro)
 Site: Bravura Reservoir, Odiáxere Stream (Ribeiras do Algarve Basin)
 Reference: Oliveira 1984a (as *Melosira granulata* v. *angustissima*)
 Municipality: Silves (District: Faro)
 Site: Arade Reservoir, Arade River (Ribeiras do Algarve Basin)
 Reference: Oliveira 1984a (as *Melosira granulata* v. *angustissima*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa do Canário

Reference: Mölder 1947 (as *Melosira granulata* v. *angustissima* O. Muell)

Site: Lagoa Grande

Reference: Mölder 1947 (as *Melosira granulata* v. *angustissima* O. Muell)

Site: Lagoa das Sete Cidades

Reference: Mölder 1947 (as *Melosira granulata* v. *angustissima* O. Muell)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Mölder 1947 (as *Melosira granulata* v. *angustissima* O. Muell)

***Aulacoseira granulata* f. *curvata* (Hustedt) Simonsen 1979**, p. 59
[CAS ref. 003160]

Basionym: *Melosira granulata* f. *curvata* Hustedt 1935 [CAS ref. 000509]

Distribution (Fig. 101):

REGION: LISBOA

Subregion: Península de Setúbal

Municipality: Sesimbra (District: Setúbal)

Site: Alfarim diatomite

Reference: Ferreira & Castelo 1957 (as *Melosira granulata* f. *curvata* (Grunow) Hustedt, fossil)

***Aulacoseira islandica* (O. Müller) Simonsen 1979**, p. 60 [CAS ref. 003160]

Basionym: *Melosira islandica* O. Müller 1906 [CAS ref. 002199]

Distribution (Fig. 102):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Melosira islandica*)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Repolão, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Melosira islandica*)

Subregion: Médio Tejo
Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
Reference: Brito & Andrade 1992 (as *Melosira islandica*)

REGION: ALENTEJO
Subregion: Lezíria do Tejo
Municipality: Santarém (District: Santarém)
Site: Ómnias, Tagus River (Tagus Basin)
Reference: Brito & Andrade 1992 (as *Melosira islandica*)

REGION: AUTONOMOUS REGION OF AZORES
Municipality: Ponta Delgada (São Miguel Island)
Site: Lagoa Grande
Reference: Cedercreutz 1941 (as *Melosira islandica*)
Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
References: Manguin 1942 (as *Melosira islandica* O. Müll.); Bourrelly & Manguin 1946a (as *Melosira islandica* O. Müll.)
Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Aulacoseira islandica* (O. Müller) Simonsen)

***Aulacoseira islandica* subsp. *helvetica* (O. Müller) Simonsen 1979,**
p. 60 [CAS ref. 003160]

Basionym: *Melosira islandica* subsp. *helvetica* O. Müller 1906 [CAS ref. 002199]

Distribution (Fig. 103):

REGION: NORTE
Subregion: Cávado
Municipality: Terras de Bouro (District: Braga)
Site: Bouro Reservoir, Homem River (Cávado Basin)
Reference: Nauwerck 1962 (as *Melosira islandica* ssp. *helvetica* O. Muell.)

REGION: CENTRO
Subregion: Baixo Mondego
Municipality: Figueira da Foz (District: Coimbra)
Site: Lagoa da Vela, Bom-Sucesso
Reference: Nauwerck 1962 (as *Melosira islandica* ssp. *helvetica* O. Muell.)
Subregion: Beira Interior Sul

Municipality: Idanha-a-Nova (District: Castelo Branco)

Site: Marechal Carmona Reservoir, Ponsul River (Tagus Basin)

Reference: Nauwerck 1962 (as *Melosira islandica* ssp. *helvetica* O. Muell.)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: Covão do Vidoal Reservoir (Mondego Basin)

References: Nauwerck 1962 (as *Melosira islandica* ssp. *helvetica* O. Muell.); Santos & Carvalho 2001 (as *Melosira islandica* ssp. *helvetica* O. Muell.)

Site: Lagoa Comprida Reservoir, Lagoa Stream (Mondego Basin)

References: Nauwerck 1962 (as *Melosira islandica* ssp. *helvetica* O. Muell.); Santos & Carvalho 2001 (as *Melosira islandica* ssp. *helvetica* O. Muell.)

Site: Lagoa Escura

References: Nauwerck 1962 (as *Melosira islandica* ssp. *helvetica* O. Muell.); Santos & Carvalho 2001 (as *Melosira islandica* ssp. *helvetica* O. Muell.)

REGION: LISBOA

Subregion: Península de Setúbal

Municipality: Sesimbra (District: Setúbal)

Site: Lagoa de Albufeira

Reference: Nauwerck 1962 (as *Melosira islandica* ssp. *helvetica* O. Muell.)

REGION: ALENTEJO

Subregion: Alentejo Litoral

Municipality: Santiago do Cacém (District: Setúbal)

Site: Campilhas Reservoir, Campilhas Stream (Sado Basin)

Reference: Nauwerck 1962 (as *Melosira islandica* ssp. *helvetica* O. Muell.)

Subregion: Alto Alentejo

Municipality: Nisa (District: Portalegre)

Site: Poio Reservoir, Nisa Stream (Tagus Basin)

Reference: Nauwerck 1962 (as *Melosira islandica* ssp. *helvetica* O. Muell.)

Subregion: Lezíria do Tejo

Municipality: Salvaterra de Magos (District: Santarém)

Site: Magos Reservoir, Magos Stream (Tagus Basin)

Reference: Nauwerck 1962 (as *Melosira islandica* ssp. *helvetica* O. Muell.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação

Site: Lagoa das Furnas

Reference: Cedercreutz 1941 (as *Melosira islandica helvetica*)

***Aulacoseira italica* (Ehrenberg) Simonsen 1979**, p. 60 [CAS ref. 003160]

Basionym: *Gaillonella italica* Ehrenberg 1838 [CAS ref. 000288]

Nomenclatural synonym: *Melosira italica* (Ehrenberg) Kützing 1844 [CAS ref. 000595]

Distribution (Fig. 104):

REGION: NORTE

Subregion: Cávado

Municipality: Braga (District: Braga)

Site: Padim da Graça, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Melosira italica*)

Municipality: Not specified

Site: Homem River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Melosira italica*)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Melosira italica*)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Perrães, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Melosira italica*)

Site: Repolão, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Melosira italica*)

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Melosira italica*)

Site: Forno Novo, Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Melosira italica*)

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Melosira italica*)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Vila Franca de Xira (District: Lisboa)

Site: Vila Franca de Xira, Tagus River (Tagus Basin)

Reference: Rodrigues & Moita 1979b (as *Melosira italica*)
Subregion: Península de Setúbal
Municipality: Sesimbra (District: Setúbal)
Site: Lagoa de Albufeira
Reference: Nauwerck 1962 (as *Melosira italica* (E.) Kützing)

REGION: ALENTEJO

Subregion: Alentejo Litoral
Municipality: Santiago do Cacém (District: Setúbal)
Site: Campilhas Reservoir, Campilhas Stream (Sado Basin)
Reference: Nauwerck 1962 (as *Melosira italica* (E.) Kützing)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Ponta Delgada (São Miguel Island)
Site: Lagoa Grande
Reference: Mölder 1947 (as *Melosira italica* (E.) Kützing)
Site: Lagoa das Sete Cidades
References: Mölder 1947 (as *Melosira italica* (E.) Kützing); Oliveira 1989 (as *Melosira italica*)
Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Aulacoseira italica* (Ehrenberg) Crawford, Likoshway & Jahn)
Site: Not specified
Reference: Gonçalves 2008 (as *Aulacoseira italica* (Ehrenberg) Crawford, Likoshway & Jahn)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Ponta do Sol (Madeira Island)
Site: Rabaçal (Madeira Island)
Reference: Mölder 1947 (as *Melosira italica* (E.) Kützing)

REGION: Not specified

Subregion: Not specified
Municipality: Not specified
Site: Reservoirs in the North and Centre of Portugal
Reference: Cabecinha et al. 2009 (as *Melosira italica*)

***Aulacoseira italica* var. *subarctica* (O. Müller) Davydova in Gleser, Makarova, Moisseeva & Nikolaev 1992, p. 82-83; pl. 61, fig. 19-20 [CAS ref. 006385]**

Basionym: *Melosira italica* subsp. *subarctica* O. Müller 1906 [CAS ref. 002199]

Nomenclatural synonym: *Aulacoseira subarctica* (O. Müller) E.Y. Haworth 1990 [CAS ref. 008332]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Aulacoseira subarctica* (O. Muller) Haworth)

***Aulacoseira italica* var. *tenuissima* (Grunow) Simonsen 1979**, p. 60 [CAS ref. 003160]

Basionym: *Melosira tenuissima* Grunow in Van Heurck 1882 [CAS ref. 001036]

Nomenclatural synonym: *Melosira italica* var. *tenuissima* (Grunow in Van Heurck) O. Müller 1904 [CAS ref. 001400]

Distribution (Fig. 105):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

References: Chaves 1908 (as *Melosira tenuissima* Ktz.); Manguin 1942 (as *Melosira italica* (Ehr.) Kütz. var. *tenuissima* (Grun.) O. Müll.); Bourrelly & Manguin 1946a (as *Melosira italica* (Ehr.) Kütz. var. *tenuissima* (Grun.) O. Müll.)

Site: Ribeira Quente

References: Manguin 1942 (as *Melosira italica* (Ehr.) Kütz. var. *tenuissima* (Grun.) O. Müll.); Bourrelly & Manguin 1946a (as *Melosira italica* (Ehr.) Kütz. var. *tenuissima* (Grun.) O. Müll.)

Municipality: Vila Franca do Campo (São Miguel Island)

Site: Lagoa do Congro

References: Manguin 1942 (as *Melosira italica* (Ehr.) Kütz. var. *tenuissima* (Grun.) O. Müll.); Bourrelly & Manguin 1946a (as *Melosira italica* (Ehr.) Kütz. var. *tenuissima* (Grun.) O. Müll.)

Municipality: Not specified

Site: Lagoa de Cazador (São Miguel Island)

Reference: Manguin 1942 (as *Melosira italica* (Ehr.) Kütz. var. *tenuissima* (Grun.) O. Müll.)

***Aulacoseira lacustris* f. *tenuior* (Grunow) Houk, Klee & Passauer 2007**, p. 71 [CAS ref. 012912]

Basionym: *Melosira lirata* f. *tenuior* Grunow in Van Heurck 1882 [CAS ref. 001036]

Nomenclatural synonym: *Aulacoseira tenuior* (Grunow) Krammer 1991 [CAS ref. 006893]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Aulacoseira tenuior* Krammer)

***Aulacoseira lirata* (Ehrenberg) R. Ross in Hartley, Ross & Williams 1986**, p. 606-607 [CAS ref. 002355]

Basionym: *Gaillonella lirata* Ehrenberg 1843 [CAS ref. 000294]

Nomenclatural synonym: *Melosira distans* var. *lirata* (Ehrenberg) VanLandingham 1971 [CAS ref. 006305]

Distribution (Fig. 106):

REGION: CENTRO

Subregion: Beira Interior Sul

Municipality: Idanha-a-Nova (District: Castelo Branco)

Site: Marechal Carmona Reservoir, Ponsul River (Tagus Basin)

Reference: Nauwerck 1962 (as *Melosira distans* v. *lirata* (E.) Bethge)

Subregion: Médio Tejo

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

References: Nauwerck 1962 (as *Melosira distans* v. *lirata* (E.) Bethge);

Frade 1963 (as *Melosira distans* var. *lirata* (E.) Bethge)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: Covão do Vidoal Reservoir (Mondego Basin)

References: Nauwerck 1962 (as *Melosira distans* v. *lirata* (E.) Bethge);

Santos & Carvalho 2001 (as *Melosira distans* (E.) Kg. var. *lirata* (E.)

Bethge)

Site: Lagoa Comprida Reservoir, Lagoa Stream (Mondego Basin)

References: Nauwerck 1962 (as *Melosira distans* v. *lirata* (E.) Bethge); Santos & Carvalho 2001 (as *Melosira distans* (E.) Kg. var. *lirata* (E.) Bethge)

REGION: LISBOA

Subregion: Península de Setúbal

Municipality: Sesimbra (District: Setúbal)

Site: Lagoa de Albufeira

Reference: Nauwerck 1962 (as *Melosira distans* v. *lirata* (E.) Bethge)

REGION: ALENTEJO

Subregion: Alentejo Litoral

Municipality: Alcácer do Sal (District: Setúbal)

Site: Pêgo do Altar Reservoir (ancient Salazar Reservoir), Alcáçovas Stream (Sado Basin)

Reference: Nauwerck 1962 (as *Melosira distans* v. *lirata* (E.) Bethge)

Subregion: Alto Alentejo

Municipality: Santiago do Cacém (District: Setúbal)

Site: Campilhas Reservoir, Campilhas Stream (Sado Basin)

Reference: Nauwerck 1962 (as *Melosira distans* v. *lirata* (E.) Bethge)

Subregion: Alto Alentejo

Municipality: Nisa (District: Portalegre)

Site: Poio Reservoir, Nisa Stream (Tagus Basin)

Reference: Nauwerck 1962 (as *Melosira distans* v. *lirata* (E.) Bethge)

Subregion: Lezíria do Tejo

Municipality: Salvaterra de Magos (District: Santarém)

Site: Magos Reservoir, Magos Stream (Tagus Basin)

Reference: Nauwerck 1962 (as *Melosira distans* v. *lirata* (E.) Bethge)

***Aulacoseira muzzanensis* (F. Meister) Krammer 1991, p. 98 [CAS ref. 006893]**

Basionym: *Melosira muzzanensis* F. Meister 1912 [CAS ref. 000642]

Distribution (Fig. 107):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Aulacoseira muzzanensis* (Meister) Krammer)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: Lagoa Comprida Reservoir, Lagoa Stream (Mondego Basin)

Reference: Santos et al. 2002 (as *Aulacoseira muzzanensis* (Meister) Krammer)

***Aulacoseira perglabra* (Østrup) E.Y. Haworth 1990**, p. 195 [CAS ref. 008332]

Basionym: *Melosira perglabra* Østrup 1910 [CAS ref. 000706]

Distribution (Fig. 108):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Aulacoseira perglabra* (Østrup) Haworth)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: Lagoa Comprida Reservoir, Lagoa Stream (Mondego Basin)

Reference: Santos et al. 2002 (as *Aulacoseira perglabra* (Østrup) Haworth)

***Aulacoseira pfaffiana* (Reinsch) Krammer 1991**, p. 94; fig. 45-54 [CAS ref. 006893]

Basionym: *Melosira pfaffiana* Reinsch 1866 [CAS ref. 000791]:

Distribution (Fig. 109):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Aulacoseira pfaffiana* (Reinsch) Krammer)

***Aulacoseira subarctica* f. *recta* (O. Müller) Krammer in Krammer & Lange-Bertalot 1991a**, p. 28 [CAS ref. 006521]

Basionym: *Melosira italica* f. *recta* O. Müller 1906 [CAS ref. 002199]

Distribution (Fig. 110):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Coimbra (as District: Coimbra)

Site: Coimbra Reservoir, Mondego River (Mondego Basin)

References: Craveiro & Santos 1997 (as *Aulacoseira subarctica* (O.M.)

Haworth f. *recta* (O.M.) Krammer); Craveiro & Santos 1998 (as *Aulacoseira subarctica* f. *recta*)

***Aulacoseira tethera* E.Y. Haworth 1990, p. 195 [CAS ref. 008332]**

Distribution (Fig. 111):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Aulacoseira tethera* Haworth)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: Lagoa Comprida Reservoir, Lagoa Stream (Mondego Basin)

Reference: Santos et al. 2002 (as *Aulacoseira tethera* Haworth)

Site: Sabugueiro, Lagoacho Reservoir

Reference: Santos et al. 2002 (as *Aulacoseira tethera* Haworth)

Site: São Romão, Lagoa do Covão do Curral

Reference: Santos et al. 2002 (as *Aulacoseira tethera* Haworth)

***Aulacoseira* sp.**

Distribution (Fig. 112):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Bragança (District: Bragança)

Site: São Serrada Reservoir, Andorinhas Stream (Douro Basin)

Reference: Geraldès & Boavida 2005 (as *Aulacoseira* sp.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Aulacoseira* spp.)

Auliscus Ehrenberg 1843b, p. 270
[CAS ref. 001182]

Auliscus cylindricus Ehrenberg 1844a, p. 271 [CAS ref. 001182]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Tagus riverbanks (Tagus Basin)

Reference: Ehrenberg 1845 (as *Auliscus cylindricus*)

Bacillaria J.F. Gmelin 1788, Tomus I, pars 6, p. 3903
[CAS ref. 000613]

Bacillaria paxillifera (O.F. Müller) Hendey 1951, p. 74 '*paxillifer*'
[CAS ref. 000477]

Basionym: *Vibrio paxillifer* O.F. Müller 1786 [CAS ref. 000679]

Synonym: *Bacillaria paradoxa* J.F. Gmelin in Linnaeus 1788 [CAS ref. 000613],
according to Krammer & Lange-Bertalot 1988, p. 8 and to Jahn & Schmid 2007, p.
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Distribution (Fig. 113):

REGION: NORTE

Subregion: Cávado

Municipality: Esposende (District: Braga)

Site: Marachão, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Bacillaria paradoxa*)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Bacillaria paradoxa* Gmelin)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Bacillaria paradoxa* Gmelin)

Municipality: Soure (District: Coimbra)

- Site: Irrigation channel near Soure
Reference: Santos et al. 2002 (as *Bacillaria paradoxa* Gmelin)
- Subregion: Baixo Vouga
- Municipality: Águeda (District: Aveiro)
- Site: Águeda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Bacillaria paxillifer*)
- Site: Bolfiar, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Bacillaria paxillifer*)
- Municipality: Anadia (District: Aveiro)
- Site: Curia, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Bacillaria paradoxa*)
- Site: Mogofores, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Bacillaria paradoxa*)
- Site: Tamengos, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Bacillaria paradoxa*)
- Municipality: Aveiro (District: Aveiro)
- Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Bacillaria paradoxa* Gmelin)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Bacillaria paradoxa* Gmelin)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Bacillaria paxillifer*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Bacillaria paxillifer*)
- Site: Vessada, Fontão Creek (Vouga Basin)
Reference: Almeida 1998 (as *Bacillaria paradoxa* Gmelin)
- Municipality: Mealhada (District: Aveiro)
- Site: Pampilhosa, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Bacillaria paradoxa*)
- Site: Viadouros, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Bacillaria paradoxa*)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Bacillaria paradoxa* Gmelin)
- Site: Perrães, Cértima River (Vouga Basin)
References: Rino & Gil 1989 (as *Bacillaria paradoxa*); Almeida 1998 (as *Bacillaria paradoxa* Gmelin)
- Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Bacillaria paradoxa*)
- Site: Vila Verde, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Bacillaria paradoxa* Gmelin)
- Municipality: Not specified
- Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Bacillaria paxillifera* (Muller) Hendey)

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Tramagal, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Bacillaria paradoxa*)

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Frade 1952 (as *Bacillaria paradoxa*); Frade 1954 (as *Bacillaria paradoxa*)

Municipality: Vila Nova da Barquinha (District: Santarém)

Site: Almourol, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Bacillaria paradoxa*)

Subregion: Oeste

Municipality: Alenquer (District: Lisboa)

Site: Alenquer, Alenquer River (Tagus Basin)

Reference: Frade 1941a (as *Bacillaria paradoxa*)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

References: Calado 1990 (as *Bacillaria paradoxa* Gmelin); Gil et al. 1991 (as *Bacillaria paradoxa*); Almeida & Gil 2001 (as *Bacillaria paxillifera* (O.F. Müller) Hendey)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Vila Franca de Xira (District: Lisboa)

Site: Vila Franca de Xira, Tagus River (Tagus Basin)

References: Rodrigues & Moita 1979b (as *Bacillaria paxillifer*); Fernandes et al. 1987 (as *Bacillaria paradoxa*)

REGION: ALENTEJO

Subregion: Alentejo Litoral

Municipality: Alcácer do Sal (District: Setúbal)

Site: São Romão, Sado River (Sado Basin)

Reference: Coutinho 2003 (as *Bacillaria paxillifera* (Müller) Hendey)

Subregion: Alto Alentejo

Municipality: Gavião (District: Portalegre)

Site: Belver Reservoir, Tagus River (Tagus Basin)

References: INIP 1977 (as *Bacillaria paradoxa* Hust.); Fernandes et al. 1987 (as *Bacillaria paradoxa*)

Municipality: Nisa (District: Portalegre)

Site: Barca da Amieira, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Bacillaria paradoxa*)

Site: Fratel Reservoir, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Bacillaria paradoxa*)

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Água Forte, Água Forte Stream (Sado Basin)
Reference: Luís et al. 2009 (as *Bacillaria paradoxa* Gmelin)
Site: Porto de Beja, Água Forte Stream (Sado Basin)
Reference: Luís et al. 2009 (as *Bacillaria paradoxa* Gmelin)
Site: Porto Ferreira, Roxo Stream (Sado Basin)
Reference: Luís et al. 2009 (as *Bacillaria paradoxa* Gmelin)
Municipality: Almodôvar (District: Beja)
Site: Monte da Vinha, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Bacillaria paradoxa*)
Subregion: Lezíria do Tejo
Municipality: Cartaxo (District: Santarém)
Site: Valada, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Bacillaria paradoxa*)
Municipality: Santarém (District: Santarém)
Site: Ómnias, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Bacillaria paradoxa*)
Subregion: Not specified
Municipality: Not specified
Site: Rocha da Galé, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Bacillaria paradoxa*)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Bacillaria paradoxa* Gmelin)

***Bacillaria* sp.**

Distribution (Fig. 114):

REGION: CENTRO
Subregion: Oeste
Municipality: Alenquer (District: Lisboa)
Site: Alenquer, Alenquer Reservoir
Reference: Frade 1941b (as *Bacillaria* sp.)

***Belonastrum* (Lemmermann) Round & Maidana 2001,**
p. 22 [CAS ref. 009507]

***Belonastrum berolinensis* (Lemmermann) Round & Maidana**
2001, p. 22 [CAS ref. 009507]

Basionym: *Synedra berolinensis* Lemmermann 1900a [CAS ref. 002757]

Distribution (Fig. 115):

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Synedra berolinensis*)

***Biddulphia* Gray 1821, p. 294**
[CAS ref. 000390]

***Biddulphia amphicephala* (Ehrenberg) Ralfs in Pritchard 1861, p. 849** [CAS ref. 001063]

Basionym: *Odontella amphicephala* Ehrenberg 1845a [CAS ref. 000957]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Tagus riverbanks (Tagus Basin)

Reference: Ehrenberg 1845a (as *Odontella? amphicephala*)

***Biddulphia brevis* Ehrenberg 1845a, p. 361** [CAS ref. 000957]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Tagus riverbanks (Tagus Basin)

Reference: Ehrenberg 1845a (as *Biddulphia brevis*)

***Biddulphia* sp.**

Distribution (Fig. 116):

REGION: ALENTEJO

Subregion: Baixo Alentejo

Municipality: Almodôvar (District: Beja)

Site: Monte da Vinha, Guadiana River (Guadiana Basin)

Reference: Andrade & Brito 1991 (as *Biddulphia* sp.)

Subregion: Lezíria do Tejo

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Biddulphia* sp.)

***Biremis* D.G. Mann & E.J. Cox in Round, Crawford & Mann 1990, p. 664 [CAS ref. 003245]**

***Biremis zachariasii* (Reichelt) Edlund, N.A. Andresen & Soninkhishig 2001, p. 303 [CAS ref. 009403]**

Basionym: *Navicula zachariasii* Reichelt 1903 [CAS ref. 000786]

Nomenclatural synonym: *Caloneis zachariasii* (Reichelt) Hustedt 1930 [CAS ref. 000502]

Distribution (Fig. 117):

REGION: NORTE

Subregion: Grande Porto

Municipality: Gondomar (District: Porto)

Site: Gramido

Reference: Silva 1950b (as *Caloneis zachariasii* Reichelt)

***Brachysira* Kützing 1836, p. [3], no. 153
[CAS ref. 003207]**

***Brachysira brebissonii* R. Ross in Hartley, Ross & Williams 1986,
p. 607 [CAS ref. 002355]**

Basionym: *Navicula brachysira* Brébisson in Rabenhorst 1853 [CAS ref. 000772]

Nomenclatural synonyms: *Anomoeoneis brachysira* (Brébisson in Rabenhorst) Cleve 1895 [CAS ref. 000949]

Anomoeoneis serians var. *brachysira* (Brébisson in Rabenhorst) Hustedt 1930 [CAS ref. 000502]

Distribution (Fig. 118):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Anomoeoneis brachysira* (Brébisson) Grunow)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Anomoeoneis brachysira* (Brébisson) Grunow)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* Hustedt); Gil et al. 1989-1990 (as *Anomoeoneis serians* v. *brachysira*)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* Hustedt); Gil et al. 1989-1990 (as *Anomoeoneis serians* v. *brachysira*); Almeida 1998 (as *Anomoeoneis brachysira* (Brébisson) Grunow)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* Hustedt); Gil et al. 1989-1990 (as *Anomoeoneis serians* v. *brachysira*)

Site: Bolfiãr, Águeda River (Vouga Basin)

References: Gil 1988 (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* Hustedt); Gil et al. 1989-1990 (as *Anomoeoneis serians* v. *brachysira*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

References: Gil 1988 (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* Hustedt); Gil et al. 1989-1990 (as *Anomoeoneis serians* v. *brachysira*)

Site: Óis da Ribeira, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Anomoeoneis brachysira* (Brébisson) Grunow)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* Hustedt); Gil et al. 1989-1990 (as *Anomoeoneis serians* v. *brachysira*)

Site: Raivo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* Hustedt); Gil et al. 1989-1990 (as *Anomoeoneis serians* v. *brachysira*)

Site: Redonda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* Hustedt); Gil et al. 1989-1990 (as *Anomoeoneis serians* v. *brachysira*)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* Hustedt); Gil et al. 1989-1990 (as *Anomoeoneis serians* v. *brachysira*)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

References: Gil 1988 (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* Hustedt); Gil et al. 1989-1990 (as *Anomoeoneis serians* v. *brachysira*)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

References: Gil 1988 (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* Hustedt); Gil et al. 1989-1990 (as *Anomoeoneis serians* v. *brachysira*)

Municipality: Sever do Vouga (District: Aveiro)

Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)

Reference: Nunes 2007 (as *Anomoeoneis brachysira* (Brébisson in Rabenhorst) Grunow in Cleve)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* Hustedt); Gil et al. 1989-1990 (as *Anomoeoneis serians* v. *brachysira*)

Site: São João do Monte, Águeda River (Vouga Basin)

References: Gil 1988 (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* Hustedt); Gil et al. 1989-1990 (as *Anomoeoneis serians* v. *brachysira*)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* Hustedt)

Municipality: Tondela (District: Viseu)

Site: Boi, Agadão River (Vouga Basin)

References: Gil 1988 (as *Anomoeoneis seriens* (Bréb.) Cleve v. *brachysira* Hustedt); Gil et al. 1989-1990 (as *Anomoeoneis seriens* v. *brachysira*)

Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil et al. 1989-1990 (as *Anomoeoneis seriens* v. *brachysira*)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis seriens* (Bréb.) Cleve v. *brachysira* Hustedt)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis seriens* (Bréb.) Cleve v. *brachysira* Hustedt)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: Lagoa Comprida Reservoir, Lagoa Stream (Mondego Basin)

Reference: Santos et al. 2002 (as *Anomoeoneis brachysira* (Brébisson) Grunow)

Site: Pond near Lagoa Comprida

Reference: Santos et al. 2002 (as *Anomoeoneis brachysira* (Brébisson) Grunow)

Site: São Romão, Lagoa do Covão do Curral

Reference: Santos et al. 2002 (as *Anomoeoneis brachysira* (Brébisson) Grunow)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Gil et al. 1991 (as *Anomoeoneis seriens* v. *brachysira*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)

Site: Lagoa da Falca (Terceira Island)

Reference: Gonçalves 1996 (as *Anomoeoneis brachysira* (Brébisson) Grunow var. *brachysira* Krammer & Lange-Bertalot)

Municipality: Horta (Faial Island)

Site: Not specified

Reference: Johansson 1977 (as *Anomoeoneis seriens* v. *brachysira* (Bréb.) Hust.)

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Anomoeoneis seriens* (Bréb.) Cleve v. *brachysira* (Bréb.) Hust.); Bourrelly & Manguin 1946a (as *Anomoeoneis seriens* (Bréb.) Cleve v. *brachysira* (Bréb.) Hust.)

Municipality: Lajes do Pico (Pico Island)

Site: Lagoa do Caiado

Reference: Mölder 1947 (as *Anomoeoneis seriens* (Bréb.) Cleve v. *brachysira* (Bréb.) Hust.)

Municipality: Nordeste (São Miguel Island)

Site: Serra Tronqueira

References: Manguin 1942 (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* (Bréb.) Hust.); Bourrelly & Manguin 1946a (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* (Bréb.) Hust.)

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa do Canário

Reference: Mölder 1947 (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* (Bréb.) Hust.)

Municipality: Praia da Vitória (Terceira Island)

Site: Lagoa do Boi

Reference: Gonçalves 1996 (as *Anomoeoneis brachysira* (Brébisson) Grunow var. *brachysira* Krammer & Lange-Bertalot)

Site: Lagoa do Negro

Reference: Gonçalves 1996 (as *Anomoeoneis brachysira* (Brébisson) Grunow var. *brachysira* Krammer & Lange-Bertalot)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Ribeira Grande

References: Manguin 1942 (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* (Bréb.) Hust.); Bourrelly & Manguin 1946a (as *Anomoeoneis serians* (Bréb.) Cleve v. *brachysira* (Bréb.) Hust.)

Municipality: Not specified

Site: Corvo Island

Reference: Gonçalves et al. 2010 (as *Brachysira brebissonii* Ross in Hartley)

Site: Faial Island

Reference: Gonçalves et al. 2010 (as *Brachysira brebissonii* Ross in Hartley)

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Brachysira brebissonii* Ross in Hartley)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Brachysira brebissonii* Ross in Hartley)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Brachysira brebissonii* Ross in Hartley)

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Brachysira brebissonii* Ross in Hartley)

Site: Not specified

Reference: Gonçalves 2008 (as *Brachysira brebissonii* Ross in Hartley)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Anomoeoneis brachysira* (Brébisson in Rabenhorst) Grunow in Cleve)

***Brachysira brebissonii* f. *thermalis* (Grunow in Van Heurck) R. Ross in Hartley, Ross & Williams 1986, p. 607 [CAS ref. 002355]**

Basionym: *Navicula serians* var. *thermalis* Grunow in Van Heurck 1880 [CAS ref. 000895]

Nomenclatural synonym: *Anomoeoneis serians* var. *brachysira* f. *thermalis* (Grunow in Van Heurck) Hustedt 1930 [CAS ref. 000502]

Distribution (Fig. 119):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Anomoeoneis serians* (Bréb.) Cleve fo. *thermalis* (Grun.) Hust.); Bourrelly & Manguin 1946a (as *Anomoeoneis serians* (Bréb.) Cleve fo. *thermalis* (Grun.) Hust.)

Municipality: Povoação (São Miguel Island)

Site: Pico da Vara

References: Manguin 1942 (as *Anomoeoneis serians* (Bréb.) Cleve fo. *thermalis* (Grun.) Hust.); Bourrelly & Manguin 1946a (as *Anomoeoneis serians* (Bréb.) Cleve fo. *thermalis* (Grun.) Hust.)

Municipality: Not specified

Site: Lagoa de Cazador (São Miguel Island)

References: Manguin 1942 (as *Anomoeoneis serians* (Bréb.) Cleve fo. *thermalis* (Grun.) Hust.); Bourrelly & Manguin 1946a (as *Anomoeoneis serians* (Bréb.) Cleve fo. *thermalis* (Grun.) Hust.)

***Brachysira exilis* (Kützing) Round & D.G. Mann 1981, p. 227 [CAS ref. 006882]**

Basionym: *Navicula exilis* Kützing 1844 [CAS ref. 000595]

Nomenclatural synonyms: *Colletonema exile* (Kützing) Grunow 1860 [CAS ref. 000427]

Anomoeoneis exilis (Kützing) Cleve 1895 [CAS ref. 000949]

Distribution (Fig. 120):

REGION: CENTRO

- Subregion: Baixo Mondego
 Municipality: Coimbra (District: Coimbra)
 Site: Coimbra
 Reference: Zimmermann 1910 (as *Navicula exilis* Kütz.)
- Subregion: Baixo Vouga
 Municipality: Águeda (District: Aveiro)
 Site: Agadão, Agadão River (Vouga Basin)
 References: Gil 1988 (as *Navicula exilis* Kützing); Gil et al. 1989-1990 (as *Navicula exilis*)
 Site: Águeda, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Navicula exilis* Kützing); Gil et al. 1989-1990 (as *Navicula exilis*)
 Site: Avelal de Baixo, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Navicula exilis* Kützing); Gil et al. 1989-1990 (as *Navicula exilis*)
 Site: Bolfiar, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Navicula exilis* Kützing); Gil et al. 1989-1990 (as *Navicula exilis*)
 Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
 References: Gil 1988 (as *Navicula exilis* Kützing); Gil et al. 1989-1990 (as *Navicula exilis*)
 Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Navicula exilis* Kützing); Gil et al. 1989-1990 (as *Navicula exilis*)
 Site: Raivo, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Navicula exilis* Kützing); Gil et al. 1989-1990 (as *Navicula exilis*)
 Site: Redonda, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Navicula exilis* Kützing); Gil et al. 1989-1990 (as *Navicula exilis*)
 Site: Ribeiro, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Navicula exilis* Kützing); Gil et al. 1989-1990 (as *Navicula exilis*)
- Municipality: Anadia (District: Aveiro)
 Site: Curia, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Navicula exilis*)
- Municipality: Aveiro (District: Aveiro)
 Site: Aveiro, lake in the municipal park (artificial substrate)
 Reference: Gil & Almeida 1993 (as *Navicula exilis* Koetzing)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Navicula exilis* Kützing); Gil et al. 1989-1990 (as *Navicula exilis*)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

References: Gil 1988 (as *Navicula exilis* Kützing); Gil et al. 1989-1990 (as *Navicula exilis*)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula exilis* Kützing)

Site: Repolão, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula exilis*)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Navicula exilis* Kützing); Gil et al. 1989-1990 (as *Navicula exilis*)

Site: São João do Monte, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula exilis* Kützing)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula exilis* Kützing)

Municipality: Tondela (District: Viseu)

Site: Boi, Agadão River (Vouga Basin)

References: Gil 1988 (as *Navicula exilis* Kützing); Gil et al. 1989-1990 (as *Navicula exilis*)

Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil et al. 1989-1990 (as *Navicula exilis*)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Navicula exilis* Kützing)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Navicula exilis* Kützing); Gil et al. 1989-1990 (as *Navicula exilis*)

Subregion: Pinhal Interior Norte

Municipality: Pedrógão Grande (District: Leiria)

Site: Bouçã Reservoir, Zêzere River (Tagus Basin)

Reference: Oliveira 1982b (as *Anomoeoneis exilis*)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: São Romão, Lagoa do Covão do Curral

Reference: Santos et al. 2002 (as *Navicula exilis* Kützing)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Gil et al. 1991 (as *Navicula exilis*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Horta (Faial Island)

Site: Not specified

Reference: Johansson 1977 (as *Anomoeoneis exilis* (Kütz.) Cleve)

Municipality: Nordeste (São Miguel Island)

Site: Serra Tronqueira
References: Manguin 1942 (as *Anomoeoneis exilis* (Kütz.) Cleve);
Bourrelly & Manguin 1946a (as *Anomoeoneis exilis* (Kütz.) Cleve)
Municipality: Povoação (São Miguel Island)
Site: Ferruginous springs, Furnas
Reference: Chaves 1908 (as *Colletonema exilis* Grun.)
Municipality: Santa Cruz das Flores (Flores Island)
Site: Ribeira Grande
References: Manguin 1942 (as *Anomoeoneis exilis* (Kütz.) Cleve);
Bourrelly & Manguin 1946a (as *Anomoeoneis exilis* (Kütz.) Cleve)
Municipality: Not specified
Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Navicula exilis* Kützing)
Site: São Jorge Island
Reference: Johansson 1977 (as *Anomoeoneis exilis* (Kütz.) Cleve)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Navicula exilis* Kützing)
Site: Terceira Island
Reference: Johansson 1977 (as *Anomoeoneis exilis* (Kütz.) Cleve)

***Brachysira liliana* Lange-Bertalot in Lange-Bertalot & Moser 1994, p. 41-42; pl. 10, fig. 1-12 [CAS ref. 006662]**

Distribution (Fig. 121):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Brachysira liliana* Lange-Bertalot)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Brachysira liliana* Lange-Bertalot)

***Brachysira microcephala* (Grunow) Compère 1986, p. 26, 28; fig. 94 [CAS ref. 008136]**

Basionym: *Navicula microcephala* Grunow 1867 [CAS ref. 000432]

Nomenclatural synonym: *Achnanthes microcephala* (Kützing) Cleve 1895 [CAS ref. 000949]

Synonym: *Brachysira neoexilis* Lange-Bertalot in Lange-Bertalot & Moser 1994 [CAS ref. 006662], according to Shayler & Siver 2004, p. 324

Distribution (Fig. 122):

REGION: NORTE

Subregion: Grande Porto

Municipality: Vila Nova de Gaia (District: Porto)

Site: Febros River (Douro Basin)

Reference: Cerqueira da Silva 1993 (as *Achnanthes microcephala*)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Mira (District: Coimbra)

Site: Lagoa de Mira

Reference: Oliveira 1971a (as *Achnanthes microcephala*)

Subregion: Beira Interior Sul

Municipality: Idanha-a-Nova (District: Castelo Branco)

Site: Idanha Reservoir, Ponsul River (Tagus Basin)

Reference: Oliveira 1982c (as *Achnanthes microcephala*)

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Achnanthes microcephala*)

Site: Forno Novo, Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Achnanthes microcephala*)

Municipality: Torres Novas (District: Santarém)

Site: Casal do Feijão, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Achnanthes microcephala* Kütz.)

Site: Casal da Pinheira, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Achnanthes microcephala* Kütz.)

Site: Renova, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Achnanthes microcephala* Kütz.)

Site: Ribeira Branca, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Achnanthes microcephala* Kütz.)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Calado 1990 (as *Achnanthes microcephala* (Kützing) Cleve)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Mafra (District: Lisboa)

Site: Tapada de Mafra, Sobral da Abelheira

Reference: Oliveira 1971b (as *Achnanthes microcephala*)

REGION: ALENTEJO

Subregion: Alentejo Central

Municipality: Arraiolos (District: Évora)

Site: Divor Reservoir, Divor Stream (Tagus Basin)

- Reference: Oliveira 1984a (as *Achnanthes microcephala*)
Municipality: Évora (District: Évora)
Site: Monte Novo Reservoir, Degebe River (Guadiana Basin)
References: Oliveira & Monteiro 1995 (as *Achnanthes microcephala*);
Oliveira 1996 (as *Achnanthes microcephala*)
- Subregion: Alentejo Litoral
Municipality: Alcácer do Sal (District: Setúbal)
Site: São Romão, Sado River (Sado Basin)
Reference: Coutinho 2003 (as *Achnanthes microcephala* Kützing)
- Municipality: Odemira (District: Beja)
Site: Santa Clara Reservoir, Mira River (Mira Basin)
Reference: Oliveira 1987 (as *Achnanthes microcephala* Kz.)
- Municipality: Santiago do Cacém (District: Setúbal)
Site: Campilhas Reservoir, Campilhas Stream (Sado Basin)
Reference: Oliveira 1984a (as *Achnanthes microcephala*)
- Subregion: Alto Alentejo
Municipality: Avis (District: Portalegre)
Site: Maranhão Reservoir, Raia Stream (Tagus Basin)
Reference: Oliveira 1984c (as *Achnanthes microcephala*)
- Municipality: Gavião (District: Portalegre)
Site: Belver Reservoir, Tagus River (Tagus Basin)
Reference: INIP 1977 (as *Achnanthes microcephala* Kütz.)
- Municipality: Marvão (District: Portalegre)
Site: Sever River (Tagus Basin)
Reference: Oliveira 1975 (as *Achnanthes microcephala*)
- Municipality: Nisa (District: Portalegre)
Site: Fratel Reservoir, Tagus River (Tagus Basin)
Reference: INIP 1977 (as *Achnanthes microcephala* Kütz.)
- Municipality: Ponte de Sôr (District: Portalegre)
Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
Reference: Coutinho 1990a (as *Achnanthes microcephala*)
- Subregion: Baixo Alentejo
Municipality: Aljustrel (District: Beja)
Site: Roxo Reservoir, Roxo Stream (Sado Basin)
References: Oliveira 1976 (as *Achnanthes microcephala* Kütz.; Oliveira
1984a (as *Achnanthes microcephala*)
- Municipality: Ferreira do Alentejo (District: Beja)
Site: Odivelas Reservoir, Odivelas Stream (Sado Basin)
Reference: Oliveira 1984a (as *Achnanthes microcephala*)
- Subregion: Lezíria do Tejo
Municipality: Salvaterra de Magos (District: Santarém)
Site: Magos Reservoir, Magos Stream (Tagus Basin)
Reference: Oliveira 1984a (as *Achnanthes microcephala*)

REGION: ALGARVE

Subregion: Algarve

Municipality: Silves (District: Faro)

Site: Arade Reservoir, Arade River (Ribeiras do Algarve Basin)

References: Oliveira 1984a (as *Achnanthes microcephala*); Oliveira 1987 (as *Achnanthes microcephala* Kz.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

Reference: Manguin 1942 (as *Achnanthes microcephala* (Kütz.) Grun.)

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa Grande

Reference: Mölder 1947 (as *Achnanthes microcephala* (Kütz.) Grun.)

Site: Lagoa das Sete Cidades

References: Mölder 1947 (as *Achnanthes microcephala* (Kütz.) Grun.); Oliveira 1989 (as *Achnanthes microcephala*)

Municipality: Povoação (São Miguel Island)

Site: Ferruginous springs, Furnas

Reference: Chaves 1908 (as *Achnantidium microcephalum* Ktz.)

Site: Lagoa das Furnas

References: Chaves 1908 (as *Achnantidium microcephalum* Ktz.); Mölder 1947 (as *Achnanthes microcephala* (Kütz.) Grun.)

Site: Pico da Vara

Reference: Mölder 1947 (as *Achnanthes microcephala* (Kütz.) Grun.)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Ribeira Grande

References: Manguin 1942 (as *Achnanthes microcephala* (Kütz.) Grun.); Bourrelly & Manguin 1946a (as *Achnanthes microcephala* (Kütz.) Grun.)

Site: Not specified

Reference: Mölder 1947 (as *Achnanthes microcephala* (Kütz.) Grun.)

***Brachysira neoexilis* Lange-Bertalot in Lange-Bertalot & Moser 1994, p. 51-54; pl. 5, fig. 1-35, pl. 6, fig. 1-6, pl. 17, fig. 7-11, pl. 32, fig. 27-30, pl. 46, fig. 19-27 [CAS ref. 006662]**

Synonym: *Brachysira microcephala* (Kützing) Compère 1986 [CAS ref. 008136], according to Shayler & Siver 2004, p. 324

Distribution:

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Brachysira neoexilis* Lange-Bertalot)

***Brachysira procera* Lange-Bertalot & Gerd Moser 1994**, p. 55-57;
pl. 7, fig. 8-26, pl. 9, fig. 4-6, pl. 32, fig. 21-26 [CAS ref. 006662]

Distribution (Fig. 123):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Faial Island

Reference: Gonçalves et al. 2010 (as *Brachysira procera* Lange-Bertalot & Moser)

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Brachysira procera* Lange-Bertalot & Moser)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Brachysira procera* Lange-Bertalot & Moser)

Site: Not specified

Reference: Lange-Bertalot & Moser 1994 (as *Brachysira procera* Lange-Bertalot & Moser)

***Brachysira seriens* (Brébisson) Round & D.G. Mann 1981**, p. 227
[CAS ref. 006882]

Basionym: *Frustulia seriens* Brébisson 1838 [CAS ref. 000161]

Nomenclatural synonym: *Anomoeoneis seriens* (Brébisson) Cleve 1895 [CAS ref. 000949]

Distribution (Fig. 124):

REGION: NORTE

Subregion: Not specified

Municipality: Not specified

Site: Serra do Gerês

Reference: Silva 1950a (as *Anomoeoneis seriens* (Bréb.) Cleve)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis seriens* (Bréb.) Cleve)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis seriens* (Bréb.) Cleve)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis seriens* (Bréb.) Cleve)
Site: Raivo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Anomoeoneis seriens* (Bréb.) Cleve)
Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Anomoeoneis seriens* (Bréb.) Cleve)
Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Anomoeoneis seriens* (Bréb.) Cleve)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Gil et al. 1991 (as *Anomoeoneis seriens*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes do Pico (Pico Island)
Site: Lagoa do Caiado
Reference: Mölder 1947 (as *Anomoeoneis seriens* (Bréb.) Cleve)
Municipality: Povoação (São Miguel Island)
Site: Pico da Vara
References: Manguin 1942 (as *Anomoeoneis seriens* (Bréb.) Cleve);
Bourrelly & Manguin 1946a (as *Anomoeoneis seriens* (Bréb.) Cleve);
Mölder 1947 (as *Anomoeoneis seriens* (Bréb.) Cleve)
Municipality: Vila Franca do Campo (São Miguel Island)
Site: Lagoa do Congro
References: Manguin 1942 (as *Anomoeoneis seriens* (Bréb.) Cleve);
Bourrelly & Manguin 1946a (as *Anomoeoneis seriens* (Bréb.) Cleve)
Municipality: Vila do Porto (Santa Maria Island)
Site: Not specified
References: Manguin 1942 (as *Anomoeoneis seriens* (Bréb.) Cleve);
Bourrelly & Manguin 1946a (as *Anomoeoneis seriens* (Bréb.) Cleve)
Municipality: Not specified
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Brachysira seriens* (Brébisson)
Round & Mann)
Site: Lagoa de Cazador (São Miguel Island)
References: Manguin 1942 (as *Anomoeoneis seriens* (Bréb.) Cleve);
Bourrelly & Manguin 1946a (as *Anomoeoneis seriens* (Bréb.) Cleve)
Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Brachysira seriens* (Brébisson)
Round & Mann)
Site: Santa Maria Island
Reference: Gonçalves et al. 2010 (as *Brachysira seriens* (Brébisson)
Round & Mann)
Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Brachysira serians* (Brébisson) Round & Mann)

Site: Not specified

References: Bourrelly & Manguin 1946b (as *Anomoeoneis serians*);
Gonçalves 2008 (as *Brachysira serians* (Brébisson) Round & Mann)

***Brachysira spectabilis* (Manguin) Lange-Bertalot & Gerd Moser 1994**, p. 65 [CAS ref. 006662]

Basionym: *Anomoeoneis spectabilis* Manguin 1942 [CAS ref. 000623]

Distribution (Fig. 125):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Pico da Vara

References: Manguin 1942 (as *Anomoeoneis spectabilis* Manguin);
Bourrelly & Manguin 1946a (as *Anomoeoneis spectabilis* Manguin)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Brachysira spectabilis* (Manguin) Lange-Bertalot & Moser)

***Brachysira styriaca* (Grunow in Van Heurck) R. Ross in Hartley, Ross & Williams 1986**, p. 607 [CAS ref. 002355]

Basionym: *Navicula styriaca* Grunow in Van Heurck 1880 [CAS ref. 000895]

Nomenclatural synonym: *Anomoeoneis styriaca* (Grunow in Van Heurck) Hustedt 1930 [CAS ref. 000502]

Distribution (Fig. 126):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Horta (Faial Island)

Site: Not specified

Reference: Johansson 1977 (as *Anomoeoneis styriaca* (Grun.) Hust.)

Municipality: Not specified

Site: Faial Island

Reference: Gonçalves et al. 2010 (as *Brachysira styriaca* (Grunow) Ross)

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Brachysira styriaca* (Grunow) Ross)

Site: Terceira Island

References: Johansson 1977 (as *Anomoeoneis styriaca* (Grun.) Hust.);
Gonçalves et al. 2010 (as *Brachysira styriaca* (Grunow) Ross)
Site: Not specified
Reference: Gonçalves 2008 (as *Brachysira styriaca* (Grunow) Ross)

***Brachysira vitrea* (Grunow) R. Ross in Hartley, Ross & Williams
1986, p. 607 [CAS ref. 002355]**

Basionym: *Gomphonema vitreum* Grunow 1878 [CAS ref. 000439]

Nomenclatural synonym: *Anomoeoneis vitrea* (Grunow) R. Ross in Patrick &
Reimer 1966 [CAS ref. 003167]

Distribution (Fig. 127):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Anomoeoneis vitrea* (Grunow) Ross)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Anomoeoneis vitrea* (Grun.) Ross); Gil et al.
1989-1990 (as *Anomoeoneis vitrea*)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Anomoeoneis vitrea* (Grun.) Ross); Gil et al.
1989-1990 (as *Anomoeoneis vitrea*); Almeida 1998 (as *Anomoeoneis
vitrea* (Grunow) Ross)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Anomoeoneis vitrea* (Grunow) Ross)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis vitrea* (Grun.) Ross)

Site: Bolfiar, Águeda River (Vouga Basin)

References: Gil 1988 (as *Anomoeoneis vitrea* (Grun.) Ross); Gil et al.
1989-1990 (as *Anomoeoneis vitrea*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers
(Vouga Basin)

References: Gil 1988 (as *Anomoeoneis vitrea* (Grun.) Ross); Gil et al.
1989-1990 (as *Anomoeoneis vitrea*)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Anomoeoneis vitrea*)

Site: Óis da Ribeira, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Anomoeoneis vitrea* (Grunow) Ross)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

- Reference: Gil 1988 (as *Anomoeoneis vitrea* (Grun.) Ross)
- Site: Raivo, Águeda River (Vouga Basin)
- References: Gil 1988 (as *Anomoeoneis vitrea* (Grun.) Ross); Gil et al. 1989-1990 (as *Anomoeoneis vitrea*)
- Site: Redonda, Águeda River (Vouga Basin)
- References: Gil 1988 (as *Anomoeoneis vitrea* (Grun.) Ross); Gil et al. 1989-1990 (as *Anomoeoneis vitrea*)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Anomoeoneis vitrea* (Grun.) Ross); Gil et al. 1989-1990 (as *Anomoeoneis vitrea*)
- Municipality: Albergaria-a-Velha (District: Aveiro)
- Site: Frossos, Carreira Creek (Mondego Basin)
- Reference: Almeida 1998 (as *Anomoeoneis vitrea* (Grunow) Ross)
- Municipality: Anadia (District: Aveiro)
- Site: Tamengos, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Anomoeoneis vitrea*)
- Municipality: Aveiro (District: Aveiro)
- Site: Eixo, Horta Stream (Vouga Basin)
- Reference: Almeida 1998 (as *Anomoeoneis vitrea* (Grunow) Ross)
- Site: Pano, Largo River (Vouga Basin)
- Reference: Almeida 1998 (as *Anomoeoneis vitrea* (Grunow) Ross)
- Site: Requeixo, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Anomoeoneis vitrea* (Grunow) Ross)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
- References: Gil 1988 (as *Anomoeoneis vitrea* (Grun.) Ross); Gil et al. 1989-1990 (as *Anomoeoneis vitrea*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
- References: Gil 1988 (as *Anomoeoneis vitrea* (Grun.) Ross); Gil et al. 1989-1990 (as *Anomoeoneis vitrea*)
- Municipality: Mealhada (District: Aveiro)
- Site: Viadourous, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Anomoeoneis vitrea*)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Anomoeoneis vitrea*)
- Site: Perrães, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Anomoeoneis vitrea*)
- Municipality: Sever do Vouga (District: Aveiro)
- Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
- Reference: Nunes 2007 (as *Anomoeoneis vitrea* (Grunow) Ross)
- Municipality: Not specified
- Site: Pateira de Fermentelos (District: Aveiro)
- Reference: Calado 1991 (as *Anomoeoneis vitrea* (Grunow) Ross)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis vitrea* (Grun.) Ross)

Site: São João do Monte, Águeda River (Vouga Basin)

References: Gil 1988 (as *Anomoeoneis vitrea* (Grun.) Ross); Gil et al. 1989-1990 (as *Anomoeoneis vitrea*)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis vitrea* (Grun.) Ross)

Municipality: Tondela (District: Viseu)

Site: Boi, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis vitrea* (Grun.) Ross)

Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis vitrea* (Grun.) Ross)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Anomoeoneis vitrea* (Grun.) Ross)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: São Romão, Lagoa do Covão do Curral

Reference: Santos et al. 2002 (as *Anomoeoneis vitrea* (Grunow) Ross)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

References: Calado 1990 (as *Anomoeoneis vitrea* (Grunow) Ross); Gil et al. 1991 (as *Anomoeoneis vitrea*)

REGION: ALENTEJO

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Água Azeda, Água Azeda Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Brachysira vitrea* Ross in Hartley)

Site: Jungeiros, Roxo Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Brachysira vitrea* Ross in Hartley)

Municipality: Mértola (District: Beja)

Site: Reservoir in the abandoned São Domingos mine

Reference: Gerhardt et al. 2008 (as *Anomoeoneis vitrea* (Grunow) Ross)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)

Site: Lagoa da Falca (Terceira Island)

Reference: Gonçalves 1996 (as *Anomoeoneis vitrea* (Grunow) Ross)

Municipality: Praia da Vitória (Terceira Island)

Site: Lagoa do Negro

Reference: Gonçalves 1996 (as *Anomoeoneis vitrea* (Grunow) Ross)

Municipality: Not specified

Site: Corvo Island
Reference: Gonçalves et al. 2010 (as *Brachysira vitrea* (Grunow) Ross)
Site: Faial Island
Reference: Gonçalves et al. 2010 (as *Brachysira vitrea* (Grunow) Ross)
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Brachysira vitrea* (Grunow) Ross)
Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Brachysira vitrea* (Grunow) Ross)
Site: São Jorge Island
Reference: Gonçalves et al. 2010 (as *Brachysira vitrea* (Grunow) Ross)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Brachysira vitrea* (Grunow) Ross)
Site: Terceira Island
Reference: Gonçalves et al. 2010 (as *Brachysira vitrea* (Grunow) Ross)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Anomoeoneis vitrea* (Grunow) Ross)

***Brachysira zellensis* (Grunow) Round & D.G. Mann 1981**, p. 227
[CAS ref. 006882]

Basionym: *Navicula zellensis* Grunow 1860 [CAS ref. 000427]

Nomenclatural synonym: *Anomoeoneis brachysira* var. *zellensis* (Grunow)
Krammer in Krammer & Lange-Bertalot 1986 [CAS ref. 006519]

Distribution (Fig. 128):

REGION: NORTE
Subregion: Entre Douro e Vouga
Municipality: Arouca (District: Aveiro)
Site: Serra da Freita, Arões, Caima River (Vouga Basin)
References: Nunes 2007 (as *Anomoeoneis brachysira* (Bréb.) Grunow var. *zellensis* (Grunow) Krammer); Ferreira da Silva et al. 2009 (as *Anomoeoneis brachysira* (Bréb.) Grunow var. *zellensis* (Grunow) Krammer)

Caloneis Cleve 1894a, p. 46
[CAS ref. 000232]

Caloneis alpestris (Grunow) Cleve 1894a, p. 53 [CAS ref. 000232]

Basionym: *Navicula alpestris* Grunow 1860 [CAS ref. 000427]

Distribution:

REGION: NORTE

Subregion: Not specified

Municipality: Not specified

Site: Serra do Gerês

Reference: Silva 1950a (as *Caloneis alpestris* (Grun.) Cleve)

Caloneis amphisbaena (Bory) Cleve 1894a, p. 58 [CAS ref. 000232]

Basionym: *Navicula amphisbaena* Bory 1824 [CAS ref. 000147]

Distribution (Fig. 129):

REGION: NORTE

Subregion: Grande Porto

Municipality: Porto (District: Porto)

Site: Vilarinho

Reference: Zimmermann 1910 (as *Navicula amphisbaena* Bory)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Caloneis amphisbaena*)

Municipality: Anadia (District: Aveiro)

Site: Espairo, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Caloneis amphisbaena*)

Site: Mogofores, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Caloneis amphisbaena*)

Municipality: Aveiro (District: Aveiro)

Site: Pano, Largo River (Vouga Basin)

Reference: Almeida 1998 (as *Caloneis amphisbaena* (Bory) Cleve)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Perrães, Levira River (Vouga Basin)

Reference: Almeida 1998 (as *Caloneis amphisbaena* (Bory) Cleve)

Site: Perrães, Cértima River (Vouga Basin)
References: Rino & Gil 1989 (as *Caloneis amphisbaena*); Almeida 1998
(as *Caloneis amphisbaena* (Bory) Cleve)
Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Caloneis amphisbaena*)
Site: Vila Verde, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Caloneis amphisbaena* (Bory) Cleve)
Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Caloneis amphisbaena* (Bory) Cleve)
Subregion: Médio Tejo
Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
Reference: Brito & Andrade 1992 (as *Navicula amphisbaena* (?))

REGION: ALENTEJO

Subregion: Alentejo Litoral
Municipality: Alcácer do Sal (District: Setúbal)
Site: São Romão, Sado River (Sado Basin)
Reference: Coutinho 2003 (as *Caloneis amphisbaena* (Bory) Cleve)
Subregion: Alto Alentejo
Municipality: Ponte de Sôr (District: Portalegre)
Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
Reference: Coutinho 1990a (as *Caloneis amphisbaena*)
Subregion: Lezíria do Tejo
Municipality: Alpiarça (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Caloneis amphisbaena* (Bory) Cleve, fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)
Site: Tambores, Furnas
Reference: Chaves 1908 (as *Navicula amphisbaena*, fossil)
Site: Salto do Bargado, Furnas
Reference: Chaves 1908 (as *Navicula amphisbaena*, fossil)
Municipality: Not specified
Site: Not specified
Reference: Gonçalves et al. 2010 (as *Caloneis amphisbaena* (Bory) Cleve, fossil)

***Caloneis bacillum* (Grunow) Cleve 1894b**, p. 99 [CAS ref. 000231]

Basionym: *Stauroneis bacillum* Grunow 1863 [CAS ref. 000429]

Distribution (Fig. 130):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: São João da Madeira (District: Aveiro)

Site: Ui River (Vouga Basin)

Reference: Resende et al. 2010 (as *Caloneis bacillum* (Grunow) Cleve)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve); Almeida 1998 (as *Caloneis bacillum* (Grunow) Cleve)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Caloneis bacillum* (Grunow) Cleve)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Caloneis bacillum* (Grunow) Cleve)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Caloneis bacillum*)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve)

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Bosturenga, Ribeira de Fráguas, Coval da Mó Stream (Vouga Basin)

References: Nunes 2007 (as *Caloneis bacillum* (Grunow) Cleve); Ferreira da Silva et al. 2009 (as *Caloneis bacillum* (Grunow) Cleve)

Site: Frossos, Carreira Creek (Mondego Basin)

Reference: Almeida 1998 (as *Caloneis bacillum* (Grunow) Cleve)

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Caloneis bacillum*)

Site: Mogofores, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Caloneis bacillum*)

- Site: São João de Azenha, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Caloneis bacillum* (Grunow) Cleve)
- Site: Tamengos, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Caloneis bacillum*)
- Municipality: Aveiro (District: Aveiro)
- Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Caloneis bacillum* (Grunow) Cleve)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Caloneis bacillum* (Grunow) Cleve)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve)
- Municipality: Mealhada (District: Aveiro)
- Site: Pampilhosa, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Caloneis bacillum*)
- Site: Viadouros, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Caloneis bacillum*)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Caloneis bacillum* (Grunow) Cleve)
- Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Caloneis bacillum* (Grunow) Cleve)
- Site: Perrães, Cértima River (Vouga Basin)
References: Rino & Gil 1989 (as *Caloneis bacillum*); Almeida 1998 (as *Caloneis bacillum* (Grunow) Cleve)
- Site: Vila Verde, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Caloneis bacillum* (Grunow) Cleve)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve)
- Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve)
- Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve)
- Municipality: Tondela (District: Viseu)
- Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve)
- Municipality: Vouzela (District: Viseu)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve)

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Caloneis bacillum*)

Site: Forno Novo, Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Caloneis bacillum*)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

References: Calado 1990 (as *Caloneis bacillum* (Grun.) Cleve); Gil et al.

1991 (as *Caloneis bacillum*); Feio et al. 2007 (as *Caloneis bacillum*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Ribeira Quente

References: Manguin 1942 (as *Caloneis bacillum* (Grun.) Cleve);

Bourrelly & Manguin 1946a (as *Caloneis bacillum* (Grun.) Cleve)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Ribeira Grande

References: Manguin 1942 (as *Caloneis bacillum* (Grun.) Cleve);

Bourrelly & Manguin 1946a (as *Caloneis bacillum* (Grun.) Cleve)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Caloneis bacillum* (Grunow) Cleve)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Caloneis bacillum* (Grunow) Cleve)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Caloneis bacillum* (Grunow) Cleve)

Site: Not specified

Reference: Gonçalves 2008 (as *Caloneis bacillum* (Grunow) Cleve)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Caloneis bacillum* (Grunow) Cleve)

***Caloneis bacillum* var. *fontinalis* (Grunow in Van Heurck) Cleve
1894b, p. 99 [CAS ref. 000231]**

Basionym: *Navicula bacillaris* var. *fontinalis* Grunow in Van Heurck 1880 [CAS
ref. 000895]

Distribution (Fig. 131):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve v. *fontinalis* Grunow)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve v. *fontinalis* Grunow)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve v. *fontinalis* Grunow)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

References: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve v. *fontinalis* Grunow); Gil et al. 1989-1990 (as *Caloneis bacillum* v. *fontinalis*)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Caloneis bacillum* v. *fontinalis*)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve v. *fontinalis* Grunow)

Site: Raivo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve v. *fontinalis* Grunow); Gil et al. 1989-1990 (as *Caloneis bacillum* v. *fontinalis*)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve v. *fontinalis* Grunow)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve v. *fontinalis* Grunow)

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Caloneis bacillum* v. *fontinalis*)

Site: Espairo, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Caloneis bacillum* v. *fontinalis*)

Site: Mogofores, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Caloneis bacillum* v. *fontinalis*)

Site: São João da Azenha, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Caloneis bacillum* v. *fontinalis*)

Site: Tamengos, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Caloneis bacillum* v. *fontinalis*)

Municipality: Aveiro (District: Aveiro)

Site: Aveiro, lake in the municipal park (artificial substrate)

Reference: Gil & Almeida 1993 (as *Caloneis bacillum* v. *fontinalis* Grunow)

- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve v. *fontinalis* Grunow)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve v. *fontinalis* Grunow); Gil et al. 1989-1990 (as *Caloneis bacillum* v. *fontinalis*)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Caloneis bacillum* v. *fontinalis*)
- Site: Perrães, Levira River (Vouga Basin)
 Reference: Almeida 1998 (as *Caloneis bacillum* (Grunow) Cleve var. *fontinalis* Grunow)
- Site: Perrães, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Caloneis bacillum* v. *fontinalis*)
- Site: Repolão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Caloneis bacillum* v. *fontinalis*)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve v. *fontinalis* Grunow)
- Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve v. *fontinalis* Grunow)
- Site: Varzielas, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve v. *fontinalis* Grunow)
- Municipality: Tondela (District: Viseu)
- Site: Boi, Agadão River (Vouga Basin)
 References: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve v. *fontinalis* Grunow); Gil et al. 1989-1990 (as *Caloneis bacillum* v. *fontinalis*)
- Municipality: Vouzela (District: Viseu)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil et al. 1989-1990 (as *Caloneis bacillum* v. *fontinalis*)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve v. *fontinalis* Grunow)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Caloneis bacillum* (Grun.) P. Cleve v. *fontinalis* Grunow)

***Caloneis branderii* (Hustedt) Krammer in Krammer & Lange-Bertalot 1985**, p. 17-18; pl. 10, fig. 6, 7 [CAS ref. 006263]

Basionym: *Stauroneis branderi* Hustedt 1959a [CAS ref. 000535]

Distribution (Fig. 132):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Stauroneis branderii* Hustedt)

***Caloneis clevei* var. *undulata* f. *inaequalis* Manguin 1942**, p. 135; pl. 2, fig. 30 [CAS ref. 000623]

Distribution (Fig. 133):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Horta (Faial Island)

Site: Not specified

Reference: Johansson 1977 (as *Caloneis clevei* v. *undulata* cfr. fo. *inaequalis* Mang.)

Municipality: Nordeste (São Miguel Island)

Site: Serra Tronqueira

References: Manguin 1942 (as *Caloneis clevei* (Lgst.) Cleve var. *undulata* Krasske fo. *inaequalis*); Bourrelly & Manguin 1946a (as *Caloneis clevei* (Lgst.) Cleve var. *undulata* Krasske fo. *inaequalis*)

***Caloneis dubia* Krammer in Lange-Bertalot & Krammer 1987**, p. 112 [CAS ref. 006173]

Basionym: *Navicula sublinearis* Grunow in Van Heurck 1885 [CAS ref. 001040]

Nomenclatural synonyms: *Pinnularia sublinearis* (Grunow in Van Heurck) Cleve 1895 [CAS ref. 000949]

Caloneis sublinearis (Grunow) Krammer in Krammer & Lange-Bertalot 1985 [CAS ref. 006263]

Distribution (Fig. 134):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Jorge Island

References: Johansson 1977 (as *Pinnularia sublinearis* Grun.); Gonçalves et al. 2010 (as *Caloneis dubia* Krammer)

***Caloneis fontinalis* (Grunow) Lange-Bertalot & E. Reichardt in Lange-Bertalot & Metzeltin 1996**, v. 2: p. 29; pl. 87, fig. 14-15 [CAS ref. 007048]

Basionym: *Navicula fontinalis* Grunow in Van Heurck 1885 [CAS ref. 001040]

Distribution (Fig. 135):

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Mafra (District: Lisboa)

Site: Tapada de Mafra, Sobral da Abelheira

Reference: Oliveira 1971b (as *Navicula fontinalis*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Ferruginous springs, Furnas

Reference: Chaves 1908 (as *Navicula fontinalis* Grun.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Caloneis fontinalis* (Grunow) Lange-Bertalot & Reichardt)

***Caloneis hyalina* Hustedt 1937a**, p. 281-282; pl. 15, fig. 8-10 [CAS ref. 001012]

Distribution (Fig. 136):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Santa Cruz da Graciosa (Graciosa Island)

Site: Fundão, Caldeira

Reference: Azevedo et al. 2005 (as *Caloneis hyalina*)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Caloneis hyalina* Hustedt)

Site: Graciosa Island

Reference: Gonçalves et al. 2010 (as *Caloneis hyalina* Hustedt)

Site: Lagoa de Cazador (São Miguel Island)

References: Manguin 1942 (as *Caloneis hyalina* Hust.); Bourrelly & Manguin 1946a (as *Caloneis hyalina* Hust.)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Caloneis hyalina* Hustedt)

Site: Not specified

References: Bourrelly & Manguin 1946b (as *Caloneis hyalina*); Gonçalves 2008 (as *Caloneis hyalina* Hustedt)

***Caloneis lagerstedtii* (Lagerstedt) Cholnoky 1957**, p. 43; fig. 17-20 [CAS ref. 000203]

Nomenclatural synonyms: *Navicula fasciata* Lagerstedt 1873 [CAS ref. 000597]
Caloneis fasciata (Lagerstedt) Cleve 1894a [CAS ref. 000232]

Distribution (Fig. 137):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Navicula fasciata* Lag.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Caloneis fasciata* (Lagerstedt) Cleve)

***Caloneis lepidula* (Grunow in Van Heurck) Cleve 1894a**, p. 50 [CAS ref. 000232]

Basionym: *Navicula lepidula* Grunow in Van Heurck 1880 [CAS ref. 000895]

Distribution (Fig. 138):

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Guarda

References: Zimmermann 1910 (as *Navicula lepidula* Grun.); Carvalho 1913 (as *Navicula lepidula* Grun.)

Site: Lameirinhas

Reference: Carvalho 1913 (as *Navicula lepidula* Grun.)

***Caloneis leptosoma* (Grunow) Krammer in Krammer & Lange-Bertalot 1985, p. 18-19 [CAS ref. 006263]**

Basionym: *Navicula leptosoma* Grunow in Van Heurck 1880 [CAS ref. 000895]

Nomenclatural synonym: *Pinnularia leptosoma* (Grunow in Van Heurck) Cleve 1895 [CAS ref. 000949]

Distribution (Fig. 139):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Furnas

Reference: Mölder 1947 (as *Pinnularia leptosoma* Grun.)

Municipality: Not specified

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Caloneis leptosoma* (Grunow) Krammer)

***Caloneis molaris* (Grunow) Krammer in Krammer & Lange-Bertalot 1985, p. 18; pl. 10, fig. 9 [CAS ref. 006263]**

Basionym: *Navicula molaris* Grunow 1863 [CAS ref. 000429]

Nomenclatural synonym: *Pinnularia molaris* (Grunow) Cleve 1895 [CAS ref. 000949]

Distribution (Fig. 140):

REGION: ALENTEJO

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Água Forte, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Caloneis molaris* (Grunow) Krammer)

Site: Porto de Beja, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Caloneis molaris* (Grunow) Krammer)

Site: Porto Ferreira, Roxo Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Caloneis molaris* (Grunow) Krammer)

Subregion: Lezíria do Tejo

Municipality: Alpiarça (District: Santarém)

Site: Not specified

References: Silva 1946a (as *Pinnularia molaris* Grun., fossil); Silva 1946b (as *Pinnularia molaris* Grun., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)
Site: Lagoa da Achada
Reference: Mölder 1947 (as *Pinnularia molaris* Grun.)

Municipality: Corvo (Corvo Island)
Site: Not specified
Reference: Mölder 1947 (as *Pinnularia molaris* Grun.)

Municipality: Ponta Delgada (São Miguel Island)
Site: Lagoa Grande
Reference: Mölder 1947 (as *Pinnularia molaris* Grun.)

Site: Lagoa das Sete Cidades
Reference: Mölder 1947 (as *Pinnularia molaris* Grun.)

Municipality: Povoação (São Miguel Island)
Site: Pico da Vara
Reference: Mölder 1947 (as *Pinnularia molaris* Grun.)

Municipality: Not specified
Site: Corvo Island
Reference: Gonçalves et al. 2010 (as *Caloneis molaris* (Grunow) Krammer)

Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Caloneis molaris* (Grunow) Krammer)

Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Caloneis molaris* (Grunow) Krammer)

Site: Terceira Island
Reference: Gonçalves et al. 2010 (as *Caloneis molaris* (Grunow) Krammer)

Site: Not specified
Reference: Gonçalves 2008 (as *Caloneis molaris* (Grunow) Krammer)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Almeida 1998 (as *Caloneis molaris* (Grunow) Krammer)

***Caloneis permagna* (J.W. Bailey) Cleve 1894a**, p. 59 [CAS ref. 000232]

Basionym: *Pinnularia permagna* J.W. Bailey 1851 [CAS ref. 000119]

Distribution (Fig. 141):

REGION: CENTRO
Subregion: Baixo Vouga

Municipality: Aveiro (District: Aveiro)
Site: Vagueira, Canal de Mira
Reference: Resende et al. 2005 (as *Caloneis permagna*)

***Caloneis pulchra* Messikommer 1927** [CAS ref. 001385]

Distribution (Fig. 142):

REGION: ALENTEJO
Subregion: Lezíria do Tejo
Municipality: Alpiarça (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Caloneis pulchra* Messik., fossil)

REGION: AUTONOMOUS REGION OF AZORES
Municipality: Not specified
Site: Not specified
Reference: Gonçalves 2008 (as *Caloneis* cf. *pulchra* Messikommer)

***Caloneis schumanniana* (Grunow in Van Heurck) Cleve 1894a**, p. 53 [CAS ref. 000232]

Basionym: *Navicula schumanniana* Grunow in Van Heurck 1880 [CAS ref. 000895]

Distribution (Fig. 143):

REGION: AUTONOMOUS REGION OF AZORES
Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Caloneis schumanniana* (Grunow) Cleve)
Site: Not specified
Reference: Gonçalves 2008 (as *Caloneis schumanniana* (Grunow) Cleve)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
References: Almeida 1998 (as *Caloneis schumanniana* (Grunow) Cleve);
INAG 2008 (as *Caloneis schumanniana* (Grunow) Cleve)

***Caloneis silicula* (Ehrenberg) Cleve 1894a**, p. 51 [CAS ref. 000232]

Basionym: *Navicula silicula* Ehrenberg 1839a [CAS ref. 000289]

Synonym: *Caloneis ventricosa* (Ehrenberg) F. Meister 1912 [CAS ref. 000642], according to Krammer & Lange-Bertalot 1986, p. 388

Distribution (Fig. 144):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Mira (District: Coimbra)

Site: Lagoa de Mira

Reference: Oliveira 1971a (as *Caloneis silicula*)

Municipality: Soure (District: Coimbra)

Site: Irrigation channel near Soure

Reference: Santos et al. 2002 (as *Caloneis silicula* (Ehr.) Cleve)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Caloneis silicula* (Ehr.) Cleve)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Caloneis silicula* (Ehrenberg) Cleve)

Site: Óis da Ribeira, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Caloneis silicula* (Ehrenberg) Cleve)

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Caloneis silicula*)

Site: São João de Azenha, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Caloneis silicula* (Ehrenberg) Cleve)

Site: Tamengos, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Caloneis silicula*)

Municipality: Aveiro (District: Aveiro)

Site: Pano, Largo River (Vouga Basin)

Reference: Almeida 1998 (as *Caloneis silicula* (Ehrenberg) Cleve)

Site: Requeixo, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Caloneis silicula* (Ehrenberg) Cleve)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Caloneis silicula* (Ehr.) Cleve)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Caloneis silicula* (Ehr.) Cleve)

Municipality: Mealhada (District: Aveiro)

Site: Viadouros, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Caloneis silicula*)

Municipality: Oliveira do Bairro (District: Aveiro)
Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Caloneis silicula* (Ehrenberg) Cleve)
Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Caloneis silicula* (Ehrenberg) Cleve)
Site: Perrães, Cértima River (Vouga Basin)
References: Rino & Gil 1989 (as *Caloneis silicula*); Almeida 1998 (as *Caloneis silicula* (Ehrenberg) Cleve)
Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Caloneis silicula*)
Site: Vila Verde, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Caloneis silicula* (Ehrenberg) Cleve)

Subregion: Médio Tejo

Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
Reference: Cabeçadas et al. 1980 (as *Caloneis silicula*)
Municipality: Torres Novas (District: Santarém)
Site: Casal da Pinheira, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Caloneis silicula* (Ehr.) Cleve)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Mafra (District: Lisboa)
Site: Tapada de Mafra, Sobral da Abelheira
Reference: Oliveira 1971b (as *Caloneis silicula*)

REGION: ALENTEJO

Subregion: Baixo Alentejo

Municipality: Almodôvar (District: Beja)
Site: Monte da Vinha, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Caloneis silicula*)

Subregion: Lezíria do Tejo

Municipality: Santarém (District: Santarém)
Site: Ómnias, Tagus River (Tagus Basin)
Reference: Brito & Andrade 1992 (as *Caloneis silicula*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)
Site: Lagoa Rasa
Reference: Bourrelly & Manguin 1946a (as *Caloneis silicula* (Ehr.) Cleve)
Site: Lagoinha, Fajãzinha
Reference: Manguin 1942 (as *Caloneis silicula* (Ehr.) Cleve)
Municipality: Ponta Delgada (São Miguel Island)
Site: Lagoa das Sete Cidades
Reference: Oliveira 1989 (as *Caloneis silicula*)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

References: Manguin 1942 (as *Caloneis silicula* (Ehr.) Cleve); Bourrelly & Manguin 1946a (as *Caloneis silicula* (Ehr.) Cleve); Mölder 1947 (as *Caloneis silicula* (Ehr.) Cleve); Gonçalves 1997 (as *Caloneis silicula*)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Ribeira Grande

References: Manguin 1942 (as *Caloneis silicula* (Ehr.) Cleve); Bourrelly & Manguin 1946a (as *Caloneis silicula* (Ehr.) Cleve)

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Caloneis silicula* (Ehrenberg) Cleve)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Caloneis silicula* (Ehrenberg) Cleve)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Caloneis silicula* (Ehrenberg) Cleve)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Caloneis silicula* (Ehr.) Cleve)

***Caloneis silicula* f. *alpina* (Cleve) Krammer in Krammer & Lange-Bertalot 1985, p. 22 [CAS ref. 006263]**

Basionym: *Caloneis silicula* var. *alpina* Cleve 1894a [CAS ref. 000232]

Nomenclatural synonym: *Navicula limosa* var. *alpina* (Cleve) Peragallo 1903 [CAS ref. 001463]

Distribution (Fig. 145):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Navicula limosa* Ktz. var. *alpina* Ktz.)

***Caloneis silicula* var. *genuina* Cleve 1894a, p. 51 [CAS ref. 000232]**

Distribution (Fig. 146):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Furnas

Reference: Holmboe 1901 (as *Caloneis silicula* (Ehr.) Cl. var. *genuina* Cl.)

Site: Inferno Grote near Lagoa das Furnas (São Miguel Island)

Reference: Holmboe 1901 (as *Caloneis silicula* (Ehr.) Cl. var. *genuina* Cl.)

Site: Lagoa das Furnas

Reference: Holmboe 1901 (as *Caloneis silicula* (Ehr.) Cl. var. *genuina* Cl.)

***Caloneis silicula* var. *gibberula* (Kützing) Cleve-Euler 1932, p. 132; fig. 371 [CAS ref. 000248]**

Basionym: *Navicula gibberula* Kützing 1844 [CAS ref. 000595]

Nomenclatural synonym: *Navicula limosa* var. *gibberula* (Kützing) Grunow 1860 [CAS ref. 000427]

Distribution (Fig. 147):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Mealhada (District: Aveiro)

Site: Pampilhosa, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Caloneis silicula* var. *gibberula*)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Perrães, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Caloneis silicula* var. *gibberula*)

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Alfarazes

Reference: Carvalho 1913 (as *Navicula limosa* Kuetz. var. *gibberula*)

Site: Diz River

Reference: Carvalho 1913 (as *Navicula limosa* Kuetz. var. *gibberula*)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Mafra (District: Lisboa)

Site: Tapada de Mafra, Sobral da Abelheira

Reference: Oliveira 1971b (as *Caloneis silicula* var. *gibberula*)

***Caloneis silicula* var. *limosa* (Kützing) VanLandingham 1968**, p. 619 [CAS ref. 006294]

Basionym: *Navicula limosa* Kützing 1844 [CAS ref. 000595]

Distribution (Fig. 148):

REGION: CENTRO

Subregion: Beira Interior Sul

Municipality: Castelo Branco (District: Castelo Branco)

Site: Torre, Ocreza River (Tagus Basin)

Reference: Zimmermann 1906 (as *Navicula limosa* Kuetz.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Navicula limosa* Ktz.)

Site: Salto do Bargado, Furnas

Reference: Chaves 1908 (as *Navicula limosa* Ktz., fossil)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Navicula limosa* Kützing)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Levada do Bom Sucesso

Reference: Zimmermann 1910-1911 (as *Navicula limosa* Kuetz.)

Municipality: Porto Santo (Porto Santo Island)

Site: Faial Stream

Reference: Zimmermann 1910-1911 (as *Navicula limosa* Kuetz.)

Municipality: Ribeira Brava (Madeira Island)

Site: Sítio da Chamorra, Campanário

Reference: Zimmermann 1909a (as *Navicula limosa* Kuetz.)

***Caloneis tenuis* (W. Gregory) Krammer in Krammer & Lange-Bertalot 1985**, p. 17; pl. 10, fig. 5 [CAS ref. 006263]

Basionym: *Pinnularia tenuis* W. Gregory 1854 [CAS ref. 000393]

Distribution:

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves et al. 2010 (as *Caloneis tenuis* (Gregory) Krammer, fossil)

***Caloneis thermalis* (Grunow) Krammer in Krammer & Lange-Bertalot 1985**, p. 22-23 [CAS ref. 006263]

Basionym: *Navicula bacillaris* var. *thermalis* Grunow in Van Heurck 1880 [CAS ref. 000895]

Distribution (Fig. 149):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Ferruginous springs, Furnas

Reference: Chaves 1908 (as *Navicula bacillaris* var. *thermalis* Greg.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Caloneis thermalis* (Grunow) Krammer)

***Caloneis undosa* Krammer in Lange-Bertalot & Krammer 1987**, p. 114 [CAS ref. 006173]

Distribution (Fig. 150):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Caloneis undosa* Krammer)

Site: Not specified

Reference: Gonçalves 2008 (as *Caloneis undosa* Krammer)

***Caloneis undulatiformis* Lange-Bertalot & E. Reichardt in Rumrich, Lange-Bertalot & Rumrich 2000**, p. 100 [CAS ref. 009156]

Distribution (Fig. 151):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Faial Island

Reference: Gonçalves et al. 2010 (as *Caloneis undulatiformis* Lange-Bertalot & Reichardt)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Caloneis undulatiformis* Lange-Bertalot & Reichardt)

***Caloneis ventricosa* (Ehrenberg) F. Meister 1912**, p. 116; pl. 17, fig. 4 [CAS ref. 000642]

Basionym: *Navicula ventricosa* Ehrenberg 1830 [CAS ref. 001999]

Synonym: *Caloneis silicula* (Ehrenberg) Cleve 1894a [CAS ref. 000232], according to Krammer & Lange-Bertalot 1986, p. 388

Distribution (Fig. 152):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Caloneis ventricosa* (Ehr.) Meister)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Calado 1990 (as *Caloneis ventricosa* (Ehrenberg) Meister)

***Caloneis* sp.**

Distribution (Fig. 153):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Caloneis* sp.)

Municipality: Torres Novas (District: Santarém)

Site: Casal da Pinheira, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Caloneis* sp.)

REGION: ALENTEJO

Subregion: Baixo Alentejo

Municipality: Almodôvar (District: Beja)

Site: Monte da Vinha, Guadiana River (Guadiana Basin)

Reference: Andrade & Brito 1991 (as *Caloneis* sp.)
Subregion: Lezíria do Tejo
Municipality: Cartaxo (District: Santarém)
Site: Valada, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Caloneis* sp.)

REGION: AUTONOMOUS REGION OF AZORES
Municipality: Not specified
Site: Not specified
Reference: Gonçalves 2008 (as *Caloneis* sp.)

***Campylodiscus* Ehrenberg ex Kützing 1844**, p. 59
[CAS ref. 000595]

***Campylodiscus costatus* W. Smith 1851**, p. 6; pl. 1, fig. 1a [CAS ref. 001528]

Distribution (Fig. 154):

REGION: AUTONOMOUS REGION OF AZORES
Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
Reference: Chaves 1908 (as *Campylodiscus costatus* Sm.)
Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Campylodiscus costatus* Smith)

***Campylodiscus hibernicus* Ehrenberg 1845b**, p. 154 [CAS ref. 000956]

Distribution (Fig. 155):

REGION: AUTONOMOUS REGION OF AZORES
Municipality: Povoação (São Miguel Island)
Site: Furnas
Reference: Holmboe 1901 (as *Campylodiscus hibernicus* Ehr.)
Site: Inferno Grote near Lagoa das Furnas (São Miguel Island)
Reference: Holmboe 1901 (as *Campylodiscus hibernicus* Ehr.)
Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Campylodiscus hibernicus* Ehrenberg)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Levada do Bom Sucesso

Reference: Zimmermann 1910-1911 (as *Campylodiscus hibernicus* Ehr.)

Site: Sítio da Pena

Reference: Zimmermann 1909a (as *Campylodiscus hibernicus* Ehr.)

***Campylodiscus noricus* Ehrenberg ex Kützing 1844, p. 59 [CAS ref. 000595]**

Distribution (Fig. 156):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Perrães, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Campylodiscus noricus*)

Site: Repolão, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Campylodiscus noricus*)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Calado 1990 (as *Campylodiscus noricus* Ehrenberg)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Holmboe 1901 (as *Campylodiscus noricus* Ehr.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Campylodiscus noricus* Ehrenberg)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Ribeira de João Gomes

Reference: Schodduyn 1927 (as *Campylodiscus noricus* Ehr.)

***Campylosira* Grunow ex Van Heurck 1881, p. 157**
[CAS ref. 001040]

***Campylosira cymbelliformis* (A.W.F. Schmidt) Grunow in Van Heurck 1881, pl. 45, fig. 43 [CAS ref. 001035]**

Basionym: *Synedra cymbelliformis* A.W.F. Schmidt 1874 [CAS ref. 000806]

Distribution (Fig. 157):

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Rio Maior (District: Santarém)

Site: Not specified

References: Silva 1945 (as *Campylosira cymbelliformis* (A. Schmidt) Grun., fossil); Silva 1946b (as *Campylosira cymbelliformis* (A. Schm.) Grun., fossil)

***Capartogramma* Kufferath 1956, pg. 27**
[CAS ref. 001326]

***Capartogramma crucicula* (Grunow ex Cleve) R. Ross 1963, p. 59; 1/B, 2/A, fig. 1a, 8-11 [CAS ref. 000797]**

Basionym: *Schizostauron crucicula* Grunow 1881 [CAS ref. 000222]

Distribution (Fig. 158):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Schizostauron crucicula* (Grun. & Cleve) Ross)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Schizostauron crucicula* (Grun. & Cleve) Ross)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Schizostauron crucicula* (Grun. & Cleve) Ross)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Gil et al. 1991 (as *Schizostauron crucicola*)

***Cavinula* D.G. Mann & Stickle in Round, Crawford & Mann 1990, p. 665 [CAS ref. 003245]**

***Cavinula cocconeiformis* (W. Gregory ex Greville) D.G. Mann & Stickle in Round, Crawford & Mann 1990, p. 665 [CAS ref. 003245]**

Basionym: *Navicula cocconeiformis* W. Gregory ex Greville 1855 [CAS ref. 001238]

Distribution (Fig. 159):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Navicula cocconeiformis* Gregory)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula cocconeiformis* Gregory)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula cocconeiformis* Gregory)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula cocconeiformis* Gregory)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Navicula cocconeiformis* Gregory)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Navicula cocconeiformis* Gregory); Gil et al. 1989-1990 (as *Navicula cocconeiformis*)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula cocconeiformis* Gregory)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula cocconeiformis* Gregory)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Navicula cocconeiformis* Gregory); Gil et al. 1989-1990 (as *Navicula cocconeiformis*)

Municipality: Anadia (District: Aveiro)

Site: Espairo, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula cocconeiformis*)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Navicula cocconeiformis* Gregory)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Navicula cocconeiformis* Gregory)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Repolão, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula cocconeiformis*)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Navicula cocconeiformis* Gregory)

Municipality: Tondela (District: Viseu)

Site: Boi, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Navicula cocconeiformis* Gregory)

Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil et al. 1989-1990 (as *Navicula cocconeiformis*)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Navicula cocconeiformis* Gregory)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Navicula cocconeiformis* Gregory)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Gil et al. 1991 (as *Navicula cocconeiformis*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Santa Cruz das Flores (Flores Island)

Site: Lagoa Branca

References: Manguin 1942 (as *Navicula cocconeiformis* Greg.); Bourrelly & Manguin 1946a (as *Navicula cocconeiformis* Greg.)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Cavinula cocconeiformis* (Gregory ex Greville) Mann & Stickle)

Site: Not specified

Reference: Gonçalves 2008 (as *Cavinula cocconeiformis* (Gregory ex Greville) Mann & Stickle)

***Cavinula jaernefeltii* (Hustedt) D.G. Mann & Stickle 1990**, p. 665
[CAS ref. 003245]

Basionym: *Navicula jaernefeltii* Hustedt 1942 [CAS ref. 000516]

Distribution (Fig. 160):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Cavinula jaernefeltii* (Hustedt) Mann & Stickle)

Site: Not specified

Reference: Gonçalves 2008 (as *Cavinula* cf. *jaernefeltii* (Hustedt) Mann & Stickle)

***Cavinula lacustris* (W. Gregory) D.G. Mann & Stickle in Round, Crawford & Mann 1990**, p. 665 [CAS ref. 003245]

Basionym: *Navicula lacustris* W. Gregory 1856 [CAS ref. 000397]

Distribution (Fig. 161):

REGION: CENTRO

Subregion: Oeste

Municipality: Óbidos (District: Leiria)

Site: Not specified

Reference: Silva 1946b (as *Navicula lacustris* Greg., fossil)

***Cavinula lapidosa* (Krasske) Lange-Bertalot in Lange-Bertalot & Metzeltin 1996**, v. 2: p. 30-31; pl. 24, fig. 17a, b [CAS ref. 007048]

Basionym: *Navicula lapidosa* Krasske 1929 [CAS ref. 000582]

Distribution (Fig. 162):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Santa Cruz da Graciosa (Graciosa Island)

Site: Barreiro

Reference: Azevedo et al. 2005 (as *Navicula lapidosa*)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Cavinula lapidosa* (Krasske) Lange-Bertalot)

Site: Graciosa Island

Reference: Gonçalves et al. 2010 (as *Cavinula lapidosa* (Krasske) Lange-Bertalot)

Site: Santa Maria Island

Reference: Gonçalves et al. 2010 (as *Cavinula lapidosa* (Krasske) Lange-Bertalot)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Cavinula lapidosa* (Krasske) Lange-Bertalot)

Site: Not specified

Reference: Gonçalves 2008 (as *Cavinula lapidosa* (Krasske) Lange-Bertalot)

***Cavinula scutiformis* (Grunow ex A.W.F. Schmidt) D.G. Mann & Stickle in Round, Crawford & Mann 1990, p. 665 [CAS ref. 003245]**

Basionym: *Navicula scutiformis* Grunow in Schmidt et al. 1881 [CAS ref. 012454]

Distribution (Fig. 163):

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Alpiarça (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Navicula scutiformis* Grun., fossil)

***Cavinula variostriata* (Krasske) D.G. Mann in Round, Crawford & Mann 1990, p. 665 [CAS ref. 003245]**

Basionym: *Navicula variostriata* Krasske 1923 [CAS ref. 000579]

Distribution (Fig. 164):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Navicula variostriata* Krasske)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Navicula variostrata* Krasske)
Municipality: Aveiro (District: Aveiro)
Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Navicula variostrata* Krasske)
Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Navicula variostrata* Krasske)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)
Site: Lagoa da Falca (Terceira Island)
Reference: Gonçalves 1996 (as *Navicula variostrata* Krasske)
Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
References: Manguin 1942 (as *Navicula variostrata* Krasske); Bourrelly & Manguin 1946a (as *Navicula variostrata* Krasske)
Municipality: Not specified
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Cavinula variostrata* (Krasske) Mann & Stickle)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Cavinula variostrata* (Krasske) Mann & Stickle)
Site: Terceira Island
Reference: Gonçalves et al. 2010 (as *Cavinula variostrata* (Krasske) Mann & Stickle)
Site: Not specified
Reference: Gonçalves 2008 (as *Cavinula cf. variostrata* (Krasske) Mann & Stickle)

***Cerataulus Ehrenberg 1843b*, p. 270**
[CAS ref. 001182]

***Cerataulus thermalis* (Meneghini) Ralfs in Pritchard 1861**, p. 847
[CAS ref. 001063]

Basionym: *Pleurosira thermalis* Meneghini 1853 [CAS ref. 001379]

Distribution (Fig. 165):

REGION: AUTONOMOUS REGION OF MADEIRA

- Municipality: Funchal (Madeira Island)
 Site: Caminho do Meio
 Reference: Zimmermann 1909a (as *Cerataulus thermalis* (Menegh.) Ralfs)
- Site: Levada do Bom Sucesso
 Reference: Zimmermann 1910-1911 (as *Cerataulus thermalis* (Menegh.) Ralfs)
- Site: Sítio da Pena
 Reference: Zimmermann 1909a (as *Cerataulus thermalis* (Menegh.) Ralfs)
- Municipality: Porto Santo (Porto Santo Island)
 Site: Ponte do Espírito Santo
 Reference: Zimmermann 1910-1911 (as *Cerataulus thermalis* (Menegh.) Ralfs)
- Site: Faial Stream
 Reference: Zimmermann 1910-1911 (as *Cerataulus thermalis* (Menegh.) Ralfs)
- Site: Porto Santo
 Reference: Zimmermann 1910-1911 (as *Cerataulus thermalis* (Menegh.) Ralfs)
- Municipality: Santa Cruz (Madeira Island)
 Site: Fonte do Mestre Henrique, Caniço
 Reference: Zimmermann 1909a (as *Cerataulus thermalis* (Menegh.) Ralfs)
- Municipality: Santana (Madeira Island)
 Site: São Roque do Faial
 Reference: Zimmermann 1909a (as *Cerataulus thermalis* (Menegh.) Ralfs)
- Municipality: Porto Santo (Porto Santo Island)
 Site: Serra de Dentro Stream
 Reference: Zimmermann 1910-1911 (as *Cerataulus thermalis* (Menegh.) Ralfs)

***Ceratoneis* Ehrenberg 1839b**, p. 157
 [CAS ref. 000291]

Note: All these varieties of *Ceratoneis arcus* should be transferred to the genus *Hannaea* R.M. Patrick 1966 in the future.

***Ceratoneis arcus* var. *amphioxys* (Rabenhorst) Brun 1880**, p. 52; pl. 2, fig. 28 [CAS ref. 000174]

Basionym: *Ceratoneis amphioxys* Rabenhorst 1853 [CAS ref. 000772]

Synonyms: *Ceratoneis arcus* var. *linearis* Holmboe 1899 [CAS ref. 011659], according to Krammer & Lange-Bertalot 1991a, p. 134

Fragilaria arcus (Ehrenberg) Cleve 1898 [CAS ref. 000235], according to Krammer & Lange-Bertalot 1991a, p. 134

Distribution (Fig. 166):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *amphioxys* (Rabh.) Brun)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *amphioxys* (Rabh.) Brun)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *amphioxys* (Rabh.) Brun)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *amphioxys* (Rabh.) Brun)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *amphioxys* (Rabh.) Brun)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *amphioxys* (Rabh.) Brun)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *amphioxys* (Rabh.) Brun)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *amphioxys* (Rabh.) Brun)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *amphioxys* (Rabh.) Brun)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *amphioxys* (Rabh.) Brun)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *amphioxys* (Rabh.) Brun)

Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *amphioxys* (Rabh.) Brun)

Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *amphioxys* (Rabh.) Brun)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *amphioxys* (Rabh.) Brun)

Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Gil et al. 1991 (as *Ceratoneis arcus* v. *amphioxys*)

***Ceratoneis arcus f. arcuata* C. Zimmermann 1915a**, p. 36; pl. 4, fig. 11 [CAS ref. 003139]

Distribution (Fig. 167):

REGION: CENTRO

Subregion: Beira Interior Sul

Municipality: Castelo Branco (District: Castelo Branco)

Site: São Fiel

Reference: Zimmermann 1915a (as *Ceratoneis arcus f. arcuata* Zimmermann)

***Ceratoneis arcus var. linearis* Holmboe 1899**, p. 30 [CAS ref. 011659]

Synonyms: *Ceratoneis arcus* var. *amphioxys* (Rabenhorst) Brun 1880 [CAS ref. 000174], according to Krammer & Lange-Bertalot 1991a, p. 134

Fragilaria arcus (Ehrenberg) Cleve 1898 [CAS ref. 000235], according to Krammer & Lange-Bertalot 1991a, p. 134

Distribution (Fig. 168):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

- Site: Águeda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *linearis* Holmboe)
- Site: Avelal de Baixo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *linearis* Holmboe)
- Site: Bolfiar, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *linearis* Holmboe)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *linearis* Holmboe)
- Site: Raivo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *linearis* Holmboe)
- Site: Redonda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *linearis* Holmboe)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *linearis* Holmboe)
- Municipality: Aveiro (District: Aveiro)
Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *linearis* Holmboe)
- Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *linearis* Holmboe)
- Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Ceratoneis arcus* (Ehr.) Kützing v. *linearis* Holmboe)

***Ceratoneis arcus* f. *semirecta* C. Zimmermann 1915a**, p. 36; pl. 4, fig. 12 [CAS ref. 003139]

Distribution (Fig. 169):

REGION: CENTRO

Subregion: Beira Interior Sul

Municipality: Castelo Branco (District: Castelo Branco)

Site: São Fiel

Reference: Zimmermann 1915a (as *Ceratoneis arcus* f. *semirecta* Zimmermann)

***Ceratoneis arcus* f. *trigibba* C. Zimmermann 1915a**, p. 36; pl. 4, fig. 10 [CAS ref. 003139]

Distribution (Fig. 170):

REGION: CENTRO

Subregion: Beira Interior Sul

Municipality: Castelo Branco (District: Castelo Branco)

Site: São Fiel

Reference: Zimmermann 1915a (as *Ceratoneis arcus* f. *trigibba* Zimmermann)

***Chaetoceros* Ehrenberg 1844b**, p. 198
[CAS ref. 001184]

***Chaetoceros* sp.**

Distribution (Fig. 171):

REGION: ALENTEJO

Subregion: Baixo Alentejo

Municipality: Ferreira do Alentejo (District: Beja)

Site: Odivelas Reservoir, Odivelas Stream (Sado Basin)

Reference: Oliveira 1984a (as *Chaetoceros* sp.)

Subregion: Lezíria do Tejo

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Chaetoceros* sp.)

***Chamaepinnularia* Lange-Bertalot & Krammer in
Lange-Bertalot & Metzeltin 1996**, p. 32
[CAS ref. 007048]

***Chamaepinnularia begeri* (Krasske) Lange-Bertalot in Lange-
Bertalot & Metzeltin 1996**, p. 33 [CAS ref. 007048]

Basionym: *Navicula begeri* Krasske 1932 [CAS ref. 000583]

Distribution:

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves et al. 2010 (as *Chamaepinnularia begeri* (Krasske) Lange-Bertalot, fossil)

***Chamaepinnularia evanida* (Hustedt) Lange-Bertalot in Lange-Bertalot & Metzeltin 1996, v. 2: p. 34 [CAS ref. 007048]**

Basionym: *Navicula evanida* Hustedt 1942a [CAS ref. 000517]

Distribution (Fig. 172):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Aveiro (District: Aveiro)

Site: Pano, Largo River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula evanida* Hustedt)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Corvo Island

Reference: Gonçalves et al. 2010 (as *Chamaepinnularia evanida* (Hustedt) Lange-Bertalot)

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Chamaepinnularia evanida* (Hustedt) Lange-Bertalot)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Chamaepinnularia evanida* (Hustedt) Lange-Bertalot)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Navicula evanida* Hustedt)

***Chamaepinnularia hassiaca* (Krasske) Cantonati & Lange-Bertalot 2009**, p. 228 [CAS ref. 013190]

Basionym: *Navicula hassiaca* Krasske 1925 [CAS ref. 000580]

Nomenclatural synonym: *Chamaepinnularia soehrensii* var. *hassiaca* (Krasske) Lange-Bertalot in Lange-Bertalot & Metzeltin 1996 [CAS ref. 007048]

Distribution:

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Chamaepinnularia soehrensii* var. *hassiaca* (Krasske) Lange-Bertalot & Krammer)

***Chamaepinnularia mediocris* (Krasske) Lange-Bertalot in Lange-Bertalot & Metzeltin 1996**, v. 2: p. 35; pl. 28, fig. 48-51 [CAS ref. 007048]

Basionym: *Navicula mediocris* Krasske 1932 [CAS ref. 000583]

Distribution (Fig. 173):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Navicula mediocris* Krasske)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula mediocris* Krasske)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula mediocris* Krasske)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Navicula mediocris* Krasske)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula mediocris*)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Navicula mediocris* Krasske)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula mediocris* Krasske)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Navicula mediocris* Krasske)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Navicula mediocris* Krasske)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Navicula mediocris* Krasske)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Navicula mediocris* Krasske)

Site: São João do Monte, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula mediocris* Krasske)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula mediocris* Krasske)

Municipality: Tondela (District: Viseu)

Site: Boi, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Navicula mediocris* Krasske)

Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Navicula mediocris* Krasske)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Navicula mediocris* Krasske)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)

Site: Lagoa da Falca (Terceira Island)

Reference: Gonçalves 1996 (as *Navicula mediocris* Krasske)

Site: Lagoa da Joaninha

Reference: Gonçalves 1996 (as *Navicula mediocris* Krasske)

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Navicula mediocris* Krasske); Bourrelly & Manguin 1946a (as *Navicula mediocris* Krasske)

Municipality: Povoação (São Miguel Island)

Site: Pico da Vara

References: Manguin 1942 (as *Navicula mediocris* Krasske); Bourrelly & Manguin 1946a (as *Navicula mediocris* Krasske)

Municipality: Praia da Vitória (Terceira Island)

Site: Lagoa do Negro

Reference: Gonçalves 1996 (as *Navicula mediocris* Krasske)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Ribeira Grande

References: Manguin 1942 (as *Navicula mediocris* Krasske); Bourrelly & Manguin 1946a (as *Navicula mediocris* Krasske)

Municipality: Not specified

- Site: Corvo Island
Reference: Gonçalves et al. 2010 (as *Chamaepinnularia mediocris* (Krasske) Lange-Bertalot)
- Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Chamaepinnularia mediocris* (Krasske) Lange-Bertalot)
- Site: Lagoa de Cazador (São Miguel Island)
References: Manguin 1942 (as *Navicula mediocris* Krasske); Bourrelly & Manguin 1946a (as *Navicula mediocris* Krasske)
- Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Chamaepinnularia mediocris* (Krasske) Lange-Bertalot)
- Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Chamaepinnularia mediocris* (Krasske) Lange-Bertalot)
- Site: Terceira Island
Reference: Gonçalves et al. 2010 (as *Chamaepinnularia mediocris* (Krasske) Lange-Bertalot)
- Site: Not specified
Reference: Gonçalves 2008 (as *Chamaepinnularia mediocris* (Krasske) Lange-Bertalot)

***Chamaepinnularia soehrensii* (Krasske) Lange-Bertalot & Krammer in Lange-Bertalot & Metzeltin 1996, v. 2: p. 36; pl. 28, fig. 52-55 [CAS ref. 007048]**

Basionym: *Navicula soehrensii* Krasske 1923 [CAS ref. 000579]

Distribution (Fig. 174):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Navicula soehrensii* Krasske)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula soehrensii* Krasske)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula soehrensii* Krasske)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Navicula soehrensii* Krasske)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Navicula soehrensii* Krasske)
Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Navicula soehrensii* Krasske)
Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Navicula soehrensii* Krasske)
Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Navicula soehrensii* Krasske)
Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Navicula soehrensii* Krasske)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Almeida 1998 (as *Navicula soehrensii* Krasske)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Chamaepinnularia soehrensii* (Krasske) Lange-Bertalot & Krammer)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Chamaepinnularia soehrensii* (Krasske) Lange-Bertalot & Krammer)
Site: Not specified
Reference: Gonçalves 2008 (as *Chamaepinnularia soehrensii* (Krasske) Lange-Bertalot & Krammer)

***Chamaepinnularia soehrensii* var. *musciola* (J.B. Petersen)
Lange-Bertalot & Krammer in Lange-Bertalot & Metzeltin 1996,
v. 2: p. 37 [CAS ref. 007048]**

Basionym: *Pinnularia musciola* J.B. Petersen 1928 [CAS ref. 000742]

Distribution:

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified
Site: Not specified
Reference: Gonçalves 2008 (as *Chamaepinnularia soehrensii* var. *musciola* (Petersen) Lange-Bertalot & Krammer)

***Chamaepinnularia submusvicola* (Krasske) Lange-Bertalot in Moser, Lange-Bertalot & Metzeltin 1998**, p. 27; pl. 3, fig. 1-4 [CAS ref. 007020]

Basionym: *Navicula submusvicola* Krasske 1939 [CAS ref. 000587]

Distribution (Fig. 175):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Chamaepinnularia submusvicola* (Krasske) Lange-Bertalot)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Chamaepinnularia submusvicola* (Krasske) Lange-Bertalot)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Chamaepinnularia submusvicola* (Krasske) Lange-Bertalot)

Site: Not specified

Reference: Gonçalves 2008 (as *Chamaepinnularia submusvicola* (Krasske) Lange-Bertalot)

Cocconeis Ehrenberg 1837c, p. 173
[CAS ref. 000285]

***Cocconeis decussata* Ehrenberg 1843**, p. 123 (411); pl. 2, fig. 6/13
[CAS ref. 000294]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Tagus riverbanks (Tagus Basin)

Reference: Ehrenberg 1845 (as *Cocconeis decussata*)

***Cocconeis disculus* (Schumann) Cleve 1895**, p. 172 [CAS ref. 000949]

Basionym: *Navicula disculus* Schumann 1862 [CAS ref. 000813]

Distribution (Fig. 176):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis disculus* (Schum.) P. Cleve)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis disculus* (Schum.) P. Cleve)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis disculus* (Schum.) P. Cleve)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis disculus* (Schum.) P. Cleve)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis disculus* (Schum.) P. Cleve)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: São João do Monte, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis disculus* (Schum.) P. Cleve)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis disculus* (Schum.) P. Cleve)

Municipality: Tondela (District: Viseu)

Site: Boi, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis disculus* (Schum.) P. Cleve)

Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis disculus* (Schum.) P. Cleve)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Almeida 1998 (as *Cocconeis disculus* (Schumann) Cleve)

***Cocconeis euglypta* Ehrenberg 1854a**, pl. 34, fig. 6A, fig. 2 [CAS ref. 000966]

Nomenclatural synonym: *Cocconeis placentula* var. *euglypta* (Ehrenberg) Cleve 1895 [CAS ref. 000949]

Distribution (Fig. 177):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: São João da Madeira (District: Aveiro)

Site: Ui River (Vouga Basin)

Reference: Resende et al. 2010 (as *Cocconeis placentula* var. *euglypta* (Ehrenberg) Grunow)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Cocconeis placentula* v. *euglypta* (Ehr.) P. Cleve); Gil et al. 1989-1990 (as *Cocconeis placentula* v. *euglypta*)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis placentula* v. *euglypta* (Ehr.) P. Cleve)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis placentula* v. *euglypta* (Ehr.) P. Cleve)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis placentula* v. *euglypta* (Ehr.) P. Cleve)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

References: Gil 1988 (as *Cocconeis placentula* v. *euglypta* (Ehr.) P. Cleve); Gil et al. 1989-1990 (as *Cocconeis placentula* v. *euglypta*)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cocconeis placentula* v. *euglypta*)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis placentula* v. *euglypta* (Ehr.) P. Cleve)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis placentula* v. *euglypta* (Ehr.) P. Cleve)

Site: Redonda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cocconeis placentula* v. *euglypta* (Ehr.) P. Cleve); Gil et al. 1989-1990 (as *Cocconeis placentula* v. *euglypta*)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis placentula* v. *euglypta* (Ehr.) P. Cleve)

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cocconeis placentula* v. *euglypta*)

Site: Espairo, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cocconeis placentula* v. *euglypta*)

Site: Mogofores, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cocconeis placentula* v. *euglypta*)

Site: Tamengos, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cocconeis placentula* v. *euglypta*)

Municipality: Aveiro (District: Aveiro)

Site: Aveiro, lake in the municipal park (artificial substrate)

Reference: Gil & Almeida 1993 (as *Cocconeis placentula* v. *euglypta* (Ehr.) Cleve)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis placentula* v. *euglypta* (Ehr.) P. Cleve)

- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Cocconeis placentula* v. *euglypta* (Ehr.) P. Cleve)
- Municipality: Mealhada (District: Aveiro)
 Site: Pampilhosa, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cocconeis placentula* v. *euglypta*)
- Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Perrães, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cocconeis placentula* v. *euglypta*)
- Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Cocconeis placentula* v. *euglypta* (Ehr.) P. Cleve)
- Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Cocconeis placentula* v. *euglypta* (Ehr.) P. Cleve)
- Site: Varzielas, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Cocconeis placentula* v. *euglypta* (Ehr.) P. Cleve)
- Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 References: Gil 1988 (as *Cocconeis placentula* v. *euglypta* (Ehr.) P. Cleve); Gil et al. 1989-1990 (as *Cocconeis placentula* v. *euglypta*)
- Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil et al. 1989-1990 (as *Cocconeis placentula* v. *euglypta*)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Cocconeis placentula* v. *euglypta* (Ehr.) P. Cleve)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Cocconeis placentula* v. *euglypta* (Ehr.) P. Cleve)
- Subregion: Médio Tejo
 Municipality: Abrantes (District: Santarém)
 Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Cocconeis placentula euglypta*)
- Site: Forno Novo, Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Cocconeis placentula euglypta*)
- Subregion: Pinhal Interior Norte
 Municipality: Pampilhosa da Serra (District: Coimbra)
 Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Cocconeis placentula* var. *euglypta* Ehrenberg)
- Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 References: Gil et al. 1991 (as *Cocconeis placentula* v. *euglypta*); Almeida 1998 (as *Cocconeis placentula* Ehrenberg var. *euglypta* (Ehrenberg) Grunow)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

Reference: Bourrelly & Manguin 1946a (as *Cocconeis placentula* Ehr. var. *euglypta* (Ehr.) Cleve)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Cocconeis euglypta* Ehrenberg)

Site: São Jorge Island

References: Johansson 1977 (as *Cocconeis placentula* v. *euglypta* (Ehr.) Cleve); Gonçalves et al. 2010 (as *Cocconeis euglypta* Ehrenberg)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Ponta do Sol (Madeira Island)

Site: Rabaçal (Madeira Island)

Reference: Mölder 1947 (as *Cocconeis placentula* Ehr. var. *euglypta* (Ehr.) Cleve)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Alto-Douro Rivers

Reference: Morais et al. 2009 (as *Cocconeis placentula* Ehr. var. *euglypta* (Ehr.) Cleve)

Site: Rivers in the South

Reference: Morais et al. 2009 (as *Cocconeis placentula* Ehr. var. *euglypta* (Ehr.) Cleve)

Site: Not specified

Reference: INAG 2008 (as *Cocconeis placentula* Ehrenberg var. *euglypta* (Ehr.) Grunow)

***Cocconeis lineata* Ehrenberg 1854a**, p. 8; pl. 6/1, fig. 40; pl. 39/II, fig. 11 [CAS ref. 000966]

Nomenclatural synonyms: *Cocconeis placentula* var. *lineata* (Ehrenberg) Van Heurck 1885 [CAS ref. 001040]

Cocconeis placentula var. *lineata* (Ehrenberg) Cleve 1895 [CAS ref. 000949]

Distribution (Fig. 178):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: São João da Madeira (District: Aveiro)

Site: Ui River (Vouga Basin)

Reference: Resende et al. 2010 (as *Cocconeis placentula* var. *lineata* (Ehrenberg) Van Heurck)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Cocconeis placentula* var. *lineata* (Ehr.) Van Heurck)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Cocconeis placentula* var. *lineata* (Ehr.) Van Heurck)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis placentula* Ehr. v. *lineata* (Ehr.) P. Cleve)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis placentula* Ehr. v. *lineata* (Ehr.) P. Cleve)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis placentula* Ehr. v. *lineata* (Ehr.) P. Cleve)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis placentula* Ehr. v. *lineata* (Ehr.) P. Cleve)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis placentula* Ehr. v. *lineata* (Ehr.) P. Cleve)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Cocconeis placentula* Ehrenberg var. *lineata* (Ehrenberg) Van Heurck)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: São João do Monte, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis placentula* Ehr. v. *lineata* (Ehr.) P. Cleve)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis placentula* Ehr. v. *lineata* (Ehr.) P. Cleve)

Municipality: Tondela (District: Viseu)

Site: Boi, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis placentula* Ehr. v. *lineata* (Ehr.) P. Cleve)

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Cocconeis placentula lineata*)

Site: Forno Novo, Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Cocconeis placentula lineata*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Tambores, Furnas

Reference: Chaves 1908 (as *Cocconeis lineata*, fossil)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Levada do Bom Sucesso

Reference: Zimmermann 1910-1911 (as *Cocconeis placentula* Ehr. var. *lineata* (Ehr.) V.H.)

Municipality: Porto Santo (Porto Santo Island)

Site: Faial Stream

Reference: Zimmermann 1910-1911 (as *Cocconeis placentula* Ehr. var. *lineata* (Ehr.) V.H.)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Alto-Douro Rivers

Reference: Morais et al. 2009 (as *Cocconeis placentula* Ehrenberg var. *lineata* (Ehr.) Van Heurck)

Site: North-South Transition Rivers and Mountain Rivers in the South

Reference: Morais et al. 2009 (as *Cocconeis placentula* Ehrenberg var. *lineata* (Ehr.) Van Heurck)

Site: Rivers in the North

Reference: Morais et al. 2009 (as *Cocconeis placentula* Ehrenberg var. *lineata* (Ehr.) Van Heurck)

Site: Rivers in the South

Reference: Morais et al. 2009 (as *Cocconeis placentula* Ehrenberg var. *lineata* (Ehr.) Van Heurck)

Site: Tagus riverbanks (Tagus Basin)

Reference: Ehrenberg 1845 (as *Cocconeis lineata*)

Site: Not specified

Reference: INAG 2008 (as *Cocconeis placentula* Ehrenberg var. *lineata* (Ehr.) Van Heurck)

***Cocconeis molesta* Kützing 1844**, p. 71; pl. 5/7, fig. 1, 2 [CAS ref. 000595]

Distribution (Fig. 179):

REGION: CENTRO

Subregion: Oeste

Municipality: Óbidos (District: Leiria)

Site: Not specified

Reference: Silva 1946b (as *Cocconeis molesta* Kütz., fossil)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Rio Maior (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Cocconeis molesta* Kütz., fossil)

***Cocconeis molesta* var. *amygdalina* (Brébisson ex Van Heurck)
Cleve in Schmidt et al. 1894**, pl. 193, fig. 48 [CAS ref. 012475]

Basionym: *Cocconeis diaphana* var. *amygdalina* Brébisson ex Van Heurck 1880 [CAS ref. 000895]

Distribution (Fig. 180):

REGION: NORTE

Subregion: Grande Porto

Municipality: Maia (District: Porto)

Site: Parada

Reference: Silva 1950b (as *Cocconeis molesta* Kütz. var. *amygdalina* (Bréb.) Grun.)

***Cocconeis neodiminuta* Krammer 1990**, p. 151; fig. 1, 2 part, 8-20, 40-45 [CAS ref. 006321]

Distribution (Fig. 181):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Soure (District: Coimbra)

Site: Irrigation channel near Soure

Reference: Santos et al. 2002 (as *Cocconeis neodiminuta* Krammer)

***Cocconeis pediculus* Ehrenberg 1838**, p. 194; pl. 21, fig. 11 [CAS ref. 000288]

Distribution (Fig. 182):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Coimbra (District: Coimbra)

Site: Coimbra

References: De Toni 1887 (as *Cocconeis pediculus* Ehrenb.);
Zimmermann 1914 (as *Cocconeis pediculus* Ehr.)

Site: Not specified

Reference: Colmeiro 1889 (as *Cocconeis pediculus* Kg.)

Site: Mondego River (Mondego Basin)

Reference: Zimmermann 1906 (as *Cocconeis pediculus* Ehr.)

Municipality: Mira (District: Coimbra)

Site: Lagoa de Mira

Reference: Oliveira 1971a (as *Cocconeis pediculus*)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Cocconeis pediculus* Ehrenberg); Gil et al.
1989-1990 (as *Cocconeis pediculus*)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cocconeis pediculus* Ehrenberg); Gil et al.
1989-1990 (as *Cocconeis pediculus*)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis pediculus* Ehrenberg)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers
(Vouga Basin)

References: Gil 1988 (as *Cocconeis pediculus* Ehrenberg); Gil et al.
1989-1990 (as *Cocconeis pediculus*)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis pediculus* Ehrenberg)

Site: Raivo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cocconeis pediculus* Ehrenberg); Gil et al.
1989-1990 (as *Cocconeis pediculus*)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis pediculus* Ehrenberg)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis pediculus* Ehrenberg)

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cocconeis pediculus*)

Site: Espairo, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cocconeis pediculus*)

- Site: Mogofores, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cocconeis pediculus*)
- Site: São João da Azenha, Cértima River (Vouga Basin)
References: Rino & Gil 1989 (as *Cocconeis pediculus*); Almeida 1998 (as *Cocconeis pediculus* Ehrenberg)
- Site: Tamengos, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cocconeis pediculus*)
- Municipality: Aveiro (District: Aveiro)
- Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Cocconeis pediculus* Ehrenberg)
- Site: Murta, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cocconeis pediculus*)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Cocconeis pediculus* Ehrenberg)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Cocconeis pediculus* Ehrenberg)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Cocconeis pediculus* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis pediculus*)
- Municipality: Mealhada (District: Aveiro)
- Site: Viadouros, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cocconeis pediculus*)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cocconeis pediculus*)
- Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Cocconeis pediculus* Ehrenberg)
- Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Cocconeis pediculus* Ehrenberg)
- Site: Perrães, Cértima River (Vouga Basin)
References: Rino & Gil 1989 (as *Cocconeis pediculus*); Almeida 1998 (as *Cocconeis pediculus* Ehrenberg)
- Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cocconeis pediculus*)
- Site: Vila Verde, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Cocconeis pediculus* Ehrenberg)
- Municipality: Not specified
- Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Cocconeis pediculus* Ehrenberg)
- Subregion: Beira Interior Norte
- Municipality: Guarda (District: Guarda)
- Site: Alfarazes
Reference: Carvalho 1913 (as *Cocconeis pediculus* Ehr.)
- Site: Mondego River (Mondego Basin)

References: Carvalho 1913 (as *Cocconeis pediculus* Ehr.); Santos & Carvalho 2001 (as *Cocconeis pediculus* Ehr.)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis pediculus* Ehrenberg)

Site: São João do Monte, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cocconeis pediculus* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis pediculus*)

Site: Varzielas, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cocconeis pediculus* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis pediculus*)

Municipality: Tondela (District: Viseu)

Site: Boi, Agadão River (Vouga Basin)

References: Gil 1988 (as *Cocconeis pediculus* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis pediculus*)

Municipality: Vouzela (District: Viseu)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cocconeis pediculus* Ehrenberg)

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Cocconeis pediculus*)

Site: Forno Novo, Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Cocconeis pediculus*)

Site: Tramagal, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cocconeis pediculus*)

Municipality: Torres Novas (District: Santarém)

Site: Almonda River (Tagus Basin)

References: Zimmermann 1906 (as *Cocconeis pediculus* Ehr.); Oliveira & Caldas 1970 (as *Cocconeis pediculus* Ehr.)

Site: Casal do Feijão, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cocconeis pediculus* Ehr.)

Site: Casal da Pinheira, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cocconeis pediculus* Ehr.)

Site: Renova, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cocconeis pediculus* Ehr.)

Site: Ribeira Branca, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cocconeis pediculus* Ehr.)

Municipality: Vila Nova da Barquinha (District: Santarém)

Site: Almourol, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cocconeis pediculus*)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

References: Calado 1990 (as *Cocconeis pediculus* Ehrenberg); Gil et al. 1991 (as *Cocconeis pediculus*)

REGION: ALENTEJO

Subregion: Alto Alentejo

Municipality: Gavião (District: Portalegre)

Site: Belver Reservoir, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cocconeis pediculus*)

Municipality: Marvão (District: Portalegre)

Site: Sever River (Tagus Basin)

Reference: Oliveira 1975 (as *Cocconeis pediculus*)

Municipality: Nisa (District: Portalegre)

Site: Barca da Amieira, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cocconeis pediculus*)

Site: Fratel Reservoir, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cocconeis pediculus*)

Subregion: Lezíria do Tejo

Municipality: Cartaxo (District: Santarém)

Site: Valada, Tagus River (Tagus Basin)

Reference: Oliveira et al. 1989 (as *Cocconeis pediculus*)

Municipality: Chamusca (District: Santarém)

Site: Chamusca, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cocconeis pediculus*)

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cocconeis pediculus*)

Subregion: Not specified

Municipality: Not specified

Site: Rocha da Galé, Guadiana River (Guadiana Basin)

Reference: Andrade & Brito 1991 (as *Cocconeis pediculus*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Cocconeis pediculus* Ehr.); Bourrelly & Manguin 1946a (as *Cocconeis pediculus* Ehr.)

Municipality: Nordeste (São Miguel Island)

Site: Serra Tronqueira

References: Manguin 1942 (as *Cocconeis pediculus* Ehr.); Bourrelly & Manguin 1946a (as *Cocconeis pediculus* Ehr.)

Municipality: Povoação (São Miguel Island)

Site: Furnas

Reference: Holmboe 1901 (as *Cocconeis pediculus* Ehrenberg)

Site: Salto do Bargado, Furnas

Reference: Chaves 1908 (as *Cocconeis pediculus*, fossil)

Site: Tambores, Furnas

Reference: Chaves 1908 (as *Cocconeis pediculus*, fossil)
Municipality: Not specified
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Cocconeis pediculus* Kützing, fossil)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Cocconeis pediculus* Kützing, fossil)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Rivers in the South
Reference: Morais et al. 2009 (as *Cocconeis pediculus* Ehrenberg)
Site: Not specified
Reference: INAG 2008 (as *Cocconeis pediculus* Ehrenberg)

***Cocconeis placentula* Ehrenberg 1838, p. 194 [CAS ref. 000288]**

Distribution (Fig. 183):

REGION: NORTE
Subregion: Cávado
Municipality: Barcelos (District: Braga)
Site: Manhente, Cávado River (Cávado Basin)
Reference: Cerqueira da Silva 1992 (as *Cocconeis placentula*)
Municipality: Esposende (District: Braga)
Site: Marachão, Cávado River (Cávado Basin)
Reference: Cerqueira da Silva 1992 (as *Cocconeis placentula*)
Municipality: Not specified
Site: Entrepontes, Cávado River (Cávado Basin)
Reference: Cerqueira da Silva 1992 (as *Cocconeis placentula*)
Subregion: Entre Douro e Vouga
Municipality: Oliveira de Azeméis (District: Aveiro)
Site: Bustelo do Caima, Ossela, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Cocconeis placentula* Ehrenberg)
Municipality: Vale de Cambra (District: Aveiro)
Site: Barbeito, Caima River (Vouga Basin)
References: Almeida 1998 (as *Cocconeis placentula* Ehrenberg); Nunes 2007 (as *Cocconeis placentula* Ehrenberg)
Site: São Pedro de Castelões, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Cocconeis placentula* Ehrenberg var. *placentula*)
Site: Vale de Cambra, Caima River (Vouga Basin)
Reference: Almeida 1998 (as *Cocconeis placentula* Ehrenberg)
Subregion: Grande Porto
Municipality: Gondomar (District: Porto)

Site: Gramido
 Reference: Silva 1950b (as *Cocconeis placentula* (Ehr.) Hust.)
 Municipality: Vila Nova de Gaia (District: Porto)
 Site: Febros River (Douro Basin)
 Reference: Cerqueira da Silva 1993 (as *Cocconeis placentula*)
 Subregion: Minho-Lima
 Municipality: Monção (District: Viana do Castelo)
 Site: Monção, Minho River (Minho Basin)
 Reference: Vasconcelos et al. 2000 (as *Cocconeis placentula*)
 Municipality: Valença (District: Viana do Castelo)
 Site: Valença, Minho River (Minho Basin)
 Reference: Vasconcelos et al. 2000 (as *Cocconeis placentula*)
 Municipality: Vila Nova de Cerveira (District: Viana do Castelo)
 Site: Barragem de Covas, Coura River (Minho Basin)
 Reference: Vasconcelos et al. 2000 (as *Cocconeis placentula*)
 Municipality: Not specified
 Site: Ínsua do Ranhão, Minho River (Minho Basin)
 Reference: Vasconcelos et al. 2000 (as *Cocconeis placentula*)
 Site: Minho River, international section (Minho Basin)
 Reference: Vasconcelos & Cerqueira 2001 (as *Cocconeis placentula*)

REGION: CENTRO

Subregion: Baixo Mondego
 Municipality: Arganil (District: Coimbra)
 Site: Fronhas Reservoir, Alva River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Cocconeis placentula* Ehrenberg)
 Municipality: Figueira da Foz (District: Coimbra)
 Site: Lagoa da Vela, Quiaios
 Reference: de Figueiredo et al. 2006 (as *Cocconeis placentula* Ehrenberg)
 Municipality: Mira (District: Coimbra)
 Site: Lagoa de Mira
 Reference: Oliveira 1971a (as *Cocconeis placentula*)
 Municipality: Montemor-o-Velho (District: Coimbra)
 Site: Irrigation channel near Montemor-o-Velho
 Reference: Santos et al. 2002 (as *Cocconeis placentula* Ehrenberg)
 Site: Marsh near Montemor-o-Velho
 Reference: Santos et al. 2002 (as *Cocconeis placentula* Ehrenberg)
 Subregion: Baixo Vouga
 Municipality: Águeda (District: Aveiro)
 Site: Agadão, Agadão River (Vouga Basin)
 References: Gil 1988 (as *Cocconeis placentula* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis placentula*)
 Site: Águeda, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Cocconeis placentula* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis placentula*); Almeida 1998 (as *Cocconeis placentula* Ehrenberg)

- Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)
Reference: Almeida 1998 (as *Cocconeis placentula* Ehrenberg)
- Site: Aldeia, Segadães, Vouga River (Vouga Basin)
Reference: Almeida 1998 (as *Cocconeis placentula* Ehrenberg)
- Site: Avelal de Baixo, Águeda River (Vouga Basin)
References: Gil 1988 (as *Cocconeis placentula* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis placentula*)
- Site: Bolfiar, Águeda River (Vouga Basin)
References: Gil 1988 (as *Cocconeis placentula* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis placentula*)
- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
References: Gil 1988 (as *Cocconeis placentula* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis placentula*)
- Site: Murta, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cocconeis placentula*)
- Site: Óis da Ribeira, Águeda River (Vouga Basin)
Reference: Almeida 1998 (as *Cocconeis placentula* Ehrenberg)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Cocconeis placentula* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis placentula*)
- Site: Raivo, Águeda River (Vouga Basin)
References: Gil 1988 (as *Cocconeis placentula* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis placentula*)
- Site: Redonda, Águeda River (Vouga Basin)
References: Gil 1988 (as *Cocconeis placentula* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis placentula*)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Cocconeis placentula* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis placentula*)
- Site: Sernada do Vouga, Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Cocconeis placentula* Ehrenberg)
- Municipality: Albergaria-a-Velha (District: Aveiro)
- Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Cocconeis placentula* Ehrenberg)
- Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Cocconeis placentula* Ehrenberg)
- Site: Ribeira de Fráguas, Coval da Mó Mine, Coval da Mó Stream (Vouga Basin)
References: Nunes 2007 (as *Cocconeis placentula* Ehrenberg); Ferreira da Silva et al. 2009 (as *Cocconeis placentula* Ehrenberg var. *placentula*)
- Site: Ribeira de Fráguas, Palhal Mine, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Cocconeis placentula* Ehrenberg)
- Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Cocconeis placentula* Ehrenberg)

- Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)
 References: Nunes et al. 2003 (as *Cocconeis placentula* Ehrenberg); Nunes 2007 (as *Cocconeis placentula* Ehrenberg)
- Site: Santo António, Valmaior, Caima River (Vouga Basin)
 Reference: Nunes 2007 (as *Cocconeis placentula* Ehrenberg)
- Site: Valmaior, mouth of Filvida River (Vouga Basin)
 References: Nunes et al. 2002 (as *Cocconeis placentula* Ehrenberg var. *placentula*); Nunes 2007 (as *Cocconeis placentula* Ehrenberg)
- Site: Valmaior (downstream of the mouth of Filvida River), Caima River (Vouga Basin)
 Reference: Nunes 2007 (as *Cocconeis placentula* Ehrenberg)
- Municipality: Anadia (District: Aveiro)
- Site: Curia, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cocconeis placentula*)
- Site: Espairo, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cocconeis placentula*)
- Site: Mogofores, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cocconeis placentula*)
- Site: São João da Azenha, Cértima River (Vouga Basin)
 References: Rino & Gil 1989 (as *Cocconeis placentula*); Almeida 1998 (as *Cocconeis placentula* Ehrenberg)
- Site: Tamengos, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cocconeis placentula*)
- Municipality: Aveiro (District: Aveiro)
- Site: Eixo, Horta Stream (Vouga Basin)
 Reference: Almeida 1998 (as *Cocconeis placentula* Ehrenberg)
- Site: Pano, Largo River (Vouga Basin)
 Reference: Almeida 1998 (as *Cocconeis placentula* Ehrenberg)
- Site: Requeixo, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Cocconeis placentula* Ehrenberg)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Cocconeis placentula* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis placentula*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Cocconeis placentula* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis placentula*)
- Site: Vessada, Fontão Creek (Vouga Basin)
 Reference: Almeida 1998 (as *Cocconeis placentula* Ehrenberg)
- Municipality: Estarreja (District: Aveiro)
- Site: Estarreja, Antuã River (Vouga Basin)
 Reference: Almeida 1998 (as *Cocconeis placentula* Ehrenberg)
- Site: Minhoteira, Antuã River (Vouga Basin)
 Reference: Almeida 1998 (as *Cocconeis placentula* Ehrenberg)

- Municipality: Mealhada (District: Aveiro)
 Site: Pampilhosa, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cocconeis placentula*)
 Site: Viadouros, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cocconeis placentula*)
- Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cocconeis placentula*)
 Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Cocconeis placentula* Ehrenberg)
 Site: Perrães, Levira River (Vouga Basin)
 Reference: Almeida 1998 (as *Cocconeis placentula* Ehrenberg)
 Site: Perrães, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cocconeis placentula*); Almeida 1998 (as *Cocconeis placentula* Ehrenberg)
 Site: Repolão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cocconeis placentula*)
 Site: Vila Verde, Levira River (Vouga Basin)
 References: Almeida 1998 (as *Cocconeis placentula* Ehrenberg); Almeida 2001 (as *Cocconeis placentula* Ehrenberg)
- Municipality: Sever do Vouga (District: Aveiro)
 Site: Pessegueiro do Vouga (mouth of Mau River), Vouga River (Vouga Basin)
 Reference: Nunes 2007 (as *Cocconeis placentula* Ehrenberg var. *placentula*)
 Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
 Reference: Nunes 2007 (as *Cocconeis placentula* Ehrenberg)
 Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)
 References: Nunes et al. 2003 (as *Cocconeis placentula* Ehrenberg); Nunes 2007 (as *Cocconeis placentula* Ehrenberg)
 Site: Silva Escura (upstream of the Braçal Mine), Mau River (Vouga Basin)
 References: Nunes et al. 2003 (as *Cocconeis placentula* Ehrenberg); Nunes 2007 (as *Cocconeis placentula* Ehrenberg)
 Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)
 References: Nunes et al. 2003 (as *Cocconeis placentula* Ehrenberg); Nunes 2007 (as *Cocconeis placentula* Ehrenberg)
 Site: Silva Escura (upstream of the Braçal Mine), Mau River (Vouga Basin)
 Reference: Nunes 2007 (as *Cocconeis placentula* Ehrenberg)
- Municipality: Not specified
 Site: Cértima River (Vouga Basin)
 Reference: Gil 1993 (as *Cocconeis placentula*)
 Site: Pateira de Fermentelos (District: Aveiro)
 Reference: Calado 1991 (as *Cocconeis placentula* Ehrenberg)
- Subregion: Beira Interior Norte

- Municipality: Guarda (District: Guarda)
 Site: Alfarazes
 Reference: Carvalho 1913 (as *Cocconeis placentula* Ehr.)
- Site: Caldeirão
 References: Carvalho 1913 (as *Cocconeis placentula* Ehr.); Santos & Carvalho 2001 (as *Cocconeis placentula* Ehr.)
- Site: Cubo
 Reference: Carvalho 1913 (as *Cocconeis placentula* Ehr.)
- Site: Diz River
 Reference: Carvalho 1913 (as *Cocconeis placentula* Ehr.)
- Site: Mondego River (Mondego Basin)
 References: Carvalho 1913 (as *Cocconeis placentula* Ehr.); Santos & Carvalho 2001 (as *Cocconeis placentula* Ehr.)
- Subregion: Beira Interior Sul
- Municipality: Castelo Branco (District: Castelo Branco)
 Site: São Fiel, Ocreza River (Tagus Basin)
 Reference: Zimmermann 1906 (as *Cocconeis placentula* Ehr.)
- Municipality: Idanha-a-Nova (District: Castelo Branco)
 Site: Idanha Reservoir, Ponsul River (Tagus Basin)
 Reference: Oliveira 1982c (as *Cocconeis placentula*)
- Municipality: Vila Velha de Ródão (District: Castelo Branco)
 Site: downstream of Cedilho Reservoir, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Cocconeis placentula*)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Cocconeis placentula* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis placentula*)
- Site: São João do Monte, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Cocconeis placentula* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis placentula*)
- Site: Varzielas, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Cocconeis placentula* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis placentula*)
- Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 References: Gil 1988 (as *Cocconeis placentula* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis placentula*)
- Site: In the proximity of Tondela, Criz River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Cocconeis placentula* Ehrenberg)
- Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil et al. 1989-1990 (as *Cocconeis placentula*)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Cocconeis placentula* Ehrenberg)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Cocconeis placentula* Ehrenberg); Gil et al. 1989-1990 (as *Cocconeis placentula*)

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Cocconeis placentula*)

Site: Tramagal, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cocconeis placentula*)

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

References: Cabeçadas et al. 1980 (as *Cocconeis placentula*); Ferreira 1986 (as *Cocconeis placentula*); Brito & Andrade 1992 (as *Cocconeis placentula*)

Municipality: Torres Novas (District: Santarém)

Site: Almonda River (Tagus Basin)

Reference: Zimmermann 1906 (as *Cocconeis placentula* Ehr.)

Site: Casal do Feijão, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cocconeis placentula* Ehr.)

Site: Casal da Pinheira, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cocconeis placentula* Ehr.)

Site: Renova, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cocconeis placentula* Ehr.)

Site: Ribeira Branca, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cocconeis placentula* Ehr.)

Municipality: Vila Nova da Barquinha (District: Santarém)

Site: Almourol, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cocconeis placentula*)

Subregion: Oeste

Municipality: Óbidos (District: Leiria)

Site: Not specified

Reference: Silva 1946b (as *Cocconeis placentula* Ehr., fossil)

Subregion: Pinhal Interior Norte

Municipality: Pampilhosa da Serra (District: Coimbra)

Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)

Reference: Santos et al. 2002 (as *Cocconeis placentula* Ehrenberg)

Municipality: Pedrógão Grande (District: Leiria)

Site: Cabril Reservoir, Zêzere River (Tagus Basin)

Reference: Oliveira 1982b (as *Cocconeis placentula*)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: São Romão, Lagoa do Covão do Curral

Reference: Santos et al. 2002 (as *Cocconeis placentula* Ehrenberg)

Subregion: Not specified

Municipality: Not specified

Site: Paiva River (Douro Basin)

References: Cerqueira da Silva 1991 (as *Cocconeis placentula*);
Cerqueira da Silva et al. 1993 (as *Cocconeis placentula*); Cerqueira da
Silva 1994 (as *Cocconeis placentula*)

Site: Not specified

References: Calado 1990 (as *Cocconeis placentula* Ehrenberg); Gil et al.
1991 (as *Cocconeis placentula*)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Mafra (District: Lisboa)

Site: Tapada de Mafra, Sobral da Abelheira

Reference: Oliveira 1971b (as *Cocconeis placentula*)

Municipality: Sintra (District: Lisboa)

Site: Mula Reservoir, Mula Stream (Western Streams Basin)

Reference: Ferreira 1986 (as *Cocconeis placentula*)

Municipality: Vila Franca de Xira (District: Lisboa)

Site: Vila Franca de Xira, Tagus River (Tagus Basin)

References: Rodrigues & Moita 1979a (as *Cocconeis placentula*);

Rodrigues & Moita 1979b (as *Cocconeis placentula*); Fernandes et al.
1987 (as *Cocconeis placentula*)

REGION: ALENTEJO

Subregion: Alentejo Central

Municipality: Arraiolos (District: Évora)

Site: Divor Reservoir, Divor Stream (Tagus Basin)

References: Oliveira 1984a (as *Cocconeis placentula*); Oliveira 1984b (as
Cocconeis placentula); Oliveira 1987 (as *Cocconeis placentula* Ehr.)

Municipality: Évora (District: Évora)

Site: Monte Novo Reservoir, Degebe River (Guadiana Basin)

References: Oliveira & Monteiro 1995 (as *Cocconeis placentula*);
Oliveira 1996 (as *Cocconeis placentula*)

Subregion: Alentejo Litoral

Municipality: Alcácer do Sal (District: Setúbal)

Site: São Romão, Sado River (Sado Basin)

Reference: Coutinho 2003 (as *Cocconeis placentula* Ehrenberg)

Municipality: Odemira (District: Beja)

Site: Santa Clara Reservoir, Mira River (Mira Basin)

Reference: Oliveira 1987 (as *Cocconeis placentula* Ehr.)

Subregion: Alto Alentejo

Municipality: Avis (District: Portalegre)

Site: Maranhão Reservoir, Raia Stream (Tagus Basin)

Reference: Oliveira 1984c (as *Cocconeis placentula*)

Municipality: Gavião (District: Portalegre)

Site: Belver Reservoir, Tagus River (Tagus Basin)

References: INIP 1977 (as *Cocconeis placentula* Ehr.); Fernandes et al.
1987 (as *Cocconeis placentula*)

- Municipality: Marvão (District: Portalegre)
 Site: Sever River (Tagus Basin)
 Reference: Oliveira 1975 (as *Cocconeis placentula*)
- Municipality: Nisa (District: Portalegre)
 Site: Barca da Amieira, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Cocconeis placentula*)
 Site: Fratel Reservoir, Tagus River (Tagus Basin)
 References: INIP 1977 (as *Cocconeis placentula* Ehr.); Fernandes et al. 1987 (as *Cocconeis placentula*)
- Municipality: Ponte de Sôr (District: Portalegre)
 Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
 Reference: Coutinho 1990a (as *Cocconeis placentula*)
- Subregion: Baixo Alentejo
- Municipality: Aljustrel (District: Beja)
 Site: Ponte do Curval, Água Forte Stream (Sado Basin)
 Reference: Luís et al. 2009 (as *Cocconeis placentula* Ehrenberg)
- Municipality: Almodôvar (District: Beja)
 Site: Monte da Vinha, Guadiana River (Guadiana Basin)
 Reference: Andrade & Brito 1991 (as *Cocconeis placentula*)
- Municipality: Ferreira do Alentejo (District: Beja)
 Site: Odivelas Reservoir, Odivelas Stream (Sado Basin)
 Reference: Oliveira 1984a (as *Cocconeis placentula*)
- Municipality: Mértola (District: Beja)
 Site: Acid mine drainage of the São Domingos mine
 Reference: Gerhardt et al. 2008 (as *Cocconeis placentula* Ehrenberg var. *placentula*)
- Municipality: Ourique (District: Beja)
 Site: Monte da Rocha Reservoir, Sado River (Sado Basin)
 Reference: Oliveira 1984a (as *Cocconeis placentula*)
- Subregion: Lezíria do Tejo
- Municipality: Cartaxo (District: Santarém)
 Site: Valada, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Cocconeis placentula*)
- Municipality: Chamusca (District: Santarém)
 Site: Chamusca, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Cocconeis placentula*)
- Municipality: Salvaterra de Magos (District: Santarém)
 Site: Magos Reservoir, Magos Stream (Tagus Basin)
 Reference: Oliveira 1984a (as *Cocconeis placentula*)
- Municipality: Santarém (District: Santarém)
 Site: Ómnias, Tagus River (Tagus Basin)
 References: Fernandes et al. 1987 (as *Cocconeis placentula*); Brito & Andrade 1992 (as *Cocconeis placentula*)
- Subregion: Not specified
 Site: Rocha da Galé, Guadiana River (Guadiana Basin)
 Reference: Andrade & Brito 1991 (as *Cocconeis placentula*)

Site: Vascão River (in the edge of the Guadiana Nature Reserve), (Guadiana Basin)

Reference: Gerhardt et al. 2008 (as *Cocconeis placentula* Ehrenberg var. *placentula*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)

Site: Lagoa da Falca (Terceira Island)

Reference: Gonçalves 1996 (as *Cocconeis placentula* Ehrenberg)

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Cocconeis placentula* Ehr.); Bourrelly & Manguin 1946a (as *Cocconeis placentula* Ehr.)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

References: Holmboe 1901 (as *Cocconeis placentula* Ehr.); Chaves 1908 (as *Cocconeis placentula* Ehr.); Manguin 1942 (as *Cocconeis placentula* Ehr.); Bourrelly & Manguin 1946a (as *Cocconeis placentula* Ehr.)

Site: Pico da Vara

Reference: Mölder 1947 (as *Cocconeis placentula* Ehr.)

Site: Salto do Bargado, Furnas

Reference: Chaves 1908 (as *Cocconeis placentula* Ehr., fossil)

Site: Tambores, Furnas

Reference: Chaves 1908 (as *Cocconeis placentula* Ehr., fossil)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Not specified

Reference: Mölder 1947 (as *Cocconeis placentula* Ehr.)

Municipality: Santa Cruz da Graciosa (Graciosa Island)

Site: Barreiro

Reference: Azevedo et al. 2005 (as *Cocconeis placentula*)

Municipality: Vila Franca do Campo (São Miguel Island)

Site: Lagoa do Congro

References: Manguin 1942 (as *Cocconeis placentula* Ehr.); Bourrelly & Manguin 1946a (as *Cocconeis placentula* Ehr.)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Cocconeis placentula* Ehrenberg, fossil)

Site: Graciosa Island

Reference: Gonçalves et al. 2010 (as *Cocconeis placentula* Ehrenberg, fossil)

Site: Santa Maria Island

Reference: Gonçalves et al. 2010 (as *Cocconeis placentula* Ehrenberg, fossil)

Site: São Jorge Island

Reference: Johansson 1977 (as *Cocconeis placentula* Ehr.); Gonçalves et al. 2010 (as *Cocconeis placentula* Ehrenberg, fossil)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Cocconeis placentula* Ehrenberg, fossil)

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Cocconeis placentula* Ehrenberg, fossil)

Site: Not specified

Reference: Gonçalves 2008 (as *Cocconeis placentula* Ehrenberg)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Ribeira de João Gomes

Reference: Zimmermann 1909a (as *Cocconeis placentula* Ehr.)

Site: Santa Luzia Stream

Reference: Zimmermann 1909a (as *Cocconeis placentula* Ehr.)

Municipality: Ponta do Sol (Madeira Island)

Site: Rabaçal (Madeira Island)

Reference: Mölder 1947 (as *Cocconeis placentula* Ehr.)

Municipality: Ribeira Brava (Madeira Island)

Site: Pico Stream, Serra da Ribeira Brava

Reference: Zimmermann 1909a (as *Cocconeis placentula* Ehr.)

Site: Pomar de Ambrosio, Campanário

Reference: Zimmermann 1909a (as *Cocconeis placentula* Ehr.)

Site: Ribeira Brava

Reference: Mölder 1947 (as *Cocconeis placentula* Ehr.)

Site: Sítio da Chamorra, Campanário

Reference: Zimmermann 1909a (as *Cocconeis placentula* Ehr.)

Municipality: Santana (Madeira Island)

Site: São Roque do Faial

Reference: Zimmermann 1909a (as *Cocconeis placentula* Ehr.)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Alto-Douro Rivers

Reference: Morais et al. 2009 (as *Cocconeis placentula* Ehrenberg var. *placentula*)

Site: Rivers in the North

Reference: Morais et al. 2009 (as *Cocconeis placentula* Ehrenberg var. *placentula*)

Site: Not specified

Reference: INAG 2008 (as *Cocconeis placentula* Ehrenberg var. *placentula*)

***Cocconeis placentula* var. *klinoraphis* Geitler 1927**, p. 514, text fig. 2a-b; pl. 12, fig. 1 [CAS ref. 001222]

Distribution (Fig. 184):

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Ribeira Brava (Madeira Island)

Site: Ribeira Brava

Reference: Mölder 1947 (as *Cocconeis placentula* Ehr. var. *klinoraphis* Geitler)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cocconeis placentula* Ehrenberg var. *klinoraphis* Geitler)

***Cocconeis pseudolineata* (Geitler) Lange-Bertalot in Werum & Lange-Bertalot 2004**, p. 133 [CAS ref. 012889]

Basionym: *Cocconeis placentula* var. *pseudolineata* Geitler 1927 [CAS ref. 001222]

Distribution (Fig. 185):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Cocconeis placentula* Ehrenberg var. *pseudolineata* Geitler)

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Cocconeis placentula* Ehrenberg var. *pseudolineata* Geitler)

Municipality: Sever do Vouga (District: Aveiro)

Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)

Reference: Nunes 2007 (as *Cocconeis placentula* Ehrenberg var. *pseudolineata* Geitler)

Site: Silva Escura (upstream of the Braçal Mine), Mau River (Vouga Basin)

Reference: Nunes 2007 (as *Cocconeis placentula* Ehrenberg var. *pseudolineata* Geitler)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Rivers in the South
Reference: Morais et al. 2009 (as *Cocconeis placentula* Ehrenberg var. *pseudolineata* Geitler)
Site: Not specified
Reference: INAG 2008 (as *Cocconeis placentula* Ehrenberg var. *pseudolineata* Geitler)

***Cocconeis scutellum* Ehrenberg 1838**, p. 194; pl. 14, fig. 8 [CAS ref. 000288]

Distribution (Fig. 186):

REGION: CENTRO
Subregion: Médio Tejo
Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
Reference: Brito & Andrade 1992 (as *Cocconeis scutellum*)
Subregion: Not specified
Municipality: Not specified
Site: Impacted site after BKME discharge, Vouga River (Vouga Basin)
Reference: Ferreira et al. 2002 (as *Cocconeis scutellum*)

REGION: ALENTEJO
Subregion: Lezíria do Tejo
Municipality: Santarém (District: Santarém)
Site: Ómnias, Tagus River (Tagus Basin)
Reference: Brito & Andrade 1992 (as *Cocconeis scutellum*)

REGION: AUTONOMOUS REGION OF AZORES
Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Cocconeis scutellum* Ehrenberg)

REGION: AUTONOMOUS REGION OF MADEIRA
Municipality: Funchal (Madeira Island)
Site: Caminho do Meio
Reference: Zimmermann 1909a (as *Cocconeis scutellum* Ehr.)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified

Site: Tagus riverbanks (Tagus Basin)
Reference: Ehrenberg 1845 (as *Cocconeis scutellum*)

***Cocconeis scutellum* var. *genuina* Cleve 1895**, p. 170 [CAS ref. 000949]

Distribution (Fig. 187):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Furnas

Reference: Holmboe 1901 (as *Cocconeis scutellum* Ehr. var. *genuina* Cl.)

***Cocconeis striata* Ehrenberg 1843**, pl. 3/1, fig. 30 [CAS ref. 000294]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Tagus riverbanks (Tagus Basin)

Reference: Ehrenberg 1845 (as *Cocconeis striata*)

***Cocconeis* sp.**

Distribution (Fig. 188):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Bragança (District: Bragança)

Site: São Serrada Reservoir, Andorinhas Stream (Douro Basin)

Reference: Geraldès & Boavida 2005 (as *Cocconeis* sp.)

Subregion: Cávado

Municipality: Not specified

Site: Entrepontes, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Cocconeis* sp.)

Site: Homem River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Cocconeis* sp.)

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Cocconeis* spp.)

REGION: ALENTEJO

Subregion: Alto Alentejo

Municipality: Nisa (District: Portalegre)

Site: Barca da Amieira, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cocconeis* sp.)

Subregion: Lezíria do Tejo

Municipality: Cartaxo (District: Santarém)

Site: Valada, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cocconeis* sp.)

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Cocconeis* spp.)

***Conticribra* Stachura-Suchoples & D.M. Williams 2009,**
p. 478 [CAS ref. 013580]

***Conticribra weissflogii* (Grunow) Stachura-Suchoples & D.M. Williams 2009,** p. 482 [CAS ref. 013580]

Basionym: *Micropodiscus weissflogii* Grunow in Van Heurck 1882-1885 [CAS ref. 000896]

Nomenclatural synonym: *Thalassiosira weissflogii* (Grunow) G.A. Fryxell & Hasle 1977 [CAS ref. 013580]

Synonym: *Thalassiosira fluviatilis* Hustedt 1926 [CAS ref. 001279], according to Krammer & Lange-Bertalot 1991a, p. 79

Distribution (Fig. 189):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Thalassiosira weissflogii*)

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Thalassiosira weissflogii*)

Site: Espairo, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Thalassiosira weissflogii*)

Site: Mogofores, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Thalassiosira weissflogii*)

- Site: São João da Azenha, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Thalassiosira weissflogii*)
- Site: Tamengos, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Thalassiosira weissflogii*)
- Municipality: Aveiro (District: Aveiro)
- Site: Aveiro, lake in the municipal park (artificial substrate)
Reference: Gil & Almeida 1993 (as *Thalassiosira weissflogii* Grunow)
- Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Thalassiosira weissflogii* (Grunow) Fryxell & Hasle)
- Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Thalassiosira weissflogii* (Grunow) Fryxell & Hasle)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Thalassiosira weissflogii* (Grunow) Fryxell & Hasle)
- Site: Vessada, Fontão Creek (Vouga Basin)
Reference: Almeida 1998 (as *Thalassiosira weissflogii* (Grunow) Fryxell & Hasle)
- Municipality: Mealhada (District: Aveiro)
- Site: Pampilhosa, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Thalassiosira weissflogii*)
- Site: Viadouros, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Thalassiosira weissflogii*)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Thalassiosira weissflogii*)
- Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Thalassiosira weissflogii* (Grunow) Fryxell & Hasle)
- Site: Perrães, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Thalassiosira weissflogii* (Grunow) Fryxell & Hasle)
- Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Thalassiosira weissflogii* (Grunow) Fryxell & Hasle)
- Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Thalassiosira weissflogii*)
- Site: Vila Verde, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Thalassiosira weissflogii* (Grunow) Fryxell & Hasle)
- Municipality: Not specified
- Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Thalassiosira weissflogii* Grunow)
- Subregion: Not specified
- Municipality: Not specified

Site: Vouga Basin

Reference: Almeida & Gil 2000 (as *Thalassiosira weissflogii* (Grunow)
Fryxell & Hasle)

Site: Not specified

Reference: Calado 1990 (as *Thalassiosira weissflogii* Grunow); Almeida
& Gil 2001 (as *Thalassiosira weissflogii* (Grunow) Fryxell & Hasle)

***Coscinodiscus Ehrenberg 1839a*, p. 128**
[CAS ref. 000289]

***Coscinodiscus africanus* C. Janisch in Schmidt et al. 1878**, pl. 59,
fig. 24, 25 [CAS ref. 012453]

Distribution (Fig. 190):

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Funchal

Reference: Tempère & Peragallo 1907-1915 (as *Coscinodiscus africanus*
Jan.)

***Coscinodiscus curvatulus* Grunow in Schmidt et al. 1878**, pl. 57,
fig. 33 [CAS ref. 012453]

Distribution (Fig. 191):

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Funchal

Reference: Tempère & Peragallo 1907-1915 (as *Coscinodiscus curvatulus*
Grun.)

***Coscinodiscus decipiens* Grunow in Van Heurck 1882**, pl. 91, fig.
10 [CAS ref. 001036]

Distribution (Fig. 192):

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Coscinodiscus decipiens* (?))

***Coscinodiscus excentricus* Ehrenberg 1840b**, p. 66 (146) [CAS ref. 000290]

Distribution (Fig. 193):

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Funchal

Reference: Tempère & Peragallo 1907-1915 (as *Coscinodiscus excentricus* Eh.)

***Coscinodiscus lineatus* Ehrenberg 1839a**, p. 129 [CAS ref. 000289]

Distribution (Fig. 194):

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Funchal

Reference: Tempère & Peragallo 1907-1915 (as *Coscinodiscus lineatus* Eh.)

***Coscinodiscus nodulifer* A.W.F. Schmidt in Schmidt et al. 1878**, pl. 59, fig. 20-23 [CAS ref. 012453]

Distribution (Fig. 195):

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Funchal

Reference: Tempère & Peragallo 1907-1915 (as *Coscinodiscus nodulifer* Jan.)

***Coscinodiscus nodulifer* f. *minor* Tempère & Peragallo 1914**, p. 465; No. 974 [CAS ref. 001070]

Distribution (Fig. 196):

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Funchal

Reference: Tempère & Peragallo 1907-1915 (as *Coscinodiscus nodulifer* f. *minor*)

***Coscinodiscus oculus-iridis* Ehrenberg emend. Sancetta 1987**, v. 33 (3): p. 240; pl. 2, fig. 11-14, pl. 3, fig. 1-12 [CAS ref. 006766]

Distribution (Fig. 197):

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Funchal

Reference: Tempère & Peragallo 1907-1915 (as *Coscinodiscus oculus-iridis* Eh.)

***Coscinodiscus* sp.**

Distribution (Fig. 198):

REGION: NORTE

Subregion: Grande Porto

Municipality: Vila Nova de Gaia (District: Porto)

Site: Febros River (Douro Basin)

Reference: Cerqueira da Silva 1993 (as *Coscinodiscus* sp.)

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Vila Nova da Barquinha (District: Santarém)

Site: Almourol, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Coscinodiscus* sp.)

Site: Tramagal, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Coscinodiscus* sp.)

Subregion: Not specified

Municipality: Not specified

Site: Paiva River (Douro Basin)

References: Cerqueira da Silva 1991 (as *Coscinodiscus* sp.); Cerqueira da Silva et al. 1993 (as *Coscinodiscus* sp.)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Vila Franca de Xira (District: Lisboa)

Site: Vila Franca de Xira, Tagus River (Tagus Basin)

Reference: Rodrigues & Moita 1979b (as *Coscinodiscus* spp.); Fernandes et al. 1987 (as *Coscinodiscus* sp.)

REGION: ALENTEJO

Subregion: Alto Alentejo

Municipality: Gavião (District: Portalegre)

Site: Belver Reservoir, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Coscinodiscus* sp.)

Subregion: Lezíria do Tejo

Municipality: Chamusca (District: Santarém)

Site: Chamusca, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Coscinodiscus* sp.)

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Coscinodiscus* spp.)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Tagus riverbanks (Tagus Basin)

Reference: Ehrenberg 1845 (as *Coscinodiscus*)

***Cosmioneis* D.G. Mann & Stickle in Round, Crawford & Mann 1990, p. 665 [CAS ref. 003245]**

***Cosmioneis incognita* (Krasske) Lange-Bertalot in Werum & Lange-Bertalot 2004, p. 134 [CAS ref. 012889]**

Basionym: *Navicula incognita* Krasske 1932 [CAS ref. 000583]

Distribution (Fig. 199):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Cosmioneis incognita* (Krasske) Lange-Bertalot)

Site: Not specified

Reference: Gonçalves 2008 (as *Cosmioneis incognita* (Krasske) Lange-Bertalot)

***Cosmioneis pusilla* (W. Smith) D.G. Mann & Stickle in Round, Crawford & Mann 1990, p. 666 [CAS ref. 003245]**

Basionym: *Navicula pusilla* W. Smith 1853 [CAS ref. 000863]

Distribution (Fig. 200):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Frossos, Carreira Creek (Mondego Basin)

Reference: Almeida 1998 (as *Navicula pusilla* W. Smith)

Municipality: Aveiro (District: Aveiro)

Site: Eixo, Horta Stream (Vouga Basin)

Reference: Almeida 1998 (as *Navicula pusilla* W. Smith)

Site: Pano, Largo River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula pusilla* W. Smith)

Site: Vessada, Fontão Creek (Vouga Basin)

Reference: Almeida 1998 (as *Navicula pusilla* W. Smith)

Subregion: Beira Interior Sul

Municipality: Idanha-a-Nova (District: Castelo Branco)

Site: Idanha Reservoir, Ponsul River (Tagus Basin)

Reference: Oliveira 1982c (as *Navicula pusilla*)

Subregion: Médio Tejo

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Cabeçadas et al. 1980 (as *Navicula pusilla*)

Municipality: Torres Novas (District: Santarém)

Site: Casal da Pinheira, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Navicula pusilla* W. Sm.)

Site: Renova, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Navicula pusilla* W. Sm.)

Subregion: Dão-Lafões

Municipality: Tondela (District: Viseu)

Site: In the proximity of Tondela, Criz River (Mondego Basin)

Reference: Santos et al. 2002 (as *Navicula pusilla* W. Smith)

Subregion: Oeste

Municipality: Óbidos (District: Leiria)

Site: Not specified

Reference: Silva 1946b (as *Navicula pusilla* W. Sm., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

References: Manguin 1942 (as *Navicula pusilla* W. Sm.); Bourrelly &

Manguin 1946a (as *Navicula pusilla* W. Sm.)

Site: Ribeira Quente
References: Manguin 1942 (as *Navicula pusilla* W. Sm.); Bourrelly & Manguin 1946a (as *Navicula pusilla* W. Sm.)
Municipality: Santa Cruz das Flores (Flores Island)
Site: Not specified
Reference: Mölder 1947 (as *Navicula pusilla* W. Smith)
Municipality: Vila do Porto (Santa Maria Island)
Site: Not specified
References: Manguin 1942 (as *Navicula pusilla* W. Sm.); Bourrelly & Manguin 1946a (as *Navicula pusilla* W. Sm.)
Municipality: Not specified
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Cosmioneis pusilla* (W. Smith) Mann & Stickle)
Site: Santa Maria Island
Reference: Gonçalves et al. 2010 (as *Cosmioneis pusilla* (W. Smith) Mann & Stickle)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Cosmioneis pusilla* (W. Smith) Mann & Stickle)
Site: Not specified
Reference: Gonçalves 2008 (as *Cosmioneis pusilla* (W. Smith) Mann & Stickle)

***Craticula* Grunow 1867, p. 20 [CAS ref. 000432]**

***Craticula accomoda* (Hustedt) D.G. Mann in Round, Crawford & Mann 1990, p. 666 [CAS ref. 003245]**

Basionym: *Navicula accomoda* Hustedt 1950 [CAS ref. 000522]

Distribution (Fig. 201):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Navicula accomoda* Hustedt)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula accomoda* Hustedt)

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula accomoda*)

Site: São João de Azenha, Cértima River (Vouga Basin)

- Reference: Almeida 1998 (as *Navicula accomoda* Hustedt)
Municipality: Aveiro (District: Aveiro)
Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Navicula accomoda* Hustedt)
Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Navicula accomoda* Hustedt)
Municipality: Oliveira do Bairro (District: Aveiro)
Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula accomoda* Hustedt)
Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Navicula accomoda* Hustedt)
Site: Vouga Basin
Reference: Almeida & Gil 2000 (as *Navicula accomoda* Hustedt)
Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Navicula accomoda* Hustedt)
Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Navicula accomoda* Hustedt)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Almeida & Gil 2001 (as *Navicula accomoda* Hustedt)
- REGION: ALENTEJO
Subregion: Baixo Alentejo
Municipality: Aljustrel (District: Beja)
Site: Água Azeda, Água Azeda Stream (Sado Basin)
Reference: Luís et al. 2009 (as *Craticula accomoda* (Hustedt) D.G. Mann)
Site: Jungeiros, Roxo Stream (Sado Basin)
Reference: Luís et al. 2009 (as *Craticula accomoda* (Hustedt) D.G. Mann)
- REGION: AUTONOMOUS REGION OF AZORES
Municipality: Not specified
Site: Corvo Island
Reference: Gonçalves et al. 2010 (as *Craticula accomoda* (Hustedt) Mann)
- REGION: Not specified
Subregion: Not specified
Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Navicula accomoda* Hustedt)

***Craticula ambigua* (Ehrenberg) D.G. Mann in Round, Crawford & Mann 1990**, p. 666 [CAS ref. 003245]

Basionym: *Navicula ambigua* Ehrenberg 1843 [CAS ref. 000294]

Nomenclatural synonym: *Navicula cuspidata* var. *ambigua* (Ehrenberg) Cleve 1894a [CAS ref. 000232]

Distribution (Fig. 202):

REGION: NORTE

Subregion: Ave

Municipality: Vila Nova de Famalicão (District: Braga)

Site: Ribeirão de Famalicão

Reference: Zimmermann 1910 (as *Navicula ambigua* Ehr.)

Subregion: Grande Porto

Municipality: Matosinhos (District: Porto)

Site: Not specified

Reference: Zimmermann 1910 (as *Navicula ambigua* Ehr.)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Coimbra (District: Coimbra)

Site: Coimbra

Reference: Zimmermann 1910 (as *Navicula ambigua* Ehr.)

Municipality: Soure (District: Coimbra)

Site: Irrigation channel near Soure

Reference: Santos et al. 2002 (as *Navicula cuspidata* var. *ambigua* (Ehr.) Cleve)

Subregion: Baixo Vouga

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula cuspidata* v. *ambigua*)

Site: Espairo, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula cuspidata* v. *ambigua*)

Site: Mogofores, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula cuspidata* v. *ambigua*)

Site: São João da Azenha, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula cuspidata* v. *ambigua*)

Municipality: Águeda (District: Aveiro)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula cuspidata* v. *ambigua*)

Municipality: Oliveira do Bairro (District: Aveiro)
Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Navicula cuspidata* v. *ambigua*)
Site: Perrães, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Navicula cuspidata* v. *ambigua*)
Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Navicula cuspidata* v. *ambigua*)
Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Navicula cuspidata* Kg. var. *ambigua* (Ehr.)
Cleve)

REGION: LISBOA

Subregion: Península de Setúbal
Municipality: Setúbal (District: Setúbal)
Site: Comenda
Reference: Zimmermann 1910 (as *Navicula ambigua* Ehr.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
Reference: Chaves 1908 (as *Navicula ambigua* Ehr.)
Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Craticula ambigua* (Ehrenberg)
D.G. Mann)

***Craticula cuspidata* (Kützing) D.G. Mann in Round, Crawford & Mann 1990, p. 666 [CAS ref. 003245]**

Basionym: *Frustulia cuspidata* Kützing 1833a [CAS ref. 000594]

Distribution (Fig. 203):

REGION: NORTE

Subregion: Alto Trás-os-Montes
Municipality: Bragança (District: Bragança)
Site: Izeda
Reference: Zimmermann 1910 (as *Navicula cuspidata* Kütz.)
Subregion: Entre Douro e Vouga
Municipality: Vale de Cambra (District: Aveiro)
Site: Barbeito, Caima River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula cuspidata* Kützing)

REGION: CENTRO

- Subregion: Baixo Mondego
- Municipality: Coimbra (District: Coimbra)
- Site: Mondego River (Mondego Basin)
- Reference: Zimmermann 1910 (as *Navicula cuspidata* Kütz.)
- Municipality: Figueira da Foz (District: Coimbra)
- Site: Lagoa da Vela, Quiaios
- Reference: de Figueiredo et al. 2006 (as *Craticula cuspidata* (Kützing) Mann)
- Municipality: Montemor-o-Velho (District: Coimbra)
- Site: Irrigation channel near Montemor-o-Velho
- Reference: Santos et al. 2002 (as *Navicula cuspidata* (Kützing) Kützing)
- Site: Marsh near Montemor-o-Velho
- Reference: Santos et al. 2002 (as *Navicula cuspidata* (Kützing) Kützing)
- Municipality: Soure (District: Coimbra)
- Site: Irrigation channel near Soure
- Reference: Santos et al. 2002 (as *Navicula cuspidata* (Kützing) Kützing)
- Subregion: Baixo Vouga
- Municipality: Águeda (District: Aveiro)
- Site: Agadão, Agadão River (Vouga Basin)
- Reference: Gil 1988 (as *Navicula cuspidata* Kützing)
- Site: Águeda, Águeda River (Vouga Basin)
- References: Gil 1988 (as *Navicula cuspidata* Kützing); Almeida 1998 (as *Navicula cuspidata* Kützing)
- Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)
- Reference: Almeida 1998 (as *Navicula cuspidata* Kützing)
- Site: Aldeia, Segadães, Vouga River (Vouga Basin)
- Reference: Almeida 1998 (as *Navicula cuspidata* Kützing)
- Site: Avelal de Baixo, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Navicula cuspidata* Kützing)
- Site: Murta, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Navicula cuspidata*)
- Site: Óis da Ribeira, Águeda River (Vouga Basin)
- Reference: Almeida 1998 (as *Navicula cuspidata* Kützing)
- Site: Redonda, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Navicula cuspidata* Kützing)
- Municipality: Albergaria-a-Velha (District: Aveiro)
- Site: Frossos, Carreira Creek (Mondego Basin)
- Reference: Almeida 1998 (as *Navicula cuspidata* Kützing)
- Municipality: Anadia (District: Aveiro)
- Site: Curia, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Navicula cuspidata*)
- Site: Espairo, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Navicula cuspidata*)
- Site: Mogofores, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Navicula cuspidata*)
- Site: São João da Azenha, Cértima River (Vouga Basin)

- References: Rino & Gil 1989 (as *Navicula cuspidata*); Almeida 1998 (as *Navicula cuspidata* Kützing)
- Site: Tamengos, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Navicula cuspidata*)
- Municipality: Aveiro (District: Aveiro)
- Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Navicula cuspidata* Kützing)
- Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula cuspidata* Kützing)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula cuspidata* Kützing)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Navicula cuspidata* Kützing)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Navicula cuspidata* Kützing); Gil et al. 1989-1990 (as *Navicula cuspidata*)
- Site: Vessada, Fontão Creek (Vouga Basin)
Reference: Almeida 1998 (as *Navicula cuspidata* Kützing)
- Municipality: Estarreja (District: Aveiro)
- Site: Estarreja, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula cuspidata* Kützing)
- Site: Minhoteira, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula cuspidata* Kützing)
- Municipality: Mealhada (District: Aveiro)
- Site: Viadouros, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Navicula cuspidata*)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Navicula cuspidata*)
- Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula cuspidata* Kützing)
- Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula cuspidata* Kützing)
- Site: Perrães, Cértima River (Vouga Basin)
References: Rino & Gil 1989 (as *Navicula cuspidata*); Almeida 1998 (as *Navicula cuspidata* Kützing)
- Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Navicula cuspidata*)
- Site: Vila Verde, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula cuspidata* Kützing)
- Municipality: Not specified
- Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Navicula cuspidata* Kützing)
- Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Caldeirão

References: Carvalho 1913 (as *Navicula cuspidata* Kuetz.); Santos & Carvalho 2001 (as *Navicula cuspidata* Kuetz.)

Site: Porto da Carne

Reference: Carvalho 1913 (as *Navicula cuspidata* Kuetz.)

Site: Vila Patrício

Reference: Carvalho 1913 (as *Navicula cuspidata* Kuetz.)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: São João do Monte, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula cuspidata* Kützing)

Subregion: Oeste

Municipality: Óbidos (District: Leiria)

Site: Not specified

Reference: Silva 1946b (as *Navicula cuspidata* Kütz., fossil)

Municipality: Torres Vedras (District: Lisboa)

Site: Catefica

Reference: Zimmermann 1910 (as *Navicula cuspidata* Kütz.)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

References: Calado 1990 (as *Navicula cuspidata* Kützing); Gil et al. 1991 (as *Navicula cuspidata*)

REGION: ALENTEJO

Subregion: Not specified

Municipality: Not specified

Site: Rocha da Galé, Guadiana River (Guadiana Basin)

Reference: Andrade & Brito 1991 (as *Navicula cuspidata*)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Ribeira de João Gomes

Reference: Zimmermann 1909a (as *Navicula cuspidata* Kuetz.)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Craticula cuspidata* (Kützing) Mann)

***Craticula halophila* (Grunow ex Van Heurck) D.G. Mann in Round, Crawford & Mann 1990, p 666 [CAS ref. 003245]**

Basionym: *Navicula cuspidata* var. *halophila* Grunow in Van Heurck 1885 [CAS ref. 001040]

Nomenclatural synonym: *Navicula halophila* (Grunow in Van Heurck) Cleve 1894a [CAS ref. 000232]

Synonyms: *Navicula halophila* var. *subcapitata* Østrup 1910 [CAS ref. 000706], according to Krammer & Lange-Bertalot 1986, p. 126

Navicula simplex Krasske 1925 [CAS ref. 000580], according to Krammer & Lange-Bertalot 1986, p. 126

Navicula halophila f. *robusta* Hustedt 1959b [CAS ref. 002276], according to Krammer & Lange-Bertalot 1986, p. 126

Distribution (Fig. 204):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Figueira da Foz (District: Coimbra)

Site: Lagoa da Vela, Quaios

References: Abrantes et al. 2006 (as *Craticula halophila*); de Figueiredo et al. 2006 (as *Craticula halophila* (Grunow ex Van Heurck) Mann)

Municipality: Soure (District: Coimbra)

Site: Irrigation channel near Soure

Reference: Santos et al. 2002 (as *Navicula halophila* (Grunow) Cleve)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula halophila* (Grunow) Cleve)

Site: Óis da Ribeira, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula halophila* (Grunow) Cleve)

Municipality: Anadia (District: Aveiro)

Site: Espairo, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula halophila*)

Site: Mogofores, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula halophila*)

Site: São João de Azenha, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula halophila* (Grunow) Cleve)

Municipality: Aveiro (District: Aveiro)

Site: Pano, Largo River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula halophila* (Grunow) Cleve)

Site: Requeixo, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula halophila* (Grunow) Cleve)

Site: Vessada, Fontão Creek (Vouga Basin)

- Reference: Almeida 1998 (as *Navicula halophila* (Grunow) Cleve)
Municipality: Mealhada (District: Aveiro)
Site: Pampilhosa, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Navicula halophila*)
Municipality: Oliveira do Bairro (District: Aveiro)
Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula halophila* (Grunow) Cleve)
Site: Perrães, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula halophila* (Grunow) Cleve)
Site: Vila Verde, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula halophila* (Grunow) Cleve)
Subregion: Médio Tejo
Municipality: Abrantes (District: Santarém)
Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Navicula halophila*)
Site: Forno Novo, Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Navicula halophila*)
- REGION: AUTONOMOUS REGION OF AZORES
Municipality: Angra do Heroísmo (Terceira Island)
Site: Lagoa da Falca (Terceira Island)
Reference: Gonçalves 1996 (as *Navicula halophila* (Grunow) Cleve)
Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Craticula halophila* (Grunow in Van
Heurck) D.G. Mann)
Site: Terceira Island
Reference: Gonçalves et al. 2010 (as *Craticula halophila* (Grunow in Van
Heurck) D.G. Mann)
- REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Tagus and Sado Sedimentary Deposits
Reference: Morais et al. 2009 (as *Navicula halophila* (Grunow) Cleve
(*Craticula*))
Site: Not specified
Reference: INAG 2008 (as *Navicula halophila* (Grunow) Cleve
(*Craticula*))

***Craticula halophila* f. *robusta* (Hustedt) Czarnecki 1994, p. 157**
[CAS ref. 008152]

Basionym: *Navicula halophila* f. *robusta* Hustedt 1959b [CAS ref. 002276]

Synonyms: *Navicula halophila* (Grunow in Van Heurck) Cleve 1894a [CAS ref. 000232], according to Krammer & Lange-Bertalot 1986, p. 126
Navicula halophila var. *subcapitata* Østrup 1910 [CAS ref. 000706], according to Krammer & Lange-Bertalot 1986, p. 126
Navicula simplex Krasske 1925 [CAS ref. 000580], according to Krammer & Lange-Bertalot 1986, p. 126

Distribution:

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Not specified

Site: Pateira de Fermentelos (District: Aveiro)

Reference: Calado 1991 (as *Navicula halophila* (Grunow) Cleve var. *robusta* Hustedt)

***Craticula halophiloides* (Hustedt) Lange-Bertalot 2001, p. 114**
[CAS ref. 009456]

Basionym: *Navicula halophiloides* Hustedt 1959b [CAS ref. 002276]

Distribution (Fig. 205):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Óis da Ribeira, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula halophiloides* Hustedt)

Municipality: Anadia (District: Aveiro)

Site: São João de Azenha, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula halophiloides* Hustedt)

Municipality: Aveiro (District: Aveiro)

Site: Pano, Largo River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula halophiloides* Hustedt)

Site: Vessada, Fontão Creek (Vouga Basin)

Reference: Almeida 1998 (as *Navicula halophiloides* Hustedt)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula halophiloides* Hustedt)

Site: Perrães, Levira River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula halophiloides* Hustedt)

Site: Perrães, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula halophiloides* Hustedt)

Site: Vila Verde, Levira River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula halophiloides* Hustedt)

Municipality: Vila Verde (District: Aveiro)
Site: Levira River (Cértima Basin)
Reference: Almeida 2001 (as *Navicula halophiloides* Hustedt)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Almeida & Gil 2001 (as *Navicula halophiloides* Hustedt)

***Craticula minusculoides* (Hustedt) Lange-Bertalot 2001**, p. 115
[CAS ref. 009456]

Basionym: *Navicula minusculoides* Hustedt 1942b [CAS ref. 002270]

Distribution (Fig. 206):

REGION: NORTE
Subregion: Entre Douro e Vouga
Municipality: Vale de Cambra (District: Aveiro)
Site: Barbeito, Caima River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula minusculoides* Hustedt)

REGION: CENTRO
Subregion: Baixo Vouga
Municipality: Anadia (District: Aveiro)
Site: São João de Azenha, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula minusculoides* Hustedt)
Municipality: Estarreja (District: Aveiro)
Site: Minhoteira, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula minusculoides* Hustedt)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Navicula minusculoides* Hustedt)

***Craticula molesta* (Krasske) Lange-Bertalot & Willmann in Lange-Bertalot et al. 1996**, v. 3: p. 130-131 [CAS ref. 008470]

Basionym: *Navicula molesta* Krasske 1938 [CAS ref. 000586]

Distribution (Fig. 207):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Navicula molesta* Krasske)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Navicula molesta* Krasske); Gil et al. 1989-1990 (as *Navicula molesta*)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula molesta* Krasske)

Site: Bolfiãr, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula molesta* Krasske)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Navicula molesta* Krasske)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Navicula molesta* Krasske)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula molesta* Krasske)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula molesta* Krasske)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Navicula molesta* Krasske)

Municipality: Anadia (District: Aveiro)

Site: Espairo, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula molesta*)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Navicula molesta* Krasske)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

References: Gil 1988 (as *Navicula molesta* Krasske); Gil et al. 1989-1990 (as *Navicula molesta*)

Municipality: Mealhada (District: Aveiro)

Site: Pampilhosa, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula molesta*)

Site: Viadouros, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula molesta*)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Canha, Casal Estevão, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula molesta*)

Site: Repolão, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula molesta*)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Navicula molesta* Krasske)
Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Navicula molesta* Krasske)
Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Navicula molesta* Krasske)
Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Navicula molesta* Krasske)
Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Navicula molesta* Krasske)
Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Navicula molesta* Krasske)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Gil et al. 1991 (as *Navicula molesta*)

***Craticula molestiformis* (Hustedt) Lange-Bertalot 2001**, p. 116
[CAS ref. 009456]

Basionym: *Navicula molestiformis* Hustedt 1949 [CAS ref. 000521]

Synonym: *Navicula twymaniana* R.E.M. Archibald 1966 [CAS ref. 003383],
according to Krammer & Lange-Bertalot 1986, p. 130

Distribution (Fig. 208):

REGION: CENTRO

Municipality: Albergaria-a-Velha (District: Aveiro)
Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Navicula molestiformis* Hustedt)
Site: Valmaior (downstream of the mouth of Filvida River), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Navicula molestiformis* Hustedt)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Almeida 1998 (as *Navicula molestiformis* Hustedt)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified
Site: Not specified

Reference: Gonçalves et al. 2010 (as *Craticula molestiformis* (Hustedt) Lange-Bertalot, fossil)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Navicula molestiformis* Hustedt)

***Craticula riparia* (Hustedt) Lange-Bertalot 1993**, p. 14; pl. 70, fig. 1-8, pl. 71, fig. 1-5 [CAS ref. 008467]

Basionym: *Navicula riparia* Hustedt 1942b [CAS ref. 002270]

Distribution:

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Craticula riparia* (Hustedt) Lange-Bertalot)

***Craticula submolesta* (Hustedt) Lange-Bertalot in Lange-Bertalot & Metzeltin 1996**, v. 2: p. 42; pl. 104, fig. 1 [CAS ref. 007048]

Basionym: *Navicula submolesta* Hustedt 1949 [CAS ref. 000521]

Distribution (Fig. 209):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula submolesta* Hustedt)

Municipality: Arouca (District: Aveiro)

Site: Serra da Freita, Arões, Caima River (Vouga Basin)

References: Nunes 2007 (as *Craticula submolesta* (Hust.) Lange-Bertalot); Ferreira da Silva et al. 2009 (as *Craticula submolesta* (Hust.) Lange-Bertalot)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula submolesta* Hustedt)
Municipality: Aveiro (District: Aveiro)
Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula submolesta* Hustedt)
Site: Vessada, Fontão Creek (Vouga Basin)
Reference: Almeida 1998 (as *Navicula submolesta* Hustedt)
Subregion: Serra da Estrela
Municipality: Seia (District: Guarda)
Site: Sabugueiro, Lagoacho Reservoir
Reference: Santos et al. 2002 (as *Navicula submolesta* Hustedt)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
References: Calado 1990 (as *Navicula submolesta* Hustedt); Almeida & Gil 2001 (as *Navicula submolesta* Hustedt)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified
Site: Corvo Island
Reference: Gonçalves et al. 2010 (as *Craticula submolesta* (Hustedt) Lange-Bertalot)
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Craticula submolesta* (Hustedt) Lange-Bertalot)
Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Craticula submolesta* (Hustedt) Lange-Bertalot)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Craticula submolesta* (Hustedt) Lange-Bertalot)
Site: Not specified
Reference: Gonçalves 2008 (as *Craticula submolesta* (Hustedt) Lange-Bertalot)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Craticula submolesta* (Hust.) Lange-Bertalot)

***Craticula* sp.**

Distribution (Fig. 210):

REGION: NORTE

Subregion: Alto Trás-os-Montes
Municipality: Bragança (District: Bragança)
Site: São Serrada Reservoir, Andorinhas Stream (Douro Basin)
Reference: Geraldès & Boavida 2005 (as *Craticula* sp.)

***Ctenophora* (Grunow) D.M. Williams & Round 1986,**
p. 330 [CAS ref. 003154]

***Ctenophora pulchella* (Ralfs ex Kützing) D.M. Williams & Round 1986,** p. 330; fig. 53-61 [CAS ref. 003154]

Basionym: *Synedra pulchella* (Ralfs ex Kützing) Kützing 1844 [CAS ref. 000595]

Nomenclatural synonym: *Fragilaria pulchella* (Ralfs ex Kützing) Lange-Bertalot 1980 [CAS ref. 008465]

Distribution (Fig. 211):

REGION: NORTE

Subregion: Cávado

Municipality: Barcelos (District: Braga)

Site: Barcelos, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Synedra pulchella*)

Site: Manhente, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Synedra pulchella*)

Municipality: Braga (District: Braga)

Site: Padim da Graça, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Synedra pulchella*)

Municipality: Esposende (District: Braga)

Site: Marachão, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Synedra pulchella*)

Municipality: Not specified

Site: Entrepontes, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Synedra pulchella*)

Site: Homem River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Synedra pulchella*)

Subregion: Grande Porto

Municipality: Porto (District: Porto)

Site: Pampolide

References: Colmeiro 1889 (as *Synedra pulchella* Kg.); Zimmermann

1914 (as *Synedra pulchella* (Ralfs) Kuetz.)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Synedra pulchella* Ralfs & Kützing)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Synedra pulchella* Ralfs & Kützing); Almeida 1998 (as *Fragilaria pulchella* (Ralfs ex Kützing) Lange-Bertalot)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria pulchella* (Ralfs ex Kützing) Lange-Bertalot)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria pulchella* (Ralfs ex Kützing) Lange-Bertalot)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Synedra pulchella* Ralfs & Kützing)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Synedra pulchella* Ralfs & Kützing)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Synedra pulchella*) Lange-Bertalot)

Site: Óis da Ribeira, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria pulchella* (Ralfs ex Kützing) Lange-Bertalot)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Synedra pulchella* Ralfs & Kützing)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Synedra pulchella* Ralfs & Kützing)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Synedra pulchella* Ralfs & Kützing)

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Frossos, Carreira Creek (Mondego Basin)

Reference: Almeida 1998 (as *Fragilaria pulchella* (Ralfs ex Kützing) Lange-Bertalot)

Municipality: Anadia (District: Aveiro)

Site: Mogofores, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Synedra pulchella*)

Site: São João de Azenha, Cértima River (Vouga Basin)

References: Rino & Gil 1989 (as *Synedra pulchella*); Almeida 1998 (as *Fragilaria pulchella* (Ralfs ex Kützing) Lange-Bertalot)

Municipality: Aveiro (District: Aveiro)

Site: Eixo, Horta Stream (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria pulchella* (Ralfs ex Kützing) Lange-Bertalot)

Site: Pano, Largo River (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria pulchella* (Ralfs ex Kützing)

Site: Requeixo, Cértima River (Vouga Basin)

- Reference: Almeida 1998 (as *Fragilaria pulchella* (Ralfs ex Kützing) Lange-Bertalot)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
- References: Gil 1988 (as *Synedra pulchella* Ralfs & Kützing); Gil et al. 1989-1990 (as *Synedra pulchella*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
- References: Gil 1988 (as *Synedra pulchella* Ralfs & Kützing); Gil et al. 1989-1990 (as *Synedra pulchella*)
- Site: Vagueira, Canal de Mira
- Reference: Mendes et al. 2009 (as *Synedra pulchella*)
- Site: Vessada, Fontão Creek (Vouga Basin)
- Reference: Almeida 1998 (as *Fragilaria pulchella* (Ralfs ex Kützing) Lange-Bertalot)
- Municipality: Estarreja (District: Aveiro)
- Site: Estarreja, Antuã River (Vouga Basin)
- Reference: Almeida 1998 (as *Fragilaria pulchella* (Ralfs ex Kützing) Lange-Bertalot)
- Site: Minhoteira, Antuã River (Vouga Basin)
- Reference: Almeida 1998 (as *Fragilaria pulchella* (Ralfs ex Kützing) Lange-Bertalot)
- Municipality: Mealhada (District: Aveiro)
- Site: Pampilhosa, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Synedra pulchella*)
- Site: Viadouros, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Synedra pulchella*)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Synedra pulchella*)
- Site: Perrães, Cértima River (Vouga Basin)
- References: Rino & Gil 1989 (as *Synedra pulchella*); Almeida 1998 (as *Fragilaria pulchella* (Ralfs ex Kützing) Lange-Bertalot)
- Site: Perrães, Levira River (Vouga Basin)
- Reference: Almeida 1998 (as *Fragilaria pulchella* (Ralfs ex Kützing) Lange-Bertalot)
- Site: Repolão, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Synedra pulchella*)
- Site: Vila Verde, Levira River (Vouga Basin)
- Reference: Almeida 1998 (as *Fragilaria pulchella* (Ralfs ex Kützing) Lange-Bertalot)
- Municipality: Not specified
- Site: Pateira de Fermentelos (District: Aveiro)
- Reference: Calado 1991 (as *Synedra pulchella* Kützing)
- Subregion: Beira Interior Sul
- Municipality: Vila Velha de Ródão (District: Castelo Branco)

- Site: downstream of Cedilho Reservoir, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Synedra pulchella*)
- Subregion: Cova da Beira
Municipality: Fundão (District: Castelo Branco)
Site: Outeiro do Bispo
Reference: Zimmermann 1909b (as *Synedra pulchella* (Ralfs) Kuetz.)
- Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Synedra pulchella* Ralfs & Kützing)
Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Synedra pulchella* Ralfs & Kützing)
- Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Synedra pulchella* Ralfs & Kützing)
- Subregion: Médio Tejo
Municipality: Abrantes (District: Santarém)
Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Synedra pulchella*)
Site: Forno Novo, Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Synedra pulchella*)
Site: Tramagal, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Synedra pulchella*)
- Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
References: Cabeçadas et al. 1980 (as *Synedra pulchella*); Andrade et al. 1988 (as *Synedra pulchella*); Brito & Andrade 1991 (as *Synedra pulchella*)
- Municipality: Vila Nova da Barquinha (District: Santarém)
Site: Almourol, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Synedra pulchella*)
- Subregion: Pinhal Interior Norte
Municipality: Pedrógão Grande (District: Leiria)
Site: Cabril Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Synedra pulchella*)
- Subregion: Not specified
Municipality: Not specified
Site: Paiva River (Douro Basin)
References: Cerqueira da Silva 1991 (as *Synedra pulchella*); Cerqueira da Silva et al. 1993 (as *Synedra pulchella*); Cerqueira da Silva 1994 (as *Synedra pulchella*)
Site: Not specified
References: Calado 1990 (as *Synedra pulchella* Ralfs & Kützing); Gil et al. 1991 (as *Synedra pulchella*)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Vila Franca de Xira (District: Lisboa)

Site: Vila Franca de Xira, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Synedra pulchella*)

REGION: ALENTEJO

Subregion: Alentejo Central

Municipality: Évora (District: Évora)

Site: Monte Novo Reservoir, Degebe River (Guadiana Basin)

References: Oliveira & Monteiro 1995 (as *Synedra pulchella*); Oliveira 1996 (as *Synedra pulchella*)

Subregion: Alentejo Litoral

Municipality: Odemira (District: Beja)

Site: Santa Clara Reservoir, Mira River (Mira Basin)

Reference: Oliveira 1987 (as *Synedra pulchella* Kz.)

Subregion: Alto Alentejo

Municipality: Gavião (District: Portalegre)

Site: Belver Reservoir, Tagus River (Tagus Basin)

References: INIP 1977 (as *Synedra pulchella* Kütz.); Fernandes et al. 1987 (as *Synedra pulchella*)

Municipality: Marvão (District: Portalegre)

Site: Sever River (Tagus Basin)

Reference: Oliveira 1975 (as *Synedra pulchella*)

Municipality: Nisa (District: Portalegre)

Site: Barca da Amieira, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Synedra pulchella*)

Site: Fratel Reservoir, Tagus River (Tagus Basin)

References: INIP 1977 (as *Synedra pulchella* Kütz.); Fernandes et al. 1987 (as *Synedra pulchella*)

Municipality: Ponte de Sôr (District: Portalegre)

Site: Montargil Reservoir, Sôr Stream (Tagus Basin)

Reference: Coutinho 1990a (as *Synedra pulchella*)

Subregion: Baixo Alentejo

Municipality: Almodôvar (District: Beja)

Site: Monte da Vinha, Guadiana River (Guadiana Basin)

Reference: Andrade & Brito 1991 (as *Synedra pulchella*)

Subregion: Lezíria do Tejo

Municipality: Cartaxo (District: Santarém)

Site: Valada, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Synedra pulchella*)

Municipality: Chamusca (District: Santarém)

Site: Chamusca, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Synedra pulchella*)

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Synedra pulchella*)

Subregion: Not specified

Municipality: Not specified

Site: Rocha da Galé, Guadiana River (Guadiana Basin)

Reference: Andrade & Brito 1991 (as *Synedra pulchella*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Furnas

Reference: Mölder 1947 (as *Synedra pulchella* Kütz.)

Site: Ribeira Quente

Reference: Mölder 1947 (as *Synedra pulchella* Kütz.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Ctenophora pulchella* (Ralfs ex Kützing) D.M. Williams & Round)

Site: Not specified

Reference: Gonçalves 2008 (as *Fragilaria pulchella* (Ralfs ex Kützing) Lange-Bertalot)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Santana (Madeira Island)

Site: Ribeiro Frio

Reference: Mölder 1947 (as *Synedra pulchella* Kütz.)

REGION: Not specified

Municipality: Not specified

Site: Reservoirs in the North and Centre of Portugal

Reference: Cabecinha et al. 2009 (as *Synedra pulchella*)

Site: Not specified

Reference: INAG 2008 (as *Fragilaria pulchella* (Ralfs ex Kütz.) Lange-Bertalot (*Ctenophora*))

***Ctenophora pulchella* var. *lanceolata* (O'Meara) Bukhtiyarova 1995, p. 419 [CAS ref. 008000]**

Basionym: *Synedra pulchella* var. *lanceolata* O'Meara 1875 [CAS ref. 000694]

Nomenclatural synonym: *Fragilaria pulchella* var. *lanceolata* (O'Meara) Witkowski, Lange-Bertalot & Metzeltin 2000 [CAS ref. 009017]

Distribution (Fig. 212):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Synedra pulchella* Ralfs & Kütz. v. *lanceolata* O'Meara)

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Mondego River (Mondego Basin)

References: Carvalho 1913 (as *Synedra pulchella* (Ralfs) Kuetz. var. *lanceolata* O'Meara); Santos & Carvalho 2001 (as *Synedra pulchella* (Ralfs) Kuetz. var. *lanceolata* O'Meara)

***Cyclostephanos* Round ex E.C. Theriot et al. 1987**, p. 346.
Description in Round 1982 p. 326 [CAS ref. 003157]

***Cyclostephanos dubius* (Fricke) Round validated by E.C. Theriot et al. 1987a**, v. 22 (4): p. 346 [CAS ref. 006794]

Basionym: *Cyclotella dubia* Fricke in Schmidt et al. 1900 [CAS ref. 012481]

Distribution (Fig. 213):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Cyclostephanos dubius* (Fricke) Round)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Cyclostephanos dubius* (Fricke) Round)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Frossos, Carreira Creek (Mondego Basin)

Reference: Almeida 1998 (as *Cyclostephanos dubius* (Fricke) Round)

Municipality: Aveiro (District: Aveiro)

Site: Eixo, Horta Stream (Vouga Basin)

Reference: Almeida 1998 (as *Cyclostephanos dubius* (Fricke) Round)

Site: Requeixo, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Cyclostephanos dubius* (Fricke) Round)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cyclostephanos dubius* (Fricke) Round)

***Cyclostephanos invisitatus* (M.H. Hohn & Hellerman) E.C. Theriot, Stoermer & Håkansson 1987b**, p. 256-257; fig. 18-24 [CAS ref. 008893]

Basionym: *Stephanodiscus invisitatus* M.H. Hohn & Hellerman 1963 [CAS ref. 000486]

Distribution (Fig. 214):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Figueira da Foz (District: Coimbra)

Site: Lagoa da Vela, Quiaios

Reference: de Figueiredo et al. 2006 (as *Cyclostephanos invisitatus* (Hohn & Hellerman) Theriot, Stoermer & Hakansson)

***Cyclotella* (Kützing) Brébisson 1838**, p. 19
[CAS ref. 000161]

***Cyclotella atomus* Hustedt 1937b**, p. 143; pl. 9, fig. 1-4 [CAS ref. 001011]

Distribution (Fig. 215):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Cyclotella atomus* Hustedt)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Cyclotella atomus* Hustedt)

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Frossos, Carreira Creek (Mondego Basin)

Reference: Almeida 1998 (as *Cyclotella atomus* Hustedt)

Municipality: Aveiro (District: Aveiro)

Site: Eixo, Horta Stream (Vouga Basin)

Reference: Almeida 1998 (as *Cyclotella atomus* Hustedt)

Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Cyclotella atomus* Hustedt)
Municipality: Oliveira do Bairro (District: Aveiro)
Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Cyclotella atomus* Hustedt)
Subregion: Médio Tejo
Municipality: Torres Novas (District: Santarém)
Site: Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1970 (as *Cyclotella atomus* Hust.)
Subregion: Serra da Estrela
Municipality: Seia (District: Guarda)
Site: Sabugueiro, Lagoacho Reservoir
Reference: Santos et al. 2002 (as *Cyclotella atomus* Hustedt)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Calado 1990 (as *Cyclotella atomus* Hustedt)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Cyclotella atomus* Hustedt)

***Cyclotella catenata* (Brun) H. Bachmann 1911**, p. 130; fig. 116-117
[CAS ref. 001590]

Distribution (Fig. 216):

REGION: CENTRO
Subregion: Baixo Mondego
Municipality: Mira (District: Coimbra)
Site: Lagoa de Mira
Reference: Oliveira 1971a (as *Cyclotella catenata*)
Subregion: Médio Tejo
Municipality: Abrantes (District: Santarém)
Site: Tramagal, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cyclotella catenata* (?))

REGION: ALENTEJO
Subregion: Lezíria do Tejo
Municipality: Rio Maior (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Cyclotella catenata* Brun, fossil)

Cyclotella chaetoceras Lemmermann 1900b, p. 29 [CAS ref. 001342]

Distribution (Fig. 217):

REGION: CENTRO

Subregion: Beira Interior Sul

Municipality: Vila Velha de Ródão (District: Castelo Branco)

Site: downstream of Cedilho Reservoir, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cyclotella chaetoceras* (?))

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Tramagal, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cyclotella chaetoceras* (?))

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Cyclotella chaetoceras* (?))

Municipality: Vila Nova da Barquinha (District: Santarém)

Site: Almourol, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cyclotella chaetoceras* (?))

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Vila Franca de Xira (District: Lisboa)

Site: Vila Franca de Xira, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cyclotella chaetoceras* (?))

REGION: ALENTEJO

Subregion: Alto Alentejo

Municipality: Gavião (District: Portalegre)

Site: Belver Reservoir, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cyclotella chaetoceras* (?))

Municipality: Nisa (District: Portalegre)

Site: Barca da Amieira, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cyclotella chaetoceras* (?))

Site: Fratel Reservoir, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cyclotella chaetoceras* (?))

Subregion: Lezíria do Tejo

Municipality: Cartaxo (District: Santarém)

Site: Valada, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cyclotella chaetoceras* (?))

Municipality: Chamusca (District: Santarém)

Site: Chamusca, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cyclotella chaetoceras* (?))

Municipality: Rio Maior (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Cyclotella chaetoceras* Lemmerm, fossil)
Municipality: Santarém (District: Santarém)
Site: Ómnias, Tagus River (Tagus Basin)
Reference: Brito & Andrade 1992 (as *Cyclotella chaetoceras* (?));
Fernandes et al. 1987 (as *Cyclotella chaetoceras* (?))
Subregion: Not specified
Municipality: Not specified
Site: Rocha da Galé, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Cyclotella chaetoceras*)

***Cyclotella comensis* Grunow in Van Heurck 1882**, pl. 93, fig. 16, 17
[CAS ref. 001036]

Distribution (Fig. 218):

REGION: CENTRO
Subregion: Médio Tejo
Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
References: Nauwerck 1962 (as *Cyclotella comensis* Grunow); Frade
1963 (as *Cyclotella comensis* Grun.)

***Cyclotella comta* (Ehrenberg) Kützing 1849**, p. 20 [CAS ref.
000596]

Basionym: *Discoplea comta* Ehrenberg 1844c [CAS ref. 001185]

Distribution (Fig. 219):

REGION: CENTRO
Subregion: Baixo Vouga
Municipality: Águeda (District: Aveiro)
Site: Murta, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cyclotella comta*)
Municipality: Anadia (District: Aveiro)
Site: Mogofores, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cyclotella comta*)
Municipality: Aveiro (District: Aveiro)
Site: Aveiro, lake in the municipal park (artificial substrate)
Reference: Gil & Almeida 1993 (as *Cyclotella comta* (Ehrenberg)
Kützing)
Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima
River (Vouga Basin)
Reference: Gil 1988 (as *Cyclotella comta* (Ehrenberg) Kützing)

- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Cyclotella comta* (Ehrenberg) Kützing)
- Subregion: Beira Interior Sul
 Municipality: Idanha-a-Nova (District: Castelo Branco)
 Site: Idanha Reservoir, Ponsul River (Tagus Basin)
 Reference: Oliveira 1982c (as *Cyclotella comta*)
- Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Cyclotella comta* (Ehrenberg) Kützing)
 Site: Varzielas, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Cyclotella comta* (Ehrenberg) Kützing)
- Subregion: Médio Tejo
 Municipality: Abrantes (District: Santarém)
 Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Cyclotella comta*)
 Site: Forno Novo, Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Cyclotella comta*)
- Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: Calado 1990 (as *Cyclotella comta* (Ehrenberg) Kützing)

REGION: LISBOA

- Subregion: Península de Setúbal
 Municipality: Sesimbra (District: Setúbal)
 Site: Lagoa de Albufeira
 Reference: Nauwerck 1962 (as *Cyclotella comta* (Ehrenberg) Kützing)

REGION: ALENTEJO

- Subregion: Alentejo Litoral
 Municipality: Alcácer do Sal (District: Setúbal)
 Site: Pêgo do Altar Reservoir (ancient Salazar Reservoir), Alcáçovas Stream (Sado Basin)
 Reference: Nauwerck 1962 (as *Cyclotella comta* (Ehrenberg) Kützing)
 Site: Trigo de Morais Reservoir, Xarrama River (Sado Basin)
 Reference: Nauwerck 1962 (as *Cyclotella comta* (Ehrenberg) Kützing)
- Municipality: Arraiolos (District: Évora)
 Site: Divor Reservoir, Divor Stream (Tagus Basin)
 Reference: Oliveira 1984b (as *Cyclotella comta*)
- Municipality: Santiago do Cacém (District: Setúbal)
 Site: Campilhas Reservoir, Campilhas Stream (Sado Basin)
 Reference: Oliveira 1984a (as *Cyclotella comta*)
- Subregion: Alto Alentejo
 Municipality: Gavião (District: Portalegre)

Site: Belver Reservoir, Tagus River (Tagus Basin)
Reference: INIP 1977 (as *Cyclotella comta* (E.) Kg.)
Municipality: Nisa (District: Portalegre)
Site: Fratel Reservoir, Tagus River (Tagus Basin)
Reference: INIP 1977 (as *Cyclotella comta* (E.) Kg.)
Site: Poio Reservoir, Nisa Stream (Tagus Basin)
Reference: Nauwerck 1962 (as *Cyclotella comta* (Ehrenberg) Kützing)
Municipality: Ponte de Sôr (District: Portalegre)
Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
Reference: Coutinho 1990a (as *Cyclotella comta*)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Cymbella cistula* (Ehr.) Kützing)

***Cyclotella cryptica* Reimann, J.C. Lewin & Guillard 1963**, p. 75-84;
fig. 4-11 [CAS ref. 001844]

Distribution (Fig. 220):

REGION: CENTRO
Subregion: Baixo Vouga
Municipality: Aveiro (District: Aveiro)
Site: Aveiro, lake in the municipal park (artificial substrate)
Reference: Gil & Almeida 1993 (as *Cyclotella cryptica* Reimann et Volcani)

***Cyclotella distinguenda* Hustedt 1927**, p. 320; fig. 4 [CAS ref. 013174]

Distribution:

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Cyclotella distinguenda* var. *distinguenda* Hustedt)

***Cyclotella gordonensis* H.J. Kling & Håkansson 1988**, p. 70, 72; fig. 51, 52, 98-100 [CAS ref. 008422]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cyclotella gordonensis* Kling & Håkansson)

***Cyclotella iris* Brun & Héribaud in Héribaud 1893**, p. 224; pl. 6, fig. 1 [CAS ref. 000481]

Distribution (Fig. 221):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Cyclotella iris* J. Br. et Hérib.); Bourrelly & Manguin 1946a (as *Cyclotella iris* J. Br. et Hérib.)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Manguin 1942 (as *Cyclotella iris* J. Br. et Hérib.)

Site: Pico da Vara

References: Manguin 1942 (as *Cyclotella iris* J. Br. et Hérib.); Bourrelly & Manguin 1946a (as *Cyclotella iris* J. Br. et Hérib.)

Site: Ribeira Quente

References: Manguin 1942 (as *Cyclotella iris* J. Br. et Hérib.); Bourrelly & Manguin 1946a (as *Cyclotella iris* J. Br. et Hérib.)

Municipality: Vila do Porto (Santa Maria Island)

Site: Not specified

References: Manguin 1942 (as *Cyclotella iris* J. Br. et Hérib.); Bourrelly & Manguin 1946a (as *Cyclotella iris* J. Br. et Hérib.)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Cyclotella iris* Brun & Héribaud)

Site: Santa Maria Island

Reference: Gonçalves et al. 2010 (as *Cyclotella iris* Brun & Héribaud)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Cyclotella iris* Brun & Héribaud)

***Cyclotella iris* var. *ovalis* Mohan 1989**, v. 58 (6): p. 297; fig. 14-16
[CAS ref. 008049]

Distribution (Fig. 222):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Cyclotella iris* J. Br. et Héríb. var. *ovalis* J. Br. et Héríb.); Bourrelly & Manguin 1946a (as *Cyclotella iris* J. Br. et Héríb. var. *ovalis* J. Br. et Héríb.)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Manguin 1942 (as *Cyclotella iris* J. Br. et Héríb. var. *ovalis* J. Br. et Héríb.)

Site: Pico Verde

References: Manguin 1942 (as *Cyclotella iris* J. Br. et Héríb. var. *ovalis* J. Br. et Héríb.); Bourrelly & Manguin 1946a (as *Cyclotella iris* J. Br. et Héríb. var. *ovalis* J. Br. et Héríb.)

Site: Ribeira Quente

References: Manguin 1942 (as *Cyclotella iris* J. Br. et Héríb. var. *ovalis* J. Br. et Héríb.); Bourrelly & Manguin 1946a (as *Cyclotella iris* J. Br. et Héríb. var. *ovalis* J. Br. et Héríb.)

Municipality: Vila Franca do Campo (São Miguel Island)

Site: Lagoa do Congro

References: Manguin 1942 (as *Cyclotella iris* J. Br. et Héríb. var. *ovalis* J. Br. et Héríb.); Bourrelly & Manguin 1946a (as *Cyclotella iris* J. Br. et Héríb. var. *ovalis* J. Br. et Héríb.)

Municipality: Vila do Porto (Santa Maria Island)

Site: Not specified

References: Manguin 1942 (as *Cyclotella iris* J. Br. et Héríb. var. *ovalis* J. Br. et Héríb.); Bourrelly & Manguin 1946a (as *Cyclotella iris* J. Br. et Héríb. var. *ovalis* J. Br. et Héríb.)

Municipality: Not specified

Site: Lagoa de Cazador (São Miguel Island)

References: Manguin 1942 (as *Cyclotella iris* J. Br. et Héríb. var. *ovalis* J. Br. et Héríb.); Bourrelly & Manguin 1946a (as *Cyclotella iris* J. Br. et Héríb. var. *ovalis* J. Br. et Héríb.)

***Cyclotella kuetzingiana* Thwaites 1848**, p. 169; pl. 11/D, fig. 1-5
[CAS ref. 000886]

Distribution (Fig. 223):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Montalegre (District: Vila Real)

Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1982a (as *Cyclotella kützingiana*)

Subregion: Not specified

Municipality: Not specified

Site: Gerês River (Cávado Basin)

Reference: González-Guerrero 1949 (as *Cyclotella kutzingiana* Thwait.)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Figueira da Foz (District: Coimbra)

Site: Lagoa da Vela, Bom-Sucesso

Reference: Nauwerck 1962 (as *Cyclotella kuetzingiana* Thwait.)

Municipality: Mira (District: Coimbra)

Site: Lagoa de Mira

Reference: Oliveira 1971a (as *Cyclotella kutzingiana*)

Subregion: Beira Interior Sul

Municipality: Idanha-a-Nova (District: Castelo Branco)

Site: Idanha Reservoir, Ponsul River (Tagus Basin)

Reference: Oliveira 1982c (as *Cyclotella kützingiana*)

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Cyclotella kützingiana*)

Site: Forno Novo, Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Cyclotella kützingiana*)

Subregion: Médio Tejo

Municipality: Torres Novas (District: Santarém)

Site: Casal da Pinheira, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cyclotella kuetzingiana* Thwait.)

Site: Ribeira Branca, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cyclotella kuetzingiana* Thwait.)

Subregion: Pinhal Interior Norte

Municipality: Pampilhosa da Serra (District: Coimbra)

Site: Santa Luzia Reservoir, Unhais River (Tagus Basin)

Reference: Oliveira 1982b (as *Cyclotella kützingiana*)

REGION: LISBOA

Subregion: Península de Setúbal

Municipality: Sesimbra (District: Setúbal)

Site: Alfarim diatomite

Reference: Ferreira & Castelo 1957 (as *Cyclotella kuetzingiana* Thw., fossil)

REGION: ALENTEJO

- Subregion: Alentejo Central
 Municipality: Évora (District: Évora)
 Site: Monte Novo Reservoir, Degebe River (Guadiana Basin)
 Reference: Oliveira & Monteiro 1995 (as *Cyclotella kützingiana*);
 Oliveira 1996 (as *Cyclotella kützingiana*)
- Subregion: Alentejo Litoral
 Municipality: Alcácer do Sal (District: Setúbal)
 Site: Pêgo do Altar Reservoir, Alcáçovas Stream (Sado Basin)
 Reference: Oliveira 1984a (as *Cyclotella kützingiana*)
 Municipality: Odemira (District: Beja)
 Site: Santa Clara Reservoir, Mira River (Mira Basin)
 Reference: Oliveira 1984a (as *Cyclotella kützingiana*)
- Subregion: Alto Alentejo
 Municipality: Avis (District: Portalegre)
 Site: Maranhão Reservoir, Raia Stream (Tagus Basin)
 Reference: Oliveira 1984c (as *Cyclotella kützingiana*)
 Municipality: Elvas, Portalegre (District: Portalegre)
 Site: Caia Reservoir, Caia River (Guadiana Basin)
 Reference: Oliveira 1984a (as *Cyclotella kützingiana*)
 Municipality: Gavião (District: Portalegre)
 Site: Belver Reservoir, Tagus River (Tagus Basin)
 Reference: INIP 1977 (as *Cyclotella kützingiana* Thwaites)
 Municipality: Nisa (District: Portalegre)
 Site: Fratel Reservoir, Tagus River (Tagus Basin)
 Reference: INIP 1977 (as *Cyclotella kützingiana* Thwaites)
 Municipality: Ponte de Sôr (District: Portalegre)
 Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
 Reference: Oliveira 1984a (as *Cyclotella kützingiana*); Coutinho 1990a
 (as *Cyclotella kützingiana*)
- Subregion: Baixo Alentejo
 Municipality: Aljustrel (District: Beja)
 Site: Roxo Reservoir, Roxo Stream (Sado Basin)
 Reference: Oliveira 1976 (as *Cyclotella kützingiana* Thwaites); Oliveira
 1984a (as *Cyclotella kützingiana*)
 Municipality: Almodôvar (District: Beja)
 Site: Monte da Vinha, Guadiana River (Guadiana Basin)
 Reference: Andrade & Brito 1991 (as *Cyclotella kützingianum*)
- Subregion: Lezíria do Tejo
 Municipality: Rio Maior (District: Santarém)
 Site: Not specified
 Reference: Silva 1946b (as *Cyclotella kuetzingiana* Thwait., fossil)

REGION: ALGARVE

- Subregion: Algarve
 Municipality: Silves (District: Faro)
 Site: Arade Reservoir, Arade River (Ribeiras do Algarve Basin)

Reference: Oliveira 1984a (as *Cyclotella kützingiana*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Furnas

Reference: Holmboe 1901 (as *Cyclotella kuetzingiana* Thwait.)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Cyclotella kutsingiana* Thw.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Cyclotella kutzingiana* Thwaites)

***Cyclotella meduanae* H. Germain 1981**, p. 36; pl. 8, fig. 28, pl. 154, fig. 4, 4a [CAS ref. 009183]

Distribution (Fig. 224):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Aveiro (District: Aveiro)

Site: Requeixo, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Cyclotella meduanae* Germain)

***Cyclotella melosiroides* (Kirchner in Schröter & Kirchner) Lemmermann 1900b**, p. 29 [CAS ref. 001342]

Basionym: *Cyclotella comta* var. *melosiroides* Kirchner in Schröter 1896 [CAS ref. 001857]

Distribution (Fig. 225):

REGION: ALENTEJO

Subregion: Alto Alentejo

Municipality: Nisa (District: Portalegre)

Site: Fratel Reservoir, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cyclotella melosiroides*)

***Cyclotella meneghiniana* Kützing 1844**, p. 50; pl. 30, fig. 68 [CAS ref. 000595]

Distribution (Fig. 226):

REGION: NORTE

Subregion: Cávado

Municipality: Barcelos (District: Braga)

Site: Barcelos, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Cyclotella meneghiniana*)

Site: Manhente, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Cyclotella meneghiniana*)

Municipality: Not specified

Site: Entrepontes, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Cyclotella meneghiniana*)

Municipality: Braga (District: Braga)

Site: Padim da Graça, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Cyclotella meneghiniana*)

Municipality: Esposende (District: Braga)

Site: Marachão, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Cyclotella meneghiniana*)

Municipality: Not specified

Site: Entrepontes, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Cyclotella meneghiniana*)

Subregion: Entre Douro e Vouga

Municipality: São João da Madeira (District: Aveiro)

Site: Ui River (Vouga Basin)

Reference: Resende et al. 2010 (as *Cyclotella meneghiniana* Kützing)

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Cyclotella meneghiniana* Kützing); Nunes 2007 (as *Cyclotella meneghiniana* Kützing)

Site: São Pedro de Castelões, Caima River (Vouga Basin)

References: Nunes et al. 2003 (as *Cyclotella meneghiniana*); Nunes 2007 (as *Cyclotella meneghiniana* Kützing)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Cyclotella meneghiniana* Kützing)

Subregion: Grande Porto

Municipality: Gondomar (District: Porto)

Site: Gramido

Reference: Silva 1950b (as *Cyclotella Meneghiniana* Kütz.)

Municipality: Porto (District: Porto)

Site: Prelada

Reference: Silva 1950b (as *Cyclotella Meneghiniana* Kütz.)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Coimbra (District: Coimbra)

Site: Poço do Almegue

Reference: Nauwerck 1959 (as *Cyclotella meneghiniana* Kützing)

Municipality: Figueira da Foz (District: Coimbra)

- Site: Lagoa da Vela, Quiaios
References: Abrantes et al. 2006 (as *Cyclotella meneghiniana*); de Figueiredo et al. 2006 (as *Cyclotella meneghiniana* Kützing)
- Municipality: Montemor-o-Velho (District: Coimbra)
Site: Marsh near Montemor-o-Velho
Reference: Santos et al. 2002 (as *Cyclotella meneghiniana* Kützing)
- Municipality: Penacova (District: Coimbra)
Site: Aguieira Reservoir, Mondego River (Mondego Basin)
Reference: Oliveira & Monteiro 1992 (as *Cyclotella meneghiniana*)
- Subregion: Baixo Vouga
Municipality: Águeda (District: Aveiro)
Site: Agadão, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Cyclotella meneghiniana* Kützing); Gil et al. 1989-1990 (as *Cyclotella meneghiniana*)
- Site: Águeda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cyclotella meneghiniana* Kützing); Gil et al. 1989-1990 (as *Cyclotella meneghiniana*); Almeida 1998 (as *Cyclotella meneghiniana* Kützing)
- Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)
Reference: Almeida 1998 (as *Cyclotella meneghiniana* Kützing)
- Site: Aldeia, Segadães, Vouga River (Vouga Basin)
Reference: Almeida 1998 (as *Cyclotella meneghiniana* Kützing)
- Site: Avelal de Baixo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cyclotella meneghiniana* Kützing); Gil et al. 1989-1990 (as *Cyclotella meneghiniana*)
- Site: Bolfiar, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cyclotella meneghiniana* Kützing)
- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
Reference: Gil 1988 (as *Cyclotella meneghiniana* Kützing); Gil et al. 1989-1990 (as *Cyclotella meneghiniana*)
- Site: Murta, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cyclotella meneghiniana*)
- Site: Óis da Ribeira, Águeda River (Vouga Basin)
Reference: Almeida 1998 (as *Cyclotella meneghiniana* Kützing)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cyclotella meneghiniana* Kützing); Gil et al. 1989-1990 (as *Cyclotella meneghiniana*)
- Site: Raivo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cyclotella meneghiniana* Kützing); Gil et al. 1989-1990 (as *Cyclotella meneghiniana*)
- Site: Redonda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cyclotella meneghiniana* Kützing); Gil et al. 1989-1990 (as *Cyclotella meneghiniana*)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)

- Reference: Gil 1988 (as *Cyclotella meneghiniana* Kützing); Gil et al. 1989-1990 (as *Cyclotella meneghiniana*)
- Site: Sernada do Vouga, Vouga River (Vouga Basin)
References: Nunes 2007 (as *Cyclotella meneghiniana* Kützing); Ferreira da Silva et al. 2009 (as *Cyclotella meneghiniana* Kützing)
- Municipality: Albergaria-a-Velha (District: Aveiro)
Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Cyclotella meneghiniana* Kützing)
- Site: Ribeira de Fráguas (downstream of the Caima paper factory), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Cyclotella meneghiniana* Kützing)
- Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Cyclotella meneghiniana* Kützing)
- Site: Ribeira de Fráguas, Palhal Mine, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Cyclotella meneghiniana* Kützing)
- Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Cyclotella meneghiniana* Kützing)
- Site: Santo António, Valmaior, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Cyclotella meneghiniana* Kützing)
- Site: Valmaior (downstream of the mouth of River Filvida), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Cyclotella meneghiniana* Kützing)
- Municipality: Anadia (District: Aveiro)
Site: Curia, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cyclotella meneghiniana*)
- Site: Espairo, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cyclotella meneghiniana*)
- Site: Mogofores, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cyclotella meneghiniana*)
- Site: São João da Azenha, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cyclotella meneghiniana*); Almeida 1998 (as *Cyclotella meneghiniana* Kützing)
- Site: Tamengos, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cyclotella meneghiniana*)
- Municipality: Aveiro (District: Aveiro)
Site: Aveiro, lake in the municipal park (artificial substrate)
Reference: Gil & Almeida 1993 (as *Cyclotella meneghiniana* Kützing)
- Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Cyclotella meneghiniana* Kützing)
- Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Cyclotella meneghiniana* Kützing)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Cyclotella meneghiniana* Kützing)

- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Cyclotella meneghiniana* Kützing); Gil et al. 1989-1990 (as *Cyclotella meneghiniana*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Cyclotella meneghiniana* Kützing); Gil et al. 1989-1990 (as *Cyclotella meneghiniana*)
- Site: Vagueira, Canal de Mira
 Reference: Mendes et al. 2009 (as *Cyclotella meneghiniana*)
- Site: Vessada, Fontão Creek (Vouga Basin)
 Reference: Almeida 1998 (as *Cyclotella meneghiniana* Kützing)
- Municipality: Estarreja (District: Aveiro)
 Site: Estarreja, Antuã River (Vouga Basin)
 Reference: Almeida 1998 (as *Cyclotella meneghiniana* Kützing)
- Site: Minhoteira, Antuã River (Vouga Basin)
 Reference: Almeida 1998 (as *Cyclotella meneghiniana* Kützing)
- Municipality: Mealhada (District: Aveiro)
 Site: Pampilhosa, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cyclotella meneghiniana*)
- Site: Viadouros, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cyclotella meneghiniana*)
- Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cyclotella meneghiniana*)
- Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Cyclotella meneghiniana* Kützing)
- Site: Perrães, Levira River (Vouga Basin)
 Reference: Almeida 1998 (as *Cyclotella meneghiniana* Kützing)
- Site: Perrães, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cyclotella meneghiniana*); Almeida 1998 (as *Cyclotella meneghiniana* Kützing)
- Site: Repolão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cyclotella meneghiniana*)
- Site: Vila Verde, Levira River (Vouga Basin)
 Reference: Almeida 1998 (as *Cyclotella meneghiniana* Kützing)
- Municipality: Sever do Vouga (District: Aveiro)
 Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
 Reference: Nunes 2007 (as *Cyclotella meneghiniana* Kützing)
- Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)
 Reference: Nunes 2007 (as *Cyclotella meneghiniana* Kützing)
- Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)
 Reference: Nunes 2007 (as *Cyclotella meneghiniana* Kützing)
- Municipality: Not specified

- Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Cyclotella meneghiniana* Kützing)
- Subregion: Beira Interior Sul
- Municipality: Idanha-a-Nova (District: Castelo Branco)
Site: Idanha Reservoir, Ponsul River (Tagus Basin)
Reference: Oliveira 1982c (as *Cyclotella meneghiniana*)
- Municipality: Vila Velha de Ródão (District: Castelo Branco)
Site: downstream of Cedilho Reservoir, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cyclotella meneghiniana*)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cyclotella meneghiniana* Kützing); Gil et al. 1989-1990 (as *Cyclotella meneghiniana*)
- Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cyclotella meneghiniana* Kützing); Gil et al. 1989-1990 (as *Cyclotella meneghiniana*)
- Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cyclotella meneghiniana* Kützing); Gil et al. 1989-1990 (as *Cyclotella meneghiniana*)
- Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Cyclotella meneghiniana* Kützing); Gil et al. 1989-1990 (as *Cyclotella meneghiniana*)
- Site: In the proximity of Tondela, Criz River (Mondego Basin)
Reference: Santos et al. 2002 (as *Cyclotella meneghiniana* Kützing)
- Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil et al. 1989-1990 (as *Cyclotella meneghiniana*)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cyclotella meneghiniana* Kützing)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cyclotella meneghiniana* Kützing); Gil et al. 1989-1990 (as *Cyclotella meneghiniana*)
- Subregion: Médio Tejo
- Municipality: Abrantes (District: Santarém)
Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Cyclotella meneghiniana*)
- Site: Forno Novo, Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Cyclotella meneghiniana*)
- Site: Pego, Tagus River (Tagus Basin)
Reference: Cerqueira da Silva 1989 (as *Cyclotella meneghiniana*)
- Site: Tramagal, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cyclotella meneghiniana*)
- Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Cabeçadas et al. 1980 (as *Cyclotella meneghiniana*); Ferreira 1986 (as *Cyclotella meneghiniana*); Brito & Andrade 1992 (as *Cyclotella meneghiniana*)

Municipality: Torres Novas (District: Santarém)

Site: Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1970 (*Cyclotella meneghiniana* Kg.)

Site: Casal do Feijão, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cyclotella meneghiniana* Kützing)

Site: Casal da Pinheira, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cyclotella meneghiniana* Kützing)

Site: Renova, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cyclotella meneghiniana* Kützing)

Site: Ribeira Branca, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cyclotella meneghiniana* Kützing)

Municipality: Vila Nova da Barquinha (District: Santarém)

Site: Almourol, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cyclotella meneghiniana*)

Site: Vila Nova da Barquinha, Tagus River (Tagus Basin)

Reference: Oliveira et al. 1989 (as *Cyclotella meneghiniana*)

Subregion: Pinhal Interior Norte

Municipality: Arganil (District: Coimbra)

Site: Fronhas Reservoir, Alva River (Mondego Basin)

Reference: Santos et al. 2002 (as *Cyclotella meneghiniana* Kützing)

Municipality: Pampilhosa da Serra (District: Coimbra)

Site: Santa Luzia Reservoir, Unhais River (Tagus Basin)

Reference: Oliveira 1982b (as *Cyclotella meneghiniana*)

Municipality: Pedrógão Grande (District: Leiria)

Site: Bouçã Reservoir, Zêzere River (Tagus Basin)

Reference: Oliveira 1982b (as *Cyclotella meneghiniana*)

Site: Cabril Reservoir, Zêzere River (Tagus Basin)

Reference: Oliveira 1982b (as *Cyclotella meneghiniana*)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: Sabugueiro, Lagoacho Reservoir

Reference: Santos et al. 2002 (as *Cyclotella meneghiniana* Kützing)

Subregion: Not specified

Municipality: Not specified

Site: Paiva River (Douro Basin)

Reference: Cerqueira da Silva 1994 (as *Cyclotella meneghiniana*)

Site: Not specified

References: Calado 1990 (as *Cyclotella meneghiniana* Kützing); Gil et al. 1991 (as *Cyclotella meneghiniana*)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Mafra (District: Lisboa)

- Site: Tapada de Mafra, Sobral da Abelheira
 Reference: Oliveira 1971b (as *Cyclotella meneghiniana*)
 Municipality: Vila Franca de Xira (District: Lisboa)
 Site: Vila Franca de Xira, Tagus River (Tagus Basin)
 Reference: Rodrigues & Moita 1979a (as *Cyclotella meneghiniana*);
 Rodrigues & Moita 1979b (as *Cyclotella meneghiniana*); Fernandes et al.
 1987 (as *Cyclotella meneghiniana*)
- REGION: ALENTEJO
 Subregion: Alentejo Central
 Municipality: Arraiolos (District: Évora)
 Site: Divor Reservoir, Divor Stream (Tagus Basin)
 References: Oliveira 1984a (as *Cyclotella meneghiniana*); Oliveira 1984b
 (as *Cyclotella meneghiniana*); Oliveira & Monteiro 1993a (as *Cyclotella
 meneghiniana*); Oliveira & Monteiro 1993b (as *Cyclotella meneghiniana*);
 Andrade & Brito 1995 (as *Cyclotella meneghiniana*)
 Municipality: Évora (District: Évora)
 Site: Monte Novo Reservoir, Degebe River (Guadiana Basin)
 References: Oliveira & Monteiro 1995 (as *Cyclotella meneghiniana*);
 Oliveira 1996 (as *Cyclotella meneghiniana*)
- Subregion: Alentejo Litoral
 Municipality: Alcácer do Sal (District: Setúbal)
 Site: Pêgo do Altar Reservoir, Alcáçovas Stream (Sado Basin)
 Reference: Ferreira 1986 (as *Cyclotella meneghiniana*)
 Site: Trigo de Morais Reservoir, Xarrama River (Sado Basin)
 Reference: Nauwerck 1962 (as *Cyclotella meneghiniana* Kützing)
 Site: Vale do Gaio Reservoir, Xarrama River (Sado Basin)
 Reference: Oliveira 1984a (as *Cyclotella meneghiniana*)
 Municipality: Not specified
 Site: Sado Estuary (Sado Basin)
 Reference: Oliveira & Coutinho 1992 (as *Cyclotella meneghiniana*)
 Site: Sado River (Sado Basin)
 Reference: Monteiro *et al.* 1995 (as *Cyclotella meneghiniana*)
- Subregion: Alto Alentejo
 Municipality: Avis (District: Portalegre)
 Site: Maranhão Reservoir, Raia Stream (Tagus Basin)
 Reference: Oliveira 1984c (as *Cyclotella meneghiniana*)
 Municipality: Elvas, Portalegre (District: Portalegre)
 Site: Caia Reservoir, Caia River (Guadiana Basin)
 Reference: Oliveira 1984a (as *Cyclotella meneghiniana*)
 Municipality: Gavião (District: Portalegre)
 Site: Belver Reservoir, Tagus River (Tagus Basin)
 Reference: INIP 1977 (as *Cyclotella meneghiniana* Kg.); Fernandes et al.
 1987 (as *Cyclotella meneghiniana*)
 Municipality: Marvão (District: Portalegre)
 Site: Sever River (Tagus Basin)

- Reference: Oliveira 1975 (as *Cyclotella meneghiniana*)
Municipality: Nisa (District: Portalegre)
Site: Barca da Amieira, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cyclotella meneghiniana*)
Site: Fratel Reservoir, Tagus River (Tagus Basin)
Reference: INIP 1977 (as *Cyclotella meneghiniana* Kg.); Fernandes et al. 1987 (as *Cyclotella meneghiniana*)
Municipality: Ponte de Sôr (District: Portalegre)
Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
Reference: Coutinho 1990a (as *Cyclotella meneghiniana*)
- Subregion: Baixo Alentejo
Municipality: Aljustrel (District: Beja)
Site: Água Azeda, Água Azeda Stream (Sado Basin)
Reference: Luís et al. 2009 (as *Cyclotella meneghiniana* Kützing)
Site: Jungeiros, Roxo Stream (Sado Basin)
Reference: Luís et al. 2009 (as *Cyclotella meneghiniana* Kützing)
Site: Roxo Reservoir, Roxo Stream (Sado Basin)
Reference: Oliveira 1976 (as *Cyclotella meneghiniana* Kg.); Oliveira 1984a (as *Cyclotella meneghiniana*)
- Municipality: Almodôvar (District: Beja)
Site: Monte da Vinha, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Cyclotella meneghiniana*)
- Municipality: Ourique (District: Beja)
Site: Monte da Rocha Reservoir, Sado River (Sado Basin)
Reference: Oliveira 1984a (as *Cyclotella meneghiniana*)
- Subregion: Lezíria do Tejo
Municipality: Cartaxo (District: Santarém)
Site: Valada, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cyclotella meneghiniana*); Oliveira et al. 1989 (as *Cyclotella meneghiniana*)
- Municipality: Chamusca (District: Santarém)
Site: Chamusca, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cyclotella meneghiniana*)
- Municipality: Rio Maior (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Cyclotella meneghiniana* Kütz., fossil)
- Municipality: Salvaterra de Magos (District: Santarém)
Site: Magos Reservoir, Magos Stream (Tagus Basin)
Reference: Oliveira 1984a (as *Cyclotella meneghiniana*)
- Municipality: Santarém (District: Santarém)
Site: Ómnias, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cyclotella meneghiniana*); Brito & Andrade 1992 (as *Cyclotella meneghiniana*)
- Subregion: Not specified
Municipality: Not specified
Site: Guadiana River (Guadiana Basin)

Reference: Oliveira 1991 (as *Cyclotella meneghiniana*)
Site: Rocha da Galé, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Cyclotella meneghiniana*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Furnas

Reference: Mölder 1947 (as *Cyclotella meneghiniana* Kützing)

Site: Ribeira Quente

Reference: Mölder 1947 (as *Cyclotella meneghiniana* Kützing)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Cyclotella meneghiniana* Kützing)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Reservoirs in the North and Centre of Portugal

Reference: Cabecinha et al. 2009 (as *Cyclotella meneghiniana*)

Site: Not specified

Reference: INAG 2008 (as *Cyclotella meneghiniana* Kützing)

***Cyclotella meneghiniana* var. *rectangulata* (Brébisson in Pritchard) Grunow in Van Heurck 1882**, pl. 94, fig. 17-19 [CAS ref. 001036]

Basionym: *Cyclotella rectangula* Brébisson in Pritchard 1861 [CAS ref. 001063]

Distribution (Fig. 227):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Cyclotella meneghiniana* var. *rectangulata* Bréb.)

***Cyclotella ocellata* Pantocsek 1902**, p. 104; pl. 15, fig. 318 [CAS ref. 000715]

Distribution (Fig. 228):

REGION: NORTE

Subregion: Not specified

Site: Ave Reservoirs, Ave River (Ave Basin)

References: Branco et al. 1991a (as *Cyclotella ocellata*); Branco et al. 1991b (as *Cyclotella ocellata*)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Figueira da Foz (District: Coimbra)

Site: Lagoa da Vela, Quiaios

References: Abrantes et al. 2006 (as *Cyclotella ocellata*); de Figueiredo et al. 2006 (as *Cyclotella ocellata* Pantocsek)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella ocellata* Pantocsek)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella ocellata* Pantocsek)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella ocellata* Pantocsek)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cyclotella ocellata*)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella ocellata* Pantocsek)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella ocellata* Pantocsek)

Municipality: Anadia (District: Aveiro)

Site: Tamengos, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cyclotella ocellata*)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella ocellata* Pantocsek)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella ocellata* Pantocsek)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Canha, Casal Estevão, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cyclotella ocellata*)

Site: Repolão, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cyclotella ocellata*)

Subregion: Beira Interior Sul

Municipality: Idanha-a-Nova (District: Castelo Branco)

Site: Idanha Reservoir, Ponsul River (Tagus Basin)

Reference: Oliveira 1982c (as *Cyclotella ocellata*)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

- Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cyclotella ocellata* Pantocsek)
- Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Cyclotella ocellata* Pantocsek)
- Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cyclotella ocellata* Pantocsek)
- Subregion: Médio Tejo
Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
Reference: Cabeçadas et al. 1980 (as *Cyclotella ocellata*)
- Municipality: Torres Novas (District: Santarém)
Site: Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1970 (*Cyclotella ocellata* Pant.)
- Subregion: Oeste
Municipality: Óbidos (District: Leiria)
Site: Not specified
Reference: Silva 1946b (as *Cyclotella ocellata* Pant., fossil)
- Subregion: Pinhal Interior Norte
Municipality: Arganil (District: Coimbra)
Site: Fronhas Reservoir, Alva River (Mondego Basin)
Reference: Santos et al. 2002 (as *Cyclotella ocellata* Pantocsek)
- Municipality: Pampilhosa da Serra (District: Coimbra)
Site: Santa Luzia Reservoir, Unhais River (Tagus Basin)
Reference: Oliveira 1982b (as *Cyclotella ocellata*)
- Municipality: Pedrógão Grande (District: Leiria)
Site: Bouçã Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Cyclotella ocellata*)
- Site: Cabril Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Cyclotella ocellata*)
- Subregion: Not specified
Municipality: Not specified
Site: Not specified
References: Calado 1990 (as *Cyclotella ocellata* Pantocsek); Almeida 1998 (as *Cyclotella ocellata* Pantocsek)

REGION: ALENTEJO

Subregion: Alentejo Central

- Municipality: Arraiolos (District: Évora)
Site: Divor Reservoir, Divor Stream (Tagus Basin)
References: Oliveira 1984b (as *Cyclotella ocellata*); Oliveira & Monteiro 1993a (as *Cyclotella ocellata*); Oliveira & Monteiro 1993b (as *Cyclotella ocellata*)
- Municipality: Évora (District: Évora)
Site: Monte Novo Reservoir, Degebe River (Guadiana Basin)

References: Oliveira & Monteiro 1993a (as *Cyclotella ocellata*); Oliveira & Monteiro 1993b (as *Cyclotella ocellata*); Oliveira & Monteiro 1995 (as *Cyclotella ocellata*); Oliveira 1996 (as *Cyclotella ocellata*)

Subregion: Alentejo Litoral

Municipality: Alcácer do Sal (District: Setúbal)

Site: Pêgo do Altar Reservoir, Alcáçovas Stream (Sado Basin)

Reference: Oliveira 1984a (as *Cyclotella ocellata*)

Site: São Romão, Sado River (Sado Basin)

Reference: Coutinho 2003 (as *Cyclotella ocellata* Pantocsek)

Municipality: Odemira (District: Beja)

Site: Santa Clara Reservoir, Mira River (Mira Basin)

References: Oliveira 1984a (as *Cyclotella ocellata*); Oliveira 1992 (as *Cyclotella ocellata* Pant.)

Municipality: Santiago do Cacém (District: Setúbal)

Site: Campilhas Reservoir, Campilhas Stream (Sado Basin)

Reference: Oliveira 1984a (as *Cyclotella ocellata*)

Site: Vale do Gaio Reservoir, Xarrama River (Sado Basin)

Reference: Oliveira 1984a (as *Cyclotella ocellata*)

Subregion: Alto Alentejo

Municipality: Avis (District: Portalegre)

Site: Maranhão Reservoir, Raia Stream (Tagus Basin)

Reference: Oliveira 1984c (as *Cyclotella ocellata* Pantocsek)

Municipality: Gavião (District: Portalegre)

Site: Belver Reservoir, Tagus River (Tagus Basin)

Reference: INIP 1977 (as *Cyclotella ocellata* Pant.)

Municipality: Elvas, Portalegre (District: Portalegre)

Site: Caia Reservoir, Caia River (Guadiana Basin)

Reference: Oliveira 1984a (as *Cyclotella ocellata*)

Municipality: Ponte de Sôr (District: Portalegre)

Site: Montargil Reservoir, Sôr Stream (Tagus Basin)

References: Oliveira 1984a (as *Cyclotella ocellata*); Coutinho 1990a (as *Cyclotella ocellata*)

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Água Forte, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Cyclotella ocellata* Pantocsek)

Site: Porto de Beja, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Cyclotella ocellata* Pantocsek)

Site: Porto Ferreira, Roxo Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Cyclotella ocellata* Pantocsek)

Site: Roxo Reservoir, Roxo Stream (Sado Basin)

Reference: Oliveira 1976 (as *Cyclotella ocellata* Pant.); Oliveira 1984a (as *Cyclotella ocellata*)

Municipality: Ferreira do Alentejo (District: Beja)

Site: Odivelas Reservoir, Odivelas Stream (Sado Basin)

Reference: Oliveira 1984a (as *Cyclotella ocellata*)

Municipality: Ourique (District: Beja)
Site: Monte da Rocha Reservoir, Sado River (Sado Basin)
Reference: Oliveira 1984a (as *Cyclotella ocellata*)

Subregion: Lezíria do Tejo

Municipality: Alpiarça (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Cyclotella ocellata* Pant., fossil)

Municipality: Salvaterra de Magos (District: Santarém)

Site: Magos Reservoir, Magos Stream (Tagus Basin)

Reference: Oliveira 1984a (as *Cyclotella ocellata*)

REGION: ALGARVE

Subregion: Algarve

Municipality: Lagos (District: Faro)

Site: Bravura Reservoir, Odiáxere Stream (Ribeiras do Algarve Basin)

Reference: Oliveira 1984a (as *Cyclotella ocellata*)

Municipality: Silves (District: Faro)

Site: Arade Reservoir, Arade River (Ribeiras do Algarve Basin)

Reference: Oliveira 1984a (as *Cyclotella ocellata*)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cyclotella ocellata* Pantocsek)

***Cyclotella operculata* (C. Agardh) Brébisson 1838**, p. 20 [CAS ref. 000161]

Basionym: *Frustulia operculata* C. Agardh 1827 [CAS ref. 000103]

Distribution (Fig. 229):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Montalegre (District: Vila Real)

Site: Alto Rabagão Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1982a (as *Cyclotella operculata*)

Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1982a (as *Cyclotella operculata*)

Subregion: Ave

Municipality: Vieira do Minho (District: Braga)

Site: Salamonde Reservoir, Cávado River (Cávado Basin)

Reference: Oliveira 1982a (as *Cyclotella operculata*)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Mira (District: Coimbra)

Site: Lagoa de Mira

Reference: Oliveira 1971a (as *Cyclotella operculata*)

Subregion: Médio Tejo

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Cabeçadas et al. 1980 (as *Cyclotella operculata*)

Municipality: Torres Novas (District: Santarém)

Site: Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1970 (*Cyclotella operculata* (Ag.) Kg.)

Subregion: Pinhal Interior Norte

Municipality: Pedrógão Grande (District: Leiria)

Site: Bouçã Reservoir, Zêzere River (Tagus Basin)

Reference: Oliveira 1982b (as *Cyclotella operculata*)

Site: Cabril Reservoir, Zêzere River (Tagus Basin)

Reference: Oliveira 1982b (as *Cyclotella operculata*)

Subregion: Pinhal Interior Sul

Municipality: Mação (District: Santarém)

Site: Pracana Reservoir, Ocreza River (Tagus Basin)

Reference: Oliveira 1982b (as *Cyclotella operculata*)

REGION: ALENTEJO

Subregion: Alto Alentejo

Municipality: Ponte de Sôr (District: Portalegre)

Site: Montargil Reservoir, Sôr Stream (Tagus Basin)

Reference: Coutinho 1990a (as *Cyclotella operculata*)

Subregion: Lezíria do Tejo

Municipality: Rio Maior (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Cyclotella operculata* (Ag.) Kütz., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa das Sete Cidades

Reference: Oliveira 1989 (as *Cyclotella operculata*)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Cyclotella operculata* Ktz.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Cyclotella operculata* (C. Agardh) Kützing)

***Cyclotella planctonica* Brunthaler in Brunthaler, Prowazek & von Wettstein 1901**, p. 7; fig. 1-2 [CAS ref. 001608]

Distribution (Fig. 230):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Torres Novas (District: Santarém)

Site: Renova, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cyclotella planctonica* Brunth.)

***Cyclotella striata* (Kützing) Grunow in Cleve & Grunow 1880**, p. 119 [CAS ref. 000241]

Basionym: *Coscinodiscus striatus* Kützing 1844 [CAS ref. 000595]

Distribution (Fig. 231):

REGION: NORTE

Subregion: Not specified

Municipality: Not specified

Site: Serra do Gerês

Reference: Silva 1950a (as *Cyclotella striata* (Kütz.) Grun.)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Coimbra (District: Coimbra)

Site: Poço do Almegue

Reference: Nauwerck 1959 (as *Cyclotella striata* (Kützing) Grunow)

REGION: LISBOA

Subregion: Península de Setúbal

Municipality: Sesimbra (District: Setúbal)

Site: Alfarim diatomite

Reference: Ferreira & Castelo 1957 (as *Cyclotella striata* (Kütz.) Grun., fossil)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Rio Maior (District: Santarém)

Site: Not specified

References: Silva 1946a (as *Cyclotella striata* (Kütz.) Grun., fossil); Silva 1946b (as *Cyclotella striata* (Kütz.) Grun., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Cyclotella striata* (Kützing)
Grunow)

***Cyclotella* sp.**

Distribution (Fig. 232):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Bragança (District: Bragança)

Site: São Serrada Reservoir, Andorinhas Stream (Douro Basin)

Reference: Geraldès & Boavida 2005 (as *Cyclotella* sp.)

Subregion: Cávado

Municipality: Braga (District: Braga)

Site: Padim da Graça, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Cyclotella* sp.)

Municipality: Not specified

Site: Entrepontes, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Cyclotella* sp.)

Subregion: Minho-Lima

Municipality: Caminha (District: Viana do Castelo)

Site: Seixas, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Cyclotella* sp.)

Municipality: Melgaço (District: Viana do Castelo)

Site: São Gregório, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Cyclotella* sp.)

Municipality: Monção (District: Viana do Castelo)

Site: Monção, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Cyclotella* sp.)

Municipality: Valença (District: Viana do Castelo)

Site: Valença, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Cyclotella* sp.)

Municipality: Not specified

Site: Ínsua do Ranhão, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Cyclotella* sp.)

Subregion: Tâmega

Municipality: Marco de Canavezes (District: Porto)

Site: Torrão Reservoir, Tâmega River (Douro Basin)

Reference: Branco & Guimarães 1991 (as *Cyclotella* sp.)

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

- Site: Caldeirão Reservoir, Caldeirão Stream
Reference: MAOT 2002 (as *Cyclotella* sp.)
- Subregion: Beira Interior Sul
Municipality: Vila Velha de Ródão (District: Castelo Branco)
Site: downstream of Cedilho Reservoir, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cyclotella* spp.)
- Subregion: Médio Tejo
Municipality: Abrantes (District: Santarém)
Site: Pego, Tagus River (Tagus Basin)
Reference: Cerqueira da Silva 1989 (as *Cyclotella* spp.)
Site: Tramagal, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cyclotella* spp.)
Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
Reference: Andrade et al. 1988 (as *Cyclotella* sp.); Brito & Andrade 1992 (as *Cyclotella* spp.)
Municipality: Vila Nova da Barquinha (District: Santarém)
Site: Almourol, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cyclotella* spp.)
- Subregion: Not specified
Municipality: Not specified
Site: Paiva River (Douro Basin)
References: Cerqueira da Silva 1991 (as *Cyclotella* sp.); Cerqueira da Silva et al. 1993 (as *Cyclotella* sp.)

REGION: LISBOA

- Subregion: Grande Lisboa
Municipality: Vila Franca de Xira (District: Lisboa)
Site: Vila Franca de Xira, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cyclotella* spp.)

REGION: ALENTEJO

- Subregion: Alentejo Litoral
Municipality: Alcácer do Sal (District: Setúbal)
Site: Pêgo do Altar Reservoir, Alcáçovas Stream (Sado Basin)
Reference: Oliveira 1984a (as *Cyclotella* sp.)
- Subregion: Alto Alentejo
Municipality: Elvas, Portalegre (District: Portalegre)
Site: Caia Reservoir, Caia River (Guadiana Basin)
Reference: Oliveira 1984a (as *Cyclotella* sp.)
Municipality: Gavião (District: Portalegre)
Site: Belver Reservoir, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cyclotella* spp.)
Municipality: Nisa (District: Portalegre)
Site: Barca da Amieira, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cyclotella* spp.)

Site: Fratel Reservoir, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cyclotella* spp.)
Municipality: Ponte de Sôr (District: Portalegre)
Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
References: Oliveira 1984a (as *Cyclotella* sp.); Coutinho 1990a (as *Cyclotella* sp.)
Subregion: Baixo Alentejo
Municipality: Almodôvar (District: Beja)
Site: Monte da Vinha, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Cyclotella* spp.)
Subregion: Lezíria do Tejo
Municipality: Cartaxo (District: Santarém)
Site: Valada, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cyclotella* spp.)
Municipality: Chamusca (District: Santarém)
Site: Chamusca, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cyclotella* spp.)
Municipality: Santarém (District: Santarém)
Site: Ómnias, Tagus River (Tagus Basin)
References: Fernandes et al. 1987 (as *Cyclotella* spp.); Brito & Andrade 1992 (as *Cyclotella* spp.)
Subregion: Not specified
Site: Rocha da Galé, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Cyclotella* spp.)

REGION: ALGARVE

Subregion: Algarve

Municipality: Silves (District: Faro)

Site: Arade Reservoir, Arade River (Ribeiras do Algarve Basin)

Reference: Oliveira 1984a (as *Cyclotella* sp.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Cyclotella* sp.)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Reservoirs in the North and Centre of Portugal

Reference: Cabecinha et al. 2009 (as *Cyclotella* spp.)

***Cylindrotheca Rabenhorst 1859*, No. 801**

[CAS ref. 000771]

Cylindrotheca gracilis (Brébisson) Grunow emend. Reimann & Lewin 1964, p. 288, 290; pl. 130, fig. 4-6 [CAS ref. 001843]

Distribution (Fig. 233):

REGION: ALENTEJO

Subregion: Baixo Alentejo

Municipality: Almodôvar (District: Beja)

Site: Monte da Vinha, Guadiana River (Guadiana Basin)

Reference: Andrade & Brito 1991 (as *Cylindrotheca gracilis*)

Cymatopleura W. Smith 1851, p. 12

[CAS ref. 001528]

Cymatopleura elliptica (Brébisson ex Kützing) W. Smith 1851, p. 13, pl. 3, fig. 10-11 [CAS ref. 001528]

Basionym: *Surirella elliptica* Brébisson ex Kützing 1844 [CAS ref. 000595]

Distribution (Fig. 234):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Anadia (District: Aveiro)

Site: São João de Azenha, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Cymatopleura elliptica* (Brébisson) W. Smith)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Perrães, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Cymatopleura elliptica* (Brébisson) W. Smith)

REGION: ALENTEJO

Subregion: Alto Alentejo

Municipality: Avis (District: Portalegre)

Site: Maranhão Reservoir, Raia Stream (Tagus Basin)

Reference: Oliveira 1984c (as *Cymatopleura elliptica*)

Subregion: Lezíria do Tejo

Municipality: Salvaterra de Magos (District: Santarém)
Site: Magos Reservoir, Magos Stream (Tagus Basin)
Reference: Oliveira 1984a (as *Cymatopleura elliptica*)

***Cymatopleura solea* (Brébisson in Brébisson & Godey) W. Smith
1851, p. 12; pl. 3, fig. 9 [CAS ref. 001528]**

Basionym: *Cymbella solea* Brébisson in Brébisson & Godey 1835 [CAS ref. 000160]

Distribution (Fig. 235):

REGION: NORTE

Subregion: Grande Porto

Municipality: Gondomar (District: Porto)

Site: Gramido

Reference: Silva 1950b (as *Cymatopleura solea* (Bréb.) W. Smith)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Coimbra (District: Coimbra)

Site: Coimbra

Reference: Zimmermann 1909b (as *Cymatopleura solea* (Bréb.) W. Sm.)

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Cymatopleura solea* (Brébisson) W. Smith)

Municipality: Soure (District: Coimbra)

Site: Irrigation channel near Soure

Reference: Santos et al. 2002 (as *Cymatopleura solea* (Brébisson) W. Smith)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Cymatopleura solea* (Brébisson) W. Smith)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cymatopleura solea*)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymatopleura solea* (Bréb.) W. Smith)

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cymatopleura solea*)

Site: Espairo, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cymatopleura solea*)

Site: Mogofores, Cértima River (Vouga Basin)

- Reference: Rino & Gil 1989 (as *Cymatopleura solea*)
 Site: São João da Azenha, Cértima River (Vouga Basin)
 References: Rino & Gil 1989 (as *Cymatopleura solea*); Almeida 1998 (as *Cymatopleura solea* (Brébisson) W. Smith)
 Site: Tamengos, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymatopleura solea*)
 Municipality: Aveiro (District: Aveiro)
 Site: Eixo, Horta Stream (Vouga Basin)
 Reference: Almeida 1998 (as *Cymatopleura solea* (Brébisson) W. Smith)
 Site: Pano, Largo River (Vouga Basin)
 Reference: Almeida 1998 (as *Cymatopleura solea* (Brébisson) W. Smith)
 Site: Requeixo, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Cymatopleura solea* (Brébisson) W. Smith)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Cymatopleura solea* (Bréb.) W. Smith)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Cymatopleura solea* (Bréb.) W. Smith); Gil et al. 1989-1990 (as *Cymatopleura solea*)
 Site: Vagueira, Canal de Mira
 Reference: Resende et al. 2005 (as *Cymatopleura solea*)
 Site: Vessada, Fontão Creek (Vouga Basin)
 Reference: Almeida 1998 (as *Cymatopleura solea* (Brébisson) W. Smith)
 Municipality: Mealhada (District: Aveiro)
 Site: Pampilhosa, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymatopleura solea*)
 Site: Viadouros, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymatopleura solea*)
 Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymatopleura solea*)
 Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Cymatopleura solea* (Brébisson) W. Smith)
 Site: Perrães, Levira River (Vouga Basin)
 Reference: Almeida 1998 (as *Cymatopleura solea* (Brébisson) W. Smith)
 Site: Perrães, Cértima River (Vouga Basin)
 References: Rino & Gil 1989 (as *Cymatopleura solea*); Almeida 1998 (as *Cymatopleura solea* (Brébisson) W. Smith)
 Site: Repolão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymatopleura solea*)
 Site: Vila Verde, Levira River (Vouga Basin)
 Reference: Almeida 1998 (as *Cymatopleura solea* (Brébisson) W. Smith)
 Municipality: Not specified
 Site: Pateira de Fermentelos (District: Aveiro)
 Reference: Calado 1991 (as *Cymatopleura solea* (Brébisson) W. Smith)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cymatopleura solea* (Bréb.) W. Smith)

Site: São João do Monte, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymatopleura solea* (Bréb.) W. Smith)

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Tramagal, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cymatopleura solea*)

Municipality: Torres Novas (District: Santarém)

Site: Casal da Pinheira, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cymatopleura solea* (Bréb.) W. Sm.)

Subregion: Oeste

Municipality: Torres Vedras (District: Lisboa)

Site: Ponte de Rol, Sizandro River

Reference: Zimmermann 1909b (as *Cymatopleura solea* (Bréb.) W. Sm.)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

References: Calado 1990 (as *Cymatopleura solea* (Brébisson) W. Smith);

Gil et al. 1991 (as *Cymatopleura solea*); Almeida & Gil 2001 (as

Cymatopleura solea (Brébisson) W. Smith)

REGION: ALENTEJO

Subregion: Alentejo Central

Municipality: Arraiolos (District: Évora)

Site: Divor Reservoir, Divor Stream (Tagus Basin)

References: Oliveira 1984b (as *Cymatopleura solea*); Oliveira 1987 (as *Cymatopleura solea* (Bréb.) W. Sm.)

Municipality: Évora (District: Évora)

Site: Monte Novo Reservoir, Degebe River (Gadiana Basin)

References: Oliveira & Monteiro 1995 (as *Cymatopleura solea*); Oliveira 1996 (as *Cymatopleura solea*)

Subregion: Alentejo Litoral

Municipality: Alcácer do Sal (District: Setúbal)

Site: São Romão, Sado River (Sado Basin)

Reference: Coutinho 2003 (as *Cymatopleura solea* (Brébisson) W. Smith)

Municipality: Odemira (District: Beja)

Site: Santa Clara Reservoir, Mira River (Mira Basin)

Reference: Oliveira 1987 (as *Cymatopleura solea* (Bréb.) W. Sm.)

Subregion: Alto Alentejo

Municipality: Elvas, Portalegre (District: Portalegre)

Site: Caia Reservoir, Caia River (Gadiana Basin)

Reference: Oliveira 1984a (as *Cymatopleura solea*)

Subregion: Baixo Alentejo

Municipality: Almodôvar (District: Beja)

Site: Monte da Vinha, Guadiana River (Guadiana Basin)

Reference: Andrade & Brito 1991 (as *Cymatopleura solea*)

Subregion: Lezíria do Tejo

Municipality: Cartaxo (District: Santarém)

Site: Valada, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cymatopleura solea*)

Municipality: Rio Maior (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Cymatopleura solea* (Bréb.) W. Sm., fossil)

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

References: Fernandes et al. 1987 (as *Cymatopleura solea*); Brito & Andrade 1992 (as *Cymatopleura solea*)

Subregion: Not specified

Municipality: Not specified

Site: Rocha da Galé, Guadiana River (Guadiana Basin)

Reference: Andrade & Brito 1991 (as *Cymatopleura solea*)

***Cymatopleura solea* var. *apiculata* (W. Smith) Ralfs in Pritchard 1861, p. 793 [CAS ref. 001063]**

Basionym: *Cymatopleura apiculata* W. Smith 1853 [CAS ref. 000863]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cymatopleura solea* (Brébisson) W. Smith var. *apiculata* (W. Smith) Ralfs)

***Cymatosira* Grunow 1862, p. 377 (63)
[CAS ref. 000428]**

***Cymatosira belgica* Grunow in Van Heurck 1881, pl. 45, fig. 38-41
[CAS ref. 001035]**

Distribution (Fig. 236):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Salto do Bargado, Furnas

Reference: Chaves 1908 (as *Cymatosira belgica*, fossil)

Municipality: Not specified

Site: Not specified

Reference: Gonçalves et al. 2010 (as *Cymatosira belgica* Grunow, fossil)

***Cymbella C. Agardh 1830*, p. 1**
[CAS ref. 000105]

***Cymbella affinis* Kützing 1844**, p. 80; pl 6, fig. 15 [CAS ref. 000595]

Distribution (Fig. 237):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Coimbra (District: Coimbra)

Site: Not specified

Reference: Colmeiro 1889 (as *Cymbella affinis* Kg.)

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Cymbella affinis* Kützing)

Municipality: Soure (District: Coimbra)

Site: Irrigation channel near Soure

Reference: Santos et al. 2002 (as *Cymbella affinis* Kützing)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella affinis* Kützing)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella affinis* Kützing)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella affinis* Kützing)

Site: Bolfiãr, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella affinis* Kützing)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Cymbella affinis* Kützing)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cymbella affinis*)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella affinis* Kützing)

- Site: Raivo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella affinis* Kützing)
- Site: Redonda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella affinis* Kützing)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella affinis* Kützing)
- Municipality: Albergaria-a-Velha (District: Aveiro)
Site: Ribeira de Fráguas, Coval da Mó Mine, Coval da Mó Stream (Vouga Basin)
Reference: Nunes 2007 (as *Cymbella affinis* Kützing)
- Municipality: Anadia (District: Aveiro)
Site: Curia, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella affinis*)
- Site: São João da Azenha, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella affinis*)
- Municipality: Aveiro (District: Aveiro)
Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella affinis* Kützing)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Cymbella affinis* Kützing); Gil et al. 1989-1990 (as *Cymbella affinis*)
- Municipality: Mealhada (District: Aveiro)
Site: Pampilhosa, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella affinis*)
- Municipality: Oliveira do Bairro (District: Aveiro)
Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella affinis*)
- Site: Perrães, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella affinis*)
- Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella affinis*)
- Municipality: Sever do Vouga (District: Aveiro)
Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)
Reference: Nunes 2007 (as *Cymbella affinis* Kützing)
- Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)
Reference: Nunes 2007 (as *Cymbella affinis* Kützing)
- Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Cymbella affinis* Kützing)
- Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: São João do Monte, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cymbella affinis* Kützing); Gil et al. 1989-1990 (as *Cymbella affinis*)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella affinis* Kützing)

Municipality: Tondela (District: Viseu)

Site: Boi, Agadão River (Vouga Basin)

References: Gil 1988 (as *Cymbella affinis* Kützing); Gil et al. 1989-1990 (as *Cymbella affinis*)

Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil et al. 1989-1990 (as *Cymbella affinis*)

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Tramagal, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cymbella affinis*)

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

References: Frade 1961 (as *Cymbella affinis*); Cabeçadas et al. 1980 (as *Cymbella affinis*)

Municipality: Torres Novas (District: Santarém)

Site: Almonda River (Tagus Basin)

Reference: Zimmermann 1906 (as *Cymbella affinis* Kütz.)

Municipality: Vila Nova da Barquinha (District: Santarém)

Site: Almourol, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cymbella affinis*)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

References: Calado 1990 (as *Cymbella affinis* Kützing); Gil et al. 1991 (as *Cymbella affinis*); Almeida 1998 (as *Cymbella affinis* Kützing)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Mafra (District: Lisboa)

Site: Tapada de Mafra, Sobral da Abelheira

Reference: Oliveira 1971b (as *Cymbella affinis*)

REGION: ALENTEJO

Subregion: Alentejo Litoral

Municipality: Odemira (District: Beja)

Site: Santa Clara Reservoir, Mira River (Mira Basin)

References: Oliveira 1984a (as *Cymbella affinis*); Oliveira 1987 (as *Cymbella affinis* Kz.)

Subregion: Alto Alentejo

Municipality: Avis (District: Portalegre)

Site: Maranhão Reservoir, Raia Stream (Tagus Basin)

- Reference: Oliveira 1984c (as *Cymbella affinis*)
 Subregion: Baixo Alentejo
 Municipality: Ferreira do Alentejo (District: Beja)
 Site: Odivelas Reservoir, Odivelas Stream (Sado Basin)
 Reference: Oliveira 1984a (as *Cymbella affinis*)
 Subregion: Lezíria do Tejo
 Municipality: Alpiarça (District: Santarém)
 Site: Not specified
 Reference: Silva 1946b (as *Cymbella affinis* Kütz., fossil)
 Municipality: Rio Maior (District: Santarém)
 Site: Espanadal diatomite
 Reference: Zbyszewski 1943 (as *Cymbella affinis* Ktz., fossil)
 Site: Rio Maior diatomite
 Reference: Lefébure 1938 (as *Cymbella affinis* Ktz., fossil)
 Site: Not specified
 Reference: Silva 1946b (as *Cymbella affinis* Kütz., fossil)
 Municipality: Salvaterra de Magos (District: Santarém)
 Site: Magos Reservoir, Magos Stream (Tagus Basin)
 Reference: Oliveira 1984a (as *Cymbella affinis*)
 Subregion: Not specified
 Site: Vascão River (in the edge of the Guadiana Nature Reserve), (Guadiana Basin)
 Reference: Gerhardt et al. 2008 (as *Cymbella affinis* Kützing)

REGION: ALGARVE

- Subregion: Algarve
 Municipality: Lagos (District: Faro)
 Site: Bravura Reservoir, Odiáxere Stream (Ribeiras do Algarve Basin)
 Reference: Oliveira 1984a (as *Cymbella affinis*)
 Municipality: Silves (District: Faro)
 Site: Arade Reservoir, Arade River (Ribeiras do Algarve Basin)
 Reference: Oliveira 1984a (as *Cymbella affinis*)

REGION: AUTONOMOUS REGION OF AZORES

- Municipality: Lajes das Flores (Flores Island)
 Site: Lagoa Rasa
 References: Manguin 1942 (as *Cymbella affinis* Kütz.); Bourrelly & Manguin 1946a (as *Cymbella affinis* Kütz.)
 Municipality: Nordeste (São Miguel Island)
 Site: Serra Tronqueira
 References: Manguin 1942 (as *Cymbella affinis* Kütz.); Bourrelly & Manguin 1946a (as *Cymbella affinis* Kütz.)
 Municipality: Povoação (São Miguel Island)
 Site: Lagoa das Furnas
 References: O'Meara 1874 (as *Cymbella affinis*); Dyer 1875 (as *Cymbella affinis* Kütz.); Holmboe 1901 (as *Cymbella affinis* Kütz.)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Lagoa Branca

References: Manguin 1942 (as *Cymbella affinis* Kütz.); Bourrelly & Manguin 1946a (as *Cymbella affinis* Kütz.)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Cymbella affinis* Kützing)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Cymbella affinis* Kützing)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cymbella affinis* Kützing var. *affinis*)

***Cymbella amphioxys* Cleve 1894a**, p. 164 [CAS ref. 000232]

Distribution (Fig. 238):

REGION: CENTRO

Subregion: Oeste

Municipality: Óbidos (District: Leiria)

Site: Not specified

Reference: Silva 1946b (as *Cymbella amphioxys* (Kütz.) Grun., fossil)

***Cymbella aspera* (Ehrenberg) Cleve 1894a**, p. 175 [CAS ref. 000232]

Basionym: *Cocconema asperum* Ehrenberg 1840a [CAS ref. 000293]

Nomenclatural synonym: *Cymbella lanceolatum* var. *aspera* (Ehrenberg) Brun 1880 [CAS ref. 000174]

Distribution (Fig. 239):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: São Pedro de Castelões, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Cymbella aspera* (Ehrenberg) Cleve)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Arganil (District: Coimbra)

- Site: Fronhas Reservoir, Alva River (Mondego Basin)
Reference: Santos et al. 2002 (as *Cymbella aspera* (Ehr.) Cleve)
- Municipality: Montemor-o-Velho (District: Coimbra)
Site: Irrigation channel near Montemor-o-Velho
Reference: Santos et al. 2002 (as *Cymbella aspera* (Ehr.) Cleve)
- Municipality: Soure (District: Coimbra)
Site: Irrigation channel near Soure
Reference: Santos et al. 2002 (as *Cymbella aspera* (Ehr.) Cleve)
- Subregion: Baixo Vouga
- Municipality: Águeda (District: Aveiro)
Site: Águeda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella aspera* Peragallo)
- Site: Bolfiar, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella aspera* Peragallo)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella aspera* Peragallo)
- Site: Redonda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella aspera* Peragallo)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella aspera* Peragallo)
- Site: Sernada do Vouga, Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Cymbella aspera* (Ehrenberg) Cleve)
- Municipality: Albergaria-a-Velha (District: Aveiro)
Site: Ribeira de Fráguas, Palhal Mine, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Cymbella aspera* (Ehrenberg) Cleve)
- Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Cymbella aspera* (Ehrenberg) Cleve)
- Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Cymbella aspera* (Ehrenberg) Cleve)
- Site: Valmaior, mouth of Filvida River (Vouga Basin)
Reference: Nunes 2007 (as *Cymbella aspera* (Ehrenberg) Cleve)
- Municipality: Aveiro (District: Aveiro)
Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella aspera* (Ehrenberg) Peragallo)
- Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella aspera* (Ehrenberg) Peragallo)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella aspera* (Ehrenberg) Peragallo)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella aspera* Peragallo); Gil et al. 1989-1990 (as *Cymbella aspera*)
- Site: Vessada, Fontão Creek (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella aspera* (Ehrenberg) Peragallo)

- Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Perrães, Levira River (Vouga Basin)
 Reference: Almeida 1998 (as *Cymbella aspera* (Ehrenberg) Peragallo)
- Site: Perrães, Cértima River (Vouga Basin)
 References: Rino & Gil 1989 (as *Cymbella aspera*); Almeida 1998 (as *Cymbella aspera* (Ehrenberg) Peragallo)
- Site: Repolão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymbella aspera*)
- Municipality: Sever do Vouga (District: Aveiro)
 Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
 Reference: Nunes 2007 (as *Cymbella aspera* (Ehrenberg) Cleve)
- Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)
 Reference: Nunes 2007 (as *Cymbella aspera* (Ehrenberg) Cleve)
- Municipality: Not specified
 Site: Pateira de Fermentelos (District: Aveiro)
 Reference: Calado 1991 (as *Cymbella aspera* (Ehrenberg) Cleve)
- Subregion: Beira Interior Sul
 Municipality: Castelo Branco (District: Castelo Branco)
 Site: Sobral do Campo
 Reference: Zimmermann 1909b (as *Cymbella lanceolata* (Ehr.) Kirchn. var. *aspera* (Ehr.) Brun.)
- Subregion: Dão-Lafões
 Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella aspera* Peragallo)
- Site: In the proximity of Tondela, Criz River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Cymbella aspera* (Ehr.) Cleve)
- Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: Calado 1990 (as *Cymbella aspera* (Ehrenberg) Cleve)
- REGION: ALENTEJO
 Subregion: Lezíria do Tejo
 Municipality: Alpiarça (District: Santarém)
 Site: Not specified
 Reference: Silva 1946b (as *Cymbella aspera* (Ehr.) Cleve, fossil)
- REGION: Not specified
 Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: INAG 2008 (as *Cymbella aspera* (Ehrenberg) H. Peragallo)

***Cymbella cesatii* f. *minor* Manguin 1942**, p. 148; pl. 4, fig. 66 [CAS ref. 000623]

Distribution (Fig. 240):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

References: Manguin 1942 (as *Cymbella cesatii* (Rabh.) Grun. fo. *minor*); Bourrelly & Manguin 1946a (as *Cymbella cesatii* (Rabh.) Grun. fo. *minor*)

Site: Ribeira Quente

References: Manguin 1942 (as *Cymbella cesatii* (Rabh.) Grun. fo. *minor*); Bourrelly & Manguin 1946a (as *Cymbella cesatii* (Rabh.) Grun. fo. *minor*)

***Cymbella cistula* (Hemprich in Hemprich & Ehrenberg) Kirchner 1878**, p. 189 [CAS ref. 000561]

Basionym: *Bacillaria cistula* Ehrenberg in Hemprich & Ehrenberg 1828 [CAS ref. 000474]

Distribution (Fig. 241):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Coimbra (District: Coimbra)

Site: Mondego River (Mondego Basin)

Reference: Zimmermann 1906 (as *Cymbella cistula* (Hempr.) Kirchn.)

Municipality: Soure (District: Coimbra)

Site: Irrigation channel near Soure

Reference: Santos et al. 2002 (as *Cymbella cistula* (Ehr.) Cleve)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Cymbella cistula* (Hemprich) Grunow); Gil et al. 1989-1990 (as *Cymbella cistula*)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella cistula* (Hemprich) Grunow)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella cistula* (Hemprich) Grunow)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cymbella cistula*)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

- References: Gil 1988 (as *Cymbella cistula* (Hemprich) Grunow); Gil et al. 1989-1990 (as *Cymbella cistula*)
- Site: Raivo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella cistula* (Hemprich) Grunow)
- Site: Redonda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella cistula* (Hemprich) Grunow)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella cistula* (Hemprich) Grunow)
- Municipality: Anadia (District: Aveiro)
Site: Mogofores, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella cistula*)
- Municipality: Aveiro (District: Aveiro)
Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella cistula* (Ehrenberg) Kirchner)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella cistula* (Ehrenberg) Kirchner)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Cymbella cistula* (Hemprich) Grunow); Gil et al. 1989-1990 (as *Cymbella cistula*)
- Site: Vessada, Fontão Creek (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella cistula* (Ehrenberg) Kirchner)
- Municipality: Mealhada (District: Aveiro)
Site: Pampilhosa, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella cistula*)
- Municipality: Oliveira do Bairro (District: Aveiro)
Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella cistula* (Ehrenberg) Kirchner)
- Site: Perrães, Cértima River (Vouga Basin)
References: Rino & Gil 1989 (as *Cymbella cistula*); Almeida 1998 (as *Cymbella cistula* (Ehrenberg) Kirchner)
- Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Cymbella cistula* (Hemprich) Grunow)
- Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Cymbella cistula* (Hemprich) Grunow); Gil et al. 1989-1990 (as *Cymbella cistula*)
- Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella cistula* (Hemprich) Grunow)
- Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella cistula* (Hemprich) Grunow)
- Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella cistula* (Hemprich) Grunow)

Municipality: Vouzela (District: Viseu)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella cistula* (Hemprich) Grunow)

Subregion: Médio Tejo
 Municipality: Tomar (District: Santarém)
 Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
 Reference: Cabeçadas et al. 1980 (as *Cymbella cistula*)

Municipality: Torres Novas (District: Santarém)
 Site: Almonda River (Tagus Basin)
 Reference: Oliveira & Caldas 1970 (as *Cymbella cistula* (Hempr e Ehr.) Kirchn.)

Site: Casal do Feijão, Almonda River (Tagus Basin)
 Reference: Oliveira & Caldas 1971 (as *Cymbella cistula* Hempr.)

Site: Casal da Pinheira, Almonda River (Tagus Basin)
 Reference: Oliveira & Caldas 1971 (as *Cymbella cistula* Hempr.)

Site: Renova, Almonda River (Tagus Basin)
 Reference: Oliveira & Caldas 1971 (as *Cymbella cistula* Hempr.)

Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 References: Calado 1990 (as *Cymbella cistula* (Hemprich) Grunow); Gil et al. 1991 (as *Cymbella cistula*)

REGION: ALENTEJO

Subregion: Alentejo Central
 Municipality: Arraiolos (District: Évora)
 Site: Divor Reservoir, Divor Stream (Tagus Basin)
 Reference: Oliveira 1984a (as *Cymbella cistula*)

Municipality: Évora (District: Évora)
 Site: Monte Novo Reservoir, Degebe River (Guadiana Basin)
 References: Oliveira & Monteiro 1995 (as *Cymbella cistula*); Oliveira 1996 (as *Cymbella cistula*)

Subregion: Alentejo Litoral
 Municipality: Alcácer do Sal (District: Setúbal)
 Site: Carvalhal diatomite
 Reference: Silva 1949 (as *Cymbella cistula* (Hempr.) Kirchn., fossil)

Municipality: Not specified
 Site: Sado River (Sado Basin)
 Reference: Monteiro et al. 1995 (as *Cymbella cistula*)

Subregion: Alto Alentejo
 Municipality: Avis (District: Portalegre)
 Site: Maranhão Reservoir, Raia Stream (Tagus Basin)
 Reference: Oliveira 1984c (as *Cymbella cistula*)

Municipality: Marvão (District: Portalegre)
 Site: Sever River (Tagus Basin)
 Reference: Oliveira 1975 (as *Cymbella cistula*)

Municipality: Ponte de Sôr (District: Portalegre)
Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
Reference: Coutinho 1990a (as *Cymbella cistula*)
Subregion: Baixo Alentejo
Municipality: Aljustrel (District: Beja)
Site: Roxo Reservoir, Roxo Stream (Sado Basin)
Reference: Oliveira 1976 (as *Cymbella cistula* Hempr.)
Subregion: Lezíria do Tejo
Municipality: Salvaterra de Magos (District: Santarém)
Site: Magos Reservoir, Magos Stream (Tagus Basin)
Reference: Oliveira 1984a (as *Cymbella cistula*)
Municipality: Rio Maior (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Cymbella cystula* (Hempr.) Kirchn., fossil)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Cymbella cistula* (Ehrenberg) Kirchner)

***Cymbella cistula* var. *maculata* (Kützing) Van Heurck 1885**, p. 64;
pl. 2, fig. 16 [CAS ref. 001040]

Basionym: *Frustulia maculata* Kützing 1833a [CAS ref. 000594]

Distribution (Fig. 242):

REGION: CENTRO
Subregion: Baixo Mondego
Municipality: Coimbra (District: Coimbra)
Site: Coimbra
Reference: Zimmermann 1909b (as *Cymbella cistula* (Hempr.) Kirchn.
var. *maculata* (Kuetz.) Grun.)
Subregion: Baixo Vouga
Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Cymbella cistula* (Hemprich) Grunow var.
maculata (Kg.) Van Heurck)

***Cymbella crassa* (Grunow) Krammer 2002**, p. 121 [CAS ref.
009520]

Basionym: *Cymbella gastroides* var. *crassa* Grunow 1882 [CAS ref. 000442]

Nomenclatural synonym: *Cymbella cistula* var. *crassa* (Grunow) Cleve-Euler 1932
[CAS ref. 000248]

Distribution (Fig. 243):

REGION: ALENTEJO

Subregion: Alentejo Litoral

Municipality: Alcácer do Sal (District: Setúbal)

Site: São Romão, Sado River (Sado Basin)

Reference: Coutinho 2003 (as *Cymbella cistula* v. *crassa* Cleve)

***Cymbella cuspidata* Kützing 1844**, p. 79; pl. 3, fig. 40 [CAS ref. 000595]

Distribution (Fig. 244):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella cuspidata* Kützing)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella cuspidata* Kützing)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cymbella cuspidata*)

Site: Sernada do Vouga, Vouga River (Vouga Basin)

Reference: Nunes 2007 (as *Cymbella cuspidata* Kützing)

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cymbella cuspidata*)

Site: Espairo, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cymbella cuspidata*)

Site: Mogofores, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cymbella cuspidata*)

Site: Tamengos, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cymbella cuspidata*)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella cuspidata* Kützing)

Municipality: Mealhada (District: Aveiro)

Site: Pampilhosa, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cymbella cuspidata*)

Site: Viadouros, Cértima River (Vouga Basin)

- Reference: Rino & Gil 1989 (as *Cymbella cuspidata*)
Municipality: Oliveira do Bairro (District: Aveiro)
Site: Perrães, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Cymbella cuspidata*)
Site: Repolão, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Cymbella cuspidata*)
Municipality: Sever do Vouga (District: Aveiro)
Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)
- Reference: Nunes 2007 (as *Cymbella cuspidata* Kützing)
Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
- Reference: Calado 1991 (as *Cymbella cuspidata* Kützing)
Subregion: Beira Interior Norte
Municipality: Guarda (District: Guarda)
Site: Caldeirão
References: Carvalho 1913 (as *Cymbella cuspidata* Kuetz.); Santos & Carvalho 2001 (as *Cymbella cuspidata* Kuetz.)
- Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella cuspidata* Kützing)
- Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella cuspidata* Kützing)
- Subregion: Médio Tejo
Municipality: Torres Novas (District: Santarém)
Site: Casal do Feijão, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Cymbella cuspidata* Kütz.)
Site: Casal da Pinheira, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Cymbella cuspidata* Kütz.)
Site: Renova, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Cymbella cuspidata* Kütz.)
Site: Ribeira Branca, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Cymbella cuspidata* Kütz.)
- Subregion: Oeste
Municipality: Óbidos (District: Leiria)
Site: Not specified
Reference: Silva 1946b (as *Cymbella cuspidata* Kütz., fossil)
- REGION: AUTONOMOUS REGION OF AZORES
Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
Reference: Chaves 1908 (as *Cymbella cuspidata* Ktz.)
Site: Tambores, Furnas
Reference: Chaves 1908 (as *Cymbella cuspidata* Ktz., fossil)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Cymbella cuspidata* Kützing)

***Cymbella cuspidata* var. *naviculiformis* (Auerswald in Rabenhorst)
Rabenhorst 1864, p. 78 [CAS ref. 000775]**

Distribution (Fig. 245):

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Alfarazes

Reference: Carvalho 1913 (as *Cymbella cuspidata* Kuetz. var. *naviculiformis* Auers.)

Site: Caldeirão

References: Carvalho 1913 (as *Cymbella cuspidata* Kuetz. var. *naviculiformis* Auers.); Santos & Carvalho 2001 (as *Cymbella cuspidata* Kuetz. var. *naviculiformis* Auers.)

Site: Cruz da Faia

Reference: Carvalho 1913 (as *Cymbella cuspidata* Kuetz. var. *naviculiformis* Auers.)

Site: Diz River

Reference: Carvalho 1913 (as *Cymbella cuspidata* Kuetz. var. *naviculiformis* Auers.)

Site: Gonçalo

Reference: Carvalho 1913 (as *Cymbella cuspidata* Kuetz. var. *naviculiformis* Auers.)

Site: Mondego River (Mondego Basin)

References: Carvalho 1913 (as *Cymbella cuspidata* Kuetz. var. *naviculiformis* Auers.); Santos & Carvalho 2001 (as *Cymbella cuspidata* Kuetz. var. *naviculiformis* Auers.)

Site: Porto da Carne

Reference: Carvalho 1913 (as *Cymbella cuspidata* Kuetz. var. *naviculiformis* Auers.)

Site: Vela

Reference: Carvalho 1913 (as *Cymbella cuspidata* Kuetz. var. *naviculiformis* Auers.)

Subregion: Oeste

Municipality: Torres Vedras (District: Lisboa)

Site: Santa Cruz

Reference: Zimmermann 1910 (as *Cymbella cuspidata* Kütz. var. *naviculaeformis* Auersw.)

***Cymbella cymbiformis* C. Agardh 1830, p. 10 [CAS ref. 000105]**

Distribution (Fig. 246):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Cymbella cymbiformis* Agardh)

Municipality: Soure (District: Coimbra)

Site: Irrigation channel near Soure

Reference: Santos et al. 2002 (as *Cymbella cymbiformis* Agardh)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella cymbiformis* Agardh)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella cymbiformis* Agardh)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella cymbiformis* Agardh)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Cymbella cymbiformis* Agardh)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cymbella cymbiformis*)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella cymbiformis* Agardh)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella cymbiformis* Agardh)

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cymbella cymbiformis*)

Site: Mogofores, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cymbella cymbiformis*)

Site: São João da Azenha, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cymbella cymbiformis*)

Site: Tamengos, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cymbella cymbiformis*)

Municipality: Aveiro (District: Aveiro)

Site: Pano, Largo River (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella cymbiformis* Agardh)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

References: Gil 1988 (as *Cymbella cymbiformis* Agardh); Gil et al. 1989-1990 (as *Cymbella cymbiformis*)

Municipality: Oliveira do Bairro (District: Aveiro)

- Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella cymbiformis*)
- Site: Perrães, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella cymbiformis*)
- Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella cymbiformis*)
- Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Cymbella cymbiformis* (Agardh & Kützing) Van Heurck)
- Subregion: Beira Interior Norte
Municipality: Guarda (District: Guarda)
Site: Mondego River (Mondego Basin)
References: Carvalho 1913 (as *Cymbella cymbiformis* (Kuetz.) Bréb.); Santos & Carvalho 2001 (as *Cymbella cymbiformis* (Kuetz.) Bréb.)
- Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella cymbiformis* Agardh)
Site: São João do Monte, Águeda River (Vouga Basin)
References: Gil 1988 (as *Cymbella cymbiformis* Agardh); Gil et al. 1989-1990 (as *Cymbella cymbiformis*)
- Subregion: Médio Tejo
Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
Reference: Cabeçadas et al. 1980 (as *Cymbella cymbiformis*)
- Municipality: Torres Novas (District: Santarém)
Site: Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1970 (as *Cymbella cymbiformis* (Kütz) V.H.)
Site: Casal do Feijão, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Cymbella cymbiformis* Ehr.)
Site: Casal da Pinheira, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Cymbella cymbiformis* Ehr.)
- Subregion: Oeste
Municipality: Óbidos (District: Leiria)
Site: Not specified
Reference: Silva 1946b (as *Cymbella cymbiformis* (Kütz.) Bréb., fossil)
- Subregion: Pinhal Interior Norte
Municipality: Pedrógão Grande (District: Leiria)
Site: Cabril Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Cymbella cymbiformis*)
- Subregion: Pinhal Interior Sul
Municipality: Mação (District: Santarém)
Site: Pracana Reservoir, Ocreza River (Tagus Basin)
Reference: Oliveira 1982b (as *Cymbella cymbiformis*)

Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Calado 1990 (as *Cymbella cymbiformis* Agardh)

REGION: LISBOA

Subregion: Grande Lisboa
Municipality: Mafra (District: Lisboa)
Site: Tapada de Mafra, Sobral da Abelheira
Reference: Oliveira 1971b (as *Cymbella cymbiformis*)

REGION: ALENTEJO

Subregion: Alentejo Central
Municipality: Arraiolos (District: Évora)
Site: Divor Reservoir, Divor Stream (Tagus Basin)
References: Oliveira 1984b (as *Cymbella cymbiformis*); Oliveira 1987 (as *Cymbella cymbiformis* Ehr.)
Municipality: Évora (District: Évora)
Site: Monte Novo Reservoir, Degebe River (Gadiana Basin)
Reference: Oliveira & Monteiro 1995 (as *Cymbella cymbiformis*);
Oliveira 1996 (as *Cymbella cymbiformis*)

Subregion: Alentejo Litoral

Municipality: Alcácer do Sal (District: Setúbal)
Site: Vale do Gaio Reservoir, Xarrama River (Sado Basin)
Reference: Oliveira 1984a (as *Cymbella cymbiformis*)
Site: São Romão, Sado River (Sado Basin)
Reference: Coutinho 2003 (as *Cymbella cymbiformis* (Agardh?) Kützing)

Subregion: Alto Alentejo

Municipality: Avis (District: Portalegre)
Site: Maranhão Reservoir, Raia Stream (Tagus Basin)
Reference: Oliveira 1984c (as *Cymbella cymbiformis*)
Municipality: Gavião (District: Portalegre)
Site: Belver Reservoir, Tagus River (Tagus Basin)
Reference: INIP 1977 (as *Cymbella cymbiformis* Ehr.)
Municipality: Marvão (District: Portalegre)
Site: Sever River (Tagus Basin)
Reference: Oliveira 1975 (as *Cymbella cymbiformis*)
Municipality: Nisa (District: Portalegre)
Site: Fratel Reservoir, Tagus River (Tagus Basin)
Reference: INIP 1977 (as *Cymbella cymbiformis* Ehr.)

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)
Site: Roxo Reservoir, Roxo Stream (Sado Basin)
Reference: Oliveira 1976 (as *Cymbella cymbiformis* Ehr.)

Subregion: Lezíria do Tejo

Municipality: Alpiarça (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Cymbella cymbiformis* (Kütz.) Bréb., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Furnas

Reference: Holmboe 1901 (as *Cymbella cymbiformis* (Kuetz.) Bréb.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Cymbella cymbiformis* C. Agardh)

***Cymbella cymbiformis* var. *jimboi* (Pantocsek) Cleve-Euler 1955**, p. 160; fig. 1246 f, 1245 o [CAS ref. 001043]

Basionym: *Cymbella jimboi* Pantocsek 1892 [CAS ref. 001034]

Distribution (Fig. 247):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Torres Novas (District: Santarém)

Site: Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1970 (as *Cymbella cymbiformis* var. *jimboi* (Pant) A. Cl.)

***Cymbella cymbiformis* var. *parva* (W. Smith) Van Heurck 1885**, p. 64; pl. 2, fig. 14 [CAS ref. 001040]

Basionym: *Cocconema parvum* W. Smith 1853 [CAS ref. 000863]

Distribution (Fig. 248):

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Lameirinhas

Reference: Carvalho 1913 (as *Cymbella cymbiformis* (Kuetz.) Bréb. var. *parva* W. Sm.)

Site: Mondego River (Mondego Basin)

References: Carvalho 1913 (as *Cymbella cymbiformis* (Kuetz.) Bréb. var. *parva* W. Sm.); Santos & Carvalho 2001 (as *Cymbella cymbiformis* (Kuetz.) Bréb. var. *parva* W. Sm.)

Subregion: Beira Interior Sul

Municipality: Castelo Branco (District: Castelo Branco)

Site: São Fiel

Reference: Zimmermann 1910 (as *Cymbella cymbiformis* (Kuetz.) Bréb. var. *parva* (W. Sm.) V.H.)

Subregion: Médio Tejo

Municipality: Torres Novas (District: Santarém)

Site: Almonda River (Tagus Basin)

Reference: Zimmermann 1910 (as *Cymbella cymbiformis* (Kuetz.) Bréb. var. *parva* (W. Sm.) V.H.)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Mafra (District: Lisboa)

Site: Tapada de Mafra, Sobral da Abelheira

Reference: Oliveira 1971b (as *Cymbella cymbiformis* var. *parva*)

***Cymbella dicephala* (Ehrenberg) Holmboe 1901, p. 278 [CAS ref.-]**

Basionym: *Navicula dicephala* Ehrenberg 1837d [CAS ref. 001178]

Distribution (Fig. 249):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa das Sete Cidades

Reference: Holmboe 1901 (as *Cymbella dicephala* Ehr.)

Municipality: Povoação (São Miguel Island)

Site: Furnas

Reference: Holmboe 1901 (as *Cymbella dicephala* Ehr.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Cymbella dicephala* (Ehrenberg) Holmboe)

***Cymbella ehrenbergii* Kützing 1844, p. 79; pl. 6, fig. 11 [CAS ref. 000595]**

Distribution (Fig. 250):

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Cubo

Reference: Carvalho 1913 (as *Cymbella ehrenbergii* Kuetz.)

Site: Nueme

Reference: Carvalho 1913 (as *Cymbella ehrenbergii* Kuetz.)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Alpiarça (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Cymbella ehrenbergii* Kütz., fossil)

***Cymbella excisa* Kützing 1844**, p. 80; pl. 6, fig. 17 [CAS ref. 000595]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cymbella excisa* Kützing var. *excisa*)

***Cymbella gastroides* (Kützing) Kützing 1844**, p. 79; pl. 6, fig. 4 b
[CAS ref. 000595]

Basionym: *Frustulia gastroides* Kützing 1833a [CAS ref. 000594]

Distribution (Fig. 251):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Torres Novas (District: Santarém)

Site: Almonda River (Tagus Basin)

Reference: Zimmermann 1909b (as *Cymbella gastroides* Kuetz.)

***Cymbella gracilis* (Ehrenberg) Kützing 1844**, p. 79; pl. 6, fig. 9
[CAS ref. 000595]

Basionym: *Cocconema gracile* Ehrenberg 1843 [CAS ref. 000294]

Distribution (Fig. 252):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

References: Almeida 1998 (as *Cymbella gracilis* (Ehrenberg) Kützing);
Nunes 2007 (as *Cymbella gracilis* (Ehrenberg) Kützing)
Site: São Pedro de Castelões, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Cymbella gracilis* (Ehrenberg) Kützing)
Site: Vale de Cambra, Caima River (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella gracilis* (Ehrenberg) Kützing)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Cymbella gracilis* (Rabh.) Grunow); Gil et al.
1989-1990 (as *Cymbella gracilis*)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cymbella gracilis* (Rabh.) Grunow); Gil et al.
1989-1990 (as *Cymbella gracilis*); Almeida 1998 (as *Cymbella gracilis*
(Ehrenberg) Kützing)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella gracilis* (Ehrenberg) Kützing)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella gracilis* (Ehrenberg) Kützing)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cymbella gracilis* (Rabh.) Grunow); Gil et al.
1989-1990 (as *Cymbella gracilis*)

Site: Bolfiar, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cymbella gracilis* (Rabh.) Grunow); Gil et al.
1989-1990 (as *Cymbella gracilis*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers
(Vouga Basin)

References: Gil 1988 (as *Cymbella gracilis* (Rabh.) Grunow); Gil et al.
1989-1990 (as *Cymbella gracilis*)

Site: Óis da Ribeira, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella gracilis* (Ehrenberg) Kützing)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Cymbella gracilis* (Rabh.) Grunow); Gil et al.
1989-1990 (as *Cymbella gracilis*)

Site: Raivo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cymbella gracilis* (Rabh.) Grunow); Gil et al.
1989-1990 (as *Cymbella gracilis*)

Site: Redonda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cymbella gracilis* (Rabh.) Grunow); Gil et al.
1989-1990 (as *Cymbella gracilis*)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Cymbella gracilis* (Rabh.) Grunow); Gil et al.
1989-1990 (as *Cymbella gracilis*)

Municipality: Albergaria-a-Velha (District: Aveiro)

- Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Cymbella gracilis* (Ehrenberg) Kützing)
- Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Cymbella gracilis* (Ehrenberg) Kützing)
- Site: Ribeira de Fráguas, Palhal Mine, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Cymbella gracilis* (Ehrenberg) Kützing)
- Municipality: Aveiro (District: Aveiro)
- Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella gracilis* (Ehrenberg) Kützing)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella gracilis* (Ehrenberg) Kützing)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Cymbella gracilis* (Rabh.) Grunow); Gil et al. 1989-1990 (as *Cymbella gracilis*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Cymbella gracilis* (Rabh.) Grunow); Gil et al. 1989-1990 (as *Cymbella gracilis*)
- Municipality: Estarreja (District: Aveiro)
- Site: Estarreja, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella gracilis* (Ehrenberg) Kützing)
- Site: Minhoteira, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella gracilis* (Ehrenberg) Kützing)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Cymbella gracilis* (Rabh.) Grunow); Gil et al. 1989-1990 (as *Cymbella gracilis*)
- Site: São João do Monte, Águeda River (Vouga Basin)
References: Gil 1988 (as *Cymbella gracilis* (Rabh.) Grunow); Gil et al. 1989-1990 (as *Cymbella gracilis*)
- Site: Varzielas, Águeda River (Vouga Basin)
References: Gil 1988 (as *Cymbella gracilis* (Rabh.) Grunow); Gil et al. 1989-1990 (as *Cymbella gracilis*)
- Municipality: Tondela (District: Viseu)
- Site: Boi, Agadão River (Vouga Basin)
References: Gil 1988 (as *Cymbella gracilis* (Rabh.) Grunow); Gil et al. 1989-1990 (as *Cymbella gracilis*)
- Municipality: Vouzela (District: Viseu)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil et al. 1989-1990 (as *Cymbella gracilis*)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella gracilis* (Rabh.) Grunow)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Cymbella gracilis* (Rabh.) Grunow); Gil et al. 1989-1990 (as *Cymbella gracilis*)

Subregion: Pinhal Interior Norte

Municipality: Pampilhosa da Serra (District: Coimbra)

Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)

Reference: Santos et al. 2002 (as *Cymbella gracilis* (Ehr.) Kützing)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: São Romão, Lagoa do Covão do Curral

Reference: Santos et al. 2002 (as *Cymbella gracilis* (Ehr.) Kützing)

Subregion: Not specified

Municipality: Not specified

Site: Vouga Basin

Reference: Almeida & Gil 2000 (as *Cymbella gracilis* (Ehrenberg) Kützing)

Site: Not specified

References: Calado 1990 (as *Cymbella gracilis* (Ehrenberg) Kützing); Gil et al. 1991 (as *Cymbella gracilis*); Almeida & Gil 2001 (as *Cymbella gracilis* (Ehrenberg) Kützing)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)

Site: Lagoa da Falca (Terceira Island)

Reference: Gonçalves 1996 (as *Cymbella gracilis* (Ehrenberg) Kützing)

Site: Lagoa da Joaninha

Reference: Gonçalves 1996 (as *Cymbella gracilis* (Ehrenberg) Kützing)

Municipality: Praia da Vitória (Terceira Island)

Site: Lagoa do Boi

Reference: Gonçalves 1996 (as *Cymbella gracilis* (Ehrenberg) Kützing)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cymbella gracilis* (Ehr.) Kützing)

***Cymbella gracilis* var. *capitata* Willi Krieger 1930**, p. 143; pl. 4, fig. 28 [CAS ref. 001736]

Distribution (Fig. 253):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa do Canário

Reference: Krieger 1931 (as *Cymbella gracilis* var. *capitata*)

***Cymbella gracilis* var. *laevis* (Nägeli in Kützing) Rabenhorst 1864**, p. 81 [CAS ref. 000775]

Basionym: *Cymbella laevis* Nägeli in Kützing 1849 [CAS ref. 000596]

Distribution (Fig. 254):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Cyclotella gracilis* var. *laevis* Ktz.)

Site: Salto do Bargado, Furnas

Reference: Chaves 1908 (as *Cyclotella gracilis* var. *laevis* Ktz., fossil)

***Cymbella gracilis* var. *rotundata* Willi Krieger 1930**, p. 143; pl. 4, fig. 2 [CAS ref. 001736]

Distribution (Fig. 255):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa do Canário

Reference: Krieger 1931 (as *Cymbella gracilis* var. *rotundata*)

***Cymbella helvetica* Kützing 1844**, p. 79; pl. 6, fig. 13 [CAS ref. 000595]

Distribution (Fig. 256):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Figueira da Foz (District: Coimbra)

Site: Lagoa da Vela, Quiaios

References: Abrantes et al. 2006 (as *Cymbella helvetica*); de Figueiredo et al. 2006 (as *Cymbella helvetica* Kützing)

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Cymbella helvetica* Kützing)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

- Reference: Gil 1988 (as *Cymbella helvetica* Kützing)
 Site: Avelal de Baixo, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella helvetica* Kützing)
 Site: Bolfiar, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella helvetica* Kützing)
 Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella helvetica* Kützing)
 Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella helvetica* Kützing)
 Municipality: Albergaria-a-Velha (District: Aveiro)
 Site: Ribeira de Fráguas, Coval da Mó Mine, Coval da Mó Stream (Vouga Basin)
 Reference: Nunes 2007 (as *Cymbella helvetica* Kützing)
 Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella helvetica* Kützing)
 Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella helvetica* Kützing)
 Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella helvetica* Kützing)
 Site: Varzielas, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella helvetica* Kützing)
 Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella helvetica* Kützing)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella helvetica* Kützing)
 Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: Calado 1990 (as *Cymbella helvetica* Kützing)
- REGION: AUTONOMOUS REGION OF AZORES
 Municipality: Not specified
 Site: Not specified
 Reference: Gonçalves 2008 (as *Cymbella helvetica* Kützing)

***Cymbella heteropleura* (Ehrenberg) Kützing 1844**, p. 79 [CAS ref. 000595]

Basionym: *Pinnularia heteropleura* Ehrenberg 1840c [CAS ref. 006085]

Distribution (Fig. 257):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella heteropleura* (Ehrenberg) Kützing)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella heteropleura* (Ehr.) Kützing)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella heteropleura* (Ehr.) Kützing)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella heteropleura* (Ehr.) Kützing)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Cymbella heteropleura* (Ehr.) Kützing)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella heteropleura* (Ehr.) Kützing)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella heteropleura* (Ehr.) Kützing)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella heteropleura* (Ehr.) Kützing)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella heteropleura* (Ehr.) Kützing)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella heteropleura* (Ehr.) Kützing)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella heteropleura* (Ehr.) Kützing)

Site: São João do Monte, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella heteropleura* (Ehr.) Kützing)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella heteropleura* (Ehr.) Kützing)

Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella heteropleura* (Ehr.) Kützing)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella heteropleura* (Ehr.) Kützing)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Gil et al. 1991 (as *Cymbella heteropleura*)

***Cymbella hungarica* (Grunow in Schmidt et al.) Pantocsek 1902**, p. 22 (21); pl. 2, fig. 24 [CAS ref. 000715]

Basionym: *Cocconema hungaricum* Grunow in Schmidt et al. 1875b [CAS ref. 012443]

Distribution (Fig. 258):

REGION: ALENTEJO

Subregion: Alentejo Litoral

Municipality: Alcácer do Sal (District: Setúbal)

Site: São Romão, Sado River (Sado Basin)

Reference: Coutinho 2003 (as *Cymbella hungarica* (Grunow) Pantocsek)

***Cymbella hustedtii* Krasske 1923**, p. 204; fig. 11 [CAS ref. 000579]

Distribution:

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Not specified

Site: Pateira de Fermentelos (District: Aveiro)

Reference: Calado 1991 (as *Cymbella hustedtii* Krasske)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Calado 1990 (as *Cymbella hustedtii* Krasske)

***Cymbella laevis* Nägeli in Rabenhorst 1863**, p. 21 [CAS ref. 001481]

Distribution (Fig. 259):

REGION: CENTRO

Subregion: Oeste

Municipality: Óbidos (District: Leiria)

Site: Not specified

Reference: Silva 1946b (as *Cymbella laevis* Naeg., fossil)

REGION: LISBOA

Subregion: Península de Setúbal

Municipality: Sesimbra (District: Setúbal)

Site: Alfarim diatomite

Reference: Ferreira & Castelo 1957 (as *Cymbella levis* Naeg., fossil)

***Cymbella lanceolata* var. *boeckii* (Ehrenberg) P.G. Richter 1914, v. 14: p. 114 [CAS ref. -]**

Basionym: *Cocconema boeckii* Ehrenberg 1835 [CAS ref. 000284]

Nomenclatural synonym: *Brebissonia boeckii* (Ehrenberg) Grunow 1860 [CAS ref. 000427]

Distribution (Fig. 260):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Torres Novas (District: Santarém)

Site: Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1970 (as *Brébissonia boeckii* (Ehr.) Grun.)

***Cymbella lancettula* (Krammer) Krammer 2002, p. 43 [CAS ref. 009520]**

Basionym: *Cymbella tumidula* var. *lancettula* Krammer in Krammer & Lange-Bertalot 1985 [CAS ref. 006263]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cymbella tumidula* Grunow var. *lancettula* Krammer)

***Cymbella leptoceros* (Ehrenberg) Kützing 1844**, p. 79; pl. 6, fig. 14
[CAS ref. 000595]

Basionym: *Cocconema leptoceros* Ehrenberg 1843 [CAS ref. 000294]

Distribution (Fig. 261):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Aveiro (District: Aveiro)

Site: Requeixo, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella leptoceros* (Ehrenberg) Kützing)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Calado 1990 (as *Cymbella leptoceros* (Ehrenberg) Kützing)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cymbella leptoceros* (Ehrenberg) Kützing)

***Cymbella maculata* Kützing 1844**, p. 79; pl. 6, fig. 2 [CAS ref. 000595]

Distribution (Fig. 262):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Coimbra (District: Coimbra)

Site: Coimbra

Reference: De Toni 1887 (as *Cymbella maculata* Kütz.)

Site: Not specified

Reference: Colmeiro 1889 (as *Cymbella maculata* Kg.)

***Cymbella neolanceolata* W. Silva in Silva et al. 2013**, p. 7

Distribution (Fig. 263):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: São João da Madeira (District: Aveiro)

Site: Ui River (Vouga Basin)

Reference: Resende et al. 2010 (as *Cymbella lanceolata* (Ehrenberg) Van Heurck)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Mira (District: Coimbra)

Site: Lagoa de Mira

Reference: Oliveira 1971a (as *Cymbella lanceolata*)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella lanceolata* (Ehr.) Van Heurck)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella lanceolata* (Ehrenberg) Van Heurck)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella lanceolata* (Ehr.) Van Heurck)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella lanceolata* (Ehr.) Van Heurck)

Municipality: Aveiro (District: Aveiro)

Site: Eixo, Horta Stream (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella lanceolata* (Ehrenberg) Van Heurck)

Site: Requeixo, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella lanceolata* (Ehrenberg) Van Heurck)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella lanceolata* (Ehr.) Van Heurck)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella lanceolata* (Ehr.) Van Heurck)

Municipality: Mealhada (District: Aveiro)

Site: Pampilhosa, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cymbella lanceolata*)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Perrães, Levira River (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella lanceolata* (Ehrenberg) Van Heurck)

Site: Perrães, Cértima River (Vouga Basin)

References: Rino & Gil 1989 (as *Cymbella lanceolata*); Almeida 1998 (as *Cymbella lanceolata* (Ehrenberg) Van Heurck)

Municipality: Not specified

Site: Pateira de Fermentelos (District: Aveiro)

Reference: Calado 1991 (as *Cymbella lanceolata* (Ehrenberg) Van Heurck)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella lanceolata* (Ehr.) Van Heurck)

Site: São João do Monte, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella lanceolata* (Ehr.) Van Heurck)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella lanceolata* (Ehr.) Van Heurck)

Subregion: Médio Tejo

Municipality: Torres Novas (District: Santarém)

Site: Almonda River (Tagus Basin)

References: Zimmermann 1906 (as *Cymbella lanceolata* (Ehr.) Kirchn.);

Oliveira & Caldas 1970 (as *Cymbella lanceolata* (Ehr.) Brun)

Site: Casal do Feijão, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cymbella lanceolata* Ehr.)

Site: Renova, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cymbella lanceolata* Ehr.)

Site: Ribeira Branca, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Cymbella lanceolata* Ehr.)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

References: Calado 1990 (as *Cymbella lanceolata* (Ehrenberg) Van Heurck); Gil et al. 1991 (as *Cymbella lanceolata*)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Mafra (District: Lisboa)

Site: Tapada de Mafra, Sobral da Abelheira

Reference: Oliveira 1971b (as *Cymbella lanceolata*)

Subregion: Península de Setúbal

Municipality: Sesimbra (District: Setúbal)

Site: Alfarim diatomite

Reference: Ferreira & Castelo 1957 (as *Cymbella lanceolata* (Ehr.) Kirchn., fossil)

REGION: ALENTEJO

Subregion: Alentejo Litoral

Municipality: Odemira (District: Beja)

Site: Santa Clara Reservoir, Mira River (Mira Basin)

Reference: Oliveira 1987 (as *Cymbella lanceolata* (Ehr.) V.H.)

Subregion: Lezíria do Tejo

Municipality: Alpiarça (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Cymbella lanceolata* (Ehr.) Kirchn., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Cymbella lanceolata* (Agardh) Agardh)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cymbella lanceolata* (Agardh?) Agardh var. *lanceolata*)

***Cymbella obtusa* W. Gregory 1856**, p. 5; pl. 1, fig. 19 [CAS ref. 000397]

Distribution (Fig. 264):

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Mondego River (Mondego Basin)

References: Carvalho 1913 (as *Cymbella obtusa* Greg.); Santos & Carvalho 2001 (as *Cymbella obtusa* Greg.)

Subregion: Oeste

Municipality: Torres Vedras (District: Lisboa)

Site: Barro

Reference: Zimmermann 1910 (as *Cymbella obtusa* Greg.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Cymbella obtusa* Greg.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Cymbella obtusa* Greg.)

***Cymbella obtusiuscula* Kützing 1844**, p. 79; pl. 3, fig. 68 [CAS ref. 000595]

Distribution:

REGION: Not specified

Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Calado 1990 (as *Cymbella obtusiuscula* (Kützing) Grunow)

***Cymbella parva* (W. Smith) Cleve [CAS ref. -]**

Basionym (?): *Cocconema parvum* W. Smith 1853 [CAS ref. 000863]

Distribution (Fig. 265):

REGION: NORTE

Subregion: Not specified
Municipality: Not specified
Site: Serra do Gerês
Reference: Silva 1950a (as *Cymbella parva* (W. Smith) Cleve)

REGION: CENTRO

Subregion: Oeste
Municipality: Óbidos (District: Leiria)
Site: Not specified
Reference: Silva 1946b (as *Cymbella parva* (W. Smith) Cleve, fossil)

REGION: ALENTEJO

Subregion: Lezíria do Tejo
Municipality: Alpiarça (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Cymbella parva* (W. Smith) Cleve, fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Ponta Delgada (São Miguel Island)
Site: Lagoa das Sete Cidades
Reference: Holmboe 1901 (as *Cymbella parva* (W. Sm.) Cl.)

Municipality: Povoação (São Miguel Island)
Site: Inferno Grote near Lagoa das Furnas (São Miguel Island)
Reference: Holmboe 1901 (as *Cymbella parva* (W. Sm.) Cl.)

Site: Lagoa das Furnas
Reference: Chaves 1908 (as *Cymbella parva* Sm.)

Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Cymbella parva* W.M. Smith);
Gonçalves et al. 2010 (as *Cymbella parva* (W. Smith) Cleve)

***Cymbella perpusilla* var. *azorica* Manguin 1942**, p. 148; pl. 4, fig. 67
[CAS ref. 000623]

Distribution (Fig. 266):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Cymbella perpusilla* A. Cleve var. *azorica*); Bourrelly & Manguin 1946a (as *Cymbella perpusilla* A. Cleve var. *azorica*)

Site: Lagoinha, Fajãzinha

References: Manguin 1942 (as *Cymbella perpusilla* A. Cleve var. *azorica*); Bourrelly & Manguin 1946a (as *Cymbella perpusilla* A. Cleve var. *azorica*)

Municipality: Povoação (São Miguel Island)

Site: Pico da Vara

References: Manguin 1942 (as *Cymbella perpusilla* A. Cleve var. *azorica*); Bourrelly & Manguin 1946a (as *Cymbella perpusilla* A. Cleve var. *azorica*)

Site: Pico Verde

References: Manguin 1942 (as *Cymbella perpusilla* A. Cleve var. *azorica*); Bourrelly & Manguin 1946a (as *Cymbella perpusilla* A. Cleve var. *azorica*)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Lagoa Comprida

References: Manguin 1942 (as *Cymbella perpusilla* A. Cleve var. *azorica*); Bourrelly & Manguin 1946a (as *Cymbella perpusilla* A. Cleve var. *azorica*)

Site: Ribeira Grande

References: Manguin 1942 (as *Cymbella perpusilla* A. Cleve var. *azorica*); Bourrelly & Manguin 1946a (as *Cymbella perpusilla* A. Cleve var. *azorica*)

Municipality: Vila Franca do Campo (São Miguel Island)

Site: Lagoa do Congro

References: Manguin 1942 (as *Cymbella perpusilla* A. Cleve var. *azorica*); Bourrelly & Manguin 1946a (as *Cymbella perpusilla* A. Cleve var. *azorica*)

Municipality: Not specified

Site: Lagoa de Cazador (São Miguel Island)

References: Manguin 1942 (as *Cymbella perpusilla* A. Cleve var. *azorica*); Bourrelly & Manguin 1946a (as *Cymbella perpusilla* A. Cleve var. *azorica*)

***Cymbella reinhardtii* Grunow in Schmidt et al. 1875b**, pl. 9, fig. 27
[CAS ref. 012443]

Distribution (Fig. 267):

REGION: CENTRO

Subregion: Oeste

Municipality: Óbidos (District: Leiria)

Site: Not specified

References: Silva 1946a (as *Cymbella reinhardtii* Grun., fossil); Silva
1946b (as *Cymbella reinhardtii* Grun., fossil)

***Cymbella simonsenii* Krammer in Krammer & Lange-Bertalot
1985**, p. 33-34; pl. 7, fig. 1-9 [CAS ref. 006263]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cymbella simonsenii* Krammer)

***Cymbella tumida* (Brébisson in Kützing) Van Heurck 1882-1885**, p.
64; pl. 2, fig. 10 [CAS ref. 000896]

Basionym: *Cocconema tumida* Brébisson in Kützing 1849 [CAS ref. 000596]

Distribution (Fig. 268):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: São João da Madeira (District: Aveiro)

Site: Ui River (Vouga Basin)

Reference: Resende et al. 2010 (as *Cymbella tumida* (Ehrenberg) Van
Heurck)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Cymbella tumida* (Brébisson) Van
Heurck)

- Municipality: Soure (District: Coimbra)
 Site: Irrigation channel near Soure
 Reference: Santos et al. 2002 (as *Cymbella tumida* (Brébisson) Van Heurck)
- Subregion: Baixo Vouga
 Municipality: Águeda (District: Aveiro)
 Site: Agadão, Agadão River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella tumida* (Bréb.) Van Heurck)
 Site: Bolfiar, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella tumida* (Bréb.) Van Heurck)
 Site: Murta, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymbella tumida*)
 Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella tumida* (Bréb.) Van Heurck)
- Municipality: Anadia (District: Aveiro)
 Site: Curia, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymbella tumida*)
 Site: Espairo, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymbella tumida*)
 Site: Mogofores, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymbella tumida*)
 Site: São João da Azenha, Cértima River (Vouga Basin)
 References: Rino & Gil 1989 (as *Cymbella tumida*); Almeida 1998 (as *Cymbella tumida* (Brébisson) Van Heurck)
- Municipality: Aveiro (District: Aveiro)
 Site: Aveiro, lake in the municipal park (artificial substrate)
 Reference: Gil & Almeida 1993 (as *Cymbella tumida* (Bréb.) Van Heurck)
 Site: Eixo, Horta Stream (Vouga Basin)
 Reference: Almeida 1998 (as *Cymbella tumida* (Brébisson) Van Heurck)
 Site: Pano, Largo River (Vouga Basin)
 Reference: Almeida 1998 (as *Cymbella tumida* (Brébisson) Van Heurck)
 Site: Requeixo, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Cymbella tumida* (Brébisson) Van Heurck)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella tumida* (Bréb.) Van Heurck)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Cymbella tumida* (Bréb.) Van Heurck); Gil et al. 1989-1990 (as *Cymbella tumida*)
 Site: Vagueira, Canal de Mira
 Reference: Resende et al. 2005 (as *Cymbella tumida*)
 Site: Vessada, Fontão Creek (Vouga Basin)
 Reference: Almeida 1998 (as *Cymbella tumida* (Brébisson) Van Heurck)
- Municipality: Mealhada (District: Aveiro)

- Site: Pampilhosa, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella tumida*)
- Municipality: Oliveira do Bairro (District: Aveiro)
Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella tumida* (Brébisson) Van Heurck)
- Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella tumida* (Brébisson) Van Heurck)
- Site: Perrães, Cértima River (Vouga Basin)
References: Rino & Gil 1989 (as *Cymbella tumida*); Almeida 1998 (as *Cymbella tumida* (Brébisson) Van Heurck)
- Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella tumida*)
- Site: Vila Verde, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella tumida* (Brébisson) Van Heurck)
- Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Cymbella tumida* (Brébisson) Van Heurck)
- Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella tumida* (Bréb.) Van Heurck)
- Site: São João do Monte, Águeda River (Vouga Basin)
References: Gil 1988 (as *Cymbella tumida* (Bréb.) Van Heurck); Gil et al. 1989-1990 (as *Cymbella tumida*)
- Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella tumida* (Bréb.) Van Heurck)
- Subregion: Médio Tejo
Municipality: Abrantes (District: Santarém)
Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Cymbella tumida*)
- Municipality: Torres Novas (District: Santarém)
Site: Casal da Pinheira, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Cymbella tumida* Bréb.)
- Subregion: Oeste
Municipality: Óbidos (District: Leiria)
Reference: Silva 1946b (as *Cymbella tumida* (Bréb.) V.H., fossil)
- Subregion: Serra da Estrela
Municipality: Seia (District: Guarda)
Site: São Romão, Lagoa do Covão do Curral
Reference: Santos et al. 2002 (as *Cymbella tumida* (Brébisson) Van Heurck)
- Subregion: Not specified
Municipality: Not specified
Site: Not specified

References: Calado 1990 (as *Cymbella tumida* (Brébisson) Van Heurck);
Gil et al. 1991 (as *Cymbella tumida*)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Vila Franca de Xira (District: Lisboa)

Site: Vila Franca de Xira, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cymbella tumida*)

REGION: ALENTEJO

Subregion: Alentejo Litoral

Municipality: Alcácer do Sal (District: Setúbal)

Site: São Romão, Sado River (Sado Basin)

Reference: Coutinho 2003 (as *Cymbella tumida* (de Brébisson) Van Heurck)

Subregion: Alto Alentejo

Municipality: Gavião (District: Portalegre)

Site: Belver Reservoir, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cymbella tumida*)

Subregion: Baixo Alentejo

Municipality: Almodôvar (District: Beja)

Site: Monte da Vinha, Guadiana River (Guadiana Basin)

Reference: Andrade & Brito 1991 (as *Cymbella tumida*)

Subregion: Lezíria do Tejo

Municipality: Chamusca (District: Santarém)

Site: Chamusca, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cymbella tumida*)

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cymbella tumida*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Santa Cruz das Flores (Flores Island)

Site: Not specified

Reference: Mölder 1947 (as *Cymbella tumida* (Bréb.) Heurck)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Cymbella tumida* (Brébisson) Van Heurck)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cymbella tumida* (Brébisson) Van Heurck)

***Cymbella tumidula* Grunow in Schmidt et al. 1875b**, pl. 9, fig. 33
[CAS ref. 012443]

Distribution:

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Not specified

Site: Pateira de Fermentelos (District: Aveiro)

Reference: Calado 1991 (as *Cymbella tumidula* Grunow)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Calado 1990 (as *Cymbella tumidula* Grunow)

***Cymbella turgida* W. Gregory 1856**, p. 5; pl. 1, fig. 18 [CAS ref. 000397]

Synonym: *Encyonema elginense* (Krammer) D.G. Mann 1990 [CAS ref. 003245],
according to Krammer 1997a, p. 111

Distribution (Fig. 269):

REGION: NORTE

Subregion: Not specified

Municipality: Not specified

Site: Serra do Gerês

Reference: Silva 1950a (as *Cymbella turgida* (Greg.) Cleve)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella turgida* (Greg.) P. Cleve)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella turgida* (Greg.) P. Cleve)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cymbella turgida* (Greg.) P. Cleve); Gil et al. 1989-1990 (as *Cymbella turgida*)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella turgida* (Greg.) P. Cleve)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Cymbella turgida* (Greg.) P. Cleve)

Site: Murta, Cértima River (Vouga Basin)

- Reference: Rino & Gil 1989 (as *Cymbella turgida*)
 Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella turgida* (Greg.) P. Cleve)
 Site: Raivo, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Cymbella turgida* (Greg.) P. Cleve); Gil et al. 1989-1990 (as *Cymbella turgida*)
 Site: Redonda, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Cymbella turgida* (Greg.) P. Cleve); Gil et al. 1989-1990 (as *Cymbella turgida*)
 Site: Ribeiro, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella turgida* (Greg.) P. Cleve)
 Municipality: Anadia (District: Aveiro)
 Site: Espairo, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymbella turgida*)
 Site: Tamengos, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymbella turgida*)
 Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Cymbella turgida* (Greg.) P. Cleve); Gil et al. 1989-1990 (as *Cymbella turgida*)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Cymbella turgida* (Greg.) P. Cleve); Gil et al. 1989-1990 (as *Cymbella turgida*)
 Municipality: Mealhada (District: Aveiro)
 Site: Pampilhosa, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymbella turgida*)
 Site: Viadouros, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymbella turgida*)
 Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymbella turgida*)
 Site: Perrães, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymbella turgida*)
 Municipality: Not specified
 Site: Pateira de Fermentelos (District: Aveiro)
 Reference: Calado 1991 (as *Cymbella turgida* (Gregory) Cleve)
 Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Cymbella turgida* (Greg.) P. Cleve); Gil et al. 1989-1990 (as *Cymbella turgida*)
 Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella turgida* (Greg.) P. Cleve)
 Site: Varzielas, Águeda River (Vouga Basin)

- Reference: Gil 1988 (as *Cymbella turgida* (Greg.) P. Cleve)
Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella turgida* (Greg.) P. Cleve)
Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella turgida* (Greg.) P. Cleve)
Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella turgida* (Greg.) P. Cleve)
Subregion: Oeste
Municipality: Óbidos (District: Leiria)
Site: Not specified
Reference: Silva 1946b (as *Cymbella turgida* (Greg.) Cleve, fossil)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
References: Calado 1990 (as *Cymbella turgida* (Gregory) Cleve); Gil et al. 1991 (as *Cymbella turgida*)

REGION: ALENTEJO

- Subregion: Alentejo Litoral
Municipality: Alcácer do Sal (District: Setúbal)
Site: Carvalhal diatomite
Reference: Silva 1949 (as *Cymbella turgida* (Greg.) Cleve, fossil)
Municipality: Not specified
Site: Sado River (Sado Basin)
Reference: Monteiro et al. 1995 (as *Cymbella turgida*)
Subregion: Lezíria do Tejo
Municipality: Alpiarça (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Cymbella turgida* (Greg.) Cleve, fossil)
Municipality: Cartaxo (District: Santarém)
Site: Valada, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cymbella turgida*)
Subregion: Not specified
Municipality: Not specified
Site: Rocha da Galé, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Cymbella turgida*)

REGION: AUTONOMOUS REGION OF AZORES

- Municipality: Angra do Heroísmo (Terceira Island)
Site: Lagoa da Achada
Reference: Mölder 1947 (as *Cymbella turgida* (Greg.) Cleve)
Site: Not specified
Reference: Trelease 1897 (as *Cymatopleura turgida* Kütz.)
Municipality: Horta (Faial Island)

Site: Not specified
Reference: Johansson 1977 (as *Cymbella turgida* (Gregory) Cleve)
Municipality: Lajes das Flores (Flores Island)
Site: Lagoinha, Fajãzinha
References: Manguin 1942 (as *Cymbella turgida* (Greg.) Cleve);
Bourrelly & Manguin 1946a (as *Cymbella turgida* (Greg.) Cleve)
Municipality: Ponta Delgada (São Miguel Island)
Site: Lagoa do Canário
Reference: Mölder 1947 (as *Cymbella turgida* (Greg.) Cleve)
Municipality: Povoação (São Miguel Island)
Site: Furnas
Reference: Mölder 1947 (as *Cymbella turgida* (Greg.) Cleve)
Site: Lagoa das Furnas
Reference: Mölder 1947 (as *Cymbella turgida* (Greg.) Cleve)
Site: Ribeira Quente
Reference: Mölder 1947 (as *Cymbella turgida* (Greg.) Cleve)
Municipality: Santa Cruz das Flores (Flores Island)
Site: Not specified
Reference: Mölder 1947 (as *Cymbella turgida* (Greg.) Cleve)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Ponta do Sol (Madeira Island)
Site: Rabaçal (Madeira Island)
Reference: Mölder 1947 (as *Cymbella turgida* (Greg.) Cleve)

***Cymbella turgidula* Grunow in Schmidt et al. 1875b**, pl. 9, fig. 23-26 [CAS ref. 012443]

Distribution (Fig. 270):

REGION: ALENTEJO

Subregion: Alentejo Litoral

Municipality: Alcácer do Sal (District: Setúbal)

Site: São Romão, Sado River (Sado Basin)

Reference: Coutinho 2003 (as *Cymbella turgidula* Grunow)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cymbella turgidula* Grunow 1875 in A. Schmidt & al. var. *turgidula*)

***Cymbella* sp.**

Distribution (Fig. 271):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Bragança (District: Bragança)

Site: São Serrada Reservoir, Andorinhas Stream (Douro Basin)

Reference: Geraldès & Boavida 2005 (as *Cymbella* sp.)

Municipality: Montalegre (District: Vila Real)

Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1982a (as *Cymbella* spp.)

Subregion: Cávado

Municipality: Esposende (District: Braga)

Site: Marachão, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Cymbella* sp.)

Municipality: Not specified

Site: Homem River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Cymbella* sp.)

Subregion: Minho-Lima

Municipality: Caminha (District: Viana do Castelo)

Site: Gondar Stream (Âncora Basin)

Reference: Formigo et al. 1993 (as *Cymbella* sp.)

Site: Sains, Âncora River (Âncora Basin)

Reference: Formigo et al. 1993 (as *Cymbella* sp.)

Municipality: Melgaço (District: Viana do Castelo)

Site: São Gregório, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Cymbella* sp.)

Municipality: Valença (District: Viana do Castelo)

Site: Valença, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Cymbella* sp.)

Municipality: Viana do Castelo (District: Viana do Castelo)

Site: Alhada, Âncora River (Âncora Basin)

Reference: Formigo et al. 1993 (as *Cymbella* sp.)

Municipality: Vila Nova de Cerveira (District: Viana do Castelo)

Site: Barragem de Covas, Coura River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Cymbella* sp.)

REGION: CENTRO

Subregion: Beira Interior Sul

Municipality: Vila Velha de Ródão (District: Castelo Branco)

Site: downstream of Cedilho Reservoir, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Cymbella* spp.)

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Tramagal, Tagus River (Tagus Basin)

- Reference: Fernandes et al. 1987 (as *Cymbella* spp.)
Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
Reference: Brito & Andrade 1992 (as *Cymbella* spp.)
Municipality: Torres Novas (District: Santarém)
Site: Renova, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Cymbella* sp.)
Subregion: Oeste
Municipality: Alenquer (District: Lisboa)
Site: Alenquer, Alenquer reservoir
Reference: Frade 1941b (as *Cymbella* sp.)
Site: Alenquer, Alenquer River (Tagus Basin)
Reference: Frade 1941a (as *Cymbella* sp.)
Subregion: Pinhal Interior Norte
Municipality: Pedrógão Grande (District: Leiria)
Site: Bouçã Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Cymbella* sp.)
- REGION: LISBOA
Subregion: Grande Lisboa
Municipality: Mafra (District: Lisboa)
Site: Tapada de Mafra, Sobral da Abelheira
Reference: Oliveira 1971b (as *Cymbella* sp.)
Municipality: Sintra (District: Lisboa)
Site: Mula Reservoir, Mula Stream (Western Streams Basin)
Reference: Ferreira 1986 (as *Cymbella* spp.)
Municipality: Vila Franca de Xira (District: Lisboa)
Site: Vila Franca de Xira, Tagus River (Tagus Basin)
References: Rodrigues & Moita 1979a (as *Cymbella* spp.); Rodrigues & Moita 1979b (as *Cymbella* spp.); Fernandes et al. 1987 (as *Cymbella* spp.)
- REGION: ALENTEJO
Subregion: Alentejo Central
Municipality: Arraiolos (District: Évora)
Site: Divor Reservoir, Divor Stream (Tagus Basin)
Reference: Oliveira 1987 (as *Cymbella* spp.)
Subregion: Alentejo Litoral
Municipality: Alcácer do Sal (District: Setúbal)
Site: São Romão, Sado River (Sado Basin)
Reference: Coutinho 2003 (as *Cymbella* sp.)
Municipality: Odemira (District: Beja)
Site: Santa Clara Reservoir, Mira River (Mira Basin)
Reference: Oliveira 1987 (as *Cymbella* spp.)
Subregion: Alto Alentejo
Municipality: Avis (District: Portalegre)
Site: Maranhão Reservoir, Raia Stream (Tagus Basin)

- Reference: Oliveira 1984c (as *Cymbella* spp.)
Municipality: Gavião (District: Portalegre)
Site: Belver Reservoir, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cymbella* spp.)
Municipality: Marvão (District: Portalegre)
Site: Sever River (Tagus Basin)
Reference: Oliveira 1975 (as *Cymbella* sp.)
Municipality: Nisa (District: Portalegre)
Site: Barca da Amieira, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cymbella* spp.)
Site: Fratel Reservoir, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cymbella* spp.)
Municipality: Ponte de Sôr (District: Portalegre)
Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
Reference: Coutinho 1990a (as *Cymbella* sp.)
- Subregion: Baixo Alentejo
Municipality: Almodôvar (District: Beja)
Site: Monte da Vinha, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Cymbella* sp.)
Municipality: Ourique (District: Beja)
Site: Monte da Rocha Reservoir, Sado River (Sado Basin)
Reference: Oliveira 1984a (as *Cymbella* sp.)
- Subregion: Lezíria do Tejo
Municipality: Cartaxo (District: Santarém)
Site: Valada, Tagus River (Tagus Basin)
References: Fernandes et al. 1987 (as *Cymbella* spp.); Oliveira et al. 1989 (as *Cymbella* sp.)
Municipality: Chamusca (District: Santarém)
Site: Chamusca, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cymbella* spp.)
Municipality: Santarém (District: Santarém)
Site: Ómnias, Tagus River (Tagus Basin)
References: Fernandes et al. 1987 (as *Cymbella* spp.); Brito & Andrade 1992 (as *Cymbella* spp.)

REGION: ALGARVE

Subregion: Algarve

- Municipality: Silves (District: Faro)
Site: Arade Reservoir, Arade River (Ribeiras do Algarve Basin)
Reference: Oliveira 1987 (as *Cymbella* spp.)

REGION: AUTONOMOUS REGION OF AZORES

- Municipality: Ponta Delgada (São Miguel Island)
Site: Lagoa das Sete Cidades
Reference: Oliveira 1989 (as *Cymbella* sp.)
Municipality: Not specified

Site: Not specified
Reference: Gonçalves 2008 (as *Cymbella* sp.)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Cymbella* species)

***Cymbopleura* (Krammer) Krammer 1999**, p. 292
[CAS ref. 009348]

***Cymbopleura amphicephala* (Nägeli) Krammer 2003**, p. 70 [CAS
ref. 011692]

Basionym: *Cymbella amphicephala* Nägeli in Kützing 1849 [CAS ref. 000596]

Distribution (Fig. 272):

REGION: NORTE
Subregion: Entre Douro e Vouga
Municipality: São João da Madeira (District: Aveiro)
Site: Ui River (Vouga Basin)
Reference: Resende et al. 2010 (as *Cymbella amphicephala* Naegeli)

REGION: CENTRO
Subregion: Beira Interior Norte
Municipality: Guarda (District: Guarda)
Site: Caldeirão
References: Carvalho 1913 (as *Cymbella amphicephala* Naeg.); Santos &
Carvalho 2001 (as *Cymbella amphicephala* Naeg.)
Site: Diz River
Reference: Carvalho 1913 (as *Cymbella amphicephala* Naeg.)
Site: Guarda
Reference: Carvalho 1913 (as *Cymbella amphicephala* Naeg.)

Subregion: Beira Interior Sul
Municipality: Castelo Branco (District: Castelo Branco)
Site: São Fiel, Ocreza River (Tagus Basin)
Reference: Zimmermann 1906 (as *Cymbella amphicephala* Naeg.)

Subregion: Médio Tejo
Municipality: Torres Novas (District: Santarém)
Site: Casal da Pinheira, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Cymbella amphicephala* Naeg.)

- Site: Renova, Almonda River (Tagus Basin)
 Reference: Oliveira & Caldas 1971 (as *Cymbella amphicephala* Naeg.)
- Site: Ribeira Branca, Almonda River (Tagus Basin)
 Reference: Oliveira & Caldas 1971 (as *Cymbella amphicephala* Naeg.)
- Subregion: Oeste
 Municipality: Torres Vedras (District: Lisboa)
 Site: Coutada, Sisandro River
 Reference: Monteiro & Oliveira 1972 (as *Cymbella amphicephala*)
- REGION: LISBOA
 Subregion: Grande Lisboa
 Municipality: Mafra (District: Lisboa)
 Site: Tapada de Mafra, Sobral da Abelheira
 Reference: Oliveira 1971b (as *Cymbella amphicephala*)
- REGION: ALENTEJO
 Subregion: Alentejo Litoral
 Municipality: Odemira (District: Beja)
 Site: Santa Clara Reservoir, Mira River (Mira Basin)
 Reference: Oliveira 1984a (as *Cymbella amphicephala*)
- Municipality: Santiago do Cacém (District: Setúbal)
 Site: Campilhas Reservoir, Campilhas Stream (Sado Basin)
 Reference: Oliveira 1984a (as *Cymbella amphicephala*)
- Subregion: Alto Alentejo
 Municipality: Avis (District: Portalegre)
 Site: Maranhão Reservoir, Raia Stream (Tagus Basin)
 Reference: Oliveira 1984c (as *Cymbella amphicephala*)
- Municipality: Elvas, Portalegre (District: Portalegre)
 Site: Caia Reservoir, Caia River (Gadiana Basin)
 Reference: Oliveira 1984a (as *Cymbella amphicephala*)
- Municipality: Gavião (District: Portalegre)
 Site: Belver Reservoir, Tagus River (Tagus Basin)
 Reference: INIP 1977 (as *Cymbella amphicephala* Naeg.)
- Municipality: Marvão (District: Portalegre)
 Site: Sever River (Tagus Basin)
 Reference: Oliveira 1975 (as *Cymbella amphicephala*)
- Municipality: Ponte de Sôr (District: Portalegre)
 Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
 Reference: Coutinho 1990a (as *Cymbella amphicephala*)
- Subregion: Baixo Alentejo
 Municipality: Aljustrel (District: Beja)
 Site: Água Azeda, Água Azeda Stream (Sado Basin)
 Reference: Luís et al. 2009 (as *Cymbella amphicephala* Naegeli =
Cymbopleura amphicephala Krammer)
- Site: Jungeiros, Roxo Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Cymbella amphicephala* Naegeli = *Cymbopleura amphicephala* Krammer)
Site: Roxo Reservoir, Roxo Stream (Sado Basin)
Reference: Oliveira 1976 (as *Cymbella amphicephala* Naeg.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Corvo Island

Reference: Gonçalves et al. 2010 (as *Cymbopleura amphicephala* Krammer)

Site: Lagoa de Cazador (São Miguel Island)

References: Manguin 1942 (as *Cymbella amphicephala* Naeg.); Bourrelly & Manguin 1946a (as *Cymbella amphicephala* Naeg.)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Cymbella amphicephala* Krammer)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Cymbella amphicephala* Krammer)

Site: Not specified

Reference: Gonçalves 2008 (as *Cymbopleura amphicephala* Krammer)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cymbella amphicephala* Naegeli)

***Cymbopleura anglica* (Lagerstedt) Krammer 2003**, p. 10 [CAS ref. 011692]

Basionym: *Cymbella anglica* Lagerstedt 1873 [CAS ref. 000597]

Distribution (Fig. 273):

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Cruz da Faia

Reference: Carvalho 1913 (as *Cymbella anglica* Lagerst.)

Site: Diz River

Reference: Carvalho 1913 (as *Cymbella anglica* Lagerst.)

Subregion: Beira Interior Sul

Municipality: Castelo Branco (District: Castelo Branco)

Site: São Fiel, Ocreza River (Tagus Basin)

Reference: Zimmermann 1906 (as *Cymbella anglica* Lagerst.)

***Cymbopleura hauckii* (Van Heurck) Krammer 2003**, p. 40 [CAS ref. 011692]

Nomenclatural synonym: *Cymbella hauckii* Van Heurck in Hauck & Richter 1886-1894 [CAS ref. 001257]

Distribution (Fig. 274):

REGION: CENTRO

Subregion: Oeste

Municipality: Óbidos (District: Leiria)

Site: Not specified

Reference: Silva 1946b (as *Cymbella hauckii* V.H., fossil)

***Cymbopleura incerta* (Grunow) Krammer 2003**, p. 90 [CAS ref. 011692]

Basionym: *Cymbella incerta* (Grunow in Cleve & Möller) Cleve 1894a [CAS ref. 000232]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Calado 1990 (as *Cymbella incerta* Grunow)

***Cymbopleura lata* (Grunow ex Cleve) Krammer 2003**, p. 20 [CAS ref. 011692]

Basionym: *Cymbella lata* Grunow ex Cleve 1894a, p. 165; pl. 4, fig. 27 [CAS ref. 000232]

Distribution (Fig. 275):

REGION: CENTRO

Subregion: Pinhal Interior Norte

Municipality: Pampilhosa da Serra (District: Coimbra)

Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)

Reference: Santos et al. 2002 (as *Cymbella lata* Grunow)

***Cymboppleura naviculiformis* (Auerswald ex Heiberg) Krammer
2003, p. 56 [CAS ref. 011692]**

Basionym: *Cymbella naviculiformis* Auerswald ex Heiberg 1863 [CAS ref. 000471]

Distribution (Fig. 276):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: São João da Madeira (District: Aveiro)

Site: Ui River (Vouga Basin)

Reference: Resende et al. 2010 (as *Cymbella naviculiformis* Auerswald)

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella naviculiformis* Auerswald)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella naviculiformis* Auerswald)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella naviculiformis* Auerswald)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cymbella naviculiformis* Auerswald); Gil et al. 1989-1990 (as *Cymbella naviculiformis*); Almeida 1998 (as *Cymbella naviculiformis* Auerswald)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella naviculiformis* Auerswald)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella naviculiformis* Auerswald)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella naviculiformis* Auerswald)

Site: Bolfiar, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cymbella naviculiformis* Auerswald); Gil et al. 1989-1990 (as *Cymbella naviculiformis*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Cymbella naviculiformis* Auerswald)

Site: Óis da Ribeira, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella naviculiformis* Auerswald)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella naviculiformis* Auerswald)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella naviculiformis* Auerswald)

Site: Redonda, Águeda River (Vouga Basin)

- Reference: Gil 1988 (as *Cymbella naviculiformis* Auerswald)
 Site: Ribeiro, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Cymbella naviculiformis* Auerswald)
 Municipality: Albergaria-a-Velha (District: Aveiro)
 Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)
- Reference: Nunes 2007 (as *Cymbella naviculiformis* Auerswald)
 Site: Frossos, Carreira Creek (Mondego Basin)
- Reference: Almeida 1998 (as *Cymbella naviculiformis* Auerswald)
 Municipality: Anadia (District: Aveiro)
 Site: São João de Azenha, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Cymbella naviculiformis* Auerswald)
 Municipality: Aveiro (District: Aveiro)
 Site: Eixo, Horta Stream (Vouga Basin)
- Reference: Almeida 1998 (as *Cymbella naviculiformis* Auerswald)
 Site: Pano, Largo River (Vouga Basin)
- Reference: Almeida 1998 (as *Cymbella naviculiformis* Auerswald)
 Site: Requeixo, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Cymbella naviculiformis* Auerswald)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
- References: Gil 1988 (as *Cymbella naviculiformis* Auerswald); Gil et al. 1989-1990 (as *Cymbella naviculiformis*)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
- References: Gil 1988 (as *Cymbella naviculiformis* Auerswald); Gil et al. 1989-1990 (as *Cymbella naviculiformis*)
 Municipality: Estarreja (District: Aveiro)
 Site: Estarreja, Antuã River (Vouga Basin)
- Reference: Almeida 1998 (as *Cymbella naviculiformis* Auerswald)
 Site: Minhoteira, Antuã River (Vouga Basin)
- Reference: Almeida 1998 (as *Cymbella naviculiformis* Auerswald)
 Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Cymbella naviculiformis* Auerswald)
 Site: Perrães, Levira River (Vouga Basin)
- Reference: Almeida 1998 (as *Cymbella naviculiformis* Auerswald)
 Site: Perrães, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Cymbella naviculiformis* Auerswald)
 Municipality: Not specified
 Site: Pateira de Fermentelos (District: Aveiro)
- Reference: Calado 1991 (as *Cymbella naviculiformis* Auerswald)
 Subregion: Dão-Lafões
 Municipality: Oliveira do Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Cymbella naviculiformis* Auerswald); Gil et al. 1989-1990 (as *Cymbella naviculiformis*)

Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella naviculiformis* Auerswald)

Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella naviculiformis* Auerswald)

Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella naviculiformis* Auerswald)

Site: In the proximity of Tondela, Criz River (Mondego Basin)
Reference: Santos et al. 2002 (as *Cymbella naviculiformis* Auerswald)

Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil et al. 1989-1990 (as *Cymbella naviculiformis*)

Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella naviculiformis* Auerswald)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella naviculiformis* Auerswald)

Subregion: Serra da Estrela
Municipality: Seia (District: Guarda)
Site: São Romão, Lagoa do Covão do Curral
Reference: Santos et al. 2002 (as *Cymbella naviculiformis* Auerswald)

Subregion: Not specified
Municipality: Not specified
Site: Paiva River (Douro Basin)
Reference: Cerqueira da Silva 1994 (as *Cymbella naviculiformis*)

Site: Not specified
References: Calado 1990 (as *Cymbella naviculiformis* Auerswald); Gil et al. 1991 (as *Cymbella naviculiformis*); Almeida & Gil 2001 (as *Cymbella naviculiformis* Auerswald)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Cymbella naviculiformis* Auerswald)

***Cymboplectra subaequalis* (Grunow) Krammer 2003, p. 101 [CAS ref. 011692]**

Basionym: *Cymbella subaequalis* Grunow in Van Heurck 1882-1885 [CAS ref. 000896]

Distribution (Fig. 277):

REGION: AUTONOMOUS REGION OF MADEIRA
Municipality: Porto Santo (Porto Santo Island)

Site: Serra de Dentro Stream

Reference: Zimmermann 1910-1911 (as *Cymbella subaequalis* Grun.)

Delicata Krammer 2003, p. 110, 164
[CAS ref. 011692]

Delicata delicatula (Kützing) Krammer 2003, p. 113 [CAS ref. 011692]

Basionym: *Cymbella delicatula* Kützing 1849 [CAS ref. 000596]

Distribution (Fig. 278):

REGION: CENTRO

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Calado 1990 (as *Cymbella delicatula* Kützing)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa do Canário

Reference: Mölder 1947 (as *Cymbella delicatula* Kütz.)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Mölder 1947 (as *Cymbella delicatula* Kütz.)

Municipality: Not specified

Site: Corvo Island

Reference: Gonçalves et al. 2010 (as *Delicata delicatula* (Kützing) Krammer)

Site: São Jorge Island

References: Johansson 1977 (as *Cymbella delicatula* Kütz.); Gonçalves et al. 2010 (as *Delicata delicatula* (Kützing) Krammer)

Denticella Ehrenberg 1838, p. 210
[CAS ref. 000288]

Denticella gracilis Ehrenberg 1840a, p. 207 [CAS ref. 000293]

Distribution:

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Tagus riverbanks (Tagus Basin)
Reference: Ehrenberg 1845 (as *Denticella gracilis*)

Denticula Kützing 1844, p. 43
[CAS ref. 000595]

***Denticula crassula* Nägeli in Kützing 1849**, p. 889 [CAS ref. 000596]

Distribution (Fig. 279):

REGION: CENTRO
Subregion: Baixo Mondego
Municipality: Coimbra (District: Coimbra)
Site: Coimbra
Reference: Zimmermann 1910 (as *Denticula crassula* Naeg.)

***Denticula elegans* Kützing 1844**, p. 44; pl. 17, fig. 5 [CAS ref. 000595]

Distribution (Fig. 280):

REGION: CENTRO
Subregion: Baixo Mondego
Municipality: Coimbra (District: Coimbra)
Site: Coimbra
Reference: Zimmermann 1910 (as *Denticula elegans* Kuetz.)
Subregion: Baixo Vouga
Municipality: Águeda (District: Aveiro)
Site: Avelal de Baixo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Denticula elegans* Kützing)
Site: Bolfiar, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Denticula elegans* Kützing)
Site: Redonda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Denticula elegans* Kützing)
Site: Ribeiro, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Denticula elegans* Kützing)
Municipality: Aveiro (District: Aveiro)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Denticula elegans* Kützing)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Denticula elegans* Kützing)

Subregion: Oeste

Municipality: Óbidos (District: Leiria)

Site: Not specified

Reference: Silva 1946b (as *Denticula elegans* Kütz., fossil)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Calado 1990 (as *Denticula elegans* Kützing)

REGION: ALENTEJO

Subregion: Not specified

Municipality: Not specified

Site: Rocha da Galé, Guadiana River (Guadiana Basin)

Reference: Andrade & Brito 1991 (as *Denticula elegans*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Denticula elegans* Ktz.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Denticula elegans* Kützing)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Ribeira de João Gomes

Reference: Zimmermann 1909a (as *Denticula elegans* Kuetz.)

***Denticula frigida* Kützing 1844**, p. 43; pl. 17, fig. 7 [CAS ref. 000595]

Distribution (Fig. 281):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Tambores, Furnas

Reference: Chaves 1908 (as *Denticula frigida*, fossil)

***Denticula kuetzingii* Grunow 1862**, p. 546, 548; pl. 28/12, fig. 27
[CAS ref. 000428]

Nomenclatural synonym: *Nitzschia denticula* Grunow in Cleve & Grunow 1880
[CAS ref. 000241]

Distribution (Fig. 282):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Nitzschia denticula* Grunow)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Nitzschia denticula* Grunow)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Nitzschia denticula* Grunow)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers
(Vouga Basin)

Reference: Gil 1988 (as *Nitzschia denticula* Grunow)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Nitzschia denticula* Grunow)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Nitzschia denticula* Grunow)

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Nitzschia denticula*)

Site: Tamengos, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Nitzschia denticula*)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima
River (Vouga Basin)

Reference: Gil 1988 (as *Nitzschia denticula* Grunow)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima
River (Vouga Basin)

Reference: Gil 1988 (as *Nitzschia denticula* Grunow)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Perrães, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Nitzschia denticula*)

Site: Repolão, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Nitzschia denticula*)

Municipality: Not specified

Site: Pateira de Fermentelos (District: Aveiro)

Reference: Calado 1991 (as *Nitzschia denticula* Grunow)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

- Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Nitzschia denticula* Grunow)
- Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Nitzschia denticula* Grunow)
- Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Nitzschia denticula* Grunow)
- Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Nitzschia denticula* Grunow)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Nitzschia denticula* Grunow)
- Subregion: Médio Tejo
Municipality: Abrantes (District: Santarém)
Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Nitzschia denticula*)
- Site: Forno Novo, Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Nitzschia denticula*)
- Municipality: Torres Novas (District: Santarém)
Site: Almonda River (Tagus Basin)
Reference: Zimmermann 1906 (as *Nitzschia denticula* Grun.)
- Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Calado 1990 (as *Nitzschia denticula* Grunow)
- REGION: ALGARVE
Subregion: Algarve
Municipality: Silves (District: Faro)
Site: Not specified
Reference: Krammer & Lange-Bertalot 1988 (as *Denticula kuetzingii* Grunow)
- REGION: AUTONOMOUS REGION OF AZORES
Municipality: Povoação (São Miguel Island)
Site: Furnas
Reference: Holmboe 1901 (as *Nitzschia denticula* Grun.)
- Municipality: Not specified
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Denticula kuetzingii* Grunow)
- Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Denticula kuetzingii* Grunow)
- REGION: AUTONOMOUS REGION OF MADEIRA
Municipality: Porto Santo (Porto Santo Island)
Site: Ponte do Espírito Santo

Reference: Zimmermann 1910-1911 (as *Nitzschia denticula* Grun.)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Denticula kuetzingii* Grunow var. *kuetzingii*)

***Denticula subtilis* Grunow 1862**, p. 547; pl. 28/12, fig. 36 [CAS ref. 000428]

Distribution (Fig. 283):

REGION: CENTRO

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Almeida 1998 (as *Denticula subtilis* Grunow)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Denticula subtilis* Grunow)

Site: Santa Maria Island

Reference: Gonçalves et al. 2010 (as *Denticula subtilis* Grunow)

***Denticula tenuis* Kützing 1844**, p. 43; pl. 17, fig. 8 [CAS ref. 000595]

Distribution (Fig. 284):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Montalegre (District: Vila Real)

Site: Alto Rabagão Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1982a (as *Denticula tenuis*)

Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1982a (as *Denticula tenuis*)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Figueira da Foz (District: Coimbra)

Site: Lagoa da Vela, Quiaios

Reference: de Figueiredo et al. 2006 (as *Denticula tenuis* Kützing)

- Municipality: Montemor-o-Velho (District: Coimbra)
 Site: Irrigation channel near Montemor-o-Velho
 Reference: Santos et al. 2002 (as *Denticula tenuis* Kützing)
- Subregion: Baixo Vouga
 Municipality: Anadia (District: Aveiro)
 Site: São João da Azenha, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Denticula tenuis*)
 Site: Tamengos, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Denticula tenuis*)
- Municipality: Aveiro (District: Aveiro)
 Site: Aveiro, lake in the municipal park (artificial substrate)
 Reference: Gil & Almeida 1993 (as *Denticula tenuis* Kuetzing)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Denticula tenuis* Kützing)
- Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Denticula tenuis* Kützing)
- Municipality: Vouzela (District: Viseu)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Denticula tenuis* Kützing)
- Subregion: Médio Tejo
 Municipality: Torres Novas (District: Santarém)
 Site: Casal da Pinheira, Almonda River (Tagus Basin)
 Reference: Oliveira & Caldas 1971 (as *Denticula tenuis* Kütz.)
 Site: Ribeira Branca, Almonda River (Tagus Basin)
 Reference: Oliveira & Caldas 1971 (as *Denticula tenuis* Kütz.)
- Subregion: Pinhal Interior Sul
 Municipality: Mação (District: Santarém)
 Site: Pracana Reservoir, Ocreza River (Tagus Basin)
 Reference: Oliveira 1982b (as *Denticula tenuis*)
- REGION: LISBOA
 Subregion: Grande Lisboa
 Municipality: Mafra (District: Lisboa)
 Site: Tapada de Mafra, Sobral da Abelheira
 Reference: Oliveira 1971b (as *Denticula tenuis*)
- REGION: ALENTEJO
 Subregion: Alentejo Litoral
 Municipality: Alcácer do Sal (District: Setúbal)
 Site: Vale do Gaio Reservoir, Xarrama River (Sado Basin)
 Reference: Oliveira 1984a (as *Denticula tenuis*)
- Subregion: Alto Alentejo
 Municipality: Avis (District: Portalegre)

Site: Maranhão Reservoir, Raia Stream (Tagus Basin)
Reference: Oliveira 1984c (as *Denticula tenuis*)
Municipality: Nisa (District: Portalegre)
Site: Fratel Reservoir, Tagus River (Tagus Basin)
Reference: INIP 1977 (as *Denticula tenuis* Kütz.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Calheta (São Jorge Island)
Site: Calheta
Reference: Mölder 1947 (as *Denticula tenuis* Kütz.)
Municipality: Horta (Faial Island)
Site: Flamengos
Reference: Holmboe 1901 (as *Denticula tenuis* Kütz.)
Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
Reference: Chaves 1908 (as *Denticula tenuis* Ktz.)
Site: Salto do Bargado, Furnas
Reference: Chaves 1908 (as *Denticula tenuis* Ktz., fossil)
Site: Tambores, Furnas
Reference: Chaves 1908 (as *Denticula tenuis* Ktz., fossil)
Municipality: Santa Cruz da Graciosa (Graciosa Island)
Site: Fundão, Caldeira
Reference: Azevedo et al. 2005 (as *Denticula tenuis*)
Municipality: Not specified
Site: Faial Island
Reference: Gonçalves et al. 2010 (as *Denticula tenuis* Kützing, fossil)
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Denticula tenuis* Kützing, fossil)
Site: Graciosa Island
Reference: Gonçalves et al. 2010 (as *Denticula tenuis* Kützing, fossil)
Site: Santa Maria Island
Reference: Gonçalves et al. 2010 (as *Denticula tenuis* Kützing, fossil)
Site: São Jorge Island
Reference: Gonçalves et al. 2010 (as *Denticula tenuis* Kützing, fossil)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Denticula tenuis* Kützing, fossil)
Site: Not specified
Reference: Gonçalves 2008 (as *Denticula tenuis* Kützing)

***Denticula tenuis* var. *inflata* (W. Smith) Grunow in Van Heurck
1882-1885, p. 159; pl. 49, fig. 32-34 [CAS ref. 000896]**

Basionym: *Denticula inflata* W. Smith 1856 [CAS ref. 001007]

Distribution (Fig. 285):

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Mafra (District: Lisboa)

Site: Tapada de Mafra, Sobral da Abelheira

Reference: Oliveira 1971b (as *Denticula tenuis* var. *inflata*)

***Denticula vanheurckii* Brun 1891**, p. 25; pl. 13, fig. 8; pl. 14, fig. 10
[CAS ref. 000176]

Distribution (Fig. 286):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Furnas

Reference: Mölder 1947 (as *Denticula vanheurcki* Brun)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Denticula vanheurcki* Brun)

***Denticula* sp.**

Distribution (Fig. 287):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Ferreira 1986 (as *Denticula* sp.)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Denticula* sp.)

***Diadesmis Kützing* 1844**, p. 109
[CAS ref. 000595]

***Diadesmis biceps* Arnott 1880** [CAS ref. -]

Nomenclatural synonyms: *Navicula contenta* f. *biceps* (Arnott) Hustedt 1930 [CAS ref. 000502]

Diadesmis contenta var. *biceps* (Grunow in Van Heurck) Hamilton in Hamilton et al. 1992 [CAS ref. 003248]

Distribution (Fig. 288):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Sever do Vouga (District: Aveiro)

Site: Pessegueiro do Vouga (mouth of Mau River), Vouga River (Vouga Basin)

Reference: Nunes 2007 (as *Diadesmis contenta* Grun. var. *biceps* (Cleve) Mann)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

References: Manguin 1942 (as *Navicula contenta* Grunow fo. *biceps* Arnott); Bourrelly & Manguin 1946a (as *Navicula contenta* Grunow fo. *biceps* Arnott)

Site: Pico Verde

References: Manguin 1942 (as *Navicula contenta* Grunow fo. *biceps* Arnott); Bourrelly & Manguin 1946a (as *Navicula contenta* Grunow fo. *biceps* Arnott)

Site: Ribeira Quente

References: Manguin 1942 (as *Navicula contenta* Grunow fo. *biceps* Arnott); Bourrelly & Manguin 1946a (as *Navicula contenta* Grunow fo. *biceps* Arnott)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Ribeira Grande

References: Manguin 1942 (as *Navicula contenta* Grunow fo. *biceps* Arnott); Bourrelly & Manguin 1946a (as *Navicula contenta* Grunow fo. *biceps* Arnott)

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Diadesmis contenta* var. *biceps* (Grunow) Hamilton)

***Diadesmis confervacea* Kützing 1844**, p. 109; pl. 30, fig. 8 [CAS ref. 000595]

Nomenclatural synonym: *Navicula confervacea* (Kützing) Grunow in Van Heurck 1880 [CAS ref. 000895]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

References: Calado 1990 (as *Navicula confervacea* (Kützing) Grunow);

INAG 2008 (as *Diadesmis confervacea* Kützing)

***Diadesmis contenta* (Grunow ex Van Heurck) D.G. Mann in Round, Crawford & Mann 1990, p. 666 [CAS ref. 003245]**

Basionym: *Navicula contenta* Grunow in Van Heurck 1885 [CAS ref. 001040]

Distribution (Fig. 289):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula contenta* Grunow)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula contenta* Grunow)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Arganil (District: Coimbra)

Site: Fronhas Reservoir, Alva River (Mondego Basin)

Reference: Santos et al. 2002 (as *Navicula contenta* Grunow)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Navicula contenta* Grunow)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Navicula contenta* Grunow); Gil et al. 1989-1990 (as *Navicula contenta*); Almeida 1998 (as *Navicula contenta* Grunow)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula contenta* Grunow)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula contenta* Grunow)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Navicula contenta* Grunow)

Site: Murta, Cértima River (Vouga Basin)

- Reference: Rino & Gil 1989 (as *Navicula contenta*)
 Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Navicula contenta* Grunow); Gil et al. 1989-1990 (as *Navicula contenta*)
 Site: Raivo, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula contenta* Grunow)
 Site: Ribeiro, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula contenta* Grunow)
 Municipality: Albergaria-a-Velha (District: Aveiro)
 Site: Bosturenga, Ribeira de Fráguas, Coval da Mó Stream (Vouga Basin)
 References: Nunes 2007 (as *Diademsis contenta* (Grunow ex V. Heurck) D.G. Mann); Ferreira da Silva et al. 2009 (as *Diademsis contenta* (Grunow ex V. Heurck) Mann)
 Municipality: Anadia (District: Aveiro)
 Site: Curia, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Navicula contenta*)
 Site: Espairo, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Navicula contenta*)
 Site: Mogofores, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Navicula contenta*)
 Site: Tamengos, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Navicula contenta*)
 Municipality: Aveiro (District: Aveiro)
 Site: Aveiro, lake in the municipal park (artificial substrate)
 Reference: Gil & Almeida 1993 (as *Navicula contenta* Grunow)
 Site: Pano, Largo River (Vouga Basin)
 Reference: Almeida 1998 (as *Navicula contenta* Grunow)
 Site: Requeixo, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Navicula contenta* Grunow)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula contenta* Grunow)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula contenta* Grunow)
 Site: Vessada, Fontão Creek (Vouga Basin)
 Reference: Almeida 1998 (as *Navicula contenta* Grunow)
 Municipality: Mealhada (District: Aveiro)
 Site: Pampilhosa, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Navicula contenta*)
 Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Navicula contenta*)
 Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Navicula contenta* Grunow)
 Site: Perrães, Levira River (Vouga Basin)

- Reference: Almeida 1998 (as *Navicula contenta* Grunow)
 Site: Perrães, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Navicula contenta*)
 Site: Repolão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Navicula contenta*)
 Municipality: Sever do Vouga (District: Aveiro)
 Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)
 Reference: Nunes 2007 (as *Diademsis contenta* (Grunow ex V. Heurck)
 D.G. Mann)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula contenta* Grunow)
 Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula contenta* Grunow)
 Site: Varzielas, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula contenta* Grunow)
- Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula contenta* Grunow)
 Site: In the proximity of Tondela, Criz River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Navicula contenta* Grunow)
- Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula contenta* Grunow)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula contenta* Grunow)
- Subregion: Not specified
- Municipality: Not specified
 Site: Vouga Basin
 Reference: Almeida & Gil 2000 (as *Navicula contenta* Grunow)
 Site: Not specified
 Reference: Gil et al. 1991 (as *Navicula contenta*); Almeida & Gil 2001
 (as *Navicula contenta* Grunow)
- REGION: AUTONOMOUS REGION OF AZORES
- Municipality: Angra do Heroísmo (Terceira Island)
 Site: Lagoa da Falca (Terceira Island)
 Reference: Gonçalves 1996 (as *Navicula contenta* Grunow)
- Municipality: Lajes das Flores (Flores Island)
 Site: Lagoa Rasa
 References: Manguin 1942 (as *Navicula contenta* Grun.); Bourrelly &
 Manguin 1946a (as *Navicula contenta* Grun.)
- Municipality: Santa Cruz da Graciosa (Graciosa Island)
 Site: Barreiro
 Reference: Azevedo et al. 2005 (as *Navicula contenta*)

Site: Fundão, Caldeira
Reference: Azevedo et al. 2005 (as *Navicula contenta*)
Site: Tanque
Reference: Azevedo et al. 2005 (as *Navicula contenta*)
Municipality: Not specified
Site: Corvo Island
Reference: Gonçalves et al. 2010 (as *Diadasmus contenta* (Grunow ex V. Heurck) Mann)
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Diadasmus contenta* (Grunow ex V. Heurck) Mann)
Site: Graciosa Island
Reference: Gonçalves et al. 2010 (as *Diadasmus contenta* (Grunow ex V. Heurck) Mann)
Site: Lagoa de Cazador (São Miguel Island)
References: Manguin 1942 (as *Navicula contenta* Grun.); Bourrelly & Manguin 1946a (as *Navicula contenta* Grun.)
Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Diadasmus contenta* (Grunow ex V. Heurck) Mann)
Site: Santa Maria Island
Reference: Gonçalves et al. 2010 (as *Diadasmus contenta* (Grunow ex V. Heurck) Mann)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Diadasmus contenta* (Grunow ex V. Heurck) Mann)
Site: Terceira Island
Reference: Gonçalves et al. 2010 (as *Diadasmus contenta* (Grunow ex V. Heurck) Mann)
Site: Not specified
Reference: Gonçalves 2008 (as *Diadasmus contenta* (Grunow ex V. Heurck) Mann)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Navicula contenta* Grunow)

***Diadasmus contenta* var. *parallela* (J.B. Petersen) Aboal in Aboal et al. 2003, p. 242 [CAS ref. 012666]**

Basionym: *Navicula contenta* var. *parallela* J.B. Petersen 1928b [CAS ref. 002116]

Nomenclatural synonym: *Navicula contenta* f. *parallela* (J.B. Petersen) Hustedt 1930 [CAS ref. 000502]

Distribution (Fig. 290):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Nordeste (São Miguel Island)

Site: Serra Tronqueira

References: Manguin 1942 (as *Navicula contenta* Grunow fo. *parallela* B. Peters.); Bourrelly & Manguin 1946a (as *Navicula contenta* Grunow fo. *parallela* B. Peters.)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Ribeira Grande

References: Manguin 1942 (as *Navicula contenta* Grunow fo. *parallela* B. Peters.); Bourrelly & Manguin 1946a (as *Navicula contenta* Grunow fo. *parallela* B. Peters.)

Municipality: Vila do Porto (Santa Maria Island)

Site: Not specified

References: Manguin 1942 (as *Navicula contenta* Grunow fo. *parallela* B. Peters.); Bourrelly & Manguin 1946a (as *Navicula contenta* Grunow fo. *parallela* B. Peters.)

Municipality: Not specified

Site: Lagoa de Cazador (São Miguel Island)

References: Manguin 1942 (as *Navicula contenta* Grunow fo. *parallela* B. Peters.); Bourrelly & Manguin 1946a (as *Navicula contenta* Grunow fo. *parallela* B. Peters.)

***Diademsis gallica* W. Smith 1857**, p. 11; pl. 2, fig. 16 [CAS ref. 000865]

Distribution (Fig. 291):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Sever do Vouga (District: Aveiro)

Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)

Reference: Nunes 2007 (as *Diademsis gallica* W.M. Smith)

***Diademsis perpusilla* (Grunow) D.G. Mann in Round, Crawford & Mann 1990**, p. 666 [CAS ref. 003245]

Basionym: *Navicula perpusilla* Grunow 1860 [CAS ref. 000427]

Nomenclatural synonyms: *Navicula gallica* var. *perpusilla* (Grunow) Lange-Bertalot in Krammer & Lange-Bertalot 1985 [CAS ref. 006263]
Diademsis gallica var. *perpusilla* (Grunow) Lange-Bertalot in Lange-Bertalot & Metzeltin 1996 [CAS ref. 007048]

Distribution (Fig. 292):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

References: Almeida 1998 (as *Navicula gallica* (W.M. Smith) Lagerstedt var. *perpusilla* (Grun.) Lange-Bertalot); Nunes 2007 (as *Diademsis gallica* var. *perpusilla* (Grunow) Lange-Bertalot)

Site: São Pedro de Castelões, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Diademsis gallica* var. *perpusilla* (Grunow) Lange-Bertalot)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula gallica* (W.M. Smith) Lagerstedt var. *perpusilla* (Grun.) Lange-Bertalot)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Navicula perpusilla* Grunow)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Navicula perpusilla* Grunow); Gil et al. 1989-1990 (as *Navicula perpusilla*)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula gallica* (W.M. Smith) Lagerstedt var. *perpusilla* (Grun.) Lange-Bertalot)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula perpusilla* Grunow)

Site: Bolfiar, Águeda River (Vouga Basin)

References: Gil 1988 (as *Navicula perpusilla* Grunow); Gil et al. 1989-1990 (as *Navicula perpusilla*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Navicula perpusilla* Grunow)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Navicula perpusilla* Grunow); Gil et al. 1989-1990 (as *Navicula perpusilla*)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula perpusilla* Grunow)

Site: Redonda, Águeda River (Vouga Basin)

- Reference: Gil 1988 (as *Navicula perpusilla* Grunow)
 Site: Ribeiro, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula perpusilla* Grunow)
 Site: Sernada do Vouga, Vouga River (Vouga Basin)
 Reference: Nunes 2007 (as *Diadismis gallica* var. *perpusilla* (Grunow)
 Lange-Bertalot)
 Municipality: Albergaria-a-Velha (District: Aveiro)
 Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River
 (Vouga Basin)
 Reference: Nunes 2007 (as *Diadismis gallica* var. *perpusilla* (Grunow)
 Lange-Bertalot)
 Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima
 River (Vouga Basin)
 References: Gil 1988 (as *Navicula perpusilla* Grunow); Gil et al. 1989-
 1990 (as *Navicula perpusilla*)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima
 River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula perpusilla* Grunow)
 Municipality: Sever do Vouga (District: Aveiro)
 Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga
 River (Vouga Basin)
 Reference: Nunes 2007 (as *Diadismis gallica* var. *perpusilla* (Grunow)
 Lange-Bertalot)
 Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Navicula perpusilla* Grunow); Gil et al. 1989-
 1990 (as *Navicula perpusilla*)
 Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula perpusilla* Grunow)
 Site: Varzielas, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula perpusilla* Grunow)
 Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 References: Gil 1988 (as *Navicula perpusilla* Grunow); Gil et al. 1989-
 1990 (as *Navicula perpusilla*)
 Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil et al. 1989-1990 (as *Navicula perpusilla*)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula perpusilla* Grunow)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Navicula perpusilla* Grunow); Gil et al. 1989-
 1990 (as *Navicula perpusilla*)
 Subregion: Not specified

Municipality: Not specified
Site: Not specified
Reference: Gil et al. 1991 (as *Navicula perpusilla*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)
Site: Lagoa Rasa
References: Manguin 1942 (as *Navicula perpusilla* Grun.); Bourrelly & Manguin 1946a (as *Navicula perpusilla* Grun.)

Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
References: Manguin 1942 (as *Navicula perpusilla* Grun.); Bourrelly & Manguin 1946a (as *Navicula perpusilla* Grun.)

Municipality: Santa Cruz das Flores (Flores Island)
Site: Lagoa Branca
References: Manguin 1942 (as *Navicula perpusilla* Grun.); Bourrelly & Manguin 1946a (as *Navicula perpusilla* Grun.)

Municipality: Santa Cruz da Graciosa (Graciosa Island)
Site: Barreiro
Reference: Azevedo et al. 2005 (as *Navicula gallica* var. *perpusilla*)
Site: Fundão, Caldeira
Reference: Azevedo et al. 2005 (as *Navicula gallica* var. *perpusilla*)

Municipality: Not specified
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Diadasmus perpusilla* (Grunow) D.G. Mann in Round, Crawford & Mann)

Site: Graciosa Island
Reference: Gonçalves et al. 2010 (as *Diadasmus perpusilla* (Grunow) D.G. Mann in Round, Crawford & Mann)

Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Diadasmus perpusilla* (Grunow) D.G. Mann in Round, Crawford & Mann)

Site: Santa Maria Island
Reference: Gonçalves et al. 2010 (as *Diadasmus perpusilla* (Grunow) D.G. Mann in Round, Crawford & Mann)

Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Diadasmus perpusilla* (Grunow) D.G. Mann in Round, Crawford & Mann)

Site: Not specified
Reference: Gonçalves 2008 (as *Diadasmus perpusilla* (Grunow) D.G. Mann)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified

Reference: INAG 2008 (as *Navicula gallica* (W.M. Sm.) Lagerstedt var. *perpusilla* (Grunow) Lange-Bertalot)

Diatoma De Candolle in Lamarck & De Candolle 1805,
p. 48 [CAS ref. 000265]

***Diatoma anceps* (Ehrenberg) Kirchner 1878**, p. 204 [CAS ref. 000561]

Basionym: *Fragilaria anceps* Ehrenberg 1843 [CAS ref. 000294]

Distribution (Fig. 293):

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Alfarazes

Reference: Carvalho 1913 (as *Diatoma anceps* (Ehr.) Kirchn.)

Site: Caldeirão

Reference: Carvalho 1913 (as *Diatoma anceps* (Ehr.) Kirchn.); Santos & Carvalho 2001 (as *Diatoma anceps* (Ehr.) Kirchn.)

Site: Mondego River (Mondego Basin)

Reference: Carvalho 1913 (as *Diatoma anceps* (Ehr.) Kirchn.); Santos & Carvalho 2001 (as *Diatoma anceps* (Ehr.) Kirchn.)

***Diatoma elongata* (Lyngbye) C. Agardh 1824**, p. 4 [CAS ref. 000102]

Basionym: *Diatoma tenuis* var. *elongata* Lyngbye 1819 [CAS ref. 000620]

Distribution (Fig. 294):

REGION: NORTE

Subregion: Grande Porto

Municipality: Matosinhos (District: Porto)

Site: Not specified

Reference: Zimmermann 1910 (as *Diatoma elongatum* Ag.)

Subregion: Minho-Lima

Municipality: Caminha (District: Viana do Castelo)

Site: Seixas, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Diatoma elongatum*)

Municipality: Monção (District: Viana do Castelo)

- Site: Monção, Minho River (Minho Basin)
Reference: Vasconcelos et al. 2000 (as *Diatoma elongatum*)
Municipality: Not specified
- Site: Ínsua do Ranhão, Minho River (Minho Basin)
Reference: Vasconcelos et al. 2000 (as *Diatoma elongatum*)
Site: Minho River, international section (Minho Basin)
Reference: Vasconcelos & Cerqueira 2001 (as *Diatoma elongatum*)
- REGION: CENTRO
- Subregion: Baixo Vouga
- Municipality: Águeda (District: Aveiro)
Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
Reference: Gil 1988 (as *Diatoma elongatum* (Lyngbye) Agardh)
Site: Murta, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Diatoma elongatum*)
- Municipality: Aveiro (District: Aveiro)
Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Diatoma elongatum* (Lyngbye) Agardh)
Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Diatoma elongatum* (Lyngbye) Agardh); Gil et al. 1989-1990 (as *Diatoma elongatum*)
- Municipality: Oliveira do Bairro (District: Aveiro)
Site: Perrães, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Diatoma elongatum*)
- Subregion: Médio Tejo
- Municipality: Abrantes (District: Santarém)
Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Diatoma elongatum*)
Site: Forno Novo, Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Diatoma elongatum*)
- Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
Reference: Brito & Andrade 1992 (as *Diatoma elongatum*)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Diatoma elongatum* (Lyngbye) Agardh)
- Subregion: Not specified
- Municipality: Not specified
Site: Not specified
References: Calado 1990 (as *Diatoma elongatum* (Lyngbye) Agardh); Gil et al. 1991 (as *Diatoma elongatum*)

REGION: ALENTEJO

Subregion: Alto Alentejo

Municipality: Nisa (District: Portalegre)

Site: Poio Reservoir, Nisa Stream (Tagus Basin)

Reference: Nauwerck 1962 (as *Diatoma elongatum* (Lyngbye) Agardh)

Subregion: Lezíria do Tejo

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Diatoma elongatum*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

References: Chaves 1908 (as *Diatoma elongata* Agh.); Mölder 1947 (as *Diatoma elongatum* Agardh)

Site: Tambores, Furnas

Reference: Chaves 1908 (as *Diatoma elongata* Agh., fossil)

***Diatoma hyemalis* (Lyngbye) Heiberg 1863**, p. 58 [CAS ref. 000471]

Basionym: *Fragilaria hyemalis* Lyngbye 1819 [CAS ref. 000620]

Nomenclatural synonym: *Odontidium hyemale* (Lyngbye) Kützing 1844 [CAS ref. 000595]

Distribution (Fig. 295):

REGION: NORTE

Subregion: Cávado

Municipality: Terras de Bouro (District: Braga)

Site: Caldas do Gerês, Vilar da Veiga

Reference: Sampaio 1950 (as *Diatoma hiemale* (Lyngbye) Heiberg)

Municipality: Not specified

Site: Entrepontes, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Diatoma hiemale*)

Subregion: Minho-Lima

Municipality: Caminha (District: Viana do Castelo)

Site: Sains, Âncora River (Âncora Basin)

Reference: Formigo et al. 1993 (as *Diatoma hiemale*)

Subregion: Not specified

Municipality: Not specified

Site: Serra do Gerês

Reference: Colmeiro 1889 (as *Odontidium hyemale* Kg.)

REGION: CENTRO

- Subregion: Baixo Vouga
Municipality: Águeda (District: Aveiro)
Site: Avelal de Baixo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg)
Site: Raivo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg)
- Municipality: Aveiro (District: Aveiro)
Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg)
- Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Diatoma hiemale* (Lyngbye) Heiberg)
- Subregion: Beira Interior Norte
Municipality: Guarda (District: Guarda)
Site: Caldeirão
References: Carvalho 1913 (as *Diatoma hiemale* (Lyngbye) Heiberg); Santos & Carvalho 2001 (as *Diatoma hiemale* (Lyngb.) Heib.)
Site: Cruz da Faia
Reference: Carvalho 1913 (as *Diatoma hiemale* (Lyngbye) Heiberg)
Site: Cubo
Reference: Carvalho 1913 (as *Diatoma hiemale* (Lyngbye) Heiberg)
Site: Gonçalo
Reference: Carvalho 1913 (as *Diatoma hiemale* (Lyngbye) Heiberg)
Site: Guarda
Reference: Carvalho 1913 (as *Diatoma hiemale* (Lyngbye) Heiberg)
Site: Lameirinhas
Reference: Carvalho 1913 (as *Diatoma hiemale* (Lyngbye) Heiberg)
Site: Mondego River (Mondego Basin)
References: Carvalho 1913 (as *Diatoma hiemale* (Lyngbye) Heiberg); Santos & Carvalho 2001 (as *Diatoma hiemale* (Lyngb.) Heib.)
- Subregion: Beira Interior Sul
Municipality: Castelo Branco (District: Castelo Branco)
Site: São Fiel, Ocreza River (Tagus Basin)
Reference: Zimmermann 1906 (as *Diatoma hyemale* (Lyngb.) Heib.)
- Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg)
Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg)
- Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg)
Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg)

Subregion: Médio Tejo

Municipality: Vila Nova da Barquinha (District: Santarém)

Site: Almourol, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Diatoma hiemale*)

Subregion: Not specified

Municipality: Not specified

Site: Paiva River (Douro Basin)

Reference: Cerqueira da Silva 1994 (as *Diatoma hiemale*)

Site: Serra da Estrela

References: Henriques 1883 (as *Odontidium hyemale* Kützing); Santos & Carvalho 2001 (as *Odontidium hyemale* Kützing)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Vila Franca de Xira (District: Lisboa)

Site: Vila Franca de Xira, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Diatoma hiemale*)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Cartaxo (District: Santarém)

Site: Valada, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Diatoma hiemale*)

Municipality: Chamusca (District: Santarém)

Site: Chamusca, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Diatoma hiemale*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Nordeste (S. Miguel Island)

Site: Serra Tronqueira

References: Manguin 1942 (as *Diatoma hiemale* (Lyngbye) Heiberg);

Bourrelly & Manguin 1946a (as *Diatoma hiemale* (Lyngbye) Heiberg)

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa das Sete Cidades

Reference: Holmboe 1901 (as *Diatoma hiemale* (Lyngbye) Heiberg)

Site: Inferno Grote near Lagoa das Furnas (São Miguel Island)

Reference: Holmboe 1901 (as *Diatoma hiemale* (Lyngbye) Heiberg)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Odontidium hyemale* Ktz.)

Site: Pico da Vara

Reference: Holmboe 1901 (as *Diatoma hiemale* (Lyngbye) Heiberg)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Diatoma hiemalis* (Roth) Heiberg)

Site: Not specified

References: Bourrelly & Manguin 1946b (as *Diatoma hiemale*);
Gonçalves 2008 (as *Diatoma hyemalis* var. *hyemalis* (Roth) Heiberg)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Tagus riverbanks (Tagus Basin)

Reference: Ehrenberg 1845 (as *Fragilaria hyemalis* ?)

***Diatoma mesodon* Kützing 1844**, p. 47; pl. 17, fig. 13 [CAS ref. 000595]

Nomenclatural synonyms: *Odontidium hiemale* var. *mesodon* (Ehrenberg) Grunow 1862 [CAS ref. 000428]

Diatoma hiemale var. *mesodon* (Ehrenberg) Kirchner 1878 [CAS ref. 000561]

Distribution (Fig. 296):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Oliveira de Azeméis (District: Aveiro)

Site: Bustelo do Caima, Ossela, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Diatoma mesodon* (Ehrenberg) Kützing)

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

References: Almeida 1998 (as *Diatoma mesodon* (Ehrenberg) Kützing);

Almeida 2001 (as *Diatoma mesodon* (Ehrenberg) Kützing); Nunes 2007

(as *Diatoma mesodon* (Ehrenberg) Kützing)

Site: São Pedro de Castelões, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Diatoma mesodon* (Ehrenberg) Kützing)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Diatoma mesodon* (Ehrenberg) Kützing)

Subregion: Not specified

Municipality: Not specified

Site: Serra do Gerês

References: Henriques 1884 (as *Odontidium hiemale* Heib. var. *mesodon*

(Ehrenb.) Grun.); Sampaio 1950 (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon*)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg v. *mesodon*

(Ehr.) Grunow); Gil et al. 1989-1990 (as *Diatoma hiemale* v. *mesodon*)

- Site: Águeda, Águeda River (Vouga Basin)
References: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg v. *mesodon* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Diatoma hiemale* v. *mesodon*)
- Site: Águeda, Águeda River (Vouga Basin)
References: Almeida 1998 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)
Reference: Almeida 1998 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Site: Aldeia, Segadães, Vouga River (Vouga Basin)
Reference: Almeida 1998 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Site: Avelal de Baixo, Águeda River (Vouga Basin)
References: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg v. *mesodon* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Diatoma hiemale* v. *mesodon*)
- Site: Bolfiar, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg v. *mesodon* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Diatoma hiemale* v. *mesodon*)
- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
References: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg v. *mesodon* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Diatoma hiemale* v. *mesodon*)
- Site: Óis da Ribeira, Águeda River (Vouga Basin)
Reference: Almeida 1998 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg v. *mesodon* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Diatoma hiemale* v. *mesodon*)
- Site: Raivo, Águeda River (Vouga Basin)
References: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg v. *mesodon* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Diatoma hiemale* v. *mesodon*)
- Site: Redonda, Águeda River (Vouga Basin)
References: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg v. *mesodon* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Diatoma hiemale* v. *mesodon*)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg v. *mesodon* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Diatoma hiemale* v. *mesodon*)
- Site: Sernada do Vouga, Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Municipality: Albergaria-a-Velha (District: Aveiro)
- Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Site: Ribeira de Fráguas, Palhal Mine, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Diatoma mesodon* (Ehrenberg) Kützing)

- Site: Valmaior, mouth of Filvida River (Vouga Basin)
References: Nunes 2007 (as *Diatoma mesodon* (Ehrenberg) Kützing);
Ferreira da Silva et al. 2009 (as *Diatoma mesodon* (Ehr.) Kützing)
- Municipality: Anadia (District: Aveiro)
Site: São João de Azenha, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Municipality: Aveiro (District: Aveiro)
Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg v. *mesodon* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Diatoma hiemale* v. *mesodon*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg v. *mesodon* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Diatoma hiemale* v. *mesodon*)
- Municipality: Estarreja (District: Aveiro)
Site: Estarreja, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Site: Minhoteira, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Municipality: Oliveira do Bairro (District: Aveiro)
Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Municipality: Sever do Vouga (District: Aveiro)
Site: Pessegueiro do Vouga (mouth of Mau River), Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)
Reference: Nunes 2007 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Site: Silva Escura, downstream of the Malhada Mine, Mau River (Vouga Basin)
Reference: Nunes 2007 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Subregion: Beira Interior Norte
Municipality: Guarda (District: Guarda)
Site: Alfazazes
Reference: Carvalho 1913 (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.)
Site: Caldeirão

References: Carvalho 1913 (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.); Santos & Carvalho 2001 (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.)

Site: Cruz da Faia

Reference: Carvalho 1913 (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.)

Site: Cubo

Reference: Carvalho 1913 (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.)

Site: Gonçalo

Reference: Carvalho 1913 (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.)

Site: Meios

References: Carvalho 1913 (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.); Santos & Carvalho 2001 (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.)

Site: Mondego River (Mondego Basin)

References: Carvalho 1913 (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.); Santos & Carvalho 2001 (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.)

Site: Nueme

Reference: Carvalho 1913 (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.)

Site: Vela

Reference: Carvalho 1913 (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.)

Site: Vila Patrício

Reference: Carvalho 1913 (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.)

Subregion: Beira Interior Sul

Municipality: Castelo Branco (District: Castelo Branco)

Site: São Fiel, Ocreza River (Tagus Basin)

Reference: Zimmermann 1906 (as *Diatoma hiemale* var. *mesodon* (Ehr.) Grun.)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg v. *mesodon* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Diatoma hiemale* v. *mesodon*)

Site: In the proximity of Tondela, Criz River (Mondego Basin)

Reference: Santos et al. 2002 (as *Diatoma mesodon* (Ehrenberg) Kützing)

Site: São João do Monte, Águeda River (Vouga Basin)

References: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg v. *mesodon* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Diatoma hiemale* v. *mesodon*)

Site: Varzielas, Águeda River (Vouga Basin)

- References: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg v. *mesodon* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Diatoma hiemale* v. *mesodon*)
- Municipality: Tondela (District: Viseu)
- Site: Boi, Agadão River (Vouga Basin)
- Reference: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg v. *mesodon* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Diatoma hiemale* v. *mesodon*)
- Municipality: Vouzela (District: Viseu)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
- Reference: Gil et al. 1989-1990 (as *Diatoma hiemale* v. *mesodon*)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg v. *mesodon* (Ehr.) Grunow)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Diatoma hiemale* (Roth) Heiberg v. *mesodon* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Diatoma hiemale* v. *mesodon*)
- Subregion: Not specified
- Municipality: Not specified
- Site: Not specified
- References: Calado 1990 (as *Diatoma hiemale* (Roth) Heiberg v. *mesodon* (Ehr.) Grunow); Gil et al. 1991 (as *Diatoma hiemale* v. *mesodon*)
- Subregion: Pinhal Interior Norte
- Municipality: Pampilhosa da Serra (District: Coimbra)
- Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)
- Reference: Santos et al. 2002 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Subregion: Serra da Estrela
- Municipality: Seia (District: Guarda)
- Site: Sabugueiro, Vale do Rossim Reservoir
- Reference: Santos et al. 2002 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Subregion: Not specified
- Municipality: Not specified
- Site: Vouga Basin
- Reference: Almeida & Gil 2000 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- Site: Not specified
- References: Almeida & Gil 2001 (as *Diatoma mesodon* (Ehrenberg) Kützing)
- REGION: AUTONOMOUS REGION OF AZORES
- Municipality: Povoação (São Miguel Island)
- Site: Lagoa das Furnas
- Reference: Chaves 1908 (as *Odontidium hyemale* Ktz. var. *mesodon* Ktz.)
- Municipality: Not specified
- Site: Flores Island
- Reference: Gonçalves et al. 2010 (as *Diatoma mesodon* (Ehrenberg) Kützing)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Diatoma mesodon* (Ehrenberg) Kützing)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Diatoma mesodon* (Ehrenberg) Kützing)

Site: Not specified

Reference: Gonçalves 2008 (as *Diatoma mesodon* (Ehrenberg) Kützing)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Ribeira de João Gomes

Reference: Zimmermann 1909a (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.)

Site: Levada do Bom Sucesso

Reference: Zimmermann 1910-1911 (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.)

(as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.)

Municipality: Ponta do Sol (Madeira Island)

Site: Rabaçal (Madeira Island)

Reference: Mölder 1947 (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.)

Municipality: Ribeira Brava (Madeira Island)

Site: Sítio da Chamorra, Campanário

Reference: Zimmermann 1909a (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.)

Municipality: Santana (Madeira Island)

Site: Ribeiro Frio

Reference: Mölder 1947 (as *Diatoma hiemale* (Lyngb.) Heib. var. *mesodon* (Ehr.) Grun.)

REGION: Not specified

Municipality: Not specified

Site: Mountain Rivers in the North

Reference: Morais et al. 2009 (as *Diatoma mesodon* (Ehrenberg) Kützing)

Site: Not specified

Reference: INAG 2008 (as *Diatoma mesodon* (Ehrenberg) Kützing)

***Diatoma mesolepta* Kützing 1844**, p. 48; pl. 17, fig. 16, fig. 1-3 [CAS ref. 000595]

Distribution (Fig. 297):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Salto do Bargado, Furnas
Reference: Chaves 1908 (as *Diatoma mesoleptum*, fossil)
Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Diatoma mesoleptum* Kützing, fossil)

***Diatoma obtusa* (Kützing) Kirchner 1878**, p. 204 [CAS ref. 000561]

Basionym: *Denticula obtusa* Kützing 1844 [CAS ref. 000595]

Distribution (Fig. 298):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Diatoma obtusa* Grun.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Diatoma obtusa* Grunow)

***Diatoma pectinalis* (Nitzsch) Kützing 1844**, p. 47; pl. 17, fig. 11
[CAS ref. 000595]

Basionym: *Bacillaria pectinalis* Nitzsch 1817 [CAS ref. 000684]

Distribution (Fig. 299):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Salto do Bargado, Furnas

Reference: Chaves 1908 (as *Diatoma pectinale*, fossil)

Site: Tambores, Furnas

Reference: Chaves 1908 (as *Diatoma pectinale*, fossil)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Diatoma pectinale* (Nitzsch) Kützing, fossil)

***Diatoma tenuis* C. Agardh 1824**, p. 4 [CAS ref. 000102]

Distribution (Fig. 300):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Aveiro (District: Aveiro)

Site: Requeixo, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Diatoma tenuis* Agardh)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Diatoma tenue* Agh.)

Site: Salto do Bargado, Furnas

Reference: Chaves 1908 (as *Diatoma tenue* Agh., fossil)

Site: Tambores, Furnas

Reference: Chaves 1908 (as *Diatoma tenue* Agh., fossil)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Diatoma tenuis* Agardh)

***Diatoma vulgaris* Bory 1831, pl. 20, fig. 1 [CAS ref. 012705]**

Distribution (Fig. 301):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Montalegre (District: Vila Real)

Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1982a (as *Diatoma vulgare*)

Subregion: Ave

Municipality: Vieira do Minho (District: Braga)

Site: Salamonde Reservoir, Cávado River (Cávado Basin)

Reference: Oliveira 1982a (as *Diatoma vulgare*)

Subregion: Grande Porto

Municipality: Vila Nova de Gaia (District: Porto)

Site: Febros River (Douro Basin)

Reference: Cerqueira da Silva 1993 (as *Diatoma vulgare*)

Subregion: Minho-Lima

Municipality: Monção (District: Viana do Castelo)

Site: Monção, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Diatoma vulgaris*)

Municipality: Not specified

Site: Minho River, international section (Minho Basin)

Reference: Vasconcelos & Cerqueira 2001 (as *Diatoma vulgare*)

Subregion: Not specified

Municipality: Not specified

Site: Neiva River (Neiva Basin)

Reference: Cerqueira da Silva & Cunha 1992 (as *Diatoma vulgare*)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Coimbra (District: Coimbra)

Site: Not specified

Reference: Colmeiro 1889 (as *Diatoma vulgare* Kg.)

Site: Coimbra

Reference: De Toni 1887 (as *Diatoma vulgare* Bory)

Municipality: Mira (District: Coimbra)

Site: Lagoa de Mira

Reference: Oliveira 1971a (as *Diatoma vulgare*)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Diatoma vulgaris* Bory)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Diatoma vulgaris* Bory)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Diatoma vulgaris* Bory)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Diatoma vulgaris* Bory); Gil et al. 1989-1990 (as *Diatoma vulgare*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

References: Gil 1988 (as *Diatoma vulgaris* Bory); Gil et al. 1989-1990 (as *Diatoma vulgare*)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diatoma vulgare*)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Diatoma vulgaris* Bory)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Diatoma vulgaris* Bory)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Diatoma vulgaris* Bory)

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diatoma vulgare*)

Site: Espairo, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diatoma vulgare*)

Site: Mogofores, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diatoma vulgare*)

Site: São João da Azenha, Cértima River (Vouga Basin)

References: Rino & Gil 1989 (as *Diatoma vulgare*); Almeida 1998 (as *Diatoma vulgaris* Bory)

Site: Tamengos, Cértima River (Vouga Basin)

- Reference: Rino & Gil 1989 (as *Diatoma vulgare*)
Municipality: Aveiro (District: Aveiro)
Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Diatoma vulgaris* Bory)
Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Diatoma vulgaris* Bory)
Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Diatoma vulgaris* Bory); Gil et al. 1989-1990 (as *Diatoma vulgare*)
Municipality: Mealhada (District: Aveiro)
Site: Viadouros, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Diatoma vulgare*)
Municipality: Oliveira do Bairro (District: Aveiro)
Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Diatoma vulgare*)
Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Diatoma vulgaris* Bory)
Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Diatoma vulgaris* Bory)
Site: Perrães, Cértima River (Vouga Basin)
References: Rino & Gil 1989 (as *Diatoma vulgare*); Almeida 1998 (as *Diatoma vulgaris* Bory)
Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Diatoma vulgare*)
Site: Vila Verde, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Diatoma vulgaris* Bory)
Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Diatoma vulgare* Bory)
Subregion: Beira Interior Sul
Municipality: Castelo Branco (District: Castelo Branco)
Site: São Fiel, Ocreza River (Tagus Basin)
Reference: Zimmermann 1906 (as *Diatoma vulgare* Bory.)
Municipality: Idanha-a-Nova (District: Castelo Branco)
Site: Idanha Reservoir, Ponsul River (Tagus Basin)
Reference: Oliveira 1982c (as *Diatoma vulgare*)
Municipality: Vila Velha de Ródão (District: Castelo Branco)
Site: downstream of Cedilho Reservoir, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Diatoma vulgare*)
Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Diatoma vulgaris* Bory); Gil et al. 1989-1990 (as *Diatoma vulgare*)

- Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Diatoma vulgaris* Bory)
- Site: Varzielas, Águeda River (Vouga Basin)
References: Gil 1988 (as *Diatoma vulgaris* Bory); Gil et al. 1989-1990 (as *Diatoma vulgare*)
- Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
References: Gil 1988 (as *Diatoma vulgaris* Bory); Gil et al. 1989-1990 (as *Diatoma vulgare*)
- Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Diatoma vulgaris* Bory)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Diatoma vulgaris* Bory)
- Subregion: Médio Tejo
Municipality: Abrantes (District: Santarém)
Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Diatoma vulgare*)
- Site: Forno Novo, Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Diatoma vulgare*)
- Site: Tramagal, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Diatoma vulgare*)
- Subregion: Médio Tejo
Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
Reference: Frade 1961 (as *Diatoma vulgare*)
- Municipality: Torres Novas (District: Santarém)
Site: Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1970 (*Diatoma vulgare* Bory)
- Site: Casal da Pinheira, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Diatoma vulgare* Bory)
- Site: Casal do Feijão, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Diatoma vulgare* Bory)
- Site: Renova, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Diatoma vulgare* Bory)
- Site: Ribeira Branca, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Diatoma vulgare* Bory)
- Municipality: Vila Nova da Barquinha (District: Santarém)
Site: Vila Nova da Barquinha, Tagus River (Tagus Basin)
Reference: Oliveira et al. 1989 (as *Diatoma vulgare*)
- Subregion: Pinhal Interior Norte
Municipality: Pampilhosa da Serra (District: Coimbra)
Site: Santa Luzia Reservoir, Unhais River (Tagus Basin)
References: Oliveira 1982b (as *Diatoma vulgare*); Santos et al. 2002 (as *Diatoma vulgaris* Bory)
- Municipality: Pedrógão Grande (District: Leiria)

Site: Bouçã Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Diatoma vulgare*)
Site: Cabril Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Diatoma vulgare*)
Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
References: Cabeçadas et al. 1980 (as *Diatoma vulgare*); Ferreira 1986
(as *Diatoma vulgare*); Brito & Andrade 1992 (as *Diatoma vulgare*)
Municipality: Vila Nova da Barquinha (District: Santarém)
Site: Almourol, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Diatoma vulgare*)
Subregion: Not specified
Municipality: Not specified
Site: Nabão River (Tagus Basin)
Reference: Rodrigues et al. 1982 (as *Diatoma vulgare*)
Site: Paiva River (Douro Basin)
References: Cerqueira da Silva 1991 (as *Diatoma vulgare*); Cerqueira da
Silva et al. 1993 (as *Diatoma vulgare*)
Site: Not specified
References: Calado 1990 (as *Diatoma vulgare* Bory); Gil et al. 1991 (as
Diatoma vulgare)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Sintra (District: Lisboa)

Site: Mula Reservoir, Mula Stream (Western Streams Basin)

Reference: Ferreira 1986 (as *Diatoma vulgare*)

Municipality: Vila Franca de Xira (District: Lisboa)

Site: Vila Franca de Xira, Tagus River (Tagus Basin)

Reference: Rodrigues & Moita 1979b (as *Diatoma vulgare*); Fernandes et
al. 1987 (as *Diatoma vulgare*)

REGION: ALENTEJO

Subregion: Alentejo Central

Municipality: Arraiolos (District: Évora)

Site: Divor Reservoir, Divor Stream (Tagus Basin)

References: Oliveira 1984b (as *Diatoma vulgare*); Oliveira 1987 (as
Diatoma vulgare Bory)

Subregion: Alentejo Litoral

Municipality: Alcácer do Sal (District: Setúbal)

Site: Vale do Gaio Reservoir, Xarrama River (Sado Basin)

Reference: Oliveira 1984a (as *Diatoma vulgare*)

Municipality: Odemira (District: Beja)

Site: Santa Clara Reservoir, Mira River (Mira Basin)

Reference: Oliveira 1984a (as *Diatoma vulgare*)

Municipality: Santiago do Cacém (District: Setúbal)

- Site: Campilhas Reservoir, Campilhas Stream (Sado Basin)
Reference: Oliveira 1984a (as *Diatoma vulgare*)
- Subregion: Alto Alentejo
- Municipality: Avis (District: Portalegre)
Site: Maranhão Reservoir, Raia Stream (Tagus Basin)
Reference: Oliveira 1984c (as *Diatoma vulgare*)
- Municipality: Gavião (District: Portalegre)
Site: Belver Reservoir, Tagus River (Tagus Basin)
References: INIP 1977 (as *Diatoma vulgare* Bory); Fernandes et al. 1987 (as *Diatoma vulgare*)
- Municipality: Marvão (District: Portalegre)
Site: Sever River (Tagus Basin)
Reference: Oliveira 1975 (as *Diatoma vulgare*)
- Municipality: Nisa (District: Portalegre)
Site: Barca da Amieira, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Diatoma vulgare*)
- Site: Fratel Reservoir, Tagus River (Tagus Basin)
References: INIP 1977 (as *Diatoma vulgare* Bory); Fernandes et al. 1987 (as *Diatoma vulgare*)
- Subregion: Baixo Alentejo
- Municipality: Almodôvar (District: Beja)
Site: Monte da Vinha, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Diatoma vulgare*)
- Municipality: Ferreira do Alentejo (District: Beja)
Site: Odivelas Reservoir, Odivelas Stream (Sado Basin)
Reference: Oliveira 1984a (as *Diatoma vulgare*)
- Subregion: Lezíria do Tejo
- Municipality: Cartaxo (District: Santarém)
Site: Valada, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Diatoma vulgare*); Oliveira et al. 1989 (as *Diatoma vulgare*)
- Municipality: Chamusca (District: Santarém)
Site: Chamusca, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Diatoma vulgare*)
- Municipality: Rio Maior (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Diatoma vulgare* Bory, fossil)
- Municipality: Santarém (District: Santarém)
Site: Ómnias, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Diatoma vulgare*); Brito & Andrade 1992 (as *Diatoma vulgare*)
- Subregion: Not specified
- Municipality: Not specified
Site: Rocha da Galé, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Diatoma vulgare*)

REGION: ALGARVE

Subregion: Algarve

Municipality: Lagos (District: Faro)

Site: Bravura Reservoir, Odiáxere Stream (Ribeiras do Algarve Basin)

Reference: Oliveira 1984a (as *Diatoma vulgare*)

Municipality: Silves (District: Faro)

Site: Arade Reservoir, Arade River (Ribeiras do Algarve Basin)

Reference: Oliveira 1984a (as *Diatoma vulgare*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa das Sete Cidades

Reference: Oliveira 1989 (as *Diatoma vulgare*)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Diatoma vulgare* Agh.)

Municipality: Praia da Vitória (Terceira Island)

Site: Lagoa do Boi

Reference: Gonçalves 1996 (as *Diatoma vulgaris* Bory)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Diatoma vulgaris* Bory)

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Diatoma vulgaris* Bory)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Diatoma vulgaris* Bory)

Site: Not specified

Reference: Gonçalves 2008 (as *Diatoma vulgaris* Bory)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Ribeira de João Gomes

Reference: Schodduyn 1927 (as *Diatoma vulgare* Bory)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Reservoirs in the North and Centre of Portugal

Reference: Cabecinha et al. 2009 (as *Diatoma vulgare*)

Site: Not specified

Reference: INAG 2008 (as *Diatoma vulgaris* Bory 1824)

***Diatoma vulgaris* var. *producta* Grunow 1862**, p. 49 (363) [CAS ref. 000428]

Distribution (Fig. 302):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Torres Novas (District: Santarém)

Site: Renova, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Diatoma vulgare* var. *producta* Grunow)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Diatoma vulgare* var. *producta* Grunow);

Bourrelly & Manguin 1946a (as *Diatoma vulgare* var. *producta* Grunow)

Municipality: Povoação (São Miguel Island)

Site: Pico Verde

References: Manguin 1942 (as *Diatoma vulgare* var. *producta* Grunow);

Bourrelly & Manguin 1946a (as *Diatoma vulgare* var. *producta* Grunow)

Municipality: Not specified

Site: Lagoa de Cazador (São Miguel Island)

References: Manguin 1942 (as *Diatoma vulgare* var. *producta* Grunow);

Bourrelly & Manguin 1946a (as *Diatoma vulgare* var. *producta* Grunow)

***Diatoma* sp.**

Distribution (Fig. 303):

REGION: NORTE

Subregion: Ave

Municipality: Fafe (District: Braga)

Site: Travassós, Vizela River (Ave Basin)

Reference: Fidalgo 1990 (as *Diatoma* sp.)

Subregion: Douro

Municipality: Armamar (District: Viseu)

Site: Queimadela, Vizela River (Ave Basin)

Reference: Fidalgo 1990 (as *Diatoma* sp.)

Subregion: Not specified

Municipality: Not specified

Site: Ave Reservoirs, Ave River (Ave Basin)

References: Branco et al. 1991a (as *Diatoma* sp.); Branco et al. 1991b (as *Diatoma* sp.)

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Diatoma* sp.)

Subregion: Oeste

Municipality: Alenquer (District: Lisboa)

Site: Alenquer, Alenquer Reservoir

Reference: Frade 1941b (as *Diatoma* sp.)

Site: Alenquer, Alenquer River (Tagus Basin)

Reference: Frade 1941a (as *Diatoma* sp.)

***Diatomella* Greville 1855, p. 259**

[CAS ref. 001238]

***Diatomella balfouriana* Greville 1855, p. 259; pl. 9, fig. 10-13 [CAS ref. 001238]**

Distribution (Fig. 304):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Pico da Vara

Reference: Mölder 1947 (as *Diatomella balfouriana* Grev.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Diatomella balfouriana* Greville)

***Didymosphenia* M. Schmidt in Schmidt et al. 1899,
pl. 214, fig. 1-12 [CAS ref. 012479]**

***Didymosphenia geminata* (Lyngbye) M. Schmidt in Schmidt et al. 1899, pl. 214, fig. 7-9 [CAS ref. 012479]**

Nomenclatural synonym: *Gomphonema geminatum* (Lyngbye) C. Agardh 1824 [CAS ref. 000102]

Distribution (Fig. 305):

REGION: NORTE

Subregion: Ave

Municipality: Vila Nova de Famalicão (District: Braga)

Site: Ave River (Ave Basin)

Reference: Zimmermann 1909b (as *Gomphonema geminatum* (Lyngb.) Ag.)

***Diploneis* (Ehrenberg) Cleve 1894a**, p. 76
[CAS ref. 000232]

***Diploneis apis* (Ehrenberg) Ehrenberg 1845c**, p. 305 [CAS ref. 010842]

Basionym: *Pinnularia apis* Ehrenberg 1843 [CAS ref. 000294]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Tagus riverbanks (Tagus Basin)

Reference: Ehrenberg 1845 (as *Diploneis apis*)

***Diploneis didyma* (A.W.F. Schmidt in Schmidt et al. 1881) Mills 1934**, p. 613 [CAS ref. 006287]

Basionym: *Navicula didyma* A.W.F. Schmidt in Schmidt et al. 1881 [CAS ref. 012454]

Distribution (Fig. 306):

REGION: CENTRO

Subregion: Oeste

Municipality: Óbidos (District: Leiria)

Site: Not specified

Reference: Silva 1946b (as *Diploneis didyma* (Ehr.) Cleve, fossil)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Tagus riverbanks (Tagus Basin)

Reference: Ehrenberg 1845 (as *Diploneis didyma*)

***Diploneis elliptica* (Kützing) Cleve 1894a**, p. 92 [CAS ref. 000232]

Basionym: *Navicula elliptica* Kützing 1844 [CAS ref. 000595]

Distribution (Fig. 307):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Mira (District: Coimbra)

Site: Lagoa de Mira

Reference: Oliveira 1971a (as *Diploneis elliptica*)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis elliptica* Kützing)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Diploneis elliptica* Kützing)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis elliptica* Kützing)

Municipality: Mealhada (District: Aveiro)

Site: Pampilhosa, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diploneis elliptica*)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Perrães, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diploneis elliptica*)

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Alfarazes

Reference: Carvalho 1913 (as *Navicula elliptica* Kuetz.)

Site: Diz River

Reference: Carvalho 1913 (as *Navicula elliptica* Kuetz.)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis elliptica* Kützing)

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Diploneis elliptica*)

Site: Forno Novo, Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Diploneis elliptica*)

Site: Tramagal, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Navicula elliptica*)

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Cabeçadas et al. 1980 (as *Diploneis elliptica*)

Municipality: Torres Novas (District: Santarém)

Site: Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1970 (as *Diploneis elliptica* (Kütz.) Cleve)

Site: Casal da Pinheira, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Navicula elliptica* Kütz.)

Site: Ribeira Branca, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Navicula elliptica* Kütz.)

Subregion: Oeste

Municipality: Torres Vedras (District: Lisboa)

Site: Barro

Reference: Zimmermann 1910 (as *Navicula elliptica* Kuetz.)

Subregion: Pinhal Interior Norte

Municipality: Pedrógão Grande (District: Leiria)

Site: Cabil Reservoir, Zêzere River (Tagus Basin)

Reference: Oliveira 1982b (as *Diploneis elliptica*)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

References: Calado 1990 (as *Diploneis elliptica* Kützing); Gil et al. 1991 (as *Diploneis elliptica*); Almeida 1998 (as *Diploneis elliptica* (Kützing) Cleve)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Mafra (District: Lisboa)

Site: Tapada de Mafra, Sobral da Abelheira

Reference: Oliveira 1971b (as *Navicula elliptica*)

REGION: ALENTEJO

Subregion: Alentejo Central

Municipality: Arraiolos (District: Évora)

Site: Divor Reservoir, Divor Stream (Tagus Basin)

References: Oliveira 1984a (as *Navicula elliptica*); Oliveira 1984b (as *Navicula elliptica*); Oliveira 1987 (as *Navicula elliptica* Kz.)

Subregion: Alto Alentejo

Municipality: Avis (District: Portalegre)

Site: Maranhão Reservoir, Raia Stream (Tagus Basin)

Reference: Oliveira 1984c (as *Navicula elliptica*)

Municipality: Gavião (District: Portalegre)

Site: Belver Reservoir, Tagus River (Tagus Basin)

Reference: INIP 1977 (as *Diploneis elliptica* (Kz.) Cl.)

Municipality: Nisa (District: Portalegre)

Site: Fratel Reservoir, Tagus River (Tagus Basin)

Reference: INIP 1977 (as *Diploneis elliptica* (Kz.) Cl.)
Municipality: Ponte de Sôr (District: Portalegre)
Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
Reference: Coutinho 1990a (as *Diploneis elliptica*)
Subregion: Baixo Alentejo
Municipality: Aljustrel (District: Beja)
Site: Roxo Reservoir, Roxo Stream (Sado Basin)
References: Oliveira 1976 (as *Navicula elliptica* Kütz.); Oliveira 1984a
(as *Navicula elliptica*)
Municipality: Ourique (District: Beja)
Site: Monte da Rocha Reservoir, Sado River (Sado Basin)
Reference: Oliveira 1984a (as *Navicula elliptica*)
Subregion: Lezíria do Tejo
Municipality: Salvaterra de Magos (District: Santarém)
Site: Magos Reservoir, Magos Stream (Tagus Basin)
Reference: Oliveira 1984a (as *Navicula elliptica*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
Reference: Chaves 1908 (as *Navicula elliptica* Ktz.)
Site: Salto do Bargado, Furnas
Reference: Chaves 1908 (as *Navicula elliptica* Ktz., fossil)
Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Diploneis elliptica* (Kützing) Cleve)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)
Site: Curral dos Romeiros, João Gomes Stream
Reference: Zimmermann 1909a (as *Navicula elliptica* Kuetz.)
Site: Sítio da Pena, São João Stream
Reference: Zimmermann 1909a (as *Navicula elliptica* Kuetz.)
Municipality: Ponta do Sol (Madeira Island)
Site: Rabaçal (Madeira Island)
Reference: Mölder 1947 (as *Diploneis elliptica* (Kütz.) Cleve)
Municipality: Ribeira Brava (Madeira Island)
Site: Pomar de Ambrosio, Campanário
Reference: Zimmermann 1909a (as *Navicula elliptica* Kuetz.)
Municipality: Santa Cruz (Madeira Island)
Site: Fonte do Mestre Henrique, Caniço
Reference: Zimmermann 1909a (as *Navicula elliptica* Kuetz.)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Diploneis elliptica* (Kützing) Cleve)

***Diploneis entomon* (Ehrenberg) Ehrenberg 1845d**, p. 56 [CAS ref. 000955]

Basionym: *Navicula entomon* Ehrenberg 1840b [CAS ref. 000290]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Tagus riverbanks (Tagus Basin)

Reference: Ehrenberg 1845 (as *Diploneis entomon*)

***Diploneis faba* Ehrenberg 1845a**, p. 362 [CAS ref. 000957]

Nomenclatural synonym: *Navicula faba* (Ehrenberg) Kützing 1849 [CAS ref. 000596]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Tagus River (Tagus Basin)

References: Colmeiro 1867 (as *Navicula faba* Kg.); Del-Amo y Mora

1870 (as *Navicula faba* Kütz.); Colmeiro 1889 (as *Navicula faba* Kg.);

Zimmermann 1906 (as *Navicula faba* Ehr.)

Site: Tagus riverbanks (Tagus Basin)

Reference: Ehrenberg 1845 (as *Diploneis faba*)

***Diploneis finnica* (Ehrenberg) Cleve 1891**, p. 43; pl. 2, fig. 11 [CAS ref. 000229]

Basionym: *Cocconeis finnica* Ehrenberg 1838 [CAS ref. 000288]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified
Site: Tagus riverbanks (Tagus Basin)
Reference: Ehrenberg 1845 (as *Cocconeis finnica*)

***Diploneis interrupta* (Kützing) Cleve 1894a**, p. 84 [CAS ref. 000232]

Basionym: *Navicula interrupta* Kützing 1844 [CAS ref. 000595]

Distribution (Fig. 308):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Diploneis interrupta* (Kützing) Cleve)

Subregion: Baixo Vouga

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Frossos, Carreira Creek (Mondego Basin)

Reference: Almeida 1998 (as *Diploneis interrupta* (Kützing) Cleve)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Navicula interrupta* Ktz.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Diploneis interrupta* (Kützing) Cleve)

***Diploneis marginestriata* Hustedt 1922**, p. 236; pl. 3, fig. 5 [CAS ref. 000494]

Distribution (Fig. 309):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis marginestriata* Hustedt)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Diploneis marginestriata* Hustedt)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis marginestriata* Hustedt)

Municipality: Aveiro (District: Aveiro)
Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Diploneis marginestriata* Hustedt)

***Diploneis minuta* J.B. Petersen 1928a**, p. 381; fig. 6 [CAS ref. 000742]

Distribution:

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Almeida 1998 (as *Diploneis minuta* Petersen)

***Diploneis nitescens* (W. Gregory) Cleve 1894a**, p. 97 [CAS ref. 000232]

Basionym: *Navicula smithii* var. *nitescens* W. Gregory 1857 [CAS ref. 000399]

Nomenclatural synonym: *Navicula nitescens* (W. Gregory) Ralfs in Pritchard 1861 [CAS ref. 001063]

Distribution (Fig. 310):

REGION: CENTRO
Subregion: Beira Interior Sul
Municipality: Castelo Branco (District: Castelo Branco)
Site: Torre, Ocreza River (Tagus Basin)
Reference: Zimmermann 1910 (as *Navicula nitescens* Ralfs)

***Diploneis oblongella* (Nägeli in Kützing) R. Ross 1947**, p. 212 [CAS ref. 000796]

Basionym: *Navicula oblongella* Nägeli in Kützing 1849 [CAS ref. 000596]

Nomenclatural synonyms: *Navicula elliptica* var. *oblongella* (Nägeli in Kützing) Grunow in Cleve & Möller 1878 [CAS ref. 001976]
Diploneis ovalis var. *oblongella* (Nägeli in Kützing) Cleve 1894a [CAS ref. 000232]

Distribution (Fig. 311):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: São Pedro de Castelões, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Diploneis oblongella* (Naegeli) Cleve-Euler)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis ovalis* (Hilse) Cleve v. *oblongella* (Naeg.) Cleve)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Diploneis ovalis* (Hilse) Cleve v. *oblongella* (Naeg.) Cleve)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis ovalis* (Hilse) Cleve v. *oblongella* (Naeg.) Cleve)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis ovalis* (Hilse) Cleve v. *oblongella* (Naeg.) Cleve)

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Diploneis oblongella* (Naegeli) Cleve-Euler)

Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Diploneis oblongella* (Naegeli) Cleve-Euler)

Municipality: Anadia (District: Aveiro)

Site: Tamengos, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diploneis ovalis* v. *oblongella*)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis ovalis* (Hilse) Cleve v. *oblongella* (Naeg.) Cleve)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis ovalis* (Hilse) Cleve v. *oblongella* (Naeg.) Cleve)

Municipality: Sever do Vouga (District: Aveiro)

Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)

Reference: Nunes 2007 (as *Diploneis oblongella* (Naegeli) Cleve-Euler)

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Alfarazes

Reference: Carvalho 1913 (as *Navicula elliptica* Kuetz. var. *oblongella* Naeg.)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis ovalis* (Hilse) Cleve v. *oblongella* (Naeg.) Cleve)

Municipality: Tondela (District: Viseu)

Site: Boi, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis ovalis* (Hilse) Cleve v. *oblongella* (Naeg.) Cleve)

Subregion: Médio Tejo

Municipality: Torres Novas (District: Santarém)

Site: Casal da Pinheira, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Navicula elliptica* Kütz. var. *oblongella* Naeg.)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Almeida 1998 (as *Diploneis oblongella* (Naegeli) Cleve-Euler)

REGION: ALENTEJO

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Ponte do Curval, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Diploneis oblongella* (Naegeli) Cleve-Euler)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Mafra (District: Lisboa)

Site: Tapada de Mafra, Sobral da Abelheira

Reference: Oliveira 1971b (as *Navicula elliptica* var. *oblongella*)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Diploneis oblongella* (Naegeli) Cleve-Euler)

***Diploneis oculata* (Brébisson in Desmazières) Cleve 1894a**, p. 92
[CAS ref. 000232]

Basionym: *Navicula oculata* Brébisson in Desmazières 1854 [CAS ref. 001047]

Distribution (Fig. 312):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Tramagal, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Navicula oculata*)

Municipality: Vila Nova da Barquinha (District: Santarém)

Site: Almourol, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Navicula oculata*)

REGION: ALENTEJO

Subregion: Not specified

Municipality: Not specified

Site: Rocha da Galé, Guadiana River (Guadiana Basin)

Reference: Andrade & Brito 1991 (as *Navicula oculata*)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Ponta do Sol (Madeira Island)

Site: Rabaçal (Madeira Island)

Reference: Mölder 1947 (as *Diploneis oculata* (Bréb.) Cleve)

***Diploneis ovalis* (Hilse) Cleve 1891** [CAS ref. 000229]

Basionym: *Pinnularia ovalis* Hilse 1860 [CAS ref. 002263]

Nomenclatural synonym: *Navicula elliptica* var. *ovalis* (Hilse) Cleve & Möller 1878 [CAS ref. 001976]

Distribution (Fig. 313):

REGION: NORTE

Subregion: Ave

Municipality: Vila Nova de Famalicão (District: Braga)

Site: Ribeirão de Famalicão

Reference: Zimmermann 1914 (as *Navicula elliptica* Kuetz. var. *ovalis* Hilse)

Subregion: Minho-Lima

Municipality: Paredes de Coura (District: Viana do Castelo)

Site: Insalde

Reference: Zimmermann 1914 (as *Navicula elliptica* Kuetz. var. *ovalis* Hilse)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Figueira da Foz (District: Coimbra)

Site: Lagoa da Vela, Quiaios

References: Abrantes et al. 2006 (as *Diploneis ovalis*); de Figueiredo et al. 2006 (as *Diploneis ovalis* (Hilse) Cleve)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis ovalis* (Hilse) Cleve)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Diploneis ovalis* (Hilse) Cleve)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diploneis ovalis*)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis ovalis* (Hilse) Cleve)

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diploneis ovalis*)

Site: Tamengos, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diploneis ovalis*)

Municipality: Aveiro (District: Aveiro)

Site: Pano, Largo River (Vouga Basin)

Reference: Almeida 1998 (as *Diploneis ovalis* (Hilse) Cleve)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis ovalis* (Hilse) Cleve)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis ovalis* (Hilse) Cleve)

Site: Vessada, Fontão Creek (Vouga Basin)

Reference: Almeida 1998 (as *Diploneis ovalis* (Hilse) Cleve)

Municipality: Mealhada (District: Aveiro)

Site: Pampilhosa, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diploneis ovalis*)

Site: Viadouros, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diploneis ovalis*)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Perrães, Levira River (Vouga Basin)

Reference: Almeida 1998 (as *Diploneis ovalis* (Hilse) Cleve)

Site: Perrães, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Diploneis ovalis* (Hilse) Cleve)

- Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Diploneis ovalis*)
- Site: Vila Verde, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Diploneis ovalis* (Hilse) Cleve)
- Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Diploneis ovalis* (Hilse) Cleve)
- Subregion: Beira Interior Norte
Municipality: Guarda (District: Guarda)
Site: Alfarazes
Reference: Carvalho 1913 (as *Navicula elliptica* Kuetz. var. *ovalis* Hilse)
- Site: Diz River
Reference: Carvalho 1913 (as *Navicula elliptica* Kuetz. var. *ovalis* Hilse)
- Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Diploneis ovalis* (Hilse) Cleve)
- Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Diploneis ovalis* (Hilse) Cleve)
- Subregion: Médio Tejo
Municipality: Abrantes (District: Santarém)
Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Diploneis ovalis*)
- Municipality: Torres Novas (District: Santarém)
Site: Almonda River (Tagus Basin)
Reference: Zimmermann 1906 (as *Navicula elliptica* Kütz. var. *ovalis* Hilse)
- Subregion: Oeste
Municipality: Óbidos (District: Leiria)
Site: Not specified
Reference: Silva 1946b (as *Diploneis ovalis* (Hilse) Cleve, fossil)
- REGION: LISBOA
Subregion: Grande Lisboa
Municipality: Mafra (District: Lisboa)
Site: Tapada de Mafra, Sobral da Abelheira
Reference: Oliveira 1971b (as *Navicula elliptica* var. *ovalis*)
- Subregion: Península de Setúbal
Municipality: Setúbal (District: Setúbal)
Site: Sado River (Sado Basin)
Reference: Zimmermann 1906 (as *Navicula elliptica* Kütz. var. *ovalis* Hilse)
- REGION: AUTONOMOUS REGION OF AZORES
Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Diploneis ovalis* (Hilse) Cleve); Bourrelly & Manguin 1946a (as *Diploneis ovalis* (Hilse) Cleve)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Diploneis ovalis* (Hilse) Cleve)

Site: São Jorge Island

References: Johansson 1977 (as *Diploneis ovalis* (Hilse) Cleve); Gonçalves et al. 2010 (as *Diploneis ovalis* (Hilse) Cleve)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Diploneis ovalis* (Hilse) Cleve)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Levada do Bom Sucesso

Reference: Zimmermann 1910-1911 (as *Navicula elliptica* Kuetz. var. *ovalis*)

Municipality: Porto Santo (Porto Santo Island)

Site: Faial Stream

Reference: Zimmermann 1910-1911 (as *Navicula elliptica* Kuetz. var. *ovalis*)

Site: Serra de Dentro Stream

Reference: Zimmermann 1910-1911 (as *Navicula elliptica* Kuetz. var. *ovalis*)

Municipality: Santana (Madeira Island)

Site: Ribeiro Frio

Reference: Mölder 1947 *Diploneis ovalis* (Hilse) Cleve

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Diploneis ovalis* (Hilse) Cleve)

***Diploneis pseudovalis* Hustedt 1930**, p. 253; fig. 403 [CAS ref. 000502]

Distribution (Fig. 314):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Diploneis pseudovalis* Hustedt)

Site: Not specified

Reference: Gonçalves 2008 (as *Diploneis pseudovalis* Hustedt)

***Diploneis puella* (Schumann) Cleve 1894a**, p. 92 [CAS ref. 000232]

Basionym: *Navicula puella* Schumann 1867 [CAS ref. 001004]

Distribution (Fig. 315):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Soure (District: Coimbra)

Site: Irrigation channel near Soure

Reference: Santos et al. 2002 (as *Diploneis puella* (Schumann) Cleve)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis puella* Schumann)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diploneis puella*)

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diploneis puella*)

Site: Espairo, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diploneis puella*)

Site: Mogofóres, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diploneis puella*)

Site: São João da Azenha, Cértima River (Vouga Basin)

References: Rino & Gil 1989 (as *Diploneis puella*); Almeida 1998 (as *Diploneis puella* (Schumann) Cleve)

Site: Tamengos, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diploneis puella*)

Municipality: Aveiro (District: Aveiro)

Site: Pano, Largo River (Vouga Basin)

Reference: Almeida 1998 (as *Diploneis puella* (Schumann) Cleve)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis puella* Schumann)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Diploneis puella* Schumann)

Site: Vessada, Fontão Creek (Vouga Basin)

Reference: Almeida 1998 (as *Diploneis puella* (Schumann) Cleve)

Municipality: Mealhada (District: Aveiro)

Site: Pampilhosa, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diploneis puella*)

Municipality: Mealhada (District: Aveiro)

Site: Viadouros, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Diploneis puella*)

Municipality: Oliveira do Bairro (District: Aveiro)
Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Diploneis puella*)
Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Diploneis puella* (Schumann) Cleve)
Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Diploneis puella* (Schumann) Cleve)
Site: Perrães, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Diploneis puella*)
Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Diploneis puella*)
Site: Vila Verde, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Diploneis puella* (Schumann) Cleve)

Municipality: Not specified

Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Diploneis puella* (Schumann) Cleve)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)
Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Diploneis puella* Schumann)

Subregion: Not specified

Municipality: Not specified
Site: Not specified
Reference: Calado 1990 (as *Diploneis puella* Schumann)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)
Site: Furnas
Reference: Mölder 1947 (as *Diploneis puella* (Schumann) Cleve)
Site: Ribeira Quente
Reference: Mölder 1947 (as *Diploneis puella* (Schumann) Cleve)
Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Diploneis puella* (Schumann) Cleve)

***Diploneis smithii* (Brébisson in W. Smith) Cleve 1894a**, p. 96 [CAS ref. 000232]

Basionym: *Navicula smithii* Brébisson in W. Smith 1856 [CAS ref. 001007]

Distribution (Fig. 316):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified
Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Diploneis smithii* (Brébisson) Cleve)

***Diploneis* sp.**

Distribution (Fig. 317):

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Vila Franca de Xira (District: Lisboa)

Site: Vila Franca de Xira, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Diploneis* sp.)

REGION: ALENTEJO

Subregion: Alto Alentejo

Municipality: Nisa (District: Portalegre)

Site: Fratel Reservoir, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Diploneis* sp.)

***Discostella* Houk & Klee 2004, p. 204-205
[CAS ref. 012607]**

***Discostella glomerata* (H. Bachmann) Houk & Klee 2004, p. 220
[CAS ref. 012607]**

Basionym: *Cyclotella glomerata* H. Bachmann 1911 [CAS ref. 001590]

Distribution (Fig. 318):

REGION: NORTE

Subregion: Minho-Lima

Municipality: Not specified

Site: Ínsua do Ranhão, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Cyclotella glomerata*)

Site: Minho River (Minho Basin)

Reference: Cerqueira da Silva & Cunha 1992 (as *Cyclotella glomerata*)

Site: Minho River, international section (Minho Basin)

Reference: Vasconcelos & Cerqueira 2001 (as *Cyclotella glomerata*)

Municipality: Melgaço (District: Viana do Castelo)

Site: Melgaço, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Cyclotella glomerata*)

Municipality: Monção (District: Viana do Castelo)

Site: Monção, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Cyclotella glomerata*)
Municipality: Valença (District: Viana do Castelo)
Site: Valença, Minho River (Minho Basin)
Reference: Vasconcelos et al. 2000 (as *Cyclotella glomerata*)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Mira (District: Coimbra)

Site: Lagoa de Mira

Reference: Oliveira 1971a (as *Cyclotella glomerata*)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella glomerata* Bachmann); Gil et al. 1989-1990 (as *Cyclotella glomerata*)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella glomerata* Bachmann); Gil et al. 1989-1990 (as *Cyclotella glomerata*)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella glomerata* Bachmann)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella glomerata* Bachmann)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella glomerata* Bachmann); Gil et al. 1989-1990 (as *Cyclotella glomerata*)

Site: São João do Monte, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella glomerata* Bachmann)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella glomerata* Bachmann)

Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil et al. 1989-1990 (as *Cyclotella glomerata*)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella glomerata* Bachmann)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella glomerata* Bachmann); Gil et al. 1989-1990 (as *Cyclotella glomerata*)

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Cyclotella glomerata*)

Site: Forno Novo, Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Cyclotella glomerata*)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Gil et al. 1991 (as *Cyclotella glomerata*)

REGION: ALENTEJO

Subregion: Alentejo Litoral
Municipality: Odemira (District: Beja)
Site: Santa Clara Reservoir, Mira River (Mira Basin)
Reference: Oliveira 1992 (as *Cyclotella glomerata* Bachman)
Subregion: Not specified
Municipality: Not specified
Site: Rocha da Galé, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Cyclotella glomerata*)

***Discostella pseudostelligera* (Hustedt) Houk & Klee 2004**, p. 223
[CAS ref. 012607]

Basionym: *Cyclotella pseudostelligera* Hustedt 1939 [CAS ref. 000514]

Distribution (Fig. 319):

REGION: NORTE

Subregion: Entre Douro e Vouga
Municipality: Vale de Cambra (District: Aveiro)
Site: Vale de Cambra, Caima River (Vouga Basin)
Reference: Almeida 1998 (as *Cyclotella pseudostelligera* Hustedt)

REGION: CENTRO

Subregion: Baixo Vouga
Municipality: Águeda (District: Aveiro)
Site: Águeda, Águeda River (Vouga Basin)
Reference: Almeida 1998 (as *Cyclotella pseudostelligera* Hustedt)
Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)
Reference: Almeida 1998 (as *Cyclotella pseudostelligera* Hustedt)
Site: Aldeia, Segadães, Vouga River (Vouga Basin)
Reference: Almeida 1998 (as *Cyclotella pseudostelligera* Hustedt)
Site: Óis da Ribeira, Águeda River (Vouga Basin)
Reference: Almeida 1998 (as *Cyclotella pseudostelligera* Hustedt)
Municipality: Albergaria-a-Velha (District: Aveiro)
Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Cyclotella pseudostelligera* Hustedt)
Municipality: Arganil (District: Coimbra)

Site: Fronhas Reservoir, Alva River (Mondego Basin)
Reference: Santos et al. 2002 (as *Cyclotella pseudostelligera* Hustedt)
Municipality: Aveiro (District: Aveiro)
Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Cyclotella pseudostelligera* Hustedt)
Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Cyclotella pseudostelligera* Hustedt)
Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Cyclotella pseudostelligera* Hustedt)
Site: Vessada, Fontão Creek (Vouga Basin)
Reference: Almeida 1998 (as *Cyclotella pseudostelligera* Hustedt)
Municipality: Sever do Vouga (District: Aveiro)
Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Cyclotella pseudostelligera* Hustedt)
Subregion: Pinhal Interior Norte
Municipality: Pampilhosa da Serra (District: Coimbra)
Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)
Reference: Santos et al. 2002 (as *Cyclotella pseudostelligera* Hustedt)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação
Site: Lagoa das Furnas
Reference: Gonçalves 1997 (as *Cyclotella pseudostelligera*)
Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Discostella pseudostelligera* (Hustedt) Houk & Klee)
Site: Not specified
Reference: Gonçalves 2008 (as *Discostella pseudostelligera* (Hustedt) Houk & Klee)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Cyclotella pseudostelligera* Hustedt)

***Discostella stelligera* (Cleve & Grunow) Houk & Klee 2004, p. 208**
[CAS ref. 012607]

Basionym: *Cyclotella meneghiniana* var. *stelligera* Cleve & Grunow in Cleve 1881
[CAS ref. 000222]

Nomenclatural synonym: *Cyclotella stelligera* Cleve & Grunow in Van Heurck 1882-1885 [CAS ref. 000896]

Distribution (Fig. 320):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Montalegre (District: Vila Real)

Site: Alto Rabagão Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1982a (as *Cyclotella stelligera*); Oliveira et al. 1985 (as *Cyclotella stelligera*)

Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1985 (as *Cyclotella stelligera*)

Subregion: Ave

Municipality: Vieira do Minho (District: Braga)

Site: Salamonde Reservoir, Cávado River (Cávado Basin)

Reference: Oliveira 1985 (as *Cyclotella stelligera*)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Figueira da Foz (District: Coimbra)

Site: Lagoa da Vela, Quiaios

Reference: de Figueiredo et al. 2006 (as *Cyclotella stelligera* Cleve & Grunow) Van Heurck)

Municipality: Penacova (District: Coimbra)

Site: Aguieira Reservoir, Mondego River (Mondego Basin)

Reference: Oliveira & Monteiro 1992 (as *Cyclotella stelligera*)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella stelligera* P. Cleve & Grunow)

Municipality: Arganil (District: Coimbra)

Site: Fronhas Reservoir, Alva River (Mondego Basin)

Reference: Santos et al. 2002 (as *Cyclotella stelligera* Cleve & Grunow)

Municipality: Aveiro (District: Aveiro)

Site: Aveiro, lake in the municipal park (artificial substrate)

Reference: Gil & Almeida 1993 (as *Cyclotella stelligera* Cleve & Grunow)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella stelligera* P. Cleve & Grunow)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Cyclotella stelligera* P. Cleve & Grunow)

Municipality: Not specified

Site: Not specified

- Reference: Almeida 1998 (as *Cyclotella stelligera* Cleve & Grunow)
- Subregion: Beira Interior Sul
- Municipality: Idanha-a-Nova (District: Castelo Branco)
- Site: Idanha Reservoir, Ponsul River (Tagus Basin)
- Reference: Oliveira 1982c (as *Cyclotella stelligera*)
- Municipality: Vila Velha de Ródão (District: Castelo Branco)
- Site: downstream of Cedilho Reservoir, Tagus River (Tagus Basin)
- Reference: Fernandes et al. 1987 (as *Cyclotella stelligera*)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: São João do Monte, Águeda River (Vouga Basin)
- References: Gil 1988 (as *Cyclotella stelligera* P. Cleve & Grunow); Gil et al. 1989-1990 (as *Cyclotella stelligera*)
- Municipality: Vouzela (District: Viseu)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Cyclotella stelligera* P. Cleve & Grunow); Gil et al. 1989-1990 (as *Cyclotella stelligera*)
- Subregion: Médio Tejo
- Municipality: Tomar (District: Santarém)
- Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
- References: Frade 1961 (as *Cyclotella stelligera* Cl. & Grun.); Cabeçadas et al. 1980 (as *Cyclotella stelligera*); Ferreira 1986 (as *Cyclotella stelligera*); Andrade et al. 1988 (as *Cyclotella stelligera*); Brito & Andrade 1991 (as *Cyclotella stelligera*); Brito & Andrade 1992 (as *Cyclotella stelligera*)
- Municipality: Vila Nova da Barquinha (District: Santarém)
- Site: Almourol, Tagus River (Tagus Basin)
- Reference: Fernandes et al. 1987 (as *Cyclotella stelligera*)
- Subregion: Pinhal Interior Norte
- Municipality: Pampilhosa da Serra (District: Coimbra)
- Site: Santa Luzia Reservoir, Unhais River (Tagus Basin)
- Reference: Oliveira 1982b (as *Cyclotella stelligera*)
- Municipality: Pedrógão Grande (District: Leiria)
- Site: Cabril Reservoir, Zêzere River (Tagus Basin)
- Reference: Oliveira 1982b (as *Cyclotella stelligera*)
- Subregion: Pinhal Interior Sul
- Municipality: Mação (District: Santarém)
- Site: Pracana Reservoir, Ocreza River (Tagus Basin)
- Reference: Oliveira 1982b (as *Cyclotella stelligera*)
- Subregion: Not specified
- Municipality: Not specified
- Site: Not specified
- Reference: Calado 1990 (as *Cyclotella stelligera* Cleve & Grunow)

REGION: ALENTEJO

Subregion: Alto Alentejo

- Municipality: Gavião (District: Portalegre)
 Site: Belver Reservoir, Tagus River (Tagus Basin)
 Reference: INIP 1977 (as *Cyclotella stelligera* Cl. et Grun.)
- Municipality: Nisa (District: Portalegre)
 Site: Barca da Amieira, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Cyclotella stelligera*)
 Site: Fratel Reservoir, Tagus River (Tagus Basin)
 Reference: INIP 1977 (as *Cyclotella stelligera* Cl. et Grun.)
- Subregion: Baixo Alentejo
 Municipality: Mértola (District: Beja)
 Site: Reservoir in the abandoned São Domingos mine
 Reference: Gerhardt et al. 2008 (as *Cyclotella stelligera* Cleve & Grunow)
- Subregion: Lezíria do Tejo
 Municipality: Cartaxo (District: Santarém)
 Site: Valada, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Cyclotella stelligera*)
- Municipality: Chamusca (District: Santarém)
 Site: Chamusca, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Cyclotella stelligera*)
- Municipality: Salvaterra de Magos (District: Santarém)
 Site: Magos Reservoir, Magos Stream (Tagus Basin)
 Reference: Oliveira 1984a (as *Cyclotella stelligera*)
- Municipality: Santarém (District: Santarém)
 Site: Ómnias, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Cyclotella stelligera*); Brito & Andrade 1992 (as *Cyclotella stelligera*)
- Subregion: Not specified
 Municipality: Not specified
 Site: Vascão River (in the edge of the Guadiana Nature Reserve), (Guadiana Basin)
 Reference: Gerhardt *et al.* 2008 (as *Cyclotella stelligera* Cleve & Grunow)
- REGION: Not specified
 Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: INAG 2008 (as *Cyclotella stelligera* Cleve et Grun. in Van Heurck)

***Discostella woltereckii* (Hustedt) Houk & Klee 2004**, p. 223 [CAS ref. 012607]

Basionym: *Cyclotella woltereckii* Hustedt 1942 [CAS ref. 000517]

Distribution:

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves et al. 2010 (as *Discostella woltereckii* (Hustedt)
Houk & Klee, fossil)

***Ellerbeckia* R.M. Crawford 1988**, pg. 421
[CAS ref. 003163]

***Ellerbeckia arenaria* (M.S. Moore ex Ralfs) R.M. Crawford 1988**,
p. 421 [CAS ref. 003163]

Basionym: *Melosira arenaria* (M.S. Moore) Ralfs 1843a [CAS ref. 002132]

Distribution (Fig. 321):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima
River (Vouga Basin)

Reference: Gil 1988 (as *Melosira arenaria* Moore)

Municipality: Not specified

Site: Pateira de Fermentelos (District: Aveiro)

Reference: Calado 1991 (as *Melosira arenaria* Moore)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Melosira arenaria* Moore)

***Ellerbeckia sol* (Ehrenberg) R.M. Crawford & P.A. Sims 2006**, p.
151 [CAS ref. 013434]

Basionym: *Gaillonella sol* Ehrenberg 1844b [CAS ref. 001184]

Nomenclatural synonym: *Melosira sol* (Ehrenberg) Kützing 1849 [CAS ref.
000596]

Distribution (Fig. 322):

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Melosira sol* (?))

***Encyonema Kützing 1833a*, p. 589
[CAS ref. 000594]**

***Encyonema alpinum* (Grunow) D.G. Mann in Round, Crawford & Mann 1990**, p. 666 [CAS ref. 003245]

Basionym: *Cymbella alpina* Grunow 1863 [CAS ref. 000429]

Distribution (Fig. 323):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Encyonema alpinum* (Grunow) D.G. Mann)

Site: Not specified

Reference: Gonçalves 2008 (as *Encyonema alpinum* (Grunow) D.G. Mann)

***Encyonema brehmii* (Hustedt) D.G. Mann in Round, Crawford & Mann 1990**, p. 666 [CAS ref. 003245]

Basionym: *Cymbella brehmii* Hustedt 1912 [CAS ref. 001706]

Distribution (Fig. 324):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella brehmii* Hustedt)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella brehmii* Hustedt)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella brehmii* Hustedt)

- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella brehmii* Hustedt)
- Site: Raivo, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella brehmii* Hustedt)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella brehmii* Hustedt)
- Municipality: Anadia (District: Aveiro)
 Site: Curia, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymbella brehmii*)
- Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella brehmii* Hustedt)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella brehmii* Hustedt)
- Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella brehmii* Hustedt)
- Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella brehmii* Hustedt)
- Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: Calado 1990 (as *Cymbella brehmii* Hustedt)

***Encyonema caespitosum* Kützing 1849**, p. 61 [CAS ref. 000596]

Nomenclatural synonym: *Cymbella caespitosa* (Kützing) Brun 1880 [CAS ref. 000174]

Distribution (Fig. 325):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Cymbella caespitosa* (Kützing) Brun)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Cymbella caespitosa* (Kütz.) Brun)

- Municipality: Anadia (District: Aveiro)
 Site: Mogofores, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymbella caespitosa*)
- Municipality: Aveiro (District: Aveiro)
 Site: Eixo, Horta Stream (Vouga Basin)
 Reference: Almeida 1998 (as *Cymbella caespitosa* (Kützing) Brun)
- Site: Requeixo, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Cymbella caespitosa* (Kützing) Brun)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella caespitosa* (Kütz.) Brun)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella caespitosa* (Kütz.) Brun)
- Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Perrães, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymbella caespitosa*)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
 Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella caespitosa* (Kütz.) Brun)
- Site: Varzielas, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella caespitosa* (Kütz.) Brun)
- Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella caespitosa* (Kütz.) Brun)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella caespitosa* (Kütz.) Brun)
- Subregion: Médio Tejo
- Municipality: Abrantes (District: Santarém)
 Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Cymbella caespitosa*)
- Site: Forno Novo, Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Cymbella caespitosa*)
- Subregion: Not specified
- Municipality: Not specified
 Site: Not specified
 Reference: Gil et al. 1991 (as *Cymbella caespitosa*)
- REGION: ALENTEJO
- Subregion: Alentejo Litoral
- Municipality: Alcácer do Sal (District: Setúbal)
 Site: São Romão, Sado River (Sado Basin)
 Reference: Coutinho 2003 (as *Cymbella caespitosa* (Kützing) Brun)
- Subregion: Alto Alentejo
- Municipality: Gavião (District: Portalegre)

Site: Belver Reservoir, Tagus River (Tagus Basin)
Reference: INIP 1977 (as *Cymbella caespitosa* (Kz.) Grun.)
Municipality: Marvão (District: Portalegre)
Site: Sever River (Tagus Basin)
Reference: Oliveira 1975 (as *Cymbella caespitosa*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
Reference: Chaves 1908 (as *Encyonema caespitosum* Ktz.)
Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Encyonema caespitosum* Kützing)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cymbella caespitosa* (Kützing) Brun (= *Encyonema*)

***Encyonema elginense* (Krammer) D.G. Mann in Round, Crawford & Mann 1990, p. 666 [CAS ref. 003245]**

Nomenclatural synonym: *Cymbella elginensis* Krammer 1980b [CAS ref. 006853]

Synonym: *Cymbella turgida* W. Gregory 1856 [CAS ref. 000397], according to Krammer 1997a, p. 111

Distribution (Fig. 326):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Soure (District: Coimbra)

Site: Irrigation channel near Soure

Reference: Santos et al. 2002 (as *Cymbella elginensis* Krammer)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Faial Island

Reference: Gonçalves et al. 2010 (as *Encyonema elginense* (Krammer) D.G. Mann)

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Encyonema elginense* (Krammer) D.G. Mann)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Encyonema elginense* (Krammer)
D.G. Mann)

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Encyonema elginense* (Krammer)
D.G. Mann)

***Encyonema gaeumannii* (F. Meister) Krammer 1997b**, v. 37: p. 78-79; pl. 141, fig. 1-22, pl. 142, fig. 22-23 [CAS ref. 008010]

Basionym: *Cymbella gaeumannii* F. Meister 1935 [CAS ref. 000645]

Distribution (Fig. 327):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)

Site: Lagoa da Falca (Terceira Island)

Reference: Gonçalves 1996 (as *Cymbella gaeumannii* Meister)

Site: Lagoa da Joaninha

Reference: Gonçalves 1996 (as *Cymbella gaeumannii* Meister)

Municipality: Praia da Vitória (Terceira Island)

Site: Lagoa do Boi

Reference: Gonçalves 1996 (as *Cymbella gaeumannii* Meister)

Site: Lagoa do Negro

Reference: Gonçalves 1996 (as *Cymbella gaeumannii* Meister)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Encyonema gaeumannii* (Meister)
D.G. Mann)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Encyonema gaeumannii* (Meister)
D.G. Mann)

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Encyonema gaeumannii* (Meister)
D.G. Mann)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Encyonema gaeumannii* (Meister)
D.G. Mann)

***Encyonema gracile* Rabenhorst 1853**, p. 25; pl. 10, Suppl. fig. 1 [CAS ref. 000772]

Nomenclatural synonym: *Cymbella gracilis* (Rabenhorst) Cleve 1894a [CAS ref. 000232]

Distribution (Fig. 328):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Encyonema gracile* Rabenhorst)

Site: São Pedro de Castelões, Caima River (Vouga Basin)

References: Nunes et al. 2003 (as *Encyonema gracile* Rabenhorst); Nunes 2007 (as *Encyonema gracile* Rabenhorst)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Fazenda

Reference: Bourrelly & Manguin 1946a (as *Cymbella gracilis* (Rabh.) Cleve)

Site: Lagoa Rasa

References: Manguin 1942 (as *Cymbella gracilis* (Rabh.) Cleve); Bourrelly & Manguin 1946a (as *Cymbella gracilis* (Rabh.) Cleve)

Site: Lagoinha, Fajãzinha

References: Manguin 1942 (as *Cymbella gracilis* (Rabh.) Cleve); Bourrelly & Manguin 1946a (as *Cymbella gracilis* (Rabh.) Cleve)

Municipality: Lajes do Pico (Pico Island)

Site: Lagoa do Caiado

Reference: Mölder 1947 (as *Cymbella gracilis* (Rabh.) Cleve)

Municipality: Nordeste (São Miguel Island)

Site: Serra Tronqueira

References: Manguin 1942 (as *Cymbella gracilis* (Rabh.) Cleve); Bourrelly & Manguin 1946a (as *Cymbella gracilis* (Rabh.) Cleve)

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa do Canário

Reference: Mölder 1947 (as *Cymbella gracilis* (Rabh.) Cleve)

Site: Lagoa Grande

Reference: Mölder 1947 (as *Cymbella gracilis* (Rabh.) Cleve)

Site: Lagoa das Sete Cidades

Reference: Mölder 1947 (as *Cymbella gracilis* (Rabh.) Cleve)

Municipality: Povoação (São Miguel Island)

Site: Jose de Canto park, near Furnas

Reference: Bourrelly & Manguin 1946a (as *Cymbella gracilis* (Rabh.) Cleve)

Site: Lagoa das Furnas

References: Manguin 1942 (as *Cymbella gracilis* (Rabh.) Cleve); Bourrelly & Manguin 1946a (as *Cymbella gracilis* (Rabh.) Cleve); Mölder 1947 (as *Cymbella gracilis* (Rabh.) Cleve)

Site: Pico da Vara

- References: Manguin 1942 (as *Cymbella gracilis* (Rabh.) Cleve);
 Bourrelly & Manguin 1946a (as *Cymbella gracilis* (Rabh.) Cleve);
 Mölder 1947 (as *Cymbella gracilis* (Rabenh.) Cleve)
- Site: Pico Verde
 References: Manguin 1942 (as *Cymbella gracilis* (Rabh.) Cleve);
 Bourrelly & Manguin 1946a (as *Cymbella gracilis* (Rabh.) Cleve)
- Site: Ribeira Quente
 References: Manguin 1942 (as *Cymbella gracilis* (Rabh.) Cleve);
 Bourrelly & Manguin 1946a (as *Cymbella gracilis* (Rabh.) Cleve)
- Municipality: Santa Cruz das Flores (Flores Island)
 Site: Lagoa Branca
 References: Manguin 1942 (as *Cymbella gracilis* (Rabh.) Cleve);
 Bourrelly & Manguin 1946a (as *Cymbella gracilis* (Rabh.) Cleve);
 Mölder 1947 (as *Cymbella gracilis* (Rabenh.) Cleve)
- Site: Lagoa Comprida
 References: Manguin 1942 (as *Cymbella gracilis* (Rabh.) Cleve);
 Bourrelly & Manguin 1946a (as *Cymbella gracilis* (Rabh.) Cleve)
- Site: Ribeira Grande
 References: Manguin 1942 (as *Cymbella gracilis* (Rabh.) Cleve);
 Bourrelly & Manguin 1946a (as *Cymbella gracilis* (Rabh.) Cleve)
- Site: Not specified
 Reference: Bourrelly & Manguin 1946a (as *Cymbella gracilis* (Rabh.)
 Cleve)
- Municipality: Vila Franca do Campo (São Miguel Island)
 Site: Lagoa do Congro
 References: Manguin 1942 (as *Cymbella gracilis* (Rabh.) Cleve);
 Bourrelly & Manguin 1946a (as *Cymbella gracilis* (Rabh.) Cleve)
- Municipality: Not specified
 Site: Lagoa de Cazador (São Miguel Island)
 References: Manguin 1942 (as *Cymbella gracilis* (Rabh.) Cleve);
 Bourrelly & Manguin 1946a (as *Cymbella gracilis* (Rabh.) Cleve)
- Site: Rochão (Flores Island)
 Reference: Bourrelly & Manguin 1946a (as *Cymbella gracilis* (Rabh.)
 Cleve)
- Site: Terceira Island
 Reference: Johansson 1977 (as *Cymbella gracilis* (Rab.) Cleve)

***Encyonema hebridicum* (W. Gregory) Grunow in Cleve & Möller
1877, No. 37 [CAS ref. 000242]**

Distribution (Fig. 329):

REGION: LISBOA

Subregion: Península de Setúbal

Municipality: Sesimbra (District: Setúbal)

Site: Alfarim diatomite

Reference: Ferreira & Castelo 1957 (as *Cymbella hebridica* (Greg.)
Grun., fossil)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Alpiarça (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Cymbella hebridica* (Greg.) Grun., fossil)

***Encyonema minutum* (Hilse in Rabenhorst) D.G. Mann in Round,
Crawford & Mann 1990, p. 667 [CAS ref. 003245]**

Basionym: *Cymbella minuta* Hilse in Rabenhorst 1862 [CAS ref. 011630]

Distribution (Fig. 330):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Oliveira de Azeméis (District: Aveiro)

Site: Bustelo do Caima, Ossela, Caima River (Vouga Basin)

References: Nunes et al. 2003 (as *Encyonema minutum* (Hilse in Rabh.)
D.G. Mann); Nunes 2007 (as *Encyonema minutum* (Hilse in Rabh.) D.G.
Mann)

Municipality: São João da Madeira (District: Aveiro)

Site: Ui River (Vouga Basin)

Reference: Resende et al. 2010 (as *Encyonema minutum* Grunow)

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

References: Almeida 1998 (as *Cymbella minuta* Hilse ex Rabenhorst);
Nunes 2007 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann)

Site: São Pedro de Castelões, Caima River (Vouga Basin)

References: Nunes et al. 2003 (as *Encyonema minutum* (Hilse in Rabh.)
D.G. Mann); Nunes 2007 (as *Encyonema minutum* (Hilse in Rabh.) D.G.
Mann)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella minuta* Hilse ex Rabenhorst)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Arganil (District: Coimbra)

Site: Fronhas Reservoir, Alva River (Mondego Basin)

Reference: Santos et al. 2002 (as *Cymbella minuta* Hilse ex Rabenhorst)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella minuta* Hilse ex Rabh.)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cymbella minuta* Hilse ex Rabh.); Almeida 1998 (as *Cymbella minuta* Hilse ex Rabenhorst)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella minuta* Hilse ex Rabenhorst)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella minuta* Hilse ex Rabenhorst)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cymbella minuta* Hilse ex Rabh.); Gil et al. 1989-1990 (as *Cymbella minuta*)

Site: Bolfiar, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cymbella minuta* Hilse ex Rabh.); Gil et al. 1989-1990 (as *Cymbella minuta*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Cymbella minuta* Hilse ex Rabh.)

Site: Óis da Ribeira, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella minuta* Hilse ex Rabenhorst)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Cymbella minuta* Hilse ex Rabh.); Gil et al. 1989-1990 (as *Cymbella minuta*)

Site: Raivo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cymbella minuta* Hilse ex Rabh.); Gil et al. 1989-1990 (as *Cymbella minuta*)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella minuta* Hilse ex Rabh.)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Cymbella minuta* Hilse ex Rabh.); Gil et al. 1989-1990 (as *Cymbella minuta*)

Site: Sernada do Vouga, Vouga River (Vouga Basin)

References: Nunes 2007 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann); Ferreira da Silva et al. 2009 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann)

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Bosturenga, Ribeira de Fráguas, Coval da Mó Stream (Vouga Basin)

Reference: Nunes 2007 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann)

- Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann)
- Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Cymbella minuta* Hilse ex Rabenhorst)
- Site: Ribeira de Fráguas, Palhal Mine, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann)
- Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann)
- Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann)
- Site: Santo António, Valmaior, Caima River (Vouga Basin)
References: Nunes et al. 2003 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann); Nunes 2007 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann)
- Site: Valmaior, mouth of Filvida River (Vouga Basin)
References: Nunes et al. 2002 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann); Nunes et al. 2003 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann); Nunes 2007 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann); Ferreira da Silva et al. 2009 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann)
- Site: Valmaior (downstream of the mouth of Filvida River), Caima River (Vouga Basin)
References: Nunes et al. 2003 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann); Nunes 2007 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann); Ferreira da Silva et al. 2009 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann)
- Municipality: Anadia (District: Aveiro)
- Site: Curia, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella minuta*)
- Site: Mogofores, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella minuta*)
- Site: São João da Azenha, Cértima River (Vouga Basin)
References: Rino & Gil 1989 (as *Cymbella minuta*); Almeida 1998 (as *Cymbella minuta* Hilse ex Rabenhorst)
- Site: Tamengos, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella minuta*)
- Municipality: Aveiro (District: Aveiro)
- Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella minuta* Hilse ex Rabenhorst)
- Site: Pano, Largo River (Vouga Basin)

- Reference: Almeida 1998 (as *Cymbella minuta* Hilse ex Rabenhorst)
 Site: Requeixo, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Cymbella minuta* Hilse ex Rabenhorst)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
- Reference: Gil 1988 (as *Cymbella minuta* Hilse ex Rabh.)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
- References: Gil 1988 (as *Cymbella minuta* Hilse ex Rabh.); Gil et al. 1989-1990 (as *Cymbella minuta*)
 Site: Vessada, Fontão Creek (Vouga Basin)
- Reference: Almeida 1998 (as *Cymbella minuta* Hilse ex Rabenhorst)
 Municipality: Estarreja (District: Aveiro)
 Site: Estarreja, Antuã River (Vouga Basin)
- Reference: Almeida 1998 (as *Cymbella minuta* Hilse ex Rabenhorst)
 Site: Minhoteira, Antuã River (Vouga Basin)
- Reference: Almeida 1998 (as *Cymbella minuta* Hilse ex Rabenhorst)
 Municipality: Mealhada (District: Aveiro)
 Site: Pampilhosa, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Cymbella minuta*)
 Site: Viadouros, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Cymbella minuta*)
 Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Cymbella minuta* Hilse ex Rabenhorst)
 Site: Perrães, Levira River (Vouga Basin)
- Reference: Almeida 1998 (as *Cymbella minuta* Hilse ex Rabenhorst)
 Site: Perrães, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Cymbella minuta* Hilse ex Rabenhorst)
 Site: Repolão, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Cymbella minuta*)
 Site: Vila Verde, Levira River (Vouga Basin)
- Reference: Almeida 1998 (as *Cymbella minuta* Hilse ex Rabenhorst)
 Municipality: Sever do Vouga (District: Aveiro)
 Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
- Reference: Nunes 2007 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann)
 Site: Pessegueiro do Vouga (mouth of Mau River), Vouga River (Vouga Basin)
- References: Nunes et al. 2003 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann); Nunes 2007 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann)
 Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)

References: Nunes et al. 2003 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann); Nunes 2007 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann)

Site: Silva Escura (upstream of the Braçal Mine), Mau River (Vouga Basin)
References: Nunes et al. 2003 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann); Nunes 2007 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann)

Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)
References: Nunes et al. 2003 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann); Nunes 2007 (as *Encyonema minutum* (Hilse in Rabh.) D.G. Mann)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Cymbella minuta* Hilse ex Rabh.); Gil et al. 1989-1990 (as *Cymbella minuta*)

Site: São João do Monte, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella minuta* Hilse ex Rabh.)

Site: Varzias, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella minuta* Hilse ex Rabh.)

Municipality: Tondela (District: Viseu)

Site: Boi, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella minuta* Hilse ex Rabh.)

Site: In the proximity of Tondela, Criz River (Mondego Basin)

Reference: Santos et al. 2002 (as *Cymbella minuta* Hilse ex Rabenhorst)

Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil et al. 1989-1990 (as *Cymbella minuta*)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella minuta* Hilse ex Rabh.)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella minuta* Hilse ex Rabh.)

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Cymbella minuta*)

Site: Forno Novo, Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Cymbella minuta*)

Subregion: Pinhal Interior Norte

Municipality: Pampilhosa da Serra (District: Coimbra)

Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)

Reference: Santos et al. 2002 (as *Cymbella minuta* Hilse ex Rabenhorst)

Subregion: Not specified

Municipality: Not specified

Site: Paiva River (Douro Basin)

Reference: Cerqueira da Silva 1994 (as *Cymbella minuta*)
Site: Not specified
Reference: Gil et al. 1991 (as *Cymbella minuta*)

REGION: ALENTEJO

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Ponte do Curval, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Encyonema minutum* (Hilse in Rabenhorst)
D.G. Mann)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Praia da Vitória (Terceira Island)

Site: Lagoa do Boi

Reference: Gonçalves 1996 (as *Cymbella minuta* Hilse ex Rabenhorst)

Municipality: Not specified

Site: Corvo Island

Reference: Gonçalves et al. 2010 (as *Encyonema minutum* (Hilse) D.G.
Mann)

Site: Faial Island

Reference: Gonçalves et al. 2010 (as *Encyonema minutum* (Hilse) D.G.
Mann)

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Encyonema minutum* (Hilse) D.G.
Mann)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Encyonema minutum* (Hilse) D.G.
Mann)

Site: São Jorge Island

Reference: Gonçalves et al. 2010 (as *Encyonema minutum* (Hilse) D.G.
Mann)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Encyonema minutum* (Hilse) D.G.
Mann)

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Encyonema minutum* (Hilse) D.G.
Mann)

Site: Not specified

Reference: Gonçalves 2008 (as *Encyonema minutum* (Hilse in
Rabenhorst) Mann)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Alto-Douro Rivers

- Reference: Morais et al. 2009 (as *Cymbella minuta* Hilse ex Rabenhorst (*Encyonema*))
 Site: North-South Transition Rivers and Mountain Rivers in the South
 Reference: Morais et al. 2009 (as *Cymbella minuta* Hilse ex Rabenhorst (*Encyonema*))
 Site: Rivers in the North
 Reference: Morais et al. 2009 (as *Cymbella minuta* Rabenhorst (*Encyonema*))
 Site: Rivers in the South
 Reference: Morais et al. 2009 (as *Cymbella minuta* Hilse ex Rabenhorst (*Encyonema*))
 Site: Not specified
 Reference: INAG 2008 (as *Cymbella minuta* Hilse ex Rabenhorst (*Encyonema*))

***Encyonema muelleri* (Hustedt) D.G. Mann in Round, Crawford & Mann 1990, p. 667 [CAS ref. 003245]**

Basionym: *Cymbella muelleri* Hustedt 1937c [CAS ref. 001013]

Distribution (Fig. 331):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Cymbella muelleri*)

Site: Forno Novo, Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Cymbella muelleri*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Encyonema muelleri* (Hustedt) D.G. Mann)

***Encyonema neogracile* Krammer 1997b, v. 36: p. 177-178; pl. 82, fig. 1-13, pl. 83, fig. 1-3, pl. 85, fig. 7-10, pl. 86, fig. 9-12, pl. 90, fig. 6, pl. 91, fig. 1-2 [CAS ref. 006780]**

Distribution (Fig. 332):

REGION: NORTE

Subregion: Entre Douro e Vouga
Municipality: Vale de Cambra (District: Aveiro)
Site: Barbeito, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Encyonema neogracile* Krammer)
Site: São Pedro de Castelões, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Encyonema neogracile* Krammer)

REGION: CENTRO

Subregion: Baixo Vouga
Municipality: Sever do Vouga (District: Aveiro)
Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Encyonema neogracile* Krammer)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified
Site: Corvo Island
Reference: Gonçalves et al. 2010 (as *Encyonema neogracile* Krammer)
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Encyonema neogracile* Krammer)
Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Encyonema neogracile* Krammer)
Site: Santa Maria Island
Reference: Gonçalves et al. 2010 (as *Encyonema neogracile* Krammer)
Site: São Jorge Island
Reference: Gonçalves et al. 2010 (as *Encyonema neogracile* Krammer)
Site: Terceira Island
Reference: Gonçalves et al. 2010 (as *Encyonema neogracile* Krammer)
Site: Not specified
Reference: Gonçalves 2008 (as *Encyonema neogracile* Krammer)

***Encyonema neomesianum* Krammer 1997**, v. 36: p. 84-85; pl. 40, fig. 6-9, pl. 54, fig. 6-7, pl. 99, fig. 1-7 [CAS ref. 006780]

Basionym: *Cymbella mesiana* Cholnoky 1955 pro parte [CAS ref. 000201]

Distribution (Fig. 333):

REGION: CENTRO

Subregion: Baixo Mondego
Municipality: Montemor-o-Velho (District: Coimbra)
Site: Irrigation channel near Montemor-o-Velho
Reference: Santos et al. 2002 (as *Cymbella mesiana* Cholnoky)
Subregion: Baixo Vouga
Municipality: Águeda (District: Aveiro)

- Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella mesiana* Cholnoky)
- Municipality: Albergaria-a-Velha (District: Aveiro)
Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Cymbella mesiana* Cholnoky)
- Site: Valmaior, mouth of Filvida River (Vouga Basin)
Reference: Nunes 2007 (as *Encyonema mesianum* (Cholnoky) D.G. Mann)
- Municipality: Aveiro (District: Aveiro)
Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella mesiana* Cholnoky)
- Municipality: Estarreja (District: Aveiro)
Site: Estarreja, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella mesiana* Cholnoky)
- Municipality: Sever do Vouga (District: Aveiro)
Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Encyonema mesianum* (Cholnoky) D.G. Mann)
- Subregion: Dão-Lafões
Municipality: Tondela (District: Viseu)
Site: In the proximity of Tondela, Criz River (Mondego Basin)
Reference: Santos et al. 2002 (as *Cymbella mesiana* Cholnoky)
- REGION: AUTONOMOUS REGION OF AZORES
Municipality: Not specified
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Encyonema mesianum* (Cholnoky) D.G. Mann)
- Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Encyonema mesianum* (Cholnoky) D.G. Mann)
- Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Encyonema mesianum* (Cholnoky) D.G. Mann)
- Site: Not specified
Reference: Gonçalves 2008 (as *Encyonema mesianum* (Cholnoky) D.G. Mann)
- REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Cymbella mesiana* Cholnoky (*Encyonema*))

***Encyonema paucistriatum* (Cleve-Euler) D.G. Mann in Round, Crawford & Mann 1990, p. 667 [CAS ref. 003245]**

Basionym: *Cymbella paucistriata* Cleve-Euler 1934 [CAS ref. 000249]

Distribution (Fig. 334):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Encyonema paucistriatum* (Cleve-Euler) D.G. Mann)

Site: Not specified

Reference: Gonçalves 2008 (as *Encyonema paucistriatum* (Cleve-Euler) D.G. Mann)

***Encyonema perpusillum* (A. Cleve) D.G. Mann in Round, Crawford & Mann 1990, p. 667 [CAS ref. 003245]**

Basionym: *Cymbella perpusilla* A. Cleve 1895 [CAS ref. 000243]

Distribution (Fig. 335):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella perpusilla* A. Cleve)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella perpusilla* A. Cleve)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella perpusilla* A. Cleve)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella perpusilla* A. Cleve)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Cymbella perpusilla* A. Cleve)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella perpusilla* A. Cleve)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella perpusilla* A. Cleve)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella perpusilla* A. Cleve)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Cymbella perpusilla* A. Cleve); Gil et al. 1989-1990 (as *Cymbella perpusilla*)

Municipality: Aveiro (District: Aveiro)

Site: Aveiro, lake in the municipal park (artificial substrate)

Reference: Gil & Almeida 1993 (as *Cymbella perpusilla* A. Cleve)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

References: Gil 1988 (as *Cymbella perpusilla* A. Cleve); Gil et al. 1989-1990 (as *Cymbella perpusilla*)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

References: Gil 1988 (as *Cymbella perpusilla* A. Cleve); Gil et al. 1989-1990 (as *Cymbella perpusilla*)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella perpusilla* A. Cleve)

Site: São João do Monte, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella perpusilla* A. Cleve)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella perpusilla* A. Cleve)

Municipality: Tondela (District: Viseu)

Site: Boi, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella perpusilla* A. Cleve)

Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella perpusilla* A. Cleve)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella perpusilla* A. Cleve)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: São Romão, Lagoa do Covão do Curral

Reference: Santos et al. 2002 (as *Cymbella perpusilla* Cleve-Euler)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

References: Calado 1990 (as *Cymbella perpusilla* Cleve); Gil et al. 1991 (as *Cymbella perpusilla*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Calheta (São Jorge Island)

Site: Ribeira de São João

Reference: Mölder 1947 (as *Cymbella perpusilla* A. Cleve)

Municipality: Praia da Vitória (Terceira Island)

Site: Lagoa do Boi

Reference: Gonçalves 1996 (as *Cymbella perpusilla* A. Cleve)

- Site: Lagoa do Negro
Reference: Mölder 1947 (as *Cymbella perpusilla* A. Cleve)
- Municipality: Not specified
- Site: Corvo Island
Reference: Gonçalves et al. 2010 (as *Encyonema perpusillum* (A. Cleve) D.G. Mann)
- Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Encyonema perpusillum* (A. Cleve) D.G. Mann)
- Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Encyonema perpusillum* (A. Cleve) D.G. Mann)
- Site: São Jorge Island
References: Johansson 1977 (as *Cymbella perpusilla* A. Cleve); Gonçalves et al. 2010 (as *Encyonema perpusillum* (A. Cleve) D.G. Mann)
- Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Encyonema perpusillum* (A. Cleve) D.G. Mann)
- Site: Terceira Island
Reference: Gonçalves et al. 2010 (as *Encyonema perpusillum* (A. Cleve) D.G. Mann)
- Site: Not specified
Reference: Gonçalves 2008 (as *Encyonema perpusillum* (A. Cleve) D.G. Mann)

***Encyonema prostratum* (Berkeley) Ralfs 1845**, p. 182; pl. 18, fig. 3
[CAS ref. 001834]

Basionym: *Monema prostratum* Berkeley 1833 [CAS ref. 001598]

Nomenclatural synonym: *Cymbella prostrata* (Berkeley) Cleve 1894a [CAS ref. 000232]

Distribution (Fig. 336):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella prostrata* (Berk.) P. Cleve)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella prostrata* (Berk.) P. Cleve)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella prostrata* (Berk.) P. Cleve)

Site: Redonda, Águeda River (Vouga Basin)

- Reference: Gil 1988 (as *Cymbella prostrata* (Berk.) P. Cleve)
 Site: Ribeiro, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella prostrata* (Berk.) P. Cleve)
 Municipality: Anadia (District: Aveiro)
 Site: Tamengos, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymbella prostrata*)
 Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil et al. 1989-1990 (as *Cymbella prostrata*)
 Municipality: Mealhada (District: Aveiro)
 Site: Pampilhosa, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Cymbella prostrata*)
 Municipality: Not specified
 Site: Pateira de Fermentelos (District: Aveiro)
 Reference: Calado 1991 (as *Cymbella prostrata* (Berkeley) Cleve)
 Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella prostrata* (Berk.) P. Cleve)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella prostrata* (Berk.) P. Cleve)
 Subregion: Beira Interior Sul
 Municipality: Castelo Branco (District: Castelo Branco)
 Site: São Fiel, Ocreza River (Tagus Basin)
 Reference: Zimmermann 1906 (as *Encyonema prostratum* (Berk.) Ralfs)
 Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella prostrata* (Berk.) P. Cleve)
 Site: Varzielas, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella prostrata* (Berk.) P. Cleve)
 Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 Reference: Gil 1988 (as *Cymbella prostrata* (Berk.) P. Cleve)
 Subregion: Médio Tejo
 Municipality: Abrantes (District: Santarém)
 Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Cymbella prostrata*)
 Site: Forno Novo, Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Cymbella prostrata*)
 Site: Tramagal, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Cymbella prostrata*)
 Subregion: Oeste
 Municipality: Óbidos (District: Leiria)

Site: Not specified
Reference: Silva 1946b (as *Cymbella prostata* (Berk.) Cleve, fossil)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Gil et al. 1991 (as *Cymbella prostrata*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)
Site: Lagoa Rasa
References: Manguin 1942 (as *Cymbella prostata* (Berkeley) Cleve);
Bourrelly & Manguin 1946a (as *Cymbella prostata* (Berkeley) Cleve)
Municipality: Povoação (São Miguel Island)
Site: Pico da Vara
Reference: Holmboe 1901 (as *Encyonema prostratum* (Berk.) Ralfs)
Municipality: Not specified
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Encyonema prostratum* (Berkeley)
Kützing)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Encyonema prostratum* (Berkeley)
Kützing)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)
Site: Levada do Bom Sucesso
Reference: Zimmermann 1910-1911 (as *Encyonema prostratum* (Berk.)
Ralfs)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cymbella prostata* (Berkeley) Grunow
(*Encyonema*))

***Encyonema rostratum* Krammer 1997b**, v. 37: p. 190-191; pl. 126,
fig. 1-14 [CAS ref. 008010]

Distribution (Fig. 337):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Encyonema rostratum* Krammer)

Municipality: Not specified

Site: Corvo Island

Reference: Gonçalves et al. 2010 (as *Encyonema rostratum* Krammer)

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Encyonema rostratum* Krammer)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Encyonema rostratum* Krammer)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Encyonema rostratum* Krammer)

***Encyonema silesiacum* (Bleisch in Rabenhorst) D.G. Mann in Round, Crawford & Mann 1990, p. 667 [CAS ref. 003245]**

Basionym: *Cymbella silesiaca* Bleisch in Rabenhorst 1861-1882 [CAS ref. 000773]

Distribution (Fig. 338):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Oliveira de Azeméis (District: Aveiro)

Site: Bustelo do Caima, Ossela, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann)

Municipality: São João da Madeira (District: Aveiro)

Site: Ui River (Vouga Basin)

Reference: Resende et al. 2010 (as *Encyonema silesiacum* (Bleisch) D.G. Mann)

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Sernada do Vouga, Vouga River (Vouga Basin)

References: Nunes 2007 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann); Ferreira da Silva et al. 2009 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann)

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann)

Site: Ribeira de Fráguas, Palhal Mine, Caima River (Vouga Basin)

- Reference: Nunes 2007 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann)
 Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)
 Reference: Nunes 2007 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann)
 Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)
 Reference: Nunes 2007 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann)
 Site: Santo António, Valmaior, Caima River (Vouga Basin)
 Reference: Nunes 2007 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann)
 Site: Valmaior, mouth of Filvida River (Vouga Basin)
 References: Nunes et al. 2002 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann); Nunes et al. 2003 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann); Nunes 2007 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann); Ferreira da Silva et al. 2009 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann)
 Site: Valmaior (downstream of the mouth of Filvida River), Caima River (Vouga Basin)
 References: Nunes 2007 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann); Ferreira da Silva et al. 2009 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann)
 Municipality: Sever do Vouga (District: Aveiro)
 Site: Pessegueiro do Vouga (mouth of Mau River), Vouga River (Vouga Basin)
 Reference: Nunes 2007 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann)
 Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
 Reference: Nunes 2007 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann)
 Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)
 Reference: Nunes 2007 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann)
 Site: Silva Escura (upstream of the Braçal Mine), Mau River (Vouga Basin)
 Reference: Nunes 2007 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann)
 Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)
 Reference: Nunes 2007 (as *Encyonema silesiacum* (Bleisch in Rabh.) D.G. Mann)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Corvo Island

Reference: Gonçalves et al. 2010 (as *Encyonema silesiacum* (Bleisch) D.G. Mann)

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Encyonema silesiacum* (Bleisch) D.G. Mann)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Encyonema silesiacum* (Bleisch) D.G. Mann)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Encyonema silesiacum* (Bleisch) D.G. Mann)

Site: Not specified

Reference: Gonçalves 2008 (as *Encyonema silesiacum* (Bleisch) D.G. Mann)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: North-South Transition Rivers and Mountain Rivers in the South

Reference: Morais et al. 2009 (as *Cymbella silesiaca* Bleisch (*Encyonema*))

Site: Not specified

Reference: INAG 2008 (as *Cymbella silesiaca* Bleisch in Rabenhorst (*Encyonema*))

***Encyonema ventricosum* (C. Agardh) Grunow in Schmidt et al. 1875b, pl. 10, fig. 59 [CAS ref. 012443]**

Synonyms: (?) *Frustulia ventricosa* C. Agardh 1827 [CAS ref. 000103]

Cymbella ventricosa (C. Agardh) C. Agardh 1830, 9.97 pro parte [CAS ref. 000105]

(?) *Frustulia ventricosa* Kützing 1833, p. 11, fig. 7

(?) *Cymbella ventricosa* Kützing 1844 [CAS ref. 000595]

Distribution (Fig. 339):

REGION: NORTE

Subregion: Cávado

Municipality: Barcelos (District: Braga)

Site: Barcelos, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Cymbella ventricosa*)

Subregion: Minho-Lima

Municipality: Caminha (District: Viana do Castelo)

Site: Gondar Stream (Âncora Basin)

Reference: Formigo et al. 1993 (as *Cymbella ventricosa*)

Site: Tourim, Âncora River (Âncora Basin)
Reference: Formigo et al. 1993 (as *Cymbella ventricosa*)
Municipality: Viana do Castelo (District: Viana do Castelo)
Site: Alhada, Âncora River (Âncora Basin)
Reference: Formigo et al. 1993 (as *Cymbella ventricosa*)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Figueira da Foz (District: Coimbra)

Site: Lagoa da Vela, Quaios

Reference: de Figueiredo et al. 2006 (as *Cymbella ventricosa* C. Agardh)

Subregion: Baixo Vouga

Municipality: Aveiro (District: Aveiro)

Site: Aveiro, lake in the municipal park (artificial substrate)

Reference: Gil & Almeida 1993 (as *Cymbella ventricosa* Kützing)

Municipality: Not specified

Site: Pateira de Fermentelos (District: Aveiro)

Reference: Calado 1991 (as *Cymbella ventricosa* Kützing)

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Alfarazes

Reference: Carvalho 1913 (as *Encyonema ventricosum* (Ag.) Grun.)

Site: Caldeirão

References: Carvalho 1913 (as *Encyonema ventricosum* (Ag.) Grun.);

Santos & Carvalho 2001 (as *Encyonema ventricosum* (Ag.) Grun.)

Site: Cruz da Faia

Reference: Carvalho 1913 (as *Encyonema ventricosum* (Ag.) Grun.)

Site: Cubo

Reference: Carvalho 1913 (as *Encyonema ventricosum* (Ag.) Grun.)

Site: Diz River

Reference: Carvalho 1913 (as *Encyonema ventricosum* (Ag.) Grun.)

Site: Gonçalo

Reference: Carvalho 1913 (as *Encyonema ventricosum* (Ag.) Grun.)

Site: Mondego River (Mondego Basin)

References: Carvalho 1913 (as *Encyonema ventricosum* (Ag.) Grun.);

Santos & Carvalho 2001 (as *Encyonema ventricosum* (Ag.) Grun.)

Site: Nueme

Reference: Carvalho 1913 (as *Encyonema ventricosum* (Ag.) Grun.)

Site: Porto da Carne

Reference: Carvalho 1913 (as *Encyonema ventricosum* (Ag.) Grun.)

Site: Vela

Reference: Carvalho 1913 (as *Encyonema ventricosum* (Ag.) Grun.)

Site: Vila Patrício

Reference: Carvalho 1913 (as *Encyonema ventricosum* (Ag.) Grun.)

Subregion: Beira Interior Sul

Municipality: Idanha-a-Nova (District: Castelo Branco)

- Site: Idanha Reservoir, Ponsul River (Tagus Basin)
 Reference: Oliveira 1982c (as *Cymbella ventricosa*)
 Municipality: Vila Velha de Ródão (District: Castelo Branco)
 Site: downstream of Cedilho Reservoir, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Cymbella ventricosa*)
- Subregion: Médio Tejo
 Municipality: Abrantes (District: Santarém)
 Site: Tramagal, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Cymbella ventricosa*)
 Municipality: Tomar (District: Santarém)
 Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
 Reference: Brito & Andrade 1992 (as *Cymbella ventricosa*); Cabeçadas et al. 1980 (as *Cymbella ventricosa*)
 Municipality: Torres Novas (District: Santarém)
 Site: Almonda River (Tagus Basin)
 Reference: Oliveira & Caldas 1970 (as *Cymbella ventricosa* Kütz.)
 Municipality: Vila Nova da Barquinha (District: Santarém)
 Site: Almourol, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Cymbella ventricosa*)
- Subregion: Oeste
 Municipality: Óbidos (District: Leiria)
 Site: Not specified
 References: Silva 1946a (as *Cymbella ventricosa* (Kütz) Cleve, fossil);
 Silva 1946b (as *Cymbella ventricosa* (Kütz) Cleve, fossil)
- Subregion: Pinhal Interior Norte
 Municipality: Pedrógão Grande (District: Leiria)
 Site: Cabril Reservoir, Zêzere River (Tagus Basin)
 Reference: Oliveira 1982b (as *Cymbella ventricosa*)
- Subregion: Not specified
 Municipality: Not specified
 Site: Nabão River (Tagus Basin)
 Reference: Rodrigues et al. 1982 (as *Cymbella ventricosa*)
 Site: Paiva River (Douro Basin)
 References: Cerqueira da Silva 1991 (as *Cymbella ventricosa*); Cerqueira da Silva et al. 1993 (as *Cymbella ventricosa*); Cerqueira da Silva 1994 (as *Cymbella ventricosa*)
 Site: Not specified
 Reference: Calado 1990 (as *Cymbella ventricosa* Kützing)
- REGION: LISBOA
 Subregion: Grande Lisboa
 Municipality: Vila Franca de Xira (District: Lisboa)
 Site: Vila Franca de Xira, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Cymbella ventricosa*)

REGION: ALENTEJO

- Subregion: Alentejo Central
Municipality: Évora (District: Évora)
Site: Monte Novo Reservoir, Degebe River (Gadiana Basin)
Reference: Oliveira & Monteiro 1995 (as *Cymbella ventricosa*); Oliveira 1996 (as *Cymbella ventricosa*)
- Subregion: Alentejo Litoral
Municipality: Alcácer do Sal (District: Setúbal)
Site: Carvalhal diatomite
Reference: Silva 1949 (as *Cymbella ventricosa* (Kütz.) Cleve, fossil)
- Subregion: Alto Alentejo
Municipality: Gavião (District: Portalegre)
Site: Belver Reservoir, Tagus River (Tagus Basin)
References: INIP 1977 (as *Cymbella ventricosa* Kütz); Fernandes et al. 1987 (as *Cymbella ventricosa*)
- Municipality: Marvão (District: Portalegre)
Site: Sever River (Tagus Basin)
Reference: Oliveira 1975 (as *Cymbella ventricosa*)
- Municipality: Nisa (District: Portalegre)
Site: Barca da Amieira, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cymbella ventricosa*)
- Site: Fratel Reservoir, Tagus River (Tagus Basin)
References: INIP 1977 (as *Cymbella ventricosa* Kütz); Fernandes et al. 1987 (as *Cymbella ventricosa*)
- Municipality: Ponte de Sôr (District: Portalegre)
Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
Reference: Coutinho 1990a (as *Cymbella ventricosa*)
- Subregion: Baixo Alentejo
Municipality: Almodôvar (District: Beja)
Site: Monte da Vinha, Gadiana River (Gadiana Basin)
Reference: Andrade & Brito 1991 (as *Cymbella ventricosa*)
- Subregion: Lezíria do Tejo
Municipality: Alcácer do Sal (District: Setúbal)
Site: São Romão, Sado River (Sado Basin)
Reference: Coutinho 2003 (as *Cymbella ventricosa* Kützing)
- Municipality: Alpiarça (District: Santarém)
Site: Not specified
References: Silva 1946a (as *Cymbella ventricosa* (Kütz) Cleve, fossil); Silva 1946b (as *Cymbella ventricosa* (Kütz) Cleve, fossil)
- Municipality: Cartaxo (District: Santarém)
Site: Valada, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cymbella ventricosa*)
- Municipality: Chamusca (District: Santarém)
Site: Chamusca, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Cymbella ventricosa*)
- Municipality: Santarém (District: Santarém)
Site: Ómnias, Tagus River (Tagus Basin)

References: Brito & Andrade 1992 (as *Cymbella ventricosa*); Fernandes et al. 1987 (as *Cymbella ventricosa*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Horta (Faial Island)

Site: Not specified

Reference: Johansson 1977 (as *Cymbella ventricosa* Kütz.)

Municipality: Lajes das Flores (Flores Island)

Site: Lagoinha, Fajãzinha

References: Manguin 1942 (as *Cymbella ventricosa* Kütz.); Bourrelly & Manguin 1946a (as *Cymbella ventricosa* Kütz.)

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa Grande

Reference: Holmboe 1901 (as *Encyonema ventricosum* (Ag.) Grun.)

Site: Lagoa das Sete Cidades

Reference: Holmboe 1901 (as *Encyonema ventricosum* (Ag.) Grun.)

Site: Pico do Carvão

Reference: Holmboe 1901 (as *Encyonema ventricosum* (Ag.) Grun.)

Municipality: Povoação (São Miguel Island)

Site: Furnas

Reference: Holmboe 1901 (as *Encyonema ventricosum* (Ag.) Grun.)

Site: Lagoa das Furnas

References: Manguin 1942 (as *Cymbella ventricosa* Kütz.); Bourrelly & Manguin 1946a (as *Cymbella ventricosa* Kütz.)

Site: Pico do Gafanhoto

Reference: Holmboe 1901 (as *Encyonema ventricosum* (Ag.) Grun.)

Site: Pico da Vara

Reference: Holmboe 1901 (as *Encyonema ventricosum* (Ag.) Grun.)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Ribeira Grande

References: Manguin 1942 (as *Cymbella ventricosa* Kütz.); Bourrelly & Manguin 1946a (as *Cymbella ventricosa* Kütz.)

Municipality: Vila do Porto (Santa Maria Island)

Site: Not specified

References: Manguin 1942 (as *Cymbella ventricosa* Kütz.); Bourrelly & Manguin 1946a (as *Cymbella ventricosa* Kütz.)

Municipality: Not specified

Site: São Jorge Island

Reference: Johansson 1977 (as *Cymbella ventricosa* Kütz.)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Encyonema ventricosum* (Agardh) Grunow)

Site: Terceira Island

Reference: Johansson 1977 (as *Cymbella ventricosa* Kütz.)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Levada do Bom Sucesso

Reference: Zimmermann 1910-1911 (as *Encyonema ventricosum* (Ag.) Grun.)

***Encyonema vulgare* Krammer 1997b**, v. 36: p. 167; pl. 36, fig. 4-10, pl. 38, fig. 1-3, 9-10, pl. 39, fig. 1-5, pl. 42, fig. 1-5, pl. 50, fig. 3-8 [CAS ref. 006780]

Distribution (Fig. 340):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Valmaior, mouth of Filvida River (Vouga Basin)

Reference: Nunes 2007 (as *Encyonema vulgare* Krammer)

***Encyonema vulgare* var. *intermedia* (Manguin) Krammer 1997b**, v. 36: p. 89 [CAS ref. 006780]

Basionym: *Cymbella turgida* var. *intermedia* Manguin 1964 [CAS ref. 001370]

Distribution (Fig. 341):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Encyonema vulgare* Krammer var. *intermedia* (Manguin) Krammer)

***Encyonema* sp.**

Distribution:

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Encyonema* sp.)

***Encyonopsis* Krammer 1997b**, p. 156
[CAS ref. 006780]

***Encyonopsis aequalis* (W. Smith) Krammer 1997b**, v. 37: p. 133-134; pl. 165, fig. 1-11, 15-16, pl. 167, fig. 7-10 [CAS ref. 008010]

Basionym: *Cymbella aequalis* W. Smith in Greville 1855 [CAS ref. 001238]

Replaced synonym: *Navicula inaequilatera* Lagerstedt 1873 [CAS ref. 000597]

Distribution (Fig. 342):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Arouca (District: Aveiro)

Site: Serra da Freita, Arões, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Cymbella aequalis* W.M. Smith)

Municipality: Vale de Cambra (District: Aveiro)

Site: São Pedro de Castelões, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Encyonopsis aequalis* (W. Smith) Krammer)

Subregion: Not specified

Municipality: Not specified

Site: Serra do Gerês

References: Zimmermann 1910 (as *Navicula inaequilatera* Lagerst.);

Sampaio 1950 (as *Navicula inaequilatera* Lagerst.)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Cymbella aequalis* W. Smith)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella aequalis* W. Smith)

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Valmaior, mouth of Filvida River (Vouga Basin)

Reference: Nunes 2007 (as *Encyonopsis aequalis* (W. Smith) Krammer)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: São João do Monte, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella aequalis* W. Smith)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella aequalis* W. Smith)

REGION: ALENTEJO

Subregion: Alentejo Litoral

Municipality: Odemira (District: Beja)

Site: Santa Clara Reservoir, Mira River (Mira Basin)

Reference: Oliveira 1984a (as *Cymbella aequalis*)

Subregion: Alto Alentejo

Municipality: Avis (District: Portalegre)

Site: Maranhão Reservoir, Raia Stream (Tagus Basin)

Reference: Oliveira 1984c (as *Cymbella aequalis*)

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Roxo Reservoir, Roxo Stream (Sado Basin)

Reference: Oliveira 1976 (as *Cymbella aequalis* W. Sm.)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cymbella aequalis* W.M. Smith)

***Encyonopsis cesatii* (Rabenhorst) Krammer 1997b**, v. 37: p. 152-153; pl. 182, fig. 1-13, pl. 183, fig. 10-12, pl. 185, fig. 1-7, 11-13 [CAS ref. 008010]

Basionym: *Navicula cesatii* Rabenhorst 1853 [CAS ref. 000772]

Nomenclatural synonym: *Cymbella cesatii* (Rabenhorst) Grunow in Schmidt et al. 1881 [CAS ref. 012454]

Distribution (Fig. 343):

REGION: NORTE

Subregion: Ave

Municipality: Vila Nova de Famalicão (District: Braga)

Site: Ribeirão de Famalicão

Reference: Zimmermann 1910 (as *Navicula cesatii* Rabenh.)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella cesatii* (Rabh.) Grunow)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella cesatii* (Rabh.) Grunow)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

- Reference: Gil 1988 (as *Cymbella cesatii* (Rabh.) Grunow)
 Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
- Reference: Gil 1988 (as *Cymbella cesatii* (Rabh.) Grunow)
 Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Cymbella cesatii* (Rabh.) Grunow)
 Site: Redonda, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Cymbella cesatii* (Rabh.) Grunow)
 Site: Ribeiro, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Cymbella cesatii* (Rabh.) Grunow)
 Municipality: Aveiro (District: Aveiro)
 Site: Pano, Largo River (Vouga Basin)
- Reference: Almeida 1998 (as *Cymbella cesatii* (Rabenhorst) Grunow)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
- Reference: Gil 1988 (as *Cymbella cesatii* (Rabh.) Grunow)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
- Reference: Gil 1988 (as *Cymbella cesatii* (Rabh.) Grunow)
 Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Cymbella cesatii* (Rabh.) Grunow)
 Site: São João do Monte, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Cymbella cesatii* (Rabh.) Grunow)
 Site: Varzielas, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Cymbella cesatii* (Rabh.) Grunow)
 Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
- Reference: Gil 1988 (as *Cymbella cesatii* (Rabh.) Grunow)
 Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Cymbella cesatii* (Rabh.) Grunow)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Cymbella cesatii* (Rabh.) Grunow)
 Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: Gil et al. 1991 (as *Cymbella cesatii*)
- REGION: ALGARVE
 Subregion: Algarve
 Municipality: Tavira (District: Faro)
 Site: Not specified

Reference: Krammer 1997 (as *Encyonopsis cesatii* (Rabenhorst) Krammer)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

References: Chaves 1908 (as *Navicula cesatii* Rab.); Mölder 1947 (as *Cymbella cesatii* (Rabenh.) Grun.)

Site: Pico da Vara

Reference: Mölder 1947 (as *Cymbella cesatii* (Rabenh.) Grun.)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Encyonopsis cesatii* (Rabenhorst) Krammer)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Encyonopsis cesatii* (Rabenhorst) Krammer)

Site: São Jorge Island

References: Johansson 1977 (as *Cymbella cesatii* (Rab.) Grun.); Gonçalves et al. 2010 (as *Encyonopsis cesatii* (Rabenhorst) Krammer)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Encyonopsis cesatii* (Rabenhorst) Krammer)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cymbella cesatii* (Rab.) Grunow)

***Encyonopsis falaisensis* (Grunow) Krammer 1997b**, v. 37: p. 116-118; pl. 161, fig. 1, 3-7, pl. 162, fig. 8-24, 27, pl. 163, fig. 1-5, pl. 164, fig. 1-13, 22-23 [CAS ref. 008010]

Basionym: *Navicula falaisensis* Grunow in Van Heurck 1880 [CAS ref. 000895]

Distribution (Fig. 344):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Encyonopsis falaisensis* (Grunow) Krammer)

Site: Not specified

Reference: Gonçalves 2008 (as *Encyonopsis falaisensis* (Grunow) Krammer)

***Encyonopsis microcephala* (Grunow) Krammer 1997b**, v.37: p. 91-92; pl. 143, fig.1, 4, 5, 8-26, pl. 146, fig. 1-5, pl. 147, fig. 1-3, pl. 148, fig. 4, 7 [CAS ref. 008010]

Basionym: *Cymbella microcephala* Grunow in Van Heurck 1885 [CAS ref. 001040]

Distribution (Fig. 345):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Mira (District: Coimbra)

Site: Lagoa de Mira

Reference: Oliveira 1971a (as *Cymbella microcephala*)

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Cymbella microcephala* Grunow)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cymbella microcephala* Grunow); Almeida 1998 (as *Cymbella microcephala* Grunow)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Cymbella microcephala* Grunow)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella microcephala* Grunow)

Site: Bolfiar, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cymbella microcephala* Grunow); Gil et al. 1989-1990 (as *Cymbella microcephala*)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Cymbella microcephala*)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Cymbella microcephala* Grunow); Gil et al. 1989-1990 (as *Cymbella microcephala*)

Site: Raivo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Cymbella microcephala* Grunow); Gil et al. 1989-1990 (as *Cymbella microcephala*)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella microcephala* Grunow)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Cymbella microcephala* Grunow)

Municipality: Anadia (District: Aveiro)

- Site: Espairo, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella microcephala*)
- Site: Mogofores, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella microcephala*)
- Site: Tamengos, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella microcephala*)
- Municipality: Albergaria-a-Velha (District: Aveiro)
Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Cymbella microcephala* Grunow)
- Municipality: Aveiro (District: Aveiro)
Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella microcephala* Grunow)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella microcephala* Grunow)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Cymbella microcephala* Grunow); Gil et al. 1989-1990 (as *Cymbella microcephala*)
- Municipality: Estarreja (District: Aveiro)
Site: Estarreja, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Cymbella microcephala* Grunow)
- Municipality: Mealhada (District: Aveiro)
Site: Pampilhosa, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella microcephala*)
- Municipality: Oliveira do Bairro (District: Aveiro)
Site: Perrães, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Cymbella microcephala*)
- Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Cymbella microcephala* Grunow)
- Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella microcephala* Grunow)
- Site: São João do Monte, Águeda River (Vouga Basin)
References: Gil 1988 (as *Cymbella microcephala* Grunow); Gil et al. 1989-1990 (as *Cymbella microcephala*)
- Site: Varzielas, Águeda River (Vouga Basin)
References: Gil 1988 (as *Cymbella microcephala* Grunow); Gil et al. 1989-1990 (as *Cymbella microcephala*)
- Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
References: Gil 1988 (as *Cymbella microcephala* Grunow); Gil et al. 1989-1990 (as *Cymbella microcephala*)
- Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil et al. 1989-1990 (as *Cymbella microcephala*)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Cymbella microcephala* Grunow)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
References: Calado 1990 (as *Cymbella microcephala* Grunow); Gil et al. 1991 (as *Cymbella microcephala*)

REGION: LISBOA

Subregion: Grande Lisboa
Municipality: Mafra (District: Lisboa)
Site: Tapada de Mafra, Sobral da Abelheira
Reference: Oliveira 1971b (as *Cymbella microcephala*)

REGION: ALENTEJO

Subregion: Alto Alentejo
Municipality: Avis (District: Portalegre)
Site: Maranhão Reservoir, Raia Stream (Tagus Basin)
Reference: Oliveira 1984c (as *Cymbella microcephala*)
Subregion: Baixo Alentejo
Municipality: Aljustrel (District: Beja)
Site: Roxo Reservoir, Roxo Stream (Sado Basin)
References: Oliveira 1976 (as *Cymbella microcephala* Grun.); Oliveira 1984a (as *Cymbella microcephala*)
Municipality: Mértola (District: Beja)
Site: Reservoir in the abandoned São Domingos mine
Reference: Gerhardt et al. 2008 (as *Cymbella microcephala* Grunow)
Subregion: Not specified
Municipality: Not specified
Site: Vascão River (in the edge of the Guadiana Nature Reserve), (Guadiana Basin)
Reference: Gerhardt et al. 2008 (as *Cymbella microcephala* Grunow)

REGION: ALGARVE

Subregion: Algarve
Municipality: Silves (District: Faro)
Site: Arade Reservoir, Arade River (Ribeiras do Algarve Basin)
Reference: Oliveira 1984a (as *Cymbella microcephala*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes do Pico (Pico Island)
Site: Lagoa do Caiado
Reference: Mölder 1947 (as *Cymbella microcephala* Grun.)
Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa do Canário
Reference: Mölder 1947 (as *Cymbella microcephala* Grun.)
Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
Reference: Mölder 1947 (as *Cymbella microcephala* Grun.)
Site: Pico da Vara
References: Manguin 1942 (as *Cymbella microcephala* Grun.); Bourrelly & Manguin 1946a (as *Cymbella microcephala* Grun.)
Municipality: Santa Cruz das Flores (Flores Island)
Site: Ribeira Grande
References: Manguin 1942 (as *Cymbella microcephala* Grun.); Bourrelly & Manguin 1946a (as *Cymbella microcephala* Grun.)
Municipality: Not specified
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Encyonopsis microcephala* (Grunow) Krammer)
Site: Lagoa de Cazador (São Miguel Island)
References: Manguin 1942 (as *Cymbella microcephala* Grun.); Bourrelly & Manguin 1946a (as *Cymbella microcephala* Grun.)
Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Encyonopsis microcephala* (Grunow) Krammer)
Site: São Jorge Island
References: Johansson 1977 (as *Cymbella microcephala* Grun.); Gonçalves et al. 2010 (as *Encyonopsis microcephala* (Grunow) Krammer)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Encyonopsis microcephala* (Grunow) Krammer)
Site: Not specified
Reference: Gonçalves 2008 (as *Encyonopsis microcephala* (Grunow) Krammer)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Cymbella microcephala* Grunow)

***Encyonopsis tavirana* Krammer 1997b**, v. 37: p. 196; pl. 148, fig. 1-3 [CAS ref. 008010]

Distribution (Fig. 346):

REGION: ALGARVE

Subregion: Algarve

Municipality: Tavira (District: Faro)

Site: Not specified

Reference: Krammer 1997b (as *Encyonopsis tavirana* Krammer)

***Encyonopsis* sp.**

Distribution:

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Encyonopsis* sp.1 (aff. *E. subminuta* Krammer & Reichardt))

***Entomoneis* (Ehrenberg) Ehrenberg 1845b, p. 154 [CAS ref. 000956]**

***Entomoneis alata* (Ehrenberg) Ehrenberg 1845b, p. 154 [CAS ref. 000956]**

Basionym: *Navicula alata* Ehrenberg 1840a [CAS ref. 000293]

Distribution (Fig. 347):

REGION: ALENTEJO

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Água Azeda, Água Azeda Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Entomoneis alata* Ehrenberg)

Site: Jungeiros, Roxo Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Entomoneis alata* Ehrenberg)

***Entomoneis paludosa* (W. Smith) Reimer in Patrick & Reimer 1975, p. 4-5; pl. 1, fig. 1 [CAS ref. 006176]**

Basionym: *Amphiprora paludosa* W. Smith 1853 [CAS ref. 000863]

Distribution (Fig. 348):

REGION: NORTE

Subregion: Ave

Municipality: Vila Nova de Famalicão (District: Braga)

Site: Ave River (Ave Basin)

Reference: Zimmermann 1909b (as *Amphiprora paludosa* W. Sm.)

***Eolimna* Lange-Bertalot & W. Schiller in Schiller & Lange-Bertalot 1997, p. 166 [CAS ref. 007052]**

***Eolimna minima* (Grunow in Van Heurck) Lange-Bertalot in Moser, Lange-Bertalot & Metzeltin 1998, p. 153 [CAS ref. 007020]**

Basionym: *Navicula minima* Grunow in Van Heurck 1880 [CAS ref. 000895]

Distribution (Fig. 349):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Montalegre (District: Vila Real)

Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1982a (as *Navicula minima*)

Subregion: Entre Douro e Vouga

Municipality: Arouca (District: Aveiro)

Site: Serra da Freita, Arões, Caima River (Vouga Basin)

References: Nunes et al. 2003 (as *Navicula minima* Grunow); Nunes 2007 (as *Eolimna minima* (Grunow) Lange-Bertalot); Ferreira da Silva et al. 2009 (as *Eolimna minima* (Grunow) Lange-Bertalot)

Municipality: Oliveira de Azeméis (District: Aveiro)

Site: Bustelo do Caima, Ossela, Caima River (Vouga Basin)

References: Nunes et al. 2003 (as *Navicula minima* Grunow); Nunes 2007 (as *Eolimna minima* (Grunow) Lange-Bertalot)

Municipality: São João da Madeira (District: Aveiro)

Site: Ui River (Vouga Basin)

Reference: Resende et al. 2010 (as *Eolimna minima* (Grunow) Lange-Bertalot)

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

References: Almeida 1998 (as *Navicula minima* Grunow); Almeida 2001 (as *Navicula minima* Grunow); Nunes et al. 2003 (as *Navicula minima* Grunow); Nunes 2007 (as *Eolimna minima* (Grunow) Lange-Bertalot)

Site: São Pedro de Castelões, Caima River (Vouga Basin)

References: Nunes et al. 2003 (as *Navicula minima* Grunow); Nunes 2007 (as *Eolimna minima* (Grunow) Lange-Bertalot)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula minima* Grunow)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula minima* Grunow)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Navicula minima* Grunow)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula minima* Grunow)

Site: Óis da Ribeira, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula minima* Grunow)

Site: Sernada do Vouga, Vouga River (Vouga Basin)

References: Nunes 2007 (as *Eolimna minima* (Grunow) Lange-Bertalot);
Ferreira da Silva et al. 2009 (as *Eolimna minima* (Grunow) Lange-Bertalot)

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Bosturenga, Ribeira de Fráguas, Coval da Mó Stream (Vouga Basin)

References: Nunes et al. 2003 (as *Navicula minima* Grunow); Nunes 2007
(as *Eolimna minima* (Grunow) Lange-Bertalot); Ferreira da Silva et al.
2009 (as *Eolimna minima* (Grunow) Lange-Bertalot)

Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)

References: Nunes et al. 2003 (as *Navicula minima* Grunow); Nunes 2007
(as *Eolimna minima* (Grunow) Lange-Bertalot)

Site: Frossos, Carreira Creek (Mondego Basin)

Reference: Almeida 1998 (as *Navicula minima* Grunow)

Site: Ribeira de Fráguas, Coval da Mó Mine, Coval da Mó Stream (Vouga
Basin)

References: Nunes 2007 (as *Eolimna minima* (Grunow) Lange-Bertalot);
Ferreira da Silva et al. 2009 (as *Eolimna minima* (Grunow) Lange-Bertalot)

Site: Ribeira de Fráguas, Palhal Mine, Caima River (Vouga Basin)

References: Nunes et al. 2003 (as *Navicula minima* Grunow); Nunes 2007
(as *Eolimna minima* (Grunow) Lange-Bertalot)

Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River
(Vouga Basin)

References: Nunes et al. 2003 (as *Navicula minima* Grunow); Nunes 2007
(as *Eolimna minima* (Grunow) Lange-Bertalot)

Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga
Basin)

References: Nunes et al. 2003 (as *Navicula minima* Grunow); Nunes 2007
(as *Eolimna minima* (Grunow) Lange-Bertalot)

Site: Santo António, Valmaior, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Eolimna minima* (Grunow) Lange-Bertalot)

Site: Valmaior, mouth of Filvida River (Vouga Basin)

References: Nunes et al. 2002 (as *Eolimna minima* (Grunow) Lange-Bertalot);
Nunes et al. 2003 (as *Navicula minima* Grunow); Nunes 2007

- (as *Eolimna minima* (Grunow) Lange-Bertalot); Ferreira da Silva et al. 2009 (as *Eolimna minima* (Grunow) Lange-Bertalot)
- Site: Valmaior (downstream of the mouth of Filvida River), Caima River (Vouga Basin)
- References: Nunes et al. 2003 (as *Navicula minima* Grunow); Nunes 2007 (as *Eolimna minima* (Grunow) Lange-Bertalot); Ferreira da Silva et al. 2009 (as *Eolimna minima* (Grunow) Lange-Bertalot)
- Municipality: Anadia (District: Aveiro)
- Site: São João de Azenha, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Navicula minima* Grunow)
- Municipality: Aveiro (District: Aveiro)
- Site: Eixo, Horta Stream (Vouga Basin)
- Reference: Almeida 1998 (as *Navicula minima* Grunow)
- Site: Requeixo, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Navicula minima* Grunow)
- Site: Vessada, Fontão Creek (Vouga Basin)
- Reference: Almeida 1998 (as *Navicula minima* Grunow)
- Municipality: Estarreja (District: Aveiro)
- Site: Estarreja, Antuã River (Vouga Basin)
- Reference: Almeida 1998 (as *Navicula minima* Grunow)
- Site: Minhoteira, Antuã River (Vouga Basin)
- Reference: Almeida 1998 (as *Navicula minima* Grunow)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Navicula minima* Grunow)
- Site: Perrães, Levira River (Vouga Basin)
- Reference: Almeida 1998 (as *Navicula minima* Grunow)
- Site: Perrães, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Navicula minima* Grunow)
- Site: Vila Verde, Levira River (Vouga Basin)
- References: Almeida 1998 (as *Navicula minima* Grunow); Almeida 2001 (as *Navicula minima* Grunow)
- Municipality: Sever do Vouga (District: Aveiro)
- Site: Pessegueiro do Vouga (mouth of Mau River), Vouga River (Vouga Basin)
- References: Nunes et al. 2003 (as *Navicula minima* Grunow); Nunes 2007 (as *Eolimna minima* (Grunow) Lange-Bertalot)
- Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
- Reference: Nunes 2007 (as *Eolimna minima* (Grunow) Lange-Bertalot)
- Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)
- References: Nunes et al. 2003 (as *Navicula minima* Grunow); Nunes 2007 (as *Eolimna minima* (Grunow) Lange-Bertalot)
- Site: Silva Escura (upstream of the Braçal Mine), Mau River (Vouga Basin)
- References: Nunes et al. 2003 (as *Navicula minima* Grunow); Nunes 2007 (as *Eolimna minima* (Grunow) Lange-Bertalot)

- Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)
 References: Nunes et al. 2003 (as *Navicula minima* Grunow); Nunes 2007 (as *Eolimna minima* (Grunow) Lange-Bertalot)
- Subregion: Beira Interior Norte
 Municipality: Guarda (District: Guarda)
 Site: Guarda
 References: Zimmermann 1910 (as *Navicula minima* Grun.); Carvalho 1913 (as *Navicula minima* Grun.)
- Site: Lameirinhas
 Reference: Carvalho 1913 (as *Navicula minima* Grun.)
- Site: Mondego River (Mondego Basin)
 References: Carvalho 1913 (as *Navicula minima* Grun.); Santos & Carvalho 2001 (as *Navicula minima* Grun.)
- Subregion: Médio Tejo
 Municipality: Abrantes (District: Santarém)
 Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Navicula minima*)
- Site: Forno Novo, Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Navicula minima*)
- Subregion: Pinhal Interior Sul
 Municipality: Mação (District: Santarém)
 Site: Pracana Reservoir, Ocreza River (Tagus Basin)
 Reference: Oliveira 1982b (as *Navicula minima*)
- Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: Feio et al. 2007 (as *Navicula minima*)
- REGION: ALENTEJO
- Subregion: Alentejo Central
 Municipality: Évora (District: Évora)
 Site: Monte Novo Reservoir, Degebe River (Gadiana Basin)
 References: Oliveira & Monteiro 1995 (*Navicula minima*); Oliveira 1996 (as *Navicula minima*)
- Subregion: Alentejo Litoral
 Municipality: Alcácer do Sal (District: Setúbal)
 Site: São Romão, Sado River (Sado Basin)
 Reference: Coutinho 2003 (as *Navicula minima* Grunow)
- Subregion: Alto Alentejo
 Municipality: Ponte de Sôr (District: Portalegre)
 Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
 Reference: Coutinho 1990a (as *Navicula minima*)
- REGION: AUTONOMOUS REGION OF AZORES
 Municipality: Povoação (São Miguel Island)

- Site: Lagoa das Furnas
References: Manguin 1942 (as *Navicula minima* Grun.); Bourrelly & Manguin 1946a (as *Navicula minima* Grun.)
- Site: Ribeira Quente
References: Manguin 1942 (as *Navicula minima* Grun.); Bourrelly & Manguin 1946a (as *Navicula minima* Grun.)
- Municipality: Praia da Vitória (Terceira Island)
Site: Lagoa do Boi
Reference: Gonçalves 1996 (as *Navicula minima* Grunow)
- Municipality: Ribeira Grande (São Miguel Island)
Site: Ribeira Grande
Reference: Gonçalves et al. 2008 (as *Eolimna minima*)
- Municipality: Santa Cruz das Flores (Flores Island)
Site: Ribeira Grande
References: Manguin 1942 (as *Navicula minima* Grun.); Bourrelly & Manguin 1946a (as *Navicula minima* Grun.)
- Municipality: Santa Cruz da Graciosa (Graciosa Island)
Site: Barreiro
Reference: Azevedo et al. 2005 (as *Navicula minima*)
- Site: Fundão, Caldeira
Reference: Azevedo et al. 2005 (as *Navicula minima*)
- Site: Tanque
Reference: Azevedo et al. 2005 (as *Navicula minima*)
- Municipality: Not specified
Site: Corvo Island
Reference: Gonçalves et al. 2010 (as *Eolimna minima* (Grunow) Lange-Bertalot)
- Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Eolimna minima* (Grunow) Lange-Bertalot)
- Site: Graciosa Island
Reference: Gonçalves et al. 2010 (as *Eolimna minima* (Grunow) Lange-Bertalot)
- Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Eolimna minima* (Grunow) Lange-Bertalot)
- Site: Santa Maria Island
Reference: Gonçalves et al. 2010 (as *Eolimna minima* (Grunow) Lange-Bertalot)
- Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Eolimna minima* (Grunow) Lange-Bertalot)
- Site: Terceira Island
Reference: Gonçalves et al. 2010 (as *Eolimna minima* (Grunow) Lange-Bertalot)
- Site: Not specified

Reference: Gonçalves 2008 (as *Eolimna minima* (Grunow) Lange-Bertalot)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Santana (Madeira Island)

Site: Ribeiro Frio

Reference: Mölder 1947 (as *Navicula minima* Grun.)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Navicula minima* Grunow (*Eolimna*))

***Eolimna ruttneri* (Hustedt) Lange-Bertalot & O. Monnier in Monnier, Lange-Bertalot & Bertrand 2003**, p. 140 [CAS ref. 013416]

Basionym: *Navicula ruttneri* Hustedt 1937 [CAS ref. 001012]

Distribution (Fig. 350):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eolimna ruttneri* Lange-Bertalot & Monnier)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eolimna ruttneri* Lange-Bertalot & Monnier)

***Eolimna subminuscula* (Manguin) Gerd Moser, Lange-Bertalot & Metzeltin 1998**, p. 154 [CAS ref. 007020]

Basionym: *Navicula subminuscula* Manguin 1942 [CAS ref. 000623]

Distribution (Fig. 351):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)

- Reference: Nunes 2007 (as *Navicula subminuscula* Manguin)
Municipality: Anadia (District: Aveiro)
Site: São João de Azenha, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula subminuscula* Manguin)
Municipality: Aveiro (District: Aveiro)
Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Navicula subminuscula* Manguin)
Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula subminuscula* Manguin)
Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula subminuscula* Manguin)
Municipality: Oliveira do Bairro (District: Aveiro)
Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula subminuscula* Manguin)
Site: Perrães, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula subminuscula* Manguin)
Municipality: Sever do Vouga (District: Aveiro)
Site: Pessegueiro do Vouga (mouth of Mau River), Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Navicula subminuscula* Manguin)
Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Navicula subminuscula* Manguin)
Site: Silva Escura (upstream of the Braçal Mine), Mau River (Vouga Basin)
Reference: Nunes 2007 (as *Eolimna subminuscula* (Manguin) Moser, Lange-Bertalot & Metzeltin)
Subregion: Médio Tejo
Municipality: Abrantes (District: Santarém)
Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Navicula subminuscula*)
Site: Forno Novo, Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Navicula subminuscula*)
Subregion: Not specified
Municipality: Not specified
Site: Vouga Basin
Reference: Almeida & Gil 2000 (as *Navicula subminuscula* Manguin)
Site: Not specified
Reference: Almeida & Gil 2001 (as *Navicula subminuscula* Manguin)
- REGION: ALENTEJO
Subregion: Baixo Alentejo
Municipality: Aljustrel (District: Beja)
Site: Ponte do Curval, Água Forte Stream (Sado Basin)
Reference: Luís et al. 2009 (as *Navicula subminuscula* Manguin)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Santa Cruz da Graciosa (Graciosa Island)

Site: Barreiro

Reference: Azevedo et al. 2005 (as *Navicula subminuscula*)

Municipality: Vila do Porto (Santa Maria Island)

Site: Not specified

References: Manguin 1942 (as *Navicula subminuscula* Manguin);

Bourrelly & Manguin 1946a (as *Navicula subminuscula* Manguin)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eolimna subminuscula* (Manguin)

Moser, Lange-Bertalot & Metzeltin)

Site: Graciosa Island

Reference: Gonçalves et al. 2010 (as *Eolimna subminuscula* (Manguin)

Moser, Lange-Bertalot & Metzeltin)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Eolimna subminuscula* (Manguin)

Moser, Lange-Bertalot & Metzeltin)

Site: Santa Maria Island

Reference: Gonçalves et al. 2010 (as *Eolimna subminuscula* (Manguin)

Moser, Lange-Bertalot & Metzeltin)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eolimna subminuscula* (Manguin)

Moser, Lange-Bertalot & Metzeltin)

Site: Not specified

Reference: Gonçalves 2008 (as *Eolimna subminuscula* (Manguin) Moser,
Lange-Bertalot & Metzeltin)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Navicula subminuscula* Manguin)

***Eolimna submuralis* (Hustedt) Lange-Bertalot & Kulikovskiy in
Kulikovskiy, Lange-Bertalot & Witkowski 2010, p. 81 [CAS ref.
013469]**

Basionym: *Navicula submuralis* Hustedt 1945 [CAS ref. 000518]

Distribution:

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Navicula submuralis* Hustedt)

***Epithemia Kützing* 1844, p. 33**
[CAS ref. 000595]

***Epithemia adnata* (Kützing) Brébisson 1838, p. 16** [CAS ref. 000161]

Basionym: *Frustulia adnata* Kützing 1833a [CAS ref. 000594]

Distribution (Fig. 352):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Figueira da Foz (District: Coimbra)

Site: Lagoa da Vela, Quiaios

Reference: de Figueiredo et al. 2006 (as *Epithemia adnata* (Kützing) Brébisson)

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Epithemia adnata* (Kützing) Brébisson)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Epithemia adnata* (Kützing) Brébisson)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Santa Cruz da Graciosa (Graciosa Island)

Site: Barreiro

Reference: Azevedo et al. 2005 (as *Epithemia adnata*)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Epithemia adnata* (Kützing) Brébisson)

Site: Graciosa Island

Reference: Gonçalves et al. 2010 (as *Epithemia adnata* (Kützing) Brébisson)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Epithemia adnata* (Kützing) Brébisson)

Site: Not specified

Reference: Gonçalves 2008 (as *Epithemia adnata* (Kützing) Brébisson)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Epithemia adnata* (Kützing) Brébisson)

***Epithemia adnata* var. *porcellus* (Kützing) R.M. Patrick in Patrick & Reimer 1975**, p. 180-181; pl. 24, fig. 6 [CAS ref. 006176]

Basionym: *Epithemia porcellus* Kützing 1844 [CAS ref. 000595]

Nomenclatural synonym: *Epithemia zebra* var. *porcellus* (Kützing) Grunow 1862 [CAS ref. 000428]

Distribution (Fig. 353):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Óis da Ribeira, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Epithemia adnata* (Kützing) Brébisson var. *porcellus* (Kützing) Grunow)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Epithemia zebra* (Ehr.) Kütz. var. *porcellus* (Kütz.) Grunow)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Epithemia zebra* (Ehr.) Kütz. var. *porcellus* (Kütz.) Grunow)

Municipality: Aveiro (District: Aveiro)

Site: Eixo, Horta Stream (Vouga Basin)

Reference: Almeida 1998 (as *Epithemia adnata* (Kützing) Brébisson var. *porcellus* (Kützing) Grunow)

Site: Pano, Largo River (Vouga Basin)

Reference: Almeida 1998 (as *Epithemia adnata* (Kützing) Brébisson var. *porcellus* (Kützing) Grunow)

Site: Requeixo, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Epithemia adnata* (Kützing) Brébisson var. *porcellus* (Kützing) Grunow)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Epithemia zebra* (Ehr.) Kütz. var. *porcellus* (Kütz.) Grunow)

Municipality: Estarreja (District: Aveiro)

Site: Minhoteira, Antuã River (Vouga Basin)

Reference: Almeida 1998 (as *Epithemia adnata* (Kützing) Brébisson var. *porcellus* (Kützing) Grunow)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Perrães, Levira River (Vouga Basin)

Reference: Almeida 1998 (as *Epithemia adnata* (Kützing) Brébisson var. *porcellus* (Kützing) Grunow)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Epithemia zebra* (Ehr.) Kütz. var. *porcellus* (Kütz.) Grunow)

Subregion: Oeste

Municipality: Óbidos (District: Leiria)

Site: Not specified

Reference: Silva 1946b (as *Epithemia zebra* var. *porcellus* (Kütz.) Grun., fossil)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Calado 1990 *Epithemia zebra* (Ehr.) Kütz. var. *porcellus* (Kützing) Grunow

REGION: ALENTEJO

Subregion: Alentejo Litoral

Municipality: Alcácer do Sal (District: Setúbal)

Site: Carvalhal diatomite

Reference: Silva 1949 (as *Epithemia zebra* var. *porcellus* (Kütz.) Grun., fossil)

Subregion: Lezíria do Tejo

Municipality: Alpiarça (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Epithemia zebra* var. *porcellus* (Kütz.) Grun., fossil)

***Epithemia adnata* var. *saxonica* (Kützing) R.M. Patrick in Patrick & Reimer 1975, p. 182; pl. 24, fig. 9 [CAS ref. 006176]**

Basionym: *Epithemia saxonica* Kützing 1844 [CAS ref. 000595]

Nomenclatural synonym: *Epithemia zebra* var. *saxonica* (Kützing) Grunow 1862 [CAS ref. 000428]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Calado 1990 (as *Epithemia zebra* (Ehr.) Kütz. var. *saxonica* (Kütz.) Grunow)

***Epithemia argus* (Ehrenberg) Kützing 1844**, p. 35; pl. 22, fig. 55, 56
[CAS ref. 000595]

Basionym: *Eunotia argus* Ehrenberg 1843 [CAS ref. 000294]

Nomenclatural synonym: *Cystopleura argus* (Ehrenberg) Kuntze 1891 [CAS ref. 001330]

Distribution (Fig. 354):

REGION: NORTE

Subregion: Ave

Municipality: Vila Nova de Famalicão (District: Braga)

Site: Ribeirão de Famalicão

Reference: Zimmermann 1910 (as *Cystopleura argus* (Ehr.) Kuntze)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Not specified

Site: Pateira de Fermentelos (District: Aveiro)

Reference: Calado 1991 (as *Epithemia argus* Kützing)

Subregion: Oeste

Municipality: Óbidos (District: Leiria)

Site: Not specified

Reference: Silva 1946b (as *Epithemia argus* Kütz., fossil)

Municipality: Torres Vedras (District: Lisboa)

Site: Barro

Reference: Zimmermann 1910 (as *Cystopleura argus* (Ehr.) Kuntze)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Mafra (District: Lisboa)

Site: Tapada de Mafra, Sobral da Abelheira

Reference: Oliveira 1971b (as *Epithemia argus*)

Subregion: Península de Setúbal

Municipality: Setúbal (District: Setúbal)

Site: Comenda

Reference: Zimmermann 1910 (as *Cystopleura argus* (Ehr.) Kuntze)

REGION: ALENTEJO

Subregion: Alto Alentejo

Municipality: Nisa (District: Portalegre)

Site: Barca da Amieira, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Epithemia argus*)

Subregion: Lezíria do Tejo

Municipality: Rio Maior (District: Santarém)

Site: Not specified

References: Silva 1945 (as *Epithemia argus* Kütz., fossil); Silva 1946b (as *Epithemia argus* Kütz., fossil)

Subregion: Not specified

Municipality: Not specified

Site: Rocha da Galé, Guadiana River (Guadiana Basin)

Reference: Andrade & Brito 1991 (as *Epithemia argus* (?))

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Salto do Bargado, Furnas

Reference: Chaves 1908 (as *Epithemia argus*, fossil)

Site: Tambores, Furnas

Reference: Chaves 1908 (as *Epithemia argus*, fossil)

Municipality: Not specified

Site: São Jorge Island

References: Johansson 1977 (as *Epithemia argus* Kütz.); Gonçalves et al. 2010 (as *Epithemia argus* (Ehrenberg) Kützing, fossil)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Epithemia argus* (Ehrenberg) Kützing, fossil)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Caminho do Meio

Reference: Zimmermann 1909a (as *Cystopleura argus* (Kuetz.) Kuntze)

Site: Ribeira de João Gomes

Reference: Zimmermann 1909a (as *Cystopleura argus* (Kuetz.) Kuntze)

Municipality: Santa Cruz (Madeira Island)

Site: Fonte do Mestre Henrique, Caniço

Reference: Zimmermann 1909a (as *Cystopleura argus* (Kuetz.) Kuntze)

***Epithemia argus* var. *alpestris* (W. Smith) Grunow 1862**, p. 15 (329); pl. 3/5, fig. 28 [CAS ref. 000428]

Basionym: *Epithemia alpestris* W. Smith 1853 [CAS ref. 000863]

Distribution (Fig. 355):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Epithemia alpestris* Sm.)

Site: Salto do Bargado, Furnas

Reference: Chaves 1908 (as *Epithemia alpestris* Sm., fossil)

***Epithemia argus* var. *capitata* Fricke in Schmidt et al. 1904**, pl. 251, fig. 14 [CAS ref. 012486]

Distribution (Fig. 356):

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Guarda, Mondego River (Mondego Basin)

Reference: Zimmermann 1910 (as *Cystopleura argus* (Ehr.) Kunze var. *capitata*)

***Epithemia faba* (Ehrenberg) Kützing 1844**, p. 36; pl. 5, fig. 21 [CAS ref. 000595]

Basionym: *Eunotia faba* Ehrenberg 1838 [CAS ref. 000288]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Serra da Estrela

Reference: Santos & Carvalho 2001 (as *Epithemia faba* Kützing)

***Epithemia ocellata* (Ehrenberg) Kützing 1844**, p. 34; pl. 29, fig. 57 [CAS ref. 000595]

Basionym: *Eunotia ocellata* Ehrenberg 1840a [CAS ref. 000293]

Distribution (Fig. 357):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Salto do Bargado, Furnas

Reference: Chaves 1908 (as *Epithemia ocellata*, fossil)

Site: Tambores, Furnas

Reference: Chaves 1908 (as *Epithemia ocellata*, fossil)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Levada do Curral dos Romeiros

Reference: Schodduyn 1927 (as *Epithemia ocellata* Kg.)

***Epithemia reicheltii* Fricke in Schmidt et al. 1904**, pl. 251, fig. 28-31 [CAS ref. 012486]

Distribution (Fig. 358):

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Rio Maior (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Epithemia reicheltii* Fricke, fossil)

***Epithemia smithii* Carruthers 1864**, p. 76 [CAS ref. 000189]

Distribution (Fig. 359):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Epithemia smithii* Carruthers)

Site: Not specified

Reference: Gonçalves 2008 (as *Epithemia smithii* Carruthers)

***Epithemia sorex* Kützing 1844**, p. 33; pl. 5/12, fig. 5 a-c [CAS ref. 000595]

Nomenclatural synonym: *Cystopleura sorex* (Kützing) Kuntze 1891 [CAS ref. 001330]

Distribution (Fig. 360):

REGION: NORTE

Subregion: Ave

Municipality: Guimarães (District: Braga)

Site: Rio Coelho

Reference: Zimmermann 1910 (as *Cystopleura sorex* (Kütz.) Kuntze)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Epithemia sorex* Kützing)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

- Site: Agadão, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Epithemia sorex* Kützing)
- Site: Águeda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Epithemia sorex* Kützing)
- Site: Avelal de Baixo, Águeda River (Vouga Basin)
References: Gil 1988 (as *Epithemia sorex* Kützing); Gil et al. 1989-1990 (as *Epithemia sorex*)
- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
References: Gil 1988 (as *Epithemia sorex* Kützing); Gil et al. 1989-1990 (as *Epithemia sorex*)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Epithemia sorex* Kützing)
- Site: Raivo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Epithemia sorex* Kützing)
- Site: Redonda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Epithemia sorex* Kützing)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Epithemia sorex* Kützing)
- Municipality: Aveiro (District: Aveiro)
- Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Epithemia sorex* Kützing)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Epithemia sorex* Kützing)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Epithemia sorex* Kützing)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Epithemia sorex* Kützing)
- Municipality: Not specified
- Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Epithemia sorex* Kützing)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Epithemia sorex* Kützing); Gil et al. 1989-1990 (as *Epithemia sorex*)
- Site: Varzielas, Águeda River (Vouga Basin)
References: Gil 1988 (as *Epithemia sorex* Kützing); Gil et al. 1989-1990 (as *Epithemia sorex*)
- Municipality: Tondela (District: Viseu)
- Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Epithemia sorex* Kützing)
- Municipality: Vouzela (District: Viseu)
- Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Epithemia sorex* Kützing)
Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Epithemia sorex* Kützing); Gil et al. 1989-1990
(as *Epithemia sorex*)

Subregion: Médio Tejo

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Cabeçadas et al. 1980 (as *Epithemia sorex*)

Municipality: Torres Novas (District: Santarém)

Site: Casal do Feijão, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Epithemia sorex* Kütz.)

Subregion: Oeste

Municipality: Torres Vedras (District: Lisboa)

Site: Santa Cruz

Reference: Zimmermann 1910 (as *Cystopleura sorex* (Kütz.) Kuntze)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

References: Calado 1990 (as *Epithemia sorex* Kützing); Gil et al. 1991 (as
Epithemia sorex)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Mafra (District: Lisboa)

Site: Tapada de Mafra, Sobral da Abelheira

Reference: Oliveira 1971b (as *Epithemia sorex*)

Subregion: Península de Setúbal

Municipality: Setúbal (District: Setúbal)

Site: Comenda

Reference: Zimmermann 1910 (as *Cystopleura sorex* (Kütz.) Kuntze)

REGION: ALENTEJO

Subregion: Alentejo Litoral

Municipality: Alcácer do Sal (District: Setúbal)

Site: Pêgo do Altar Reservoir, Alcáçovas Stream (Sado Basin)

Reference: Oliveira 1984a (as *Epithemia sorex*)

Municipality: Odemira (District: Beja)

Site: Santa Clara Reservoir, Mira River (Mira Basin)

Reference: Oliveira 1984a (as *Epithemia sorex*)

Municipality: Santiago do Cacém (District: Setúbal)

Site: Campilhas Reservoir, Campilhas Stream (Sado Basin)

Reference: Oliveira 1984a (as *Epithemia sorex*)

Subregion: Alto Alentejo

Municipality: Avis (District: Portalegre)

Site: Maranhão Reservoir, Raia Stream (Tagus Basin)

Reference: Oliveira 1984c (as *Epithemia sorex*)

Subregion: Lezíria do Tejo
Municipality: Rio Maior (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Epithemia sorex* Kütz., fossil)
Municipality: Santarém (District: Santarém)
Site: Ómnias, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Epithemia sorex*)
Subregion: Not specified
Site: Vascão River (in the edge of the Guadiana Nature Reserve), (Guadiana Basin)
Reference: Gerhardt et al. 2008 (as *Epithemia sorex* Kützing)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Ponta Delgada (São Miguel Island)
Site: Lagoa das Sete Cidades
Reference: Oliveira 1989 (as *Epithemia sorex*)
Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
Reference: Chaves 1908 (as *Epithemia sorex* Ktz.)
Site: Salto do Bargado, Furnas
Reference: Chaves 1908 (as *Epithemia sorex* Ktz., fossil)
Site: Tambores, Furnas
Reference: Chaves 1908 (as *Epithemia sorex* Ktz., fossil)
Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Epithemia sorex* Kützing)
Site: Not specified
Reference: Gonçalves 2008 (as *Epithemia sorex* Kützing)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)
Site: Caminho do Meio
Reference: Zimmermann 1909a (as *Cystopleura sorex* (Kuetz.) Kuntze)
Site: Ribeira de João Gomes
Reference: Zimmermann 1909a (as *Cystopleura sorex* (Kuetz.) Kuntze)
Site: Levada do Bom Sucesso
Reference: Zimmermann 1910-1911 (as *Cystopleura sorex* (Kuetz.) Kunze)
Municipality: Ponta do Sol (Madeira Island)
Site: Rabaçal (Madeira Island)
Reference: Mölder 1947 (as *Epithemia sorex* Kütz.)
Municipality: Porto Santo (Porto Santo Island)
Site: Faial Stream
Reference: Zimmermann 1910-1911 (as *Cystopleura sorex* (Kuetz.) Kunze)
Municipality: Ribeira Brava (Madeira Island)

Site: Pico Stream, Serra da Ribeira Brava
Reference: Zimmermann 1909a (as *Cystopleura sorex* (Kuetz.) Kuntze)
Site: Sítio da Chamorra, Campanário
Reference: Zimmermann 1909a (as *Cystopleura sorex* (Kuetz.) Kuntze)
Municipality: Santana (Madeira Island)
Site: São Roque do Faial
Reference: Zimmermann 1909a (as *Cystopleura sorex* (Kuetz.) Kuntze)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Epithemia sorex* Kützing)

***Epithemia sorex* var. *gracilis* Hustedt 1922**, p. 237; pl. 3, fig. 4 [CAS ref. 000494]

Distribution:

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Calado 1990 (as *Epithemia sorex* Kützing var. *gracilis* Hustedt)

***Epithemia turgida* (Ehrenberg) Kützing 1844**, p. 34; pl. 5, fig. 14 [CAS ref. 000595]

Basionym: *Navicula turgida* Ehrenberg 1830 [CAS ref. 001999]

Nomenclatural synonym: *Cystopleura turgida* (Ehrenberg) Kuntze 1891 [CAS ref. 001330]

Distribution (Fig. 361):

REGION: CENTRO
Subregion: Baixo Mondego
Municipality: Mira (District: Coimbra)
Site: Lagoa de Mira
Reference: Oliveira 1971a (as *Epithemia turgida*)
Subregion: Baixo Vouga
Municipality: Águeda (District: Aveiro)
Site: Agadão, Agadão River (Vouga Basin)

- Reference: Gil 1988 (as *Epithemia turgida* (Ehr.) Kützing)
 Site: Avelal de Baixo, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Epithemia turgida* (Ehr.) Kützing)
 Site: Bolfiar, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Epithemia turgida* (Ehr.) Kützing)
 Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Epithemia turgida* (Ehr.) Kützing); Gil et al. 1989-1990 (as *Epithemia turgida*)
 Site: Raivo, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Epithemia turgida* (Ehr.) Kützing)
 Site: Ribeiro, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Epithemia turgida* (Ehr.) Kützing)
 Municipality: Anadia (District: Aveiro)
 Site: Curia, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Epithemia turgida*)
 Site: São João da Azenha, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Epithemia turgida*)
 Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Epithemia turgida* (Ehr.) Kützing)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Epithemia turgida* (Ehr.) Kützing); Gil et al. 1989-1990 (as *Epithemia turgida*)
 Subregion: Cova da Beira
 Municipality: Fundão (District: Castelo Branco)
 Site: Outeiro do Bispo
 Reference: Zimmermann 1909b (as *Cystopleura turgida* (Ehr.) Kunze)
 Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Epithemia turgida* (Ehr.) Kützing)
 Site: São João do Monte, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Epithemia turgida* (Ehr.) Kützing); Gil et al. 1989-1990 (as *Epithemia turgida*)
 Site: Varzielas, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Epithemia turgida* (Ehr.) Kützing)
 Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 Reference: Gil 1988 (as *Epithemia turgida* (Ehr.) Kützing)
 Subregion: Médio Tejo
 Municipality: Torres Novas (District: Santarém)
 Site: Almonda River (Tagus Basin)
 Reference: Oliveira & Caldas 1970 (as *Epithemia turgida* (Ehr.) Kütz)
 Subregion: Not specified

Municipality: Not specified

Site: Not specified

References: Calado 1990 (as *Epithemia turgida* (Ehrenberg) Kützing); Gil et al. 1991 (as *Epithemia turgida*); Almeida 1998 (as *Epithemia turgida* (Ehr.) Kützing)

REGION: ALENTEJO

Subregion: Alentejo Litoral

Municipality: Alcácer do Sal (District: Setúbal)

Site: Carvalhal diatomite

Reference: Silva 1949 (as *Epithemia turgida* (Ehr.) Kütz., fossil)

Subregion: Lezíria do Tejo

Municipality: Rio Maior (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Epithemia turgida* (Ehr.) Kütz., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Calheta (São Jorge Island)

Site: Calheta

Reference: Mölder 1947 (as *Epithemia turgida* (Ehr.) Kütz.)

Site: Ribeira do Salto (São Jorge Island)

Reference: Mölder 1947 (as *Epithemia turgida* (Ehr.) Kütz.)

Municipality: Horta (Faial Island)

Site: Not specified

Reference: Johansson 1977 (as *Epithemia turgida* (Ehr.) Kütz.)

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Epithemia turgida* (Ehr.) Kütz.); Bourrelly & Manguin 1946a (as *Epithemia turgida* (Ehr.) Kütz.)

Site: Lagoinha, Fajãzinha

References: Manguin 1942 (as *Epithemia turgida* (Ehr.) Kütz.); Bourrelly & Manguin 1946a (as *Epithemia turgida* (Ehr.) Kütz.)

Municipality: Nordeste (São Miguel Island)

Site: Serra Tronqueira

References: Manguin 1942 (as *Epithemia turgida* (Ehr.) Kütz.); Bourrelly & Manguin 1946a (as *Epithemia turgida* (Ehr.) Kütz.)

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa Grande

Reference: Holmboe 1901 (as *Epithemia turgida* (Ehr.) Kütz.)

Site: Lagoa das Sete Cidades

Reference: Holmboe 1901 (as *Epithemia turgida* (Ehr.) Kütz.)

Municipality: Povoação (São Miguel Island)

Site: Furnas

References: Holmboe 1901 (as *Epithemia turgida* (Ehr.) Kütz.); Mölder 1947 (as *Epithemia turgida* (Ehr.) Kütz.)

Site: Inferno Grote near Lagoa das Furnas (São Miguel Island)

- Reference: Holmboe 1901 (as *Epithemia turgida* (Ehr.) Kütz.)
 Site: Lagoa das Furnas
 References: Chaves 1908 (as *Epithemia turgida* Ktz.); Manguin 1942 (as *Epithemia turgida* (Ehr.) Kütz.); Bourrelly & Manguin 1946a (as *Epithemia turgida* (Ehr.) Kütz.)
 Site: Pico do Gafanhoto
 Reference: Holmboe 1901 (as *Epithemia turgida* (Ehr.) Kütz.)
 Site: Pico da Vara
 Reference: Mölder 1947 (as *Epithemia turgida* (Ehr.) Kütz.)
 Site: Ribeira Quente
 References: Manguin 1942 (as *Epithemia turgida* (Ehr.) Kütz.); Bourrelly & Manguin 1946a (as *Epithemia turgida* (Ehr.) Kütz.); Mölder 1947 (as *Epithemia turgida* (Ehr.) Kütz.)
 Site: Salto do Bargado, Furnas
 Reference: Chaves 1908 (as *Epithemia turgida* Ktz., fossil)
 Site: Tambores, Furnas
 Reference: Chaves 1908 (as *Epithemia turgida* Ktz., fossil)
 Municipality: Santa Cruz das Flores (Flores Island)
 Site: Ribeira Grande
 References: Manguin 1942 (as *Epithemia turgida* (Ehr.) Kütz.); Bourrelly & Manguin 1946a (as *Epithemia turgida* (Ehr.) Kütz.)
 Site: Not specified
 Reference: Mölder 1947 (as *Epithemia turgida* (Ehr.) Kütz.)
 Municipality: Not specified
 Site: Faial Island
 Reference: Gonçalves et al. 2010 (as *Epithemia turgida* (Ehrenberg) Kützing)
 Site: Flores Island
 Reference: Gonçalves et al. 2010 (as *Epithemia turgida* (Ehrenberg) Kützing)
 Site: São Jorge Island
 Reference: Gonçalves et al. 2010 (as *Epithemia turgida* (Ehrenberg) Kützing)
 Site: São Miguel Island
 Reference: Gonçalves et al. 2010 (as *Epithemia turgida* (Ehrenberg) Kützing)
 Site: Terceira Island
 References: Holmboe 1901 (as *Epithemia turgida* (Ehr.) Kütz.); Gonçalves et al. 2010 (as *Epithemia turgida* (Ehrenberg) Kützing)
 Site: Not specified
 Reference: Gonçalves 2008 (as *Epithemia turgida* (Ehrenberg) Kützing)
- REGION: AUTONOMOUS REGION OF MADEIRA
 Municipality: Funchal (Madeira Island)
 Site: Caminho do Meio
 Reference: Zimmermann 1909a (as *Cystopleura turgida* (Ehr.) Kunze)

- Site: Ribeira de João Gomes
Reference: Zimmermann 1909a (as *Cystopleura turgida* (Ehr.) Kunze)
- Site: Levada do Bom Sucesso
Reference: Zimmermann 1910-1911 (as *Cystopleura turgida* (Ehr.) Kunze)
- Site: Santa Luzia Stream
Reference: Zimmermann 1909a (as *Cystopleura turgida* (Ehr.) Kunze)
- Site: São João Stream
Reference: Zimmermann 1909a (as *Cystopleura turgida* (Ehr.) Kunze)
- Site: Tanque dos Estanquinhos
Reference: Zimmermann 1910-1911 (as *Cystopleura turgida* (Ehr.) Kunze)
- Municipality: Ponta do Sol (Madeira Island)
Site: Rabaçal (Madeira Island)
Reference: Mölder 1947 (as *Epithemia turgida* (Ehr.) Kütz.)
- Municipality: Ribeira Brava (Madeira Island)
Site: Pico Stream, Serra da Ribeira Brava
Reference: Zimmermann 1909a (as *Cystopleura turgida* (Ehr.) Kunze)
- Site: Pomar de Ambrosio, Campanário
Reference: Zimmermann 1909a (as *Cystopleura turgida* (Ehr.) Kunze)
- Site: Sítio da Chamorra, Campanário
Reference: Zimmermann 1909a (as *Cystopleura turgida* (Ehr.) Kunze)
- Municipality: Santa Cruz (Madeira Island)
Site: Fonte do Mestre Henrique, Caniço
Reference: Zimmermann 1909a (as *Cystopleura turgida* (Ehr.) Kunze)
- Municipality: Santana (Madeira Island)
Site: São Roque do Faial
Reference: Zimmermann 1909a (as *Cystopleura turgida* (Ehr.) Kunze)

***Epithemia turgida* var. *granulata* (Ehrenberg) Brun 1880**, p. 44; pl. 2, fig. 13 [CAS ref. 000174]

Basionym: *Eunotia granulata* Ehrenberg 1836 [CAS ref. 001175]

Distribution (Fig. 362):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Epithemia turgida* var. *granulata* (Ehr.) Brun)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Epithemia turgida* var. *granulata* (Ehr.) Brun)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Epithemia turgida* (Ehr.) Kütz. var. *granulata* (Ehr.) Grunow)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Epithemia turgida* (Ehr.) Kütz. var. *granulata* (Ehr.) Grunow)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoinha, Fajãzinha

References: Manguin 1942 (as *Epithemia turgida* (Ehr.) Kütz. var. *granulata* (Ehr.) Grun.); Bourrelly & Manguin 1946a (as *Epithemia turgida* (Ehr.) Kütz. var. *granulata* (Ehr.) Grun.)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Mölder 1947 (as *Epithemia turgida* (Ehr.) Kütz. var. *granulata* (Ehr.) Grun.)

Site: Pico da Vara

Reference: Mölder 1947 (as *Epithemia turgida* (Ehr.) Kütz. var. *granulata* (Ehr.) Grun.)

Site: Ribeira Quente

References: Manguin 1942 (as *Epithemia turgida* (Ehr.) Kütz. var. *granulata* (Ehr.) Grun.); Bourrelly & Manguin 1946a (as *Epithemia turgida* (Ehr.) Kütz. var. *granulata* (Ehr.) Grun.)

***Epithemia zebra* (Ehrenberg) Kützing 1844**, p. 34; pl. 5/12, fig. 6a-c
[CAS ref. 000595]

Basionym: *Navicula zebra* Ehrenberg 1835 [CAS ref. 000284]

Nomenclatural synonym: *Cystopleura zebra* (Ehrenberg) Kuntze 1891 [CAS ref. 001330]

Distribution (Fig. 363):

REGION: NORTE

Subregion: Ave

Municipality: Vila Nova de Famalicão (District: Braga)

Site: Ribeirão de Famalicão

Reference: Zimmermann 1910 (as *Cystopleura zebra* (Ehr.) Kuntze)

Subregion: Grande Porto

Municipality: Gondomar (District: Porto)

Site: Gramido

Reference: Silva 1950b (as *Epithemia zebra* (Ehr.) Kütz.)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Epithemia zebra* (Ehr.) Kützing)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Epithemia zebra* (Ehr.) Kützing)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Epithemia zebra* (Ehr.) Kützing)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

References: Gil 1988 (as *Epithemia zebra* (Ehr.) Kützing); Gil et al. 1989-1990 (as *Epithemia zebra*)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

References: Gil 1988 (as *Epithemia zebra* (Ehr.) Kützing); Gil et al. 1989-1990 (as *Epithemia zebra*)

Municipality: Not specified

Site: Pateira de Fermentelos (District: Aveiro)

Reference: Calado 1991 (as *Epithemia zebra* (Ehrenberg) Kützing)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Epithemia zebra* (Ehr.) Kützing)

Subregion: Oeste

Municipality: Óbidos (District: Leiria)

Reference: Silva 1946b (as *Epithemia zebra* Ehr., fossil)

Municipality: Torres Vedras (District: Lisboa)

Site: Catefica

Reference: Zimmermann 1910 (as *Cystopleura zebra* (Ehr.) Kuntze)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Calado 1990 (as *Epithemia zebra* (Ehrenberg) Kützing)

REGION: ALENTEJO

Subregion: Alentejo Litoral

Municipality: Alcácer do Sal (District: Setúbal)

Site: Carvalhal diatomite

Reference: Silva 1949 (as *Epithemia zebra* (Ehr.) Kütz., fossil)

Subregion: Lezíria do Tejo

Municipality: Rio Maior (District: Santarém)

Site: Not specified

References: Silva 1945 (as *Epithemia zebra* (Ehr.) Kütz., fossil); Silva 1946b (as *Epithemia zebra* Ehr., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa das Sete Cidades

References: Holmboe 1901 (as *Epithemia zebra* (Ehr.) Kütz.); Oliveira 1989 (as *Epithemia zebra*)

Municipality: Povoação (São Miguel Island)

Site: Ferruginous springs, Furnas

Reference: Chaves 1908 (as *Epithemia zebra* Ehr.)

Site: Furnas

Reference: Mölder 1947 (as *Epithemia zebra* (Ehr.) Kütz.)

Site: Lagoa das Furnas

Reference: Holmboe 1901 (as *Epithemia zebra* (Ehr.) Kütz.)

Site: Pico da Vara

Reference: Mölder 1947 (as *Epithemia zebra* (Ehr.) Kütz.)

Site: Ribeira Quente

Reference: Mölder 1947 (as *Epithemia zebra* (Ehr.) Kütz.)

Site: Salto do Bargado, Furnas

Reference: Chaves 1908 (as *Epithemia zebra* Ehr., fossil)

Site: Tambores, Furnas

Reference: Chaves 1908 (as *Epithemia zebra* Ehr., fossil)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Levada do Bom Sucesso

Reference: Zimmermann 1910-1911 (as *Cystopleura zebra* (Ehr.) Kuntze)

Municipality: Ponta do Sol (Madeira Island)

Site: Rabaçal (Madeira Island)

Reference: Mölder 1947 (as *Epithemia zebra* (Ehr.) Kütz.)

Municipality: Porto Santo (Porto Santo Island)

Site: Faial Stream

Reference: Zimmermann 1910-1911 (as *Cystopleura zebra* (Ehr.) Kuntze)

***Epithemia* sp.**

Distribution (Fig. 364):

REGION: CENTRO

Subregion: Beira Interior Sul

Municipality: Vila Velha de Ródão (District: Castelo Branco)

Site: downstream of Cedilho Reservoir, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (*Epithemia* sp.)
Subregion: Médio Tejo
Municipality: Torres Novas (District: Santarém)
Site: Casal do Feijão, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Epithemia* sp.)
Site: Casal da Pinheira, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Epithemia* sp.)
Site: Renova, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Epithemia* sp.)

REGION: ALENTEJO
Subregion: Alto Alentejo
Municipality: Gavião (District: Portalegre)
Site: Belver Reservoir, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (*Epithemia* sp.)

***Eucoconeis* Cleve ex F. Meister 1912, p. 95**
[CAS ref. 000642]

***Eucoconeis austriaca* (Hustedt) Lange-Bertalot apud Lange-Bertalot & Genkal in Lange-Bertalot (ed.) 1999, p. 46** [CAS ref. 009014]

Basionym: *Achnanthes austriaca* Hustedt 1922b [CAS ref. 006174]

Nomenclatural synonym: *Achnanthes laevis* var. *austriaca* (Hustedt) Lange-Bertalot in Lange-Bertalot & Krammer 1989 [CAS ref. 006174]

Distribution (Fig. 365):

REGION: CENTRO
Subregion: Baixo Vouga
Municipality: Águeda (District: Aveiro)
Site: Agadão, Agadão River (Vouga Basin)
References: Gil 1988 (as *Achnanthes austriaca* Hustedt); Gil et al. 1989-1990 (as *Achnanthes austriaca*)
Site: Águeda, Águeda River (Vouga Basin)
References: Gil 1988 (as *Achnanthes austriaca* Hustedt); Gil et al. 1989-1990 (as *Achnanthes austriaca*)
Site: Avelal de Baixo, Águeda River (Vouga Basin)
References: Gil 1988 (as *Achnanthes austriaca* Hustedt); Gil et al. 1989-1990 (as *Achnanthes austriaca*)
Site: Bolfiar, Águeda River (Vouga Basin)

- References: Gil 1988 (as *Achnanthes austriaca* Hustedt); Gil et al. 1989-1990 (as *Achnanthes austriaca*)
- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
References: Gil 1988 (as *Achnanthes austriaca* Hustedt); Gil et al. 1989-1990 (as *Achnanthes austriaca*)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Achnanthes austriaca* Hustedt); Gil et al. 1989-1990 (as *Achnanthes austriaca*)
- Site: Raivo, Águeda River (Vouga Basin)
References: Gil 1988 (as *Achnanthes austriaca* Hustedt); Gil et al. 1989-1990 (as *Achnanthes austriaca*)
- Site: Redonda, Águeda River (Vouga Basin)
References: Gil 1988 (as *Achnanthes austriaca* Hustedt); Gil et al. 1989-1990 (as *Achnanthes austriaca*)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Achnanthes austriaca* Hustedt); Gil et al. 1989-1990 (as *Achnanthes austriaca*)
- Municipality: Aveiro (District: Aveiro)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Achnanthes austriaca* Hustedt); Gil et al. 1989-1990 (as *Achnanthes austriaca*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Achnanthes austriaca* Hustedt); Gil et al. 1989-1990 (as *Achnanthes austriaca*)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Achnanthes austriaca* Hustedt); Gil et al. 1989-1990 (as *Achnanthes austriaca*)
- Site: São João do Monte, Águeda River (Vouga Basin)
References: Gil 1988 (as *Achnanthes austriaca* Hustedt); Gil et al. 1989-1990 (as *Achnanthes austriaca*)
- Site: Varzuelas, Águeda River (Vouga Basin)
References: Gil 1988 (as *Achnanthes austriaca* Hustedt); Gil et al. 1989-1990 (as *Achnanthes austriaca*)
- Municipality: Tondela (District: Viseu)
- Site: Boi, Agadão River (Vouga Basin)
References: Gil 1988 (as *Achnanthes austriaca* Hustedt); Gil et al. 1989-1990 (as *Achnanthes austriaca*)
- Municipality: Vouzela (District: Viseu)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil et al. 1989-1990 (as *Achnanthes austriaca*)
- Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Achnanthes austriaca* Hustedt)
Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Achnanthes austriaca* Hustedt); Gil et al. 1989-1990 (as *Achnanthes austriaca*)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

References: Calado 1990 (as *Achnanthes austriaca* Hustedt); Gil et al. 1991 (as *Achnanthes austriaca*)

***Eucoconeis flexella* (Kützing) F. Meister 1912**, p. 95 [CAS ref. 000642]

Basionym: *Cymbella flexella* Kützing 1844 [CAS ref. 000595]

Nomenclatural synonyms: *Achnanthidium flexellum* (Kützing) Brébisson ex Kützing 1849 [CAS ref. 000596]

Achnanthes flexella (Kützing) Brun 1880 [CAS ref. 000174]

Achnanthes flexella (Kützing) A. Mann 1937 [CAS ref. 000634]

Distribution (Fig. 366):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Achnanthidium flexellum*)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Calado 1990 (as *Achnanthes flexella* (Kützing) Brun)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Rio Maior (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Eucoconeis flexella* (Kütz.), fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Jorge Island

References: Johansson 1977 (as *Achnanthes flexella* (Kütz.) Brun); Gonçalves et al. 2010 (as *Achnanthes flexella* (Kützing) Meister)

***Eucoconeis laevis* (Østrup) Lange-Bertalot apud Lange-Bertalot & Genkal in Lange-Bertalot (ed.) 1999, p. 46 [CAS ref. 009014]**

Basionym: *Achnanthes laevis* Østrup 1910 [CAS ref. 000706]

Distribution (Fig. 367):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Miguel Island

References: Gonçalves et al. 2010 (as *Eucoconeis laevis* (Oestrup) Lange-Bertalot)

***Eunotia Ehrenberg 1837d*, p. 44
[CAS ref. 001178]**

***Eunotia alpina* (Nägeli in Kützing) Hustedt in Schmidt et al. 1913a, pl. 291, fig. 7-8 [CAS ref. 012496]**

Basionym: *Synedra alpina* Nägeli in Kützing 1849 [CAS ref. 000596]

Distribution (Fig. 368):

REGION: NORTE

Subregion: Minho-Lima

Municipality: Caminha (District: Viana do Castelo)

Site: Gondar Stream (Âncora Basin)

Reference: Formigo et al. 1993 (as *Eunotia alpina*)

REGION: CENTRO

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: Lagoa Comprida Reservoir, Lagoa Stream (Mondego Basin)

Reference: Santos et al. 2002 (as *Eunotia alpina* (Naegeli) Hustedt)

Site: Pond near Lagoa Comprida

Reference: Santos et al. 2002 (as *Eunotia alpina* (Naegeli) Hustedt)

Site: São Romão, Lagoa do Covão do Curral

Reference: Santos et al. 2002 (as *Eunotia alpina* (Naegeli) Hustedt)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Eunotia alpina* (Naeg.) Hust.); Bourrelly & Manguin 1946a (as *Eunotia alpina* (Naeg.) Hust.)

***Eunotia arcofallax* Lange-Bertalot in Werum & Lange-Bertalot 2004**, p. 148; pl. 7, fig. 1-9 [CAS ref. 012889]

Distribution (Fig. 369):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Jorge Island

Reference: Gonçalves et al. 2010 (as *Eunotia arcofallax* Lange-Bertalot)

***Eunotia arcubus* Nörpel-Schempp & Lange-Bertalot in Lange-Bertalot 1993**, p. 24-25; pl. 16, fig. 1-6, pl. 19, fig. 1-10, pl. 20, fig. 1-6, pl. 21, fig. 1-11 [CAS ref. 008467]

Distribution (Fig. 370):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia arcubus* Nörpel & Lange-Bertalot)

***Eunotia arculus* Lange-Bertalot & Nörpel-Schempp in Krammer & Lange-Bertalot 1991a**, p. 213; pl. 157, fig. 4-12 [CAS ref. 006521]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia arculus* (Grunow) Lange-Bertalot & Nörpel)

***Eunotia arcus* Ehrenberg 1838**, p. 191; pl. 21, fig. 22 [CAS ref. 000288]

Nomenclatural synonym: *Himantidium arcus* (Ehrenberg) Ehrenberg 1840a [CAS ref. 000293]

Distribution (Fig. 371):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Montalegre (District: Vila Real)

Site: Alto Rabagão Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1985 (as *Eunotia arcus*)

Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)

References: Oliveira 1982a (as *Eunotia arcus*); Oliveira 1985 (as *Eunotia arcus*)

Subregion: Ave

Municipality: Vieira do Minho (District: Braga)

Site: Salamonde Reservoir, Cávado River (Cávado Basin)

Reference: Oliveira 1985 (as *Eunotia arcus*)

Subregion: Grande Porto

Municipality: Gondomar (District: Porto)

Site: Gramido

Reference: Silva 1950b (as *Eunotia arcus* Ehr.)

Subregion: Not specified

Municipality: Not specified

Site: Serra do Gerês

Reference: Silva 1950a (as *Eunotia arcus* Ehr.)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia arcus* Ehrenberg)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia arcus* Ehrenberg)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia arcus* Ehrenberg)

Site: Bolfiar, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia arcus* Ehrenberg); Gil et al. 1989-1990 (as *Eunotia arcus*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

References: Gil 1988 (as *Eunotia arcus* Ehrenberg); Gil et al. 1989-1990 (as *Eunotia arcus*)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

- Reference: Gil 1988 (as *Eunotia arcus* Ehrenberg)
 Site: Raivo, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia arcus* Ehrenberg)
 Site: Redonda, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia arcus* Ehrenberg)
 Site: Ribeiro, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia arcus* Ehrenberg)
 Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia arcus* Ehrenberg)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Eunotia arcus* Ehrenberg); Gil et al. 1989-1990 (as *Eunotia arcus*)
 Municipality: Not specified
 Site: Pateira de Fermentelos (District: Aveiro)
 Reference: Calado 1991 (as *Eunotia arcus* Ehrenberg)
- Subregion: Beira Interior Norte
 Municipality: Guarda (District: Guarda)
 Site: Diz River
 Reference: Carvalho 1913 (as *Eunotia arcus* Ehr.)
- Subregion: Beira Interior Sul
 Municipality: Castelo Branco (District: Castelo Branco)
 Site: São Fiel, Ocreza River (Tagus Basin)
 Reference: Zimmermann 1906 (as *Eunotia arcus* Ehr.)
- Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia arcus* Ehrenberg)
 Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia arcus* Ehrenberg)
 Site: Varzielas, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia arcus* Ehrenberg)
- Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia arcus* Ehrenberg)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia arcus* Ehrenberg)
- Subregion: Médio Tejo
 Municipality: Tomar (District: Santarém)
 Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
 Reference: Cabeçadas et al. 1980 (as *Eunotia arcus*)
 Municipality: Torres Novas (District: Santarém)
 Site: Casal da Pinheira, Almonda River (Tagus Basin)
 Reference: Oliveira & Caldas 1971 (as *Eunotia arcus* Ehr.)

Site: Ribeira Branca, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Eunotia arcus* Ehr.)
Subregion: Pinhal Interior Norte
Municipality: Pedrógão Grande (District: Leiria)
Site: Bouça Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Eunotia arcus*)
Site: Cabril Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Eunotia arcus*)
Subregion: Pinhal Interior Sul
Municipality: Mação (District: Santarém)
Site: Pracana Reservoir, Ocreza River (Tagus Basin)
Reference: Oliveira 1982b (as *Eunotia arcus*)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
References: Calado 1990 (as *Eunotia arcus* Ehrenberg); Gil et al. 1991
(as *Eunotia arcus*)

REGION: ALENTEJO

Subregion: Alentejo Litoral
Municipality: Alcácer do Sal (District: Setúbal)
Site: São Romão, Sado River (Sado Basin)
Reference: Coutinho 2003 (as *Eunotia arcus* Ehrenberg)
Municipality: Odemira (District: Beja)
Site: Santa Clara Reservoir, Mira River (Mira Basin)
Reference: Oliveira 1987 (as *Eunotia arcus* Ehr.)
Subregion: Alto Alentejo
Municipality: Avis (District: Portalegre)
Site: Maranhão Reservoir, Raia Stream (Tagus Basin)
Reference: Oliveira 1984c (as *Eunotia arcus*)
Municipality: Gavião (District: Portalegre)
Site: Belver Reservoir, Tagus River (Tagus Basin)
Reference: INIP 1977 (as *Eunotia arcus* Ehr.)
Municipality: Marvão (District: Portalegre)
Site: Sever River (Tagus Basin)
Reference: Oliveira 1975 (as *Eunotia arcus*)
Municipality: Nisa (District: Portalegre)
Site: Fratel Reservoir, Tagus River (Tagus Basin)
Reference: INIP 1977 (as *Eunotia arcus* Ehr.)
Municipality: Ponte de Sôr (District: Portalegre)
Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
Reference: Coutinho 1990a (as *Eunotia arcus*)
Subregion: Lezíria do Tejo
Municipality: Alpiarça (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Eunotia arcus* Ehr., fossil)

Municipality: Cartaxo (District: Santarém)
Site: Valada, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Eunotia arcus*)

Municipality: Rio Maior (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Eunotia arcus* Ehr., fossil)

Municipality: Salvaterra de Magos (District: Santarém)
Site: Magos Reservoir, Magos Stream (Tagus Basin)
Reference: Oliveira 1984a (as *Eunotia arcus*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)
Site: Inferno Grote near Lagoa das Furnas (São Miguel Island)
Reference: Holmboe 1901 (as *Eunotia arcus* Ehr.)
Site: Lagoa das Furnas
References: O'Meara 1874 (as *Himantidium arcus*); Dyer 1875 (as *Himantidium arcus* Ehr.); Holmboe 1901 (as *Eunotia arcus* Ehr.)
Site: Pico da Vara
Reference: Holmboe 1901 (as *Eunotia arcus* Ehr.)

Municipality: Not specified
Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Eunotia arcus* Ehrenberg)
Site: São Jorge Island
References: Johansson 1977 (as *Eunotia arcus* Ehr.); Gonçalves et al. 2010 (as *Eunotia arcus* Ehrenberg)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Eunotia arcus* Ehrenberg)
Site: Terceira Island
References: Johansson 1977 (as *Eunotia arcus* Ehr.); Gonçalves et al. 2010 (as *Eunotia arcus* Ehrenberg)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Eunotia arcus* Ehrenberg var. *arcus*)

***Eunotia arcus* var. *bidens* Grunow in Van Heurck 1882-1885, p. 142; pl. 34, fig. 7 [CAS ref. 000896]**

Distribution (Fig. 372):

REGION: NORTE
Subregion: Ave
Municipality: Vila Nova de Famalicão (District: Braga)

Site: Ribeirão de Famalicão
Reference: Zimmermann 1910 (as *Eunotia arcus* Ehr. var. *bidens* V.H.)
Subregion: Grande Porto
Municipality: Gondomar (District: Porto)
Site: Gramido
Reference: Silva 1950b (as *Eunotia arcus* Ehr. var. *bidens* Grun.)
Municipality: Not specified
Site: Serra do Gerês
Reference: Silva 1950a (as *Eunotia arcus* Ehr. var. *bidens* Grun.)

REGION: ALENTEJO
Subregion: Lezíria do Tejo
Municipality: Alpiarça (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Eunotia arcus* Ehr. var. *bidens* Grun., fossil)

REGION: AUTONOMOUS REGION OF AZORES
Municipality: Povoação (São Miguel Island)
Site: Pico da Vara
References: Manguin 1942 (as *Eunotia arcus* Ehr. var. *bidens* Grun.);
Bourrelly & Manguin 1946a (as *Eunotia arcus* Ehr. var. *bidens* Grun.)

***Eunotia arcus* var. *curtum* Grunow 1862**, p. 25 (339) [CAS ref. 000428]

Distribution (Fig. 373):

REGION: CENTRO
Subregion: Cova da Beira
Municipality: Covilhã (District: Castelo Branco)
Site: Covilhã
References: Zimmermann 1910 (as *Eunotia arcus* Ehr. var. *curta*); Santos & Carvalho 2001 (as *Eunotia arcus* Ehr. var. *curta*)

***Eunotia arcus* var. *fallax* Hustedt 1930**, p. 175; fig. 219 [CAS ref. 000502]

Distribution (Fig. 374):

REGION: NORTE
Municipality: Not specified
Site: Serra do Gerês
Reference: Silva 1950a (as *Eunotia arcus* Ehr. var. *fallax* Hust.)

REGION: ALENTEJO
Subregion: Lezíria do Tejo
Municipality: Alpiarça (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Eunotia arcus* var. *fallax* Hust., fossil)

REGION: AUTONOMOUS REGION OF AZORES
Municipality: Not specified
Site: São Jorge Island
Reference: Johansson 1977 (as *Eunotia arcus* v. *fallax* Hust.)

***Eunotia arcus* var. *minor* Grunow in Van Heurck 1882-1885, pl. 34, fig. 3 [CAS ref. 000896]**

Distribution (Fig. 375):

REGION: CENTRO
Subregion: Beira Interior Norte
Municipality: Guarda (District: Guarda)
Site: Diz River
Reference: Carvalho 1913 (as *Eunotia arcus* (Ehr.) var. *minor*)
Site: Gonçalo
Reference: Carvalho 1913 (as *Eunotia arcus* (Ehr.) var. *minor*)
Site: Meios
References: Carvalho 1913 (as *Eunotia arcus* (Ehr.) var. *minor*); Santos & Carvalho 2001 (as *Eunotia arcus* Ehr. var. *minor*)

***Eunotia bicapitata* Grunow in Van Heurck 1882-1885, pl. 35, fig. 11 [CAS ref. 000896]**

Distribution (Fig. 376):

REGION: ALENTEJO
Subregion: Lezíria do Tejo
Municipality: Rio Maior (District: Santarém)
Site: Espanadal diatomite
Reference: Zbyszewski 1943 (as *Eunotia bicapitata* Grün., fossil)
Site: Rio Maior diatomite
Reference: Lefébure 1938 (as *Eunotia bicapitata* Grün., fossil)

***Eunotia bidens* Ehrenberg 1843**, p. 413 (125) [CAS ref. 000294]

Nomenclatural synonym: *Eunotia praerupta* var. *bidens* (Ehrenberg) Grunow in Cleve & Grunow 1880 [CAS ref. 000241]

Distribution (Fig. 377):

REGION: NORTE

Subregion: Grande Porto

Municipality: Maia (District: Porto)

Site: Parada

Reference: Silva 1950b (as *Eunotia praerupta* Ehr. var. *bidens* Grun.)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia praerupta* (Ehr.) v. *bidens* (Ehr.) Grunow)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia praerupta* (Ehr.) v. *bidens* (Ehr.) Grunow)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia praerupta* Ehrenberg var. *bidens* (Ehrenberg) Grunow)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia praerupta* (Ehr.) v. *bidens* (Ehr.) Grunow)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Eunotia praerupta* (Ehr.) v. *bidens* (Ehr.) Grunow)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia praerupta* (Ehr.) v. *bidens* (Ehr.) Grunow)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia praerupta* (Ehr.) v. *bidens* (Ehr.) Grunow)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia praerupta* (Ehr.) v. *bidens* (Ehr.) Grunow)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia praerupta* (Ehr.) v. *bidens* (Ehr.) Grunow)

Municipality: Aveiro (District: Aveiro)

Site: Pano, Largo River (Vouga Basin)

- Reference: Almeida 1998 (as *Eunotia praerupta* Ehrenberg var. *bidens* (Ehrenberg) Grunow)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia praerupta* (Ehr.) v. *bidens* (Ehr.) Grunow)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia praerupta* (Ehr.) v. *bidens* (Ehr.) Grunow)
- Site: Requeixo, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Eunotia praerupta* Ehrenberg var. *bidens* (Ehrenberg) Grunow)
- Site: Vessada, Fontão Creek (Vouga Basin)
- Reference: Almeida 1998 (as *Eunotia praerupta* Ehrenberg var. *bidens* (Ehrenberg) Grunow)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Perrães, Levira River (Vouga Basin)
- Reference: Almeida 1998 (as *Eunotia praerupta* Ehrenberg var. *bidens* (Ehrenberg) Grunow)
- Subregion: Beira Interior Norte
- Municipality: Guarda (District: Guarda)
- Site: Mondego River (Mondego Basin)
- References: Carvalho 1913 (as *Eunotia praerupta* Ehr. var. *bidens* Grun.); Santos & Carvalho 2001 (as *Eunotia praerupta* Ehr. var. *bidens* Grun.)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia praerupta* (Ehr.) v. *bidens* (Ehr.) Grunow)
- Site: São João do Monte, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia praerupta* (Ehr.) v. *bidens* (Ehr.) Grunow)
- Site: Varzielas, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia praerupta* (Ehr.) v. *bidens* (Ehr.) Grunow)
- Municipality: Tondela (District: Viseu)
- Site: Boi, Agadão River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia praerupta* (Ehr.) v. *bidens* (Ehr.) Grunow)
- Municipality: Vouzela (District: Viseu)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia praerupta* (Ehr.) v. *bidens* (Ehr.) Grunow)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia praerupta* (Ehr.) v. *bidens* (Ehr.) Grunow)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Gil et al. 1991 (as *Eunotia praerupta* v. *bidens*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Nordeste (São Miguel Island)

Site: Serra Tronqueira

References: Manguin 1942 (as *Eunotia praerupta* Ehr. var. *bidens* (W. Sm.) Grun.); Bourrelly & Manguin 1946a (as *Eunotia praerupta* Ehr. var. *bidens* (W. Sm.) Grun.)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Ribeira Grande

References: Manguin 1942 (as *Eunotia praerupta* Ehr. var. *bidens* (W. Sm.) Grun.); Bourrelly & Manguin 1946a (as *Eunotia praerupta* Ehr. var. *bidens* (W. Sm.) Grun.)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eunotia bidens* Ehrenberg)

Site: Lagoa de Cazador (São Miguel Island)

References: Manguin 1942 (as *Eunotia praerupta* Ehr. var. *bidens* (W. Sm.) Grun.); Bourrelly & Manguin 1946a (as *Eunotia praerupta* Ehr. var. *bidens* (W. Sm.) Grun.)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia bidens* Ehrenberg)

***Eunotia bidentula* W. Smith 1856, p. 83 [CAS ref. 001007]**

Distribution (Fig. 378):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia bidentula* W. Smith)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia bidentula* W. Smith)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia bidentula* W. Smith)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Eunotia bidentula* W. Smith)

Site: Raivo, Águeda River (Vouga Basin)

- Reference: Gil 1988 (as *Eunotia bidentula* W. Smith)
 Site: Redonda, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia bidentula* W. Smith)
 Site: Ribeiro, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia bidentula* W. Smith)
 Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia bidentula* W. Smith)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia bidentula* W. Smith)
 Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia bidentula* W. Smith)
 Site: São João do Monte, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Eunotia bidentula* W. Smith); Gil et al. 1989-1990 (as *Eunotia bidentula*)
 Site: Varzielas, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia bidentula* W. Smith)
 Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia bidentula* W. Smith)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia bidentula* W. Smith)
 Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: Almeida 1998 (as *Eunotia bidentula* W. Smith)

REGION: ALENTEJO

- Subregion: Lezíria do Tejo
 Municipality: Alpiarça (District: Santarém)
 Site: Not specified
 References: Silva 1946a (as *Eunotia bidentula* W. Sm., fossil); Silva 1946b (as *Eunotia bidentula* W. Sm., fossil)

REGION: AUTONOMOUS REGION OF AZORES

- Municipality: Lajes das Flores (Flores Island)
 Site: Lagoa Rasa
 Reference: Manguin 1942 (as *Eunotia bidentula* W. Sm.)
 Municipality: Nordeste (São Miguel Island)
 Site: Serra Tronqueira
 References: Manguin 1942 (as *Eunotia bidentula* W. Sm.); Bourrelly & Manguin 1946a (as *Eunotia bidentula* W. Sm.)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eunotia bidentula* W.M. Smith)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia bidentula* W.M. Smith)

Site: Not specified

Reference: Bourrelly & Manguin 1946b (as *Eunotia bidentula*);
Gonçalves 2008 (as *Eunotia* cf. *bidentula* W.M. Smith)

***Eunotia bilunaris* (Ehrenberg) Mills 1934, p. 675 [CAS ref. 006287]**

Basionym: *Synedra bilunaris* Ehrenberg 1832b [CAS ref. 000282]

Distribution (Fig. 379):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Arouca (District: Aveiro)

Site: Serra da Freita, Arões, Caima River (Vouga Basin)

References: Nunes et al. 2003 (as *Eunotia bilunaris* (Ehrenberg) Mills);
Nunes 2007 (as *Eunotia bilunaris* (Ehrenberg) Mills var. *bilunaris*);
Ferreira da Silva et al. 2009 (as *Eunotia bilunaris* (Ehr.) Mills var.
bilunaris)

Municipality: São João da Madeira (District: Aveiro)

Site: Ui River (Vouga Basin)

Reference: Resende et al. 2010 (as *Eunotia bilunaris* (Ehrenberg) Mills)

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

References: Almeida 1998 (as *Eunotia bilunaris* (Ehrenberg) Mills);
Nunes 2007 (as *Eunotia bilunaris* (Ehrenberg) Mills var. *bilunaris*)

Site: São Pedro de Castelões, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Eunotia bilunaris* (Ehrenberg) Mills var.
bilunaris)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia bilunaris* (Ehrenberg) Mills)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Arganil (District: Coimbra)

Site: Fronhas Reservoir, Alva River (Mondego Basin)

Reference: Santos et al. 2002 (as *Eunotia bilunaris* (Ehrenberg) Mills)

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Eunotia bilunaris* (Ehrenberg) Mills)

Municipality: Soure (District: Coimbra)

- Site: Irrigation channel near Soure
Reference: Santos et al. 2002 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Subregion: Baixo Vouga
- Municipality: Águeda (District: Aveiro)
- Site: Águeda, Águeda River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Site: Aldeia, Segadães, Vouga River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Site: Óis da Ribeira, Águeda River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Municipality: Albergaria-a-Velha (District: Aveiro)
- Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Site: Ribeira de Fráguas, Palhal Mine, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Eunotia bilunaris* (Ehrenberg) Mills var. *bilunaris*)
- Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Eunotia bilunaris* (Ehrenberg) Mills var. *bilunaris*)
- Municipality: Anadia (District: Aveiro)
- Site: São João de Azenha, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Municipality: Aveiro (District: Aveiro)
- Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Site: Vessada, Fontão Creek (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Municipality: Estarreja (District: Aveiro)
- Site: Estarreja, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Site: Minhoteira, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Site: Perrães, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia bilunaris* (Ehrenberg) Mills)

- Site: Vila Verde, Levira River (Vouga Basin)
 Reference: Almeida 1998 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Municipality: Sever do Vouga (District: Aveiro)
 Site: Pessegueiro do Vouga (mouth of Mau River), Vouga River (Vouga Basin)
 Reference: Nunes 2007 (as *Eunotia bilunaris* (Ehrenberg) Mills var. *bilunaris*)
- Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)
 Reference: Nunes 2007 (as *Eunotia bilunaris* (Ehrenberg) Mills var. *bilunaris*)
- Site: Silva Escura, Upstream of Braçal Mine, Mau River (Vouga Basin)
 Reference: Nunes 2007 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Subregion: Dão-Lafões
 Municipality: Tondela (District: Viseu)
 Site: In the proximity of Tondela, Criz River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Subregion: Pinhal Interior Norte
 Municipality: Pampilhosa da Serra (District: Coimbra)
 Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Subregion: Serra da Estrela
 Municipality: Seia (District: Guarda)
 Site: Pond near Lagoa Comprida
 Reference: Santos et al. 2002 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Site: Sabugueiro, Lagoacho Reservoir
 Reference: Santos et al. 2002 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Site: Sabugueiro, Vale do Rossim Reservoir
 Reference: Santos et al. 2002 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Site: São Romão, Lagoa do Covão do Curral
 Reference: Santos et al. 2002 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Subregion: Not specified
 Municipality: Not specified
 Site: Impacted site after BKME discharge, Vouga River (Vouga Basin)
 Reference: Ferreira et al. 2002 (as *Eunotia bilunaris*)

REGION: AUTONOMOUS REGION OF AZORES

- Municipality: Not specified
 Site: Flores Island
 Reference: Gonçalves et al. 2010 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Site: Pico Island
 Reference: Gonçalves et al. 2010 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Site: São Jorge Island
 Reference: Gonçalves et al. 2010 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Site: São Miguel Island
 Reference: Gonçalves et al. 2010 (as *Eunotia bilunaris* (Ehrenberg) Mills)
- Site: Not specified

Reference: Gonçalves 2008 (as *Eunotia bilunaris* (Ehrenberg) Mills)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia bilunaris* (Ehr.) Mills var. *bilunaris*)

***Eunotia bilunaris* var. *linearis* (Okuno) Lange-Bertalot & Nörpel-Schempp in Krammer & Lange-Bertalot 1991a**, p. 180 [CAS ref. 006521]

Basionym: *Eunotia flexuosa* var. *linearis* Okuno 1952 [CAS ref. 001417]

Distribution (Fig. 380):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Eunotia bilunaris* (Ehrenberg) Mills var. *linearis* (Okuno) Lange-Bertalot)

Subregion: Pinhal Interior Norte

Municipality: Pampilhosa da Serra (District: Coimbra)

Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)

Reference: Santos et al. 2002 (as *Eunotia bilunaris* (Ehrenberg) Mills var. *linearis* (Okuno) Lange-Bertalot)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia bilunaris* var. *linearis* (Okuno) Lange-Bertalot & Nörpel-Schempp)

***Eunotia circumborealis* Lange-Bertalot & Nörpel-Schempp in Lange-Bertalot 1993**, p. 30 [CAS ref. 008467]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia circumborealis* Lange-Bertalot & Nörpel)

***Eunotia curtagrunowii* Nörpel-Schempp & Lange-Bertalot in Lange-Bertalot & Metzeltin 1996**, v. 2: p. 48; pl. 12, fig. 6-11 [CAS ref. 007048]

Synonym: *Eunotia praerupta* var. *musciicola* J.B. Petersen 1928a [CAS ref. 000742], according to Lange-Bertalot et al. 2011, p. 81

Distribution (Fig. 381):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eunotia curtagrunowii* Nörpel-Schempp & Lange-Bertalot in Lange-Bertalot)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia curtagrunowii* Nörpel-Schempp & Lange-Bertalot in Lange-Bertalot)

***Eunotia diadema* Ehrenberg 1837d**, p. 45 [CAS ref. 001178]

Nomenclatural synonym: *Eunotia robusta* var. *diadema* (Ehrenberg) Ralfs 1861 [CAS ref. 001063]

Distribution (Fig. 382):

REGION: NORTE

Subregion: Grande Porto

Municipality: Maia (District: Porto)

Site: Parada

Reference: Silva 1950b (as *Eunotia robusta* Ralfs var. *diadema* (Ehr.) Ralfs)

***Eunotia diodon* Ehrenberg 1837d**, p. 45 [CAS ref. 001178]

Distribution (Fig. 383):

REGION: CENTRO

Subregion: Baixo Vouga

- Municipality: Anadia (District: Aveiro)
 Site: Curia, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Eunotia diodon*)
- Municipality: Águeda (District: Aveiro)
 Site: Agadão, Agadão River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia diodon* Ehrenberg)
 Site: Avelal de Baixo, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia diodon* Ehrenberg)
 Site: Bolfiar, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia diodon* Ehrenberg)
 Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers
 (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia diodon* Ehrenberg)
 Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia diodon* Ehrenberg)
 Site: Raivo, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia diodon* Ehrenberg)
 Site: Ribeiro, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia diodon* Ehrenberg)
- Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima
 River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia diodon* Ehrenberg)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima
 River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia diodon* Ehrenberg)
- Municipality: Mealhada (District: Aveiro)
 Site: Pampilhosa, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Eunotia diodon*)
 Site: Viadouros, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Eunotia diodon*)
- Subregion: Beira Interior Norte
 Municipality: Guarda (District: Guarda)
 Site: Nueme
 Reference: Carvalho 1913 (as *Eunotia diodon* Ehr.)
- Subregion: Beira Interior Sul
 Municipality: Castelo Branco (District: Castelo Branco)
 Site: São Fiel, Ocreza River (Tagus Basin)
 Reference: Zimmermann 1906 (as *Eunotia diodon* Ehr.)
- Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia diodon* Ehrenberg)
 Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia diodon* Ehrenberg)
 Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia diodon* Ehrenberg)
Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia diodon* Ehrenberg)
Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia diodon* Ehrenberg)
Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia diodon* Ehrenberg)
Subregion: Serra da Estrela
Municipality: Seia (District: Guarda)
Site: Pond near Lagoa Comprida
Reference: Santos et al. 2002 (as *Eunotia diodon* Ehrenberg)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Gil et al. 1991 (as *Eunotia diodon*)

REGION: ALENTEJO

Subregion: Lezíria do Tejo
Municipality: Alpiarça (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Eunotia diodon* Ehr., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)
Site: Lagoa Rasa
References: Manguin 1942 (as *Eunotia diodon* Ehr.); Bourrelly & Manguin 1946a (as *Eunotia diodon* Ehr.)
Municipality: Povoação (São Miguel Island)
Site: Pico da Vara
References: Manguin 1942 (as *Eunotia diodon* Ehr.); Bourrelly & Manguin 1946a (as *Eunotia diodon* Ehr.)
Site: Pico Verde
References: Manguin 1942 (as *Eunotia diodon* Ehr.); Bourrelly & Manguin 1946a (as *Eunotia diodon* Ehr.)
Municipality: Not specified
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Eunotia diodon* Ehrenberg)
Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Eunotia diodon* Ehrenberg)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Eunotia diodon* Ehrenberg)
Site: Not specified
Reference: Bourrelly & Manguin 1946b (as *Eunotia diodon*); Gonçalves 2008 (as *Eunotia diodon* Ehrenberg)

***Eunotia exgracilis* W. Smith sensu Gil 1988 [CAS ref. -]**

Note: We were not able to find this taxon in the literature.

Distribution (Fig. 384):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia exgracilis* W. Smith)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia exgracilis* W. Smith)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia exgracilis* W. Smith)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia exgracilis* W. Smith)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Eunotia exgracilis* W. Smith)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Eunotia exgracilis* W. Smith); Gil et al. 1989-1990 (as *Eunotia exgracilis*)

Site: Raivo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia exgracilis* W. Smith); Gil et al. 1989-1990 (as *Eunotia exgracilis*)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia exgracilis* W. Smith)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Eunotia exgracilis* W. Smith); Gil et al. 1989-1990 (as *Eunotia exgracilis*)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia exgracilis* W. Smith)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia exgracilis* W. Smith)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia exgracilis* W. Smith)

Site: São João do Monte, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia exgracilis* W. Smith); Gil et al. 1989-1990 (as *Eunotia exgracilis*)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia exgracilis* W. Smith)
Municipality: Vouzela (District: Viseu)
Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia exgracilis* W. Smith)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Gil et al. 1991 (as *Eunotia exgracilis*)

***Eunotia exigua* (Brébisson ex Kützing) Rabenhorst 1864, p. 73**
[CAS ref. 000775]

Basionym: *Himantidium exiguum* Brébisson ex Kützing 1849 [CAS ref. 000596]

Synonym: *Eunotia gracilis* W. Smith 1853 [CAS ref. 000863], according to Lange-Bertalot et al. 2011, p. 95

Distribution (Fig. 385):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Arouca (District: Aveiro)

Site: Serra da Freita, Arões, Caima River (Vouga Basin)

References: Nunes 2007 (as *Eunotia exigua* (Bréb.) Rabenhorst); Ferreira da Silva et al. 2009 (as *Eunotia exigua* (Brébisson ex Kützing) Rabenhorst)

Municipality: São João da Madeira (District: Aveiro)

Site: Ui River (Vouga Basin)

Reference: Resende et al. 2010 (as *Eunotia exigua* (Brébisson ex Kützing) Rabenhorst)

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia exigua* (Brébisson) Rabenhorst)

Site: São Pedro de Castelões, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Eunotia exigua* (Bréb.) Rabenhorst)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia exigua* (Brébisson) Rabenhorst)

Subregion: Minho-Lima

Municipality: Caminha (District: Viana do Castelo)

Site: Gondar Stream (Âncora Basin)

Reference: Formigo et al. 1993 (as *Eunotia exigua*)

Site: Sains, Âncora River (Âncora Basin)

Reference: Formigo et al. 1993 (as *Eunotia exigua*)

Municipality: Viana do Castelo (District: Viana do Castelo)

Site: Alhada, Âncora River (Âncora Basin)

Reference: Formigo et al. 1993 (as *Eunotia exigua*)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Arganil (District: Coimbra)

Site: Fronhas Reservoir, Alva River (Mondego Basin)

Reference: Santos et al. 2002 (as *Eunotia exigua* (Brébisson) Rabenhorst)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Eunotia exigua* (Bréb.) Grunow); Gil et al. 1989-1990 (as *Eunotia exigua*)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia exigua* (Bréb.) Grunow); Gil et al. 1989-1990 (as *Eunotia exigua*); Almeida 1998 (as *Eunotia exigua* (Brébisson) Rabenhorst)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia exigua* (Brébisson) Rabenhorst)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia exigua* (Bréb.) Grunow); Gil et al. 1989-1990 (as *Eunotia exigua*)

Site: Bolfiar, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia exigua* (Bréb.) Grunow); Gil et al. 1989-1990 (as *Eunotia exigua*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

References: Gil 1988 (as *Eunotia exigua* (Bréb.) Grunow); Gil et al. 1989-1990 (as *Eunotia exigua*)

Site: Óis da Ribeira, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia exigua* (Brébisson) Rabenhorst)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Eunotia exigua* (Bréb.) Grunow); Gil et al. 1989-1990 (as *Eunotia exigua*)

Site: Raivo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia exigua* (Bréb.) Grunow); Gil et al. 1989-1990 (as *Eunotia exigua*)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia exigua* (Bréb.) Grunow); Gil et al. 1989-1990 (as *Eunotia exigua*)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Eunotia exigua* (Bréb.) Grunow); Gil et al. 1989-1990 (as *Eunotia exigua*)

Site: Sernada do Vouga, Vouga River (Vouga Basin)

Reference: Nunes 2007 (as *Eunotia exigua* (Bréb.) Rabenhorst)

Site: Vouga Basin

- Reference: Almeida & Gil 2000 (as *Eunotia exigua* (Brébisson) Rabenhorst)
- Municipality: Albergaria-a-Velha (District: Aveiro)
- Site: Bosturenga, Ribeira de Fráguas, Coval da Mó Stream (Vouga Basin)
- Reference: Nunes 2007 (as *Eunotia exigua* (Bréb.) Rabenhorst)
- Site: Ribeira de Fráguas, Coval da Mó Mine, Coval da Mó Stream (Vouga Basin)
- References: Nunes 2007 (as *Eunotia exigua* (Bréb.) Rabenhorst); Ferreira da Silva et al. 2009 (as *Eunotia exigua* (Brébisson ex Kützing) Rabenhorst)
- Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)
- Reference: Nunes 2007 (as *Eunotia exigua* (Bréb.) Rabenhorst)
- Municipality: Anadia (District: Aveiro)
- Site: Espairo, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Eunotia exigua*)
- Site: Tamengos, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Eunotia exigua*)
- Municipality: Aveiro (District: Aveiro)
- Site: Requeixo, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Eunotia exigua* (Brébisson) Rabenhorst)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
- References: Gil 1988 (as *Eunotia exigua* (Bréb.) Grunow); Gil et al. 1989-1990 (as *Eunotia exigua*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
- References: Gil 1988 (as *Eunotia exigua* (Bréb.) Grunow); Gil et al. 1989-1990 (as *Eunotia exigua*)
- Municipality: Estarreja (District: Aveiro)
- Site: Minhoteira, Antuã River (Vouga Basin)
- Reference: Almeida 1998 (as *Eunotia exigua* (Brébisson) Rabenhorst)
- Municipality: Mealhada (District: Aveiro)
- Site: Pampilhosa, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Eunotia exigua*)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Eunotia exigua*)
- Site: Perrães, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Eunotia exigua*)
- Site: Repolão, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Eunotia exigua*)
- Municipality: Sever do Vouga (District: Aveiro)
- Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)
- Reference: Nunes 2007 (as *Eunotia exigua* (Bréb.) Rabenhorst)

- Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)
 Reference: Nunes 2007 (as *Eunotia exigua* (Bréb.) Rabenhorst)
- Site: Silva Escura, upstream of Braçal Mine, Mau River (Vouga Basin)
 Reference: Nunes 2007 (as *Eunotia exigua* (Bréb.) Rabenhorst)
- Subregion: Beira Interior Norte
- Municipality: Guarda (District: Guarda)
- Site: Cruz da Faia
 Reference: Carvalho 1913 (as *Eunotia exigua* (Bréb.) Rabenh.)
- Site: Cubo
 Reference: Carvalho 1913 (as *Eunotia exigua* (Bréb.) Rabenh.)
- Site: Gonçalo
 Reference: Carvalho 1913 (as *Eunotia exigua* (Bréb.) Rabenh.)
- Site: Lameirinhas
 Reference: Carvalho 1913 (as *Eunotia exigua* (Bréb.) Rabenh.)
- Site: Meios
 References: Carvalho 1913 (as *Eunotia exigua* (Bréb.) Rabenh.); Santos & Carvalho 2001 (as *Eunotia exigua* (Bréb.) Rabenh.)
- Site: Mondego River (Mondego Basin)
 References: Carvalho 1913 (as *Eunotia exigua* (Bréb.) Rabenh.); Santos & Carvalho 2001 (as *Eunotia exigua* (Bréb.) Rabenh.)
- Site: Nueme
 Reference: Carvalho 1913 (as *Eunotia exigua* (Bréb.) Rabenh.)
- Site: Vila Patrício
 Reference: Carvalho 1913 (as *Eunotia exigua* (Bréb.) Rabenh.)
- Subregion: Cova da Beira
- Municipality: Fundão (District: Castelo Branco)
- Site: Serra da Gardunha
 Reference: Zimmermann 1910 (as *Eunotia exigua* (Bréb.) Rabenh.)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Eunotia exigua* (Bréb.) Grunow); Gil et al. 1989-1990 (as *Eunotia exigua*)
- Site: São João do Monte, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Eunotia exigua* (Bréb.) Grunow); Gil et al. 1989-1990 (as *Eunotia exigua*)
- Site: Varzielas, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Eunotia exigua* (Bréb.) Grunow); Gil et al. 1989-1990 (as *Eunotia exigua*)
- Municipality: Tondela (District: Viseu)
- Site: Boi, Agadão River (Vouga Basin)
 References: Gil 1988 (as *Eunotia exigua* (Bréb.) Grunow); Gil et al. 1989-1990 (as *Eunotia exigua*)
- Municipality: Vouzela (District: Viseu)
- Site: Cambra, Alfusqueiro River (Vouga Basin)

- Reference: Gil et al. 1989-1990 (as *Eunotia exigua*)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia exigua* (Bréb.) Grunow)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Eunotia exigua* (Bréb.) Grunow); Gil et al. 1989-1990 (as *Eunotia exigua*)
 Subregion: Serra da Estrela
 Municipality: Seia (District: Guarda)
 Site: São Romão, Lagoa do Covão do Curral
 Reference: Santos et al. 2002 (as *Eunotia exigua* (Brébisson) Rabenhorst)
 Subregion: Not specified
 Municipality: Not specified
 Site: Vouga Basin
 Reference: Almeida & Gil 2000 (as *Eunotia exigua* (Brébisson) Rabenhorst)
 Site: Not specified
 References: Calado 1990 (as *Eunotia exigua* (Brébisson) Grunow); Gil et al. 1991 (as *Eunotia exigua*); Almeida & Gil 2001 (as *Eunotia exigua* (Brébisson) Rabenhorst)

REGION: ALENTEJO

- Subregion: Baixo Alentejo
 Municipality: Aljustrel (District: Beja)
 Site: Água Forte, Água Forte Stream (Sado Basin)
 Reference: Luís et al. 2009 (as *Eunotia exigua* Brébisson in Kützing) Rabenhorst)
 Site: Porto de Beja, Água Forte Stream (Sado Basin)
 Reference: Luís et al. 2009 (as *Eunotia exigua* Brébisson in Kützing) Rabenhorst)
 Site: Porto Ferreira, Roxo Stream (Sado Basin)
 Reference: Luís et al. 2009 (as *Eunotia exigua* Brébisson in Kützing) Rabenhorst)
 Municipality: Mértola (District: Beja)
 Site: Acid mine drainage of the São Domingos mine
 Reference: Gerhardt *et al.* 2008 (as *Eunotia exigua* (Brébisson) Grunow)

REGION: AUTONOMOUS REGION OF AZORES

- Municipality: Angra do Heroísmo (Terceira Island)
 Site: Lagoa da Falca (Terceira Island)
 Reference: Gonçalves 1996 (as *Eunotia exigua* (Brébisson ex Kützing) Rabenhorst)
 Site: Lagoa da Joaninha
 Reference: Gonçalves 1996 (as *Eunotia exigua* (Brébisson ex Kützing) Rabenhorst)
 Municipality: Calheta (São Jorge Island)
 Site: Ribeira de São João

- Reference: Mölder 1947 (as *Eunotia exigua* (Bréb.) Grun.)
Municipality: Corvo (Corvo Island)
Site: Caldeira
- Reference: Mölder 1947 (as *Eunotia exigua* (Bréb.) Grun.)
Municipality: Lajes das Flores (Flores Island)
Site: Lagoa Rasa
- References: Manguin 1942 (as *Eunotia exigua* (Bréb.) Rabh.); Bourrelly & Manguin 1946a (as *Eunotia exigua* (Bréb.) Rabh.)
Municipality: Nordeste (São Miguel Island)
Site: Serra Tronqueira
- References: Manguin 1942 (as *Eunotia exigua* (Bréb.) Rabh.); Bourrelly & Manguin 1946a (as *Eunotia exigua* (Bréb.) Rabh.)
Municipality: Ponta Delgada (São Miguel Island)
Site: Lagoa do Canário
- Reference: Krieger 1931 (as *Eunotia exigua* Bréb.)
Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
- Reference: Mölder 1947 (as *Eunotia exigua* (Bréb.) Grun.)
Site: Pico da Vara
- References: Manguin 1942 (as *Eunotia exigua* (Bréb.) Rabh.); Bourrelly & Manguin 1946a (as *Eunotia exigua* (Bréb.) Rabh.); Mölder 1947 (as *Eunotia exigua* (Bréb.) Grun.)
Site: Pico Verde
- References: Manguin 1942 (as *Eunotia exigua* (Bréb.) Rabh.); Bourrelly & Manguin 1946a (as *Eunotia exigua* (Bréb.) Rabh.)
Municipality: Praia da Vitória (Terceira Island)
Site: Lagoa do Boi
- Reference: Gonçalves 1996 (as *Eunotia exigua* (Brébisson ex Kützing) Rabenhorst)
Site: Lagoa do Negro
- References: Mölder 1947 (as *Eunotia exigua* (Bréb.) Grun.); Gonçalves 1996 (as *Eunotia exigua* (Brébisson ex Kützing) Rabenhorst)
Municipality: Ribeira Grande (São Miguel Island)
Site: Ribeira Grande
- Reference: Gonçalves et al. 2008 (as *Eunotia exigua*)
Municipality: Santa Cruz das Flores (Flores Island)
Site: Lagoa Branca
- References: Manguin 1942 (as *Eunotia exigua* (Bréb.) Rabh.); Bourrelly & Manguin 1946a (as *Eunotia exigua* (Bréb.) Rabh.)
Site: Lagoa Comprida
- References: Manguin 1942 (as *Eunotia exigua* (Bréb.) Rabh.); Bourrelly & Manguin 1946a (as *Eunotia exigua* (Bréb.) Rabh.)
Municipality: Not specified
Site: Corvo Island
- Reference: Gonçalves et al. 2010 (as *Eunotia exigua* (Brébisson ex Kützing) Rabenhorst)

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eunotia exigua* (Brébisson ex Kützing) Rabenhorst)

Site: Lagoa de Cazador (São Miguel Island)

References: Manguin 1942 (as *Eunotia exigua* (Bréb.) Rabh.); Bourrelly & Manguin 1946a (as *Eunotia exigua* (Bréb.) Rabh.)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Eunotia exigua* (Brébisson ex Kützing) Rabenhorst)

Site: São Jorge Island

References: Johansson 1977 (as *Eunotia exigua* (Bréb.) Grun.); Gonçalves et al. 2010 (as *Eunotia exigua* (Brébisson ex Kützing) Rabenhorst)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia exigua* (Brébisson ex Kützing) Rabenhorst)

Site: Terceira Island

References: Johansson 1977 (as *Eunotia exigua* (Bréb.) Grun.); Gonçalves et al. 2010 (as *Eunotia exigua* (Brébisson ex Kützing) Rabenhorst)

Site: Not specified

Reference: Gonçalves 2008 (as *Eunotia exigua* var. *exigua* (Brébisson ex Kützing) Rabenhorst)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia exigua* (Brébisson ex Kützing) Rabenhorst)

***Eunotia faba* Ehrenberg 1837d, p. 45 [CAS ref. 001178]**

Synonyms: *Himantidium faba* Ehrenberg 1854 [CAS ref. 000966] and *Eunotia faba* (Ehrenberg) Grunow in Van Heurck 1881 [CAS ref. 001035], according to Lange-Bertalot et al. 2011, p. 97

Distribution (Fig. 386):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia faba* (Ehr.) Grunow)

Site: Águeda, Águeda River (Vouga Basin)

- References: Gil 1988 (as *Eunotia faba* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Eunotia faba*)
- Site: Avelal de Baixo, Águeda River (Vouga Basin)
References: Gil 1988 (as *Eunotia faba* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Eunotia faba*)
- Site: Bolfiar, Águeda River (Vouga Basin)
References: Gil 1988 (as *Eunotia faba* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Eunotia faba*)
- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
Reference: Gil 1988 (as *Eunotia faba* (Ehr.) Grunow)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia faba* (Ehr.) Grunow)
- Site: Raivo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia faba* (Ehr.) Grunow)
- Site: Redonda, Águeda River (Vouga Basin)
References: Gil 1988 (as *Eunotia faba* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Eunotia faba*)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia faba* (Ehr.) Grunow)
- Municipality: Aveiro (District: Aveiro)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia faba* (Ehr.) Grunow)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia faba* (Ehr.) Grunow)
- Subregion: Beira Interior Norte
- Municipality: Guarda (District: Guarda)
- Site: Lameirinhas
Reference: Carvalho 1913 (as *Eunotia faba* (Ehr.) Grun.)
- Site: Nueme
Reference: Carvalho 1913 (as *Eunotia faba* (Ehr.) Grun.)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia faba* (Ehr.) Grunow)
- Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia faba* (Ehr.) Grunow)
- Site: Varzielas, Águeda River (Vouga Basin)
References: Gil 1988 (as *Eunotia faba* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Eunotia faba*)
- Municipality: Tondela (District: Viseu)
- Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia faba* (Ehr.) Grunow)
- Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia faba* (Ehr.) Grunow)
Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia faba* (Ehr.) Grunow)
Subregion: Serra da Estrela
Municipality: Not specified
Site: Serra da Estrela
Reference: Henriques 1883 (as *Eunotia faba* Kützing)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Gil et al. 1991 (as *Eunotia faba*); Almeida 1998 (as *Eunotia faba* Ehrenberg)

REGION: LISBOA

Subregion: Península de Setúbal
Municipality: Sesimbra (District: Setúbal)
Site: Alfarim diatomite
Reference: Ferreira & Castelo 1957 (as *Eunotia faba* (Ehr.) Grun., fossil)

REGION: ALENTEJO

Subregion: Lezíria do Tejo
Municipality: Alpiarça (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Eunotia faba* (Ehr.) Grun., fossil)
Municipality: Rio Maior (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Eunotia faba* (Ehr.) Grun., fossil)
Subregion: Oeste
Municipality: Óbidos (District: Leiria)
Site: Not specified
Reference: Silva 1946b (as *Eunotia faba* (Ehr.) Grun., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)
Site: Lagoa Rasa
References: Manguin 1942 (as *Eunotia faba* (Ehr.) Grun.); Bourrelly & Manguin 1946a (as *Eunotia faba* (Ehr.) Grun.)
Municipality: Povoação (São Miguel Island)
Site: Furnas
Reference: Mölder 1947 (as *Eunotia faba* (Ehr.) Grun.)
Municipality: Santa Cruz das Flores (Flores Island)
Site: Lagoa Comprida
References: Manguin 1942 (as *Eunotia faba* (Ehr.) Grun.); Bourrelly & Manguin 1946a (as *Eunotia faba* (Ehr.) Grun.)
Municipality: Not specified

Site: Corvo Island
Reference: Gonçalves et al. 2010 (as *Eunotia faba* Grunow)
Site: Lagoa de Cazador (São Miguel Island)
References: Manguin 1942 (as *Eunotia faba* (Ehr.) Grun.); Bourrelly & Manguin 1946a (as *Eunotia faba* (Ehr.) Grun.)
Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Eunotia faba* Grunow)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Eunotia faba* Grunow)
Site: Terceira Island
Reference: Gonçalves et al. 2010 (as *Eunotia faba* Grunow)
Site: Not specified
Reference: Gonçalves 2008 (as *Eunotia faba* Grunow)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Eunotia faba* Grunow)

***Eunotia fallax* A. Cleve 1895**, p. 33; pl. 1, fig. 35 [CAS ref. 000243]

Distribution (Fig. 387):

REGION: AUTONOMOUS REGION OF AZORES
Municipality: Calheta (São Jorge Island)
Site: Ribeira de São João
Reference: Mölder 1947 (as *Eunotia fallax* A. Cleve)
Municipality: Lajes das Flores (Flores Island)
Site: Lagoa Rasa
Reference: Manguin 1942 (as *Eunotia fallax* A. Cleve)
Municipality: Nordeste (São Miguel Island)
Site: Serra Tronqueira
Reference: Manguin 1942 (as *Eunotia fallax* A. Cleve)
Municipality: Povoação (São Miguel Island)
Site: Pico da Vara
References: Manguin 1942 (as *Eunotia fallax* A. Cleve); Bourrelly & Manguin 1946a (as *Eunotia fallax* A. Cleve)
Municipality: Santa Cruz das Flores (Flores Island)
Site: Lagoa Branca
References: Manguin 1942 (as *Eunotia fallax* A. Cleve); Bourrelly & Manguin 1946a (as *Eunotia fallax* A. Cleve)
Site: Lagoa Comprida
Reference: Manguin 1942 (as *Eunotia fallax* A. Cleve)
Municipality: Not specified

Site: Lagoa de Cazador (São Miguel Island)
Reference: Manguin 1942 (as *Eunotia fallax* A. Cleve)
Site: São Jorge Island
Reference: Gonçalves et al. 2010 (as *Eunotia fallax* Cleve)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Eunotia fallax* Cleve)
Site: Not specified
Reference: Gonçalves 2008 (as *Eunotia fallax* Cleve)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Eunotia fallax* A. Cleve var. *fallax*)

***Eunotia fidelensis* C. Zimmermann 1915b**, p. 35; pl. 4, fig. 7 [CAS ref. 001930]

Distribution (Fig. 388):

REGION: CENTRO
Subregion: Beira Interior Sul
Municipality: Castelo Branco (District: Castelo Branco)
Site: São Fiel, Ocreza River (Tagus Basin)
Reference: Zimmermann 1915b (as *Eunotia fidelensis* Zimmermann)
Site: Torre, Ocreza River (Tagus Basin)
Reference: Zimmermann 1915b (as *Eunotia fidelensis* Zimmermann)

***Eunotia flexuosa* (Brébisson ex Kützing) Kützing 1849**, p. 6 [CAS ref. 000596]

Basionym: *Synedra flexuosa* Brébisson ex Kützing 1846 [CAS ref. 002752]

Distribution (Fig. 389):

REGION: CENTRO
Subregion: Baixo Vouga
Municipality: Águeda (District: Aveiro)
Site: Águeda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia flexuosa* Bréb. ex Kützing)
Site: Bolfiar, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia flexuosa* Bréb. ex Kützing)
Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

- Reference: Gil 1988 (as *Eunotia flexuosa* Bréb. ex Kützing)
 Site: Murta, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Eunotia flexuosa*)
 Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia flexuosa* Bréb. ex Kützing)
 Site: Raivo, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia flexuosa* Bréb. ex Kützing)
 Municipality: Anadia (District: Aveiro)
 Site: Curia, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Eunotia flexuosa*)
 Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia flexuosa* Bréb. ex Kützing)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia flexuosa* Bréb. ex Kützing)
 Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Perrães, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Eunotia flexuosa*)
 Municipality: Not specified
 Site: Pateira de Fermentelos (District: Aveiro)
 Reference: Calado 1991 (as *Eunotia flexuosa* Kützing)
 Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia flexuosa* Bréb. ex Kützing)
 Site: Varzielas, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia flexuosa* Bréb. ex Kützing)
 Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia flexuosa* Bréb. ex Kützing)
 Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia flexuosa* Bréb. ex Kützing)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia flexuosa* Bréb. ex Kützing)
 Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: Almeida 1998 (as *Eunotia flexuosa* (Brébisson) Kützing)
- REGION: AUTONOMOUS REGION OF AZORES
 Municipality: Not specified
 Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eunotia flexuosa* (Brébisson) Kützing)

***Eunotia flexuosa* var. *vasconiensis* Manguin in Allorge & Manguin 1941, p. 175; fig. 51 [CAS ref. 001076]**

Distribution (Fig. 390):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Eunotia flexuosa* Kütz. var. *vasconiensis* Manguin); Bourrelly & Manguin 1946a (as *Eunotia flexuosa* Kütz. var. *vasconiensis* Manguin)

***Eunotia formica* Ehrenberg 1843, p. 414 (126) [CAS ref. 000294]**

Distribution (Fig. 391):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia formica* Ehrenberg)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia formica* Ehrenberg); Gil et al. 1989-1990 (as *Eunotia formica*)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia formica* Ehrenberg)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia formica* Ehrenberg)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia formica* Ehrenberg)

Site: Bolfiãr, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia formica* Ehrenberg)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Eunotia formica* Ehrenberg)

Site: Raivo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia formica* Ehrenberg); Gil et al. 1989-1990 (as *Eunotia formica*)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia formica* Ehrenberg)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

- Reference: Gil 1988 (as *Eunotia formica* Ehrenberg)
Municipality: Aveiro (District: Aveiro)
Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia formica* Ehrenberg)
Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Eunotia formica* Ehrenberg); Gil et al. 1989-1990 (as *Eunotia formica*)
Site: Vessada, Fontão Creek (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia formica* Ehrenberg)
Municipality: Estarreja (District: Aveiro)
Site: Estarreja, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia formica* Ehrenberg)
Municipality: Oliveira do Bairro (District: Aveiro)
Site: Perrães, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia formica* Ehrenberg)
Subregion: Beira Interior Sul
Municipality: Castelo Branco (District: Castelo Branco)
Site: Sobral do Campo
Reference: Zimmermann 1909b (as *Eunotia formica* Ehr.)
Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia formica* Ehrenberg)
Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia formica* Ehrenberg)
Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia formica* Ehrenberg)
Site: In the proximity of Tondela, Criz River (Mondego Basin)
Reference: Santos et al. 2002 (as *Eunotia formica* Ehrenberg)
Municipality: Vouzela (District: Viseu)
Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia formica* Ehrenberg)
Subregion: Pinhal Interior Norte
Municipality: Pampilhosa da Serra (District: Coimbra)
Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)
Reference: Santos et al. 2002 (as *Eunotia formica* Ehrenberg)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
References: Calado 1990 (as *Eunotia formica* Ehrenberg); Gil et al. 1991 (as *Eunotia formica*)

***Eunotia formica* var. *intermedia* Grunow 1865**, p. 3; pl. 1, fig. 2 e
[CAS ref. 000430]

Distribution (Fig. 392):

REGION: NORTE

Subregion: Minho-Lima

Municipality: Paredes de Coura (District: Viana do Castelo)

Site: Insalde

Reference: Zimmermann 1910 (as *Eunotia formica* Ehr. var. *intermedia* Grun.)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia formica* Ehrenberg var. *intermedia* Grunow)

***Eunotia glacialis* F. Meister 1912**, p. 85; pl. 10, fig. 2-3 [CAS ref. 000642]

Distribution (Fig. 393):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Praia da Vitória (Terceira Island)

Site: Lagoa do Boi

Reference: Gonçalves 1996 (as *Eunotia glacialis* Meister)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eunotia glacialis* Meister)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Eunotia glacialis* Meister)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia glacialis* Meister)

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Eunotia glacialis* Meister)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia glacialis* Meister)

***Eunotia gracilis* (Ehrenberg) Rabenhorst 1864, p. 72 [CAS ref. 000775]**

Basionym: *Himantidium gracile* Ehrenberg 1843 [CAS ref. 000294]

Synonym: *Eunotia valida* Hustedt [CAS ref. 000502], according to Lange-Bertalot et al. 2011, p. 144

Distribution (Fig. 394):

REGION: NORTE

Subregion: Grande Porto

Municipality: Maia (District: Porto)

Site: Parada

Reference: Silva 1950b (as *Eunotia gracilis* (Ehr.) Rbh.)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia gracilis* (Ehr.) Rabenhorst)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia gracilis* (Ehr.) Rabenhorst)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia gracilis* (Ehr.) Rabenhorst)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Eunotia gracilis* (Ehr.) Rabenhorst)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia gracilis* (Ehr.) Rabenhorst)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia gracilis* (Ehr.) Rabenhorst)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia gracilis* (Ehr.) Rabenhorst)

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Alfarazes

Reference: Carvalho 1913 (as *Eunotia gracilis* (Ehr.) Rabenh.)

Site: Cruz da Faia

Reference: Carvalho 1913 (as *Eunotia gracilis* (Ehr.) Rabenh.)

Site: Diz River

Reference: Carvalho 1913 (as *Eunotia gracilis* (Ehr.) Rabenh.)

Site: Gonçalo

Reference: Carvalho 1913 (as *Eunotia gracilis* (Ehr.) Rabenh.)
Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia gracilis* (Ehr.) Rabenhorst)
Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia gracilis* (Ehr.) Rabenhorst)
Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia gracilis* (Ehr.) Rabenhorst)
Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia gracilis* (Ehr.) Rabenhorst)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Gil et al. 1991 (as *Eunotia gracilis*)

REGION: ALENTEJO

Subregion: Lezíria do Tejo
Municipality: Rio Maior (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Eunotia gracilis* (Ehr.) Rabenh., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
References: Chaves 1908 (as *Himantidium gracile* Ehr.)
Site: Pico da Vara
Reference: Holmboe 1901 (as *Eunotia gracilis* (Ehr.) Rabenh.)

***Eunotia gracilis* W. Smith 1853**, p. 16; pl. 30, fig. 249 [CAS ref. 000863]

Synonym: *Eunotia exigua* (Brébisson ex Kützing) Rabenhorst 1864 [CAS ref. 000775], according to Lange-Bertalot et al. 2011, p. 95

Distribution (Fig. 395):

REGION: NORTE

Subregion: Ave
Municipality: Guimarães (District: Braga)
Site: Rio Coelho
Reference: Zimmermann 1910 (as *Eunotia gracilis* W. Sm.)
Municipality: Vila Nova de Famalicão (District: Braga)
Site: Ribeirão de Famalicão

Reference: Zimmermann 1910 (as *Eunotia gracilis* W. Sm.)
Subregion: Minho-Lima
Municipality: Paredes de Coura (District: Viana do Castelo)
Site: Insalde
Reference: Zimmermann 1910 (as *Eunotia gracilis* W. Sm.)

REGION: CENTRO

Subregion: Baixo Vouga
Municipality: Aveiro (District: Aveiro)
Site: Mondego River (Mondego Basin)
Reference: Zimmermann 1910 (as *Eunotia gracilis* W. Sm.)
Subregion: Beira Interior Sul
Municipality: Castelo Branco (District: Castelo Branco)
Site: Sobral do Campo
Reference: Zimmermann 1910 (as *Eunotia gracilis* W. Sm.)
Subregion: Oeste
Municipality: Torres Vedras (District: Lisboa)
Site: Santa Cruz
Reference: Zimmermann 1910 (as *Eunotia gracilis* W. Sm.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
References: Chaves 1908 (as *Eunotia gracilis* Sm.)

***Eunotia gracilis* var. *ventralis* Ehrenberg [CAS ref. -]**

Distribution (Fig. 396):

REGION: ALENTEJO

Subregion: Lezíria do Tejo
Municipality: Rio Maior (District: Santarém)
Site: Espanadal diatomite
Reference: Zbyszewski 1943 (as *Eunotia gracilis* var. *ventralis* Ehr., fossil)
Site: Rio Maior diatomite
Reference: Lefébure 1938 (as *Eunotia gracilis* var. *ventralis* Ehr., fossil)

***Eunotia groenlandica* (Grunow) Nörpel-Schempp & Lange-Bertalot in Lange-Bertalot & Metzeltin 1996, v. 2: p. 51-52; pl. 17, fig. 25-27 [CAS ref. 007048]**

Basionym: *Eunotia paludosa* var. *groenlandica* Grunow in Van Heurck 1880-1887 [CAS ref. 000896]

Nomenclatural synonym: *Eunotia fallax* var. *groenlandica* (Grunow) Lange-Bertalot & Nörpel in Lange-Bertalot 1993 [CAS ref. 008467]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia fallax* var. *groenlandica* (Grunow) Lange-Bertalot & Nörpel)

***Eunotia implicata* Nörpel-Schempp, Alles & Lange-Bertalot in Alles, Nörpel & Lange-Bertalot 1991, v. 53 (1-2): p. 206; pl. 7, fig. 19-32 [CAS ref. 007325]**

Distribution (Fig. 397):

REGION: CENTRO

Subregion: Pinhal Interior Norte

Municipality: Pampilhosa da Serra (District: Coimbra)

Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)

Reference: Santos et al. 2002 (as *Eunotia implicata* Nörpel & Lange-Bertalot)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: São Romão, Lagoa do Covão do Curral

Reference: Santos et al. 2002 (as *Eunotia implicata* Nörpel & Lange-Bertalot)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Corvo Island

Reference: Gonçalves et al. 2010 (as *Eunotia implicata* Nörpel, Lange-Bertalot & Alles)

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eunotia implicata* Nörpel, Lange-Bertalot & Alles)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Eunotia implicata* Nörpel, Lange-Bertalot & Alles)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia implicata* Nörpel, Lange-Bertalot & Alles)

Site: Not specified

Reference: Gonçalves 2008 (as *Eunotia implicata* Nörpel, Lange-Bertalot & Alles)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia implicata* Nörpel, Lange-Bertalot & Alles)

***Eunotia impressa* Ehrenberg 1854**, pl. 3/4, fig. 20, pl. 14/66 [CAS ref. 000966]

Nomenclatural synonym: *Eunotia pectinalis* var. *minor* f. *impressa* (Ehrenberg) Hustedt 1930 [CAS ref. 000502]

Distribution (Fig. 398):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Corvo (Corvo Island)

Site: Caldeira

Reference: Mölder 1947 (as *Eunotia pectinalis* (Kütz.) Rabenh. var. *minor* (Kütz.) Rabenh. f. *impressa* Ehr.)

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Eunotia pectinalis* (Kütz.) Rabh. var. *minor* (Kütz.) fo. *impressa* (Ehr.) Hust.); Bourrelly & Manguin 1946a (as *Eunotia pectinalis* (Kütz.) Rabh. var. *minor* (Kütz.) fo. *impressa* (Ehr.) Hust.)

Site: Lagoinha, Fajãzinha

References: Manguin 1942 (as *Eunotia pectinalis* (Kütz.) Rabh. var. *minor* (Kütz.) fo. *impressa* (Ehr.) Hust.); Bourrelly & Manguin 1946a (as *Eunotia pectinalis* (Kütz.) Rabh. var. *minor* (Kütz.) fo. *impressa* (Ehr.) Hust.)

Municipality: Povoação (São Miguel Island)

Site: Pico da Vara

Reference: Mölder 1947 (as *Eunotia pectinalis* (Kütz.) Rabenh. var. *minor* (Kütz.) Rabenh. f. *impressa* Ehr.)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Ribeira Grande

References: Manguin 1942 (as *Eunotia pectinalis* (Kütz.) Rabh. var. *minor* (Kütz.) fo. *impressa* (Ehr.) Hust.); Bourrelly & Manguin 1946a (as *Eunotia pectinalis* (Kütz.) Rabh. var. *minor* (Kütz.) fo. *impressa* (Ehr.) Hust.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia impressa* Ehrenberg)

***Eunotia impressa* var. *angusta* Van Heurck 1881**, pl. 33, fig. 22
[CAS ref. 001035]

Distribution (Fig. 399):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Eunotia impressa* var. *angusta*)

***Eunotia incisa* W. Gregory 1854**, p. 96; pl. 4, fig. 4 [CAS ref. 000393]

Distribution (Fig. 400):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Arouca (District: Aveiro)

Site: Serra da Freita, Arões, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Eunotia incisa* Gregory var. *incisa*)

REGION: CENTRO

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: Pond near Lagoa Comprida

Reference: Santos et al. 2002 (as *Eunotia incisa* Gregory)

Site: São Romão, Lagoa do Covão do Curral

Reference: Santos et al. 2002 (as *Eunotia incisa* Gregory)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Rio Maior (District: Santarém)

Site: Espanadal diatomite

Reference: Zbyszewski 1943 (as *Eunotia incisa* Greg., fossil)

Site: Rio Maior diatomite

Reference: Lefébure 1938 (as *Eunotia incisa* Greg., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)

Site: Lagoa da Falca (Terceira Island)

Reference: Gonçalves 1996 (as *Eunotia incisa* Gregory)

Site: Lagoa da Joanhina
Reference: Gonçalves 1996 (as *Eunotia incisa* Gregory)
Municipality: Praia da Vitória (Terceira Island)
Site: Lagoa do Boi
Reference: Gonçalves 1996 (as *Eunotia incisa* Gregory)
Site: Lagoa do Negro
Reference: Gonçalves 1996 (as *Eunotia incisa* Gregory)
Municipality: Not specified
Site: Corvo Island
Reference: Gonçalves et al. 2010 (as *Eunotia incisa* Gregory)
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Eunotia incisa* Gregory)
Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Eunotia incisa* Gregory)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Eunotia incisa* Gregory)
Site: Terceira Island
Reference: Gonçalves et al. 2010 (as *Eunotia incisa* Gregory)
Site: Not specified
Reference: Gonçalves 2008 (as *Eunotia incisa* Gregory)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Mountain Rivers in the North

Reference: Morais et al. 2009 (as *Eunotia incisa* Gregory var. *incisa*)

Site: Not specified

Reference: INAG 2008 (as *Eunotia incisa* Gregory var. *incisa*)

***Eunotia inflata* (Grunow) Nörpel-Schempp & Lange-Bertalot in Lange-Bertalot & Metzeltin 1996, v. 2: p. 52; pl. 12, fig. 1-3 [CAS ref. 007048]**

Basionym: *Eunotia praerupta* var. *inflata* Grunow in Van Heurck 1881 [CAS ref. 001035]

Synonym: *Eunotia praerupta* Ehrenberg 1843 [CAS ref. 000294], according to Lange-Bertalot et al. 2011, p. 199

Distribution (Fig. 401):

REGION: NORTE

Subregion: Grande Porto

Municipality: Maia (District: Porto)

Site: Parada

Reference: Silva 1950b (as *Eunotia praerupta* Ehr. var. *inflata* Grun.)

***Eunotia intermedia* (Krasske ex Hustedt) Nörpel-Schempp & Lange-Bertalot in Lange-Bertalot 1993**, p. 32; Bacill. 2/3, fig. 143:10-15 [CAS ref. 008467]

Basionym: *Eunotia pectinalis* var. *minor* f. *intermedia* Krasske ex Hustedt 1932 [CAS ref. 000506]

Distribution (Fig. 402):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Arouca (District: Aveiro)

Site: Serra da Freita, Arões, Caima River (Vouga Basin)

References: Nunes et al. 2003 (as *Eunotia intermedia* (Krasske ex Hustedt) Nörpel & Lange-Bertalot); Nunes 2007 (as *Eunotia intermedia* (Krasske ex Hustedt) Nörpel & Lange-Bertalot); Ferreira da Silva et al. 2009 (as *Eunotia intermedia* (Krasske ex Hustedt) Nörpel & Lange-Bertalot)

Municipality: Vale de Cambra (District: Aveiro)

Site: São Pedro de Castelões, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Eunotia intermedia* (Krasske ex Hustedt) Nörpel & Lange-Bertalot)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eunotia intermedia* (Krasske) Nörpel & Lange-Bertalot)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Eunotia intermedia* (Krasske) Nörpel & Lange-Bertalot)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia intermedia* (Krasske) Nörpel & Lange-Bertalot)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Mountain Rivers in the North

Reference: Morais et al. 2009 (as *Eunotia intermedia* (Krasske ex Hustedt) Nörpel & Lange-Bertalot)

Site: Not specified

Reference: INAG 2008 (as *Eunotia intermedia* (Krasske ex Hustedt)
Nörpel & Lange-Bertalot)

***Eunotia lapponica* Grunow ex A. Cleve 1895** [CAS ref. 000243]

Distribution (Fig. 403):

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Rio Maior (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Eunotia lapponica* Cleve, fossil)

***Eunotia lunaris* (Ehrenberg) Grunow 1877**, p. 170 [CAS ref. 000437]

Basionym: *Synedra lunaris* Ehrenberg 1832b [CAS ref. 000282]

Distribution (Fig. 404):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Montalegre (District: Vila Real)

Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1982a (as *Eunotia lunaris*)

Subregion: Ave

Municipality: Vieira do Minho (District: Braga)

Site: Salamonde Reservoir, Cávado River (Cávado Basin)

Reference: Oliveira 1982a (as *Eunotia lunaris*)

Subregion: Cávado

Municipality: Barcelos (District: Braga)

Site: Manhente, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Eunotia lunaris*)

Municipality: Braga (District: Braga)

Site: Padim da Graça, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Eunotia lunaris*)

Municipality: Not specified

Site: Entrepontes, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Eunotia lunaris*)

Subregion: Grande Porto

Municipality: Porto (District: Porto)

Site: Not specified

Reference: Colmeiro 1889 (as *Synedra lunaris* Ehrenb.)

Subregion: Minho-Lima

Municipality: Caminha (District: Viana do Castelo)

Site: Gondar Stream (Âncora Basin)

Reference: Formigo et al. 1993 (as *Eunotia lunaris*)

Municipality: Viana do Castelo (District: Viana do Castelo)

Site: São Lourenço da Montaria, Âncora River (Âncora Basin)

Reference: Formigo et al. 1993 (as *Eunotia lunaris*)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Eunotia lunaris* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Eunotia lunaris*)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia lunaris* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Eunotia lunaris*)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia lunaris* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Eunotia lunaris*)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia lunaris* (Ehr.) Grunow)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

References: Gil 1988 (as *Eunotia lunaris* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Eunotia lunaris*)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Eunotia lunaris*)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Eunotia lunaris* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Eunotia lunaris*)

Site: Raivo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia lunaris* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Eunotia lunaris*)

Site: Redonda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia lunaris* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Eunotia lunaris*)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Eunotia lunaris* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Eunotia lunaris*)

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Eunotia lunaris*)

Site: Espairo, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Eunotia lunaris*)

Site: Tamengos, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Eunotia lunaris*)

- Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Eunotia lunaris* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Eunotia lunaris*)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Eunotia lunaris* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Eunotia lunaris*)
- Municipality: Mealhada (District: Aveiro)
 Site: Pampilhosa, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Eunotia lunaris*)
 Site: Viadouros, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Eunotia lunaris*)
- Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Eunotia lunaris*)
 Site: Perrães, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Eunotia lunaris*)
 Site: Repolão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Eunotia lunaris*)
- Municipality: Not specified
 Site: Pateira de Fermentelos (District: Aveiro)
 Reference: Calado 1991 (as *Eunotia lunaris* (Ehrenberg) Grunow)
- Subregion: Beira Interior Norte
 Municipality: Guarda (District: Guarda)
 Site: Alfarazes
 Reference: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun.)
 Site: Cruz da Faia
 Reference: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun.)
 Site: Diz River
 Reference: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun.)
 Site: Gonçalo
 Reference: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun.)
 Site: Meios
 References: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun.); Santos & Carvalho 2001 (as *Eunotia lunaris* (Ehr.) Grun.)
 Site: Mondego River (Mondego Basin)
 References: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun.); Santos & Carvalho 2001 (as *Eunotia lunaris* (Ehr.) Grun.)
 Site: Nueme
 Reference: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun.)
 Site: Vela
 Reference: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun.)
- Subregion: Beira Interior Sul
 Municipality: Castelo Branco (District: Castelo Branco)

- Site: São Fiel, Ocreza River (Tagus Basin)
Reference: Zimmermann 1906 (as *Eunotia lunaris* (Ehr.) Grun.)
- Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia lunaris* (Ehr.) Grunow)
Site: São João do Monte, Águeda River (Vouga Basin)
References: Gil 1988 (as *Eunotia lunaris* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Eunotia lunaris*)
Site: Varzielas, Águeda River (Vouga Basin)
References: Gil 1988 (as *Eunotia lunaris* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Eunotia lunaris*)
- Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
References: Gil 1988 (as *Eunotia lunaris* (Ehr.) Grunow); Gil et al. 1989-1990 (as *Eunotia lunaris*)
- Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil et al. 1989-1990 (as *Eunotia lunaris*)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia lunaris* (Ehr.) Grunow)
Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia lunaris* (Ehr.) Grunow)
- Subregion: Médio Tejo
Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
Reference: Cabeçadas et al. 1980 (as *Eunotia lunaris*)
- Subregion: Pinhal Interior Norte
Municipality: Pampilhosa da Serra (District: Coimbra)
Site: Santa Luzia Reservoir, Unhais River (Tagus Basin)
Reference: Oliveira 1982b (as *Eunotia lunaris*)
Municipality: Pedrógão Grande (District: Leiria)
Site: Bouçã Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Eunotia lunaris*)
Site: Cabril Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Eunotia lunaris*)
- Subregion: Not specified
Municipality: Not specified
Site: Not specified
References: Calado 1990 (as *Eunotia lunaris* (Ehrenberg) Grunow); Gil et al. 1991 (as *Eunotia lunaris*)
- REGION: LISBOA
Subregion: Grande Lisboa
Municipality: Mafra (District: Lisboa)
Site: Tapada de Mafra, Sobral da Abelheira

Reference: Oliveira 1971b (as *Eunotia lunaris*)
Subregion: Península de Setúbal
Municipality: Sesimbra (District: Setúbal)
Site: Alfarim diatomite
Reference: Ferreira & Castelo 1957 (as *Eunotia lunaris* (Ehr.) Grun., fossil)

REGION: ALENTEJO

Subregion: Alentejo Central
Municipality: Évora (District: Évora)
Site: Monte Novo Reservoir, Degebe River (Gadiana Basin)
References: Oliveira & Monteiro 1995 (as *Eunotia lunaris*); Oliveira 1996 (as *Eunotia lunaris*)
Municipality: Alcácer do Sal (District: Setúbal)
Site: São Romão, Sado River (Sado Basin)
Reference: Coutinho 2003 (as *Eunotia lunaris* (Ehrenberg) Grunow)
Subregion: Alto Alentejo
Municipality: Avis (District: Portalegre)
Site: Maranhão Reservoir, Raia Stream (Tagus Basin)
Reference: Oliveira 1984c (as *Eunotia lunaris*)
Municipality: Ponte de Sôr (District: Portalegre)
Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
Reference: Coutinho 1990a (as *Eunotia lunaris*)
Subregion: Lezíria do Tejo
Municipality: Rio Maior (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Eunotia lunaris* (Ehr.) Grun., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Calheta (São Jorge Island)
Site: Ribeira de São João
Reference: Mölder 1947 (as *Eunotia lunaris* (Ehr.) Grun.)
Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
References: O'Meara 1874 (as *Synedra lunaris*); Dyer 1875 (as *Synedra lunaris* Ehr.); Holmboe 1901 (as *Eunotia lunaris* (Ehr.) Grun.); Manguin 1942 (as *Eunotia lunaris* (Ehr.) Grun.); Bourrelly & Manguin 1946a (as *Eunotia lunaris* (Ehr.) Grun.); Mölder 1947 (as *Eunotia lunaris* (Ehr.) Grun.)
Site: Pico da Vara
Reference: Holmboe 1901 (as *Eunotia lunaris* (Ehr.) Grun.)
Site: Ribeira Quente
References: Manguin 1942 (as *Eunotia lunaris* (Ehr.) Grun.); Bourrelly & Manguin 1946a (as *Eunotia lunaris* (Ehr.) Grun.)
Municipality: Santa Cruz das Flores (Flores Island)
Site: Ribeira Grande

References: Manguin 1942 (as *Eunotia lunaris* (Ehr.) Grun.); Bourrelly & Manguin 1946a (as *Eunotia lunaris* (Ehr.) Grun.)

***Eunotia lunaris* var. *bilunaris* (Ehrenberg) Grunow in Van Heurck 1882-1885, pl. 35, fig. 6B [CAS ref. 000896]**

Distribution (Fig. 405):

REGION: CENTRO

Subregion: Beira Interior Sul

Municipality: Castelo Branco (District: Castelo Branco)

Site: São Fiel, Ocreza River (Tagus Basin)

Reference: Zimmermann 1906 (as *Eunotia lunaris* (Ehr.) var. *bilunaris* (Ehr.) Grun.)

***Eunotia lunaris* var. *excisa* Grunow in Van Heurck 1881, pl. 35, fig. 6c [CAS ref. 001035]**

Distribution (Fig. 406):

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Alfarazes

Reference: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun. var. *excisa* Grun.)

Site: Cruz da Faia

Reference: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun. var. *excisa* Grun.)

Site: Cubo

Reference: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun. var. *excisa* Grun.)

Site: Mondego River (Mondego Basin)

References: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun. var. *excisa* Grun.); Santos & Carvalho 2001 (as *Eunotia lunaris* (Ehr.) Grun. var. *excisa* Grun.)

Site: Nueme

Reference: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun. var. *excisa* Grun.)

Site: Vela

Reference: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun. var. *excisa* Grun.)

Site: Vila Patrício

Reference: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun. var. *excisa* Grun.)

***Eunotia lunaris* var. *subarcuata* (Nägeli ex Kützing) Grunow in Van Heurck 1881, pl. 35, fig. 2 [CAS ref. 001035]**

Basionym: *Synedra subarcuata* Nägeli ex Kützing 1849 [CAS ref. 000596]

Distribution (Fig. 407):

REGION: NORTE

Subregion: Tâmega

Municipality: Castelo de Paiva (District: Aveiro)

Site: Raiva

Reference: Tempère & Peragallo 1907-1915 (as *Eunotia lunaris* var. *subarcuata*)

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Cruz da Faia

Reference: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun. var. *subarcuata* (Naeg.) Grun.)

Site: Cubo

Reference: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun. var. *subarcuata* (Naeg.) Grun.)

Site: Diz River

Reference: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun. var. *subarcuata* (Naeg.) Grun.)

Site: Nueme

Reference: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun. var. *subarcuata* (Naeg.) Grun.)

Site: Vela

Reference: Carvalho 1913 (as *Eunotia lunaris* (Ehr.) Grun. var. *subarcuata* (Naeg.) Grun.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

References: Manguin 1942 (as *Eunotia lunaris* (Ehr.) Grun. var. *subarcuata* (Naeg.) Grun.); Bourrelly & Manguin 1946a (as *Eunotia lunaris* (Ehr.) Grun. var. *subarcuata* (Naeg.) Grun.)

***Eunotia maior* (W. Smith) Rabenhorst 1864**, p. 72 [CAS ref. 000775]

Basionym: *Himantidium majus* W. Smith 1856 [CAS ref. 001007]

Nomenclatural synonym: *Eunotia monodon* var. *maior* (W. Smith) Hustedt 1930 [CAS ref. 000502]

Distribution (Fig. 408):

REGION: NORTE

Subregion: Ave

Municipality: Vila Nova de Famalicão (District: Braga)

Site: Minho River (Minho Basin)

Reference: Zimmermann 1909b (as *Eunotia major* (W. Sm.) Rabenh.)

Subregion: Grande Porto

Municipality: Gondomar (District: Porto)

Site: Gramido

Reference: Silva 1950b (as *Eunotia monodon* Ehr. var. *maior* (W. Smith) Hust.)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia monodon* Ehr. v. *maior* (W. Smith) Hustedt)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia monodon* Ehr. v. *maior* (W. Smith) Hustedt)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia monodon* Ehr. v. *maior* (W. Smith) Hustedt)

Municipality: Not specified

Site: Pateira de Fermentelos (District: Aveiro)

Reference: Calado 1991 (as *Eunotia monodon* E. var. *major* (W. Smith) Hustedt)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia monodon* Ehr. v. *maior* (W. Smith) Hustedt)

Site: São João do Monte, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia monodon* Ehr. v. *maior* (W. Smith) Hustedt)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia monodon* Ehr. v. *maior* (W. Smith) Hustedt)

Municipality: Tondela (District: Viseu)

Site: Boi, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia monodon* Ehr. v. *maior* (W. Smith) Hustedt)

Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia monodon* Ehr. v. *maior* (W. Smith) Hustedt)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Rio Maior (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Eunotia major* (W. Sm.) Rabenh., fossil)

***Eunotia microcephala* Krasske ex Hustedt 1932**, p. 102; fig. 7 [CAS ref. 000583]

Synonym: *Eunotia microcephala* var. *tridentata* (Ant. Mayer) Hustedt 1932 [CAS ref. 000506], according to Lange-Bertalot et al. 2011, p. 155

Distribution (Fig. 409):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Calheta (São Jorge Island)

Site: Ribeira de São João

Reference: Mölder 1947 (as *Eunotia microcephala* Krasske)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eunotia microcephala* Krasske)

Site: São Jorge Island

Reference: Gonçalves et al. 2010 (as *Eunotia microcephala* Krasske)

***Eunotia microcephala* var. *tridentata* (Ant. Mayer) Hustedt 1932**, p. 290; fig. 756 c-i [CAS ref. 000506]

Basionym: *Eunotia tridentula* f. *tridentata* Ant. Mayer 1918 [CAS ref. 001373]

Synonym: *Eunotia microcephala* Krasske ex Hustedt 1932 [CAS ref. 000583], according to Lange-Bertalot et al. 2011, p. 155

Distribution (Fig. 410):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Eunotia microcephala* Krasske var. *tridentata* (A. Mayer) Hust.); Bourrelly & Manguin 1946a (as *Eunotia microcephala* Krasske var. *tridentata* (A. Mayer) Hust.)

***Eunotia minor* (Kützing) Grunow in Van Heurck 1881**, pl. 33, fig. 20-21 [CAS ref. 001035]

Basionym: *Himantidium minus* Kützing 1844 [CAS ref. 000595]

Nomenclatural synonym: *Eunotia pectinalis* var. *minor* (Kützing) Rabenhorst 1864 [CAS ref. 000775]

Distribution (Fig. 411):

REGION: NORTE

Subregion: Cávado

Municipality: Barcelos (District: Braga)

Site: Barcelos, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Eunotia pectinalis* var. *minor*)

Site: Manhente, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Eunotia pectinalis* var. *minor*)

Municipality: Braga (District: Braga)

Site: Padim da Graça, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Eunotia pectinalis* var. *minor*)

Municipality: Esposende (District: Braga)

Site: Marachão, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Eunotia pectinalis* var. *minor*)

Municipality: Not specified

Site: Entrepontes, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Eunotia pectinalis* var. *minor*)

Site: Homem River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Eunotia pectinalis* var. *minor*)

Subregion: Entre Douro e Vouga

Municipality: Arouca (District: Aveiro)

Site: Serra da Freita, Arões, Caima River (Vouga Basin)

- References: Nunes 2007 (as *Eunotia minor* (Kützing) Grunow in Van Heurck); Ferreira da Silva et al. 2009 (as *Eunotia minor* (Kütz.) Grunow in Van Heurck)
- Municipality: Oliveira de Azeméis (District: Aveiro)
 Site: Bustelo do Caima, Ossela, Caima River (Vouga Basin)
 Reference: Nunes 2007 (as *Eunotia minor* (Kützing) Grunow in Van Heurck)
- Municipality: São João da Madeira (District: Aveiro)
 Site: Ui River (Vouga Basin)
 Reference: Resende et al. 2010 (as *Eunotia minor* (Kützing) Grunow)
- Municipality: Vale de Cambra (District: Aveiro)
 Site: Barbeito, Caima River (Vouga Basin)
 References: Almeida 1998 (as *Eunotia minor* (Kützing) Grunow); Nunes 2007 (as *Eunotia minor* (Kützing) Grunow in Van Heurck)
- Site: São Pedro de Castelões, Caima River (Vouga Basin)
 Reference: Nunes 2007 (as *Eunotia minor* (Kützing) Grunow in Van Heurck)
- Site: Vale de Cambra, Caima River (Vouga Basin)
 Reference: Almeida 1998 (as *Eunotia minor* (Kützing) Grunow)
- Subregion: Grande Porto
 Municipality: Maia (District: Porto)
 Site: Parada
 Reference: Silva 1950b (as *Eunotia pectinalis* Rabenh. var. *minor* (Kütz.) Rabh.)
- Municipality: Porto (District: Porto)
 Site: Requezende
 Reference: Silva 1950b (as *Eunotia pectinalis* Rabenh. var. *minor* (Kütz.) Rabh.)
- Site: Not specified
 Reference: Colmeiro 1889 (as *Himantidium minus* Kg.)
- Subregion: Minho-Lima
 Municipality: Caminha (District: Viana do Castelo)
 Site: Gondar Stream (Âncora Basin)
 Reference: Formigo et al. 1993 (as *Eunotia pectinalis* var. *minor*)
- Site: Sains, Âncora River (Âncora Basin)
 Reference: Formigo et al. 1993 (as *Eunotia pectinalis* var. *minor*)
- Site: Tourim, Âncora River (Âncora Basin)
 Reference: Formigo et al. 1993 (as *Eunotia pectinalis* var. *minor*)
- Municipality: Viana do Castelo (District: Viana do Castelo)
 Site: São Lourenço da Montaria, Âncora River (Âncora Basin)
 Reference: Formigo et al. 1993 (as *Eunotia pectinalis* var. *minor*)
- Subregion: Tâmega
 Municipality: Castelo de Paiva (District: Aveiro)
 Site: Raiva
 Reference: Tempère & Peragallo 1907-1915 (as *Eunotia minor* Rabh.)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Eunotia minor* (Kützing) Grunow)

Municipality: Soure (District: Coimbra)

Site: Irrigation channel near Soure

Reference: Santos et al. 2002 (as *Eunotia minor* (Kützing) Grunow)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. var. *minor* (Kütz.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *minor*)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. var. *minor* (Kütz.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *minor*); Almeida 1998 (as *Eunotia minor* (Kützing) Grunow)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia minor* (Kützing) Grunow)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia minor* (Kützing) Grunow)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. var. *minor* (Kütz.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *minor*)

Site: Bolfiãr, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. var. *minor* (Kütz.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *minor*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. var. *minor* (Kütz.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *minor*)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Eunotia pectinalis* v. *minor*)

Site: Óis da Ribeira, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia minor* (Kützing) Grunow)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. var. *minor* (Kütz.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *minor*)

Site: Raivo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. var. *minor* (Kütz.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *minor*)

Site: Redonda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. var. *minor* (Kütz.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *minor*)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

- References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. var. *minor* (Kütz.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *minor*)
- Site: Sernada do Vouga, Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Eunotia minor* (Kützing) Grunow in Van Heurck)
- Municipality: Albergaria-a-Velha (District: Aveiro)
- Site: Bosturenga, Ribeira de Fráguas, Coval da Mó Stream (Vouga Basin)
References: Nunes 2007 (as *Eunotia minor* (Kützing) Grunow in Van Heurck); Ferreira da Silva et al. 2009 (as *Eunotia minor* (Kütz.) Grunow in Van Heurck)
- Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Eunotia minor* (Kützing) Grunow in Van Heurck)
- Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Eunotia minor* (Kützing) Grunow)
- Site: Ribeira de Fráguas, Coval da Mó Mine, Coval da Mó Stream (Vouga Basin)
Reference: Nunes 2007 (as *Eunotia minor* (Kützing) Grunow in Van Heurck)
- Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Eunotia minor* (Kützing) Grunow in Van Heurck)
- Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Eunotia minor* (Kützing) Grunow in Van Heurck)
- Site: Santo António, Valmaior, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Eunotia minor* (Kützing) Grunow in Van Heurck)
- Site: Valmaior, mouth of Filvida River (Vouga Basin)
References: Nunes et al. 2002 (as *Eunotia minor* (Kützing) Grunow in Van Heurck); Nunes 2007 (as *Eunotia minor* (Kützing) Grunow in Van Heurck); Ferreira da Silva et al. 2009 (as *Eunotia minor* (Kütz.) Grunow in Van Heurck)
- Site: Valmaior (downstream of the mouth of Filvida River), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Eunotia minor* (Kützing) Grunow in Van Heurck)
- Municipality: Anadia (District: Aveiro)
- Site: Mogofores, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Eunotia pectinalis* v. *minor*)
- Site: São João da Azenha, Cértima River (Vouga Basin)
References: Rino & Gil 1989 (as *Eunotia pectinalis* v. *minor*); Almeida 1998 (as *Eunotia minor* (Kützing) Grunow)
- Municipality: Aveiro (District: Aveiro)

- Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia minor* (Kützing) Grunow)
- Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia minor* (Kützing) Grunow)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia minor* (Kützing) Grunow)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. var. *minor* (Kütz.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *minor*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. var. *minor* (Kütz.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *minor*)
- Site: Vessada, Fontão Creek (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia minor* (Kützing) Grunow)
- Municipality: Estarreja (District: Aveiro)
Site: Estarreja, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia minor* (Kützing) Grunow)
- Site: Minhoteira, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia minor* (Kützing) Grunow)
- Municipality: Mealhada (District: Aveiro)
Site: Pampilhosa, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Eunotia pectinalis* v. *minor*)
- Municipality: Oliveira do Bairro (District: Aveiro)
Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Eunotia pectinalis* v. *minor*)
- Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia minor* (Kützing) Grunow)
- Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia minor* (Kützing) Grunow)
- Site: Perrães, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Eunotia pectinalis* v. *minor*); Almeida 1998 (as *Eunotia minor* (Kützing) Grunow)
- Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Eunotia pectinalis* v. *minor*)
- Site: Vila Verde, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia minor* (Kützing) Grunow)
- Municipality: Sever do Vouga (District: Aveiro)
Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)
Reference: Nunes 2007 (as *Eunotia minor* (Kützing) Grunow in Van Heurck)
- Site: Silva Escura, upstream of Braçal Mine, Mau River (Vouga Basin)
Reference: Nunes 2007 (as *Eunotia minor* (Kützing) Grunow in Van Heurck)

- Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)
Reference: Nunes 2007 (as *Eunotia minor* (Kützing) Grunow in Van Heurck)
- Site: Pessegueiro do Vouga (mouth of Mau River), Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Eunotia minor* (Kützing) Grunow in Van Heurck)
- Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Eunotia pectinalis* (Kg.) Rb. var. *minor* (Kg.) Rb.)
- Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. var. *minor* (Kütz.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *minor*)
Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. var. *minor* (Kütz.) Rabenhorst)
- Site: Varzias, Águeda River (Vouga Basin)
References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. var. *minor* (Kütz.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *minor*)
- Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. var. *minor* (Kütz.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *minor*)
Site: In the proximity of Tondela, Criz River (Mondego Basin)
Reference: Santos et al. 2002 (as *Eunotia minor* (Kützing) Grunow)
- Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *minor*)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. var. *minor* (Kütz.) Rabenhorst)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. var. *minor* (Kütz.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *minor*)
- Subregion: Serra da Estrela
Municipality: Seia (District: Guarda)
Site: Sabugueiro, Lagoacho Reservoir
Reference: Santos et al. 2002 (as *Eunotia minor* (Kützing) Grunow)
- Subregion: Not specified
Municipality: Not specified
Site: Not specified

References: Calado 1990 (as *Eunotia pectinalis* (O.Müller) Rab. var. *minor* (Kützing) Rabenhorst); Gil et al. 1991 (as *Eunotia pectinalis* v. *minor*)

REGION: LISBOA

Subregion: Península de Setúbal

Municipality: Sesimbra (District: Setúbal)

Site: Alfarim diatomite

Reference: Ferreira & Castelo 1957 (as *Eunotia pectinalis* var. *minor* (Kütz.) Rabenh., fossil)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Alpiarça (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Eunotia pectinalis* var. *minor* (Kütz.) Rabenh., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)

Site: Lagoa da Falca (Terceira Island)

Reference: Gonçalves 1996 (as *Eunotia minor* (Kützing) Rabh.)

Site: Lagoa da Joaninha

Reference: Gonçalves 1996 (as *Eunotia minor* (Kützing) Rabh.)

Municipality: Calheta (São Jorge Island)

Site: Pico do Calheta

Reference: Mölder 1947 (as *Eunotia pectinalis* (Kütz.) Rabenh. var. *minor* (Kütz.) Rabenh.)

Site: Ribeira de São João

Reference: Mölder 1947 (as *Eunotia pectinalis* (Kütz.) Rabenh. var. *minor* (Kütz.) Rabenh.)

Municipality: Corvo (Corvo Island)

Site: Caldeira

Reference: Mölder 1947 (as *Eunotia pectinalis* (Kütz.) Rabenh. var. *minor* (Kütz.) Rabenh.)

Municipality: Lajes do Pico (Pico Island)

Site: Lagoa do Caiado

Reference: Mölder 1947 (as *Eunotia pectinalis* (Kütz.) Rabenh. var. *minor* (Kütz.) Rabenh.)

Municipality: Povoação (São Miguel Island)

Site: Pico da Vara

Reference: Mölder 1947 (as *Eunotia pectinalis* (Kütz.) Rabenh. var. *minor* (Kütz.) Rabenh.)

Municipality: Praia da Vitória (Terceira Island)

Site: Lagoa do Negro

Reference: Mölder 1947 (as *Eunotia pectinalis* (Kütz.) Rabenh. var. *minor* (Kütz.) Rabenh.)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Lagoa Branca

References: Manguin 1942 (as *Eunotia pectinalis* (Kütz.) Rabh. var. *minor* (Kütz.) Rabenh.); Bourrelly & Manguin 1946a (as *Eunotia pectinalis* (Kütz.) Rabh. var. *minor* (Kütz.) Rabh.)

Municipality: Not specified

Site: Corvo Island

Reference: Gonçalves et al. 2010 (as *Eunotia minor* (Kützing) Grunow)

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eunotia minor* (Kützing) Grunow)

Site: Lagoa de Cazador (São Miguel Island)

References: Manguin 1942 (as *Eunotia pectinalis* (Kütz.) Rabh. var. *minor* (Kütz.) Rabh.); Bourrelly & Manguin 1946a (as *Eunotia pectinalis* (Kütz.) Rabh. var. *minor* (Kütz.) Rabh.)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Eunotia minor* (Kützing) Grunow)

Site: São Jorge Island

References: Johansson 1977 (as *Eunotia pectinalis* v. *minor* (Kütz.) Rab.); Gonçalves et al. 2010 (as *Eunotia minor* (Kützing) Grunow)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia minor* (Kützing) Grunow)

Site: Terceira Island

References: Johansson 1977 (as *Eunotia pectinalis* v. *minor* (Kütz.) Rab.); Gonçalves et al. 2010 (as *Eunotia minor* (Kützing) Grunow)

Site: Not specified

Reference: Gonçalves 2008 (as *Eunotia minor* (Kützing) Grunow)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Mountain Rivers in the North

Reference: Morais et al. 2009 (as *Eunotia minor* (Kützing) Grunow)

Site: Not specified

Reference: INAG 2008 (as *Eunotia minor* (Kützing) Grunow in Van Heurck)

***Eunotia minutula* Grunow 1862**, p. 22 (336); pl. 3/6, fig. 12 [CAS ref. 000428]

Distribution (Fig. 412):

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Santana (Madeira Island)

Site: São Roque do Faial

Reference: Zimmermann 1909a (as *Eunotia minutula* Grun.)

***Eunotia monodon* Ehrenberg 1843**, pl. 2/5, fig. 7, pl. 3/3, fig. 3
[CAS ref. 000294]

Distribution (Fig. 413):

REGION: NORTE

Subregion: Not specified

Municipality: Not specified

Site: Serra do Gerês

Reference: Silva 1950a (as *Eunotia monodon* Ehr.)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia monodon* Ehrenberg)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia monodon* Ehrenberg)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia monodon* Ehrenberg)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia monodon* Ehrenberg)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers
(Vouga Basin)

Reference: Gil 1988 (as *Eunotia monodon* Ehrenberg)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia monodon* Ehrenberg)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia monodon* Ehrenberg)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia monodon* Ehrenberg)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia monodon* Ehrenberg)

Municipality: Anadia (District: Aveiro)

Site: Tamengos, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Eunotia monodon*)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima
River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia monodon* Ehrenberg)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima
River (Vouga Basin)

- Reference: Gil 1988 (as *Eunotia monodon* Ehrenberg)
Municipality: Mealhada (District: Aveiro)
Site: Pampilhosa, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Eunotia monodon*)
Municipality: Oliveira do Bairro (District: Aveiro)
Site: Perrães, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Eunotia monodon*)
Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Eunotia monodon*)
Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia monodon* Ehrenberg)
Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia monodon* Ehrenberg)
Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia monodon* Ehrenberg)
Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia monodon* Ehrenberg)
Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia monodon* Ehrenberg)
Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia monodon* Ehrenberg)
Subregion: Not specified
Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Eunotia monodon* Ehrenberg)
Site: Not specified
Reference: Gil et al. 1991 (as *Eunotia monodon*)
- REGION: ALENTEJO
Subregion: Baixo Alentejo
Municipality: Aljustrel (District: Beja)
Site: Água Azeda, Água Azeda Stream (Sado Basin)
Reference: Luís et al. 2009 (as *Eunotia monodon* Ehrenberg)
Site: Jungeiros, Roxo Stream (Sado Basin)
Reference: Luís et al. 2009 (as *Eunotia monodon* Ehrenberg)
Subregion: Lezíria do Tejo
Municipality: Alpiarça (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Eunotia monodon* Ehr., fossil)
Municipality: Rio Maior (District: Santarém)
Site: Not specified
Reference: Silva 1946b (as *Eunotia monodon* Ehr., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Eunotia monodon* Ehrenberg)

***Eunotia monodon f. curta* Grunow in Van Heurck 1882-1885**, pl. 33, fig. 4 [CAS ref. 000896]

Distribution (Fig. 414):

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Nueme

Reference: Carvalho 1913 (as *Eunotia monodon* Ehr. forma *curta*)

***Eunotia mucophila* (Lange-Bertalot, Nörpel-Schempp & Alles) Lange-Bertalot in Metzeltin, Lange-Bertalot & Garcia-Rodriguez 2005**, p. 53 [CAS ref. 012898]

Basionym: *Eunotia bilunaris* var. *mucophila* Lange-Bertalot, Nörpel-Schempp & Alles in Alles, Nörpel-Schempp & Lange-Bertalot 1991 [CAS ref. 012938]

Distribution (Fig. 415):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Arouca (District: Aveiro)

Site: Serra da Freita, Arões, Caima River (Vouga Basin)

References: Nunes et al. 2003 (as *Eunotia bilunaris* (Ehrenberg) Mills var. *mucophila* Lange-Bertalot, Nörpel & Alles); Nunes 2007 (as *Eunotia bilunaris* (Ehrenberg) Mills var. *mucophila* Lange-Bertalot, Nörpel & Alles); Ferreira da Silva et al. 2009 (as *Eunotia bilunaris* (Ehr.) Mills var. *mucophila* Lange-Bertalot, Nörpel & Alles)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Bosturenga, Ribeira de Fráguas, Coval da Mó Stream (Vouga Basin)

Reference: Nunes 2007 (as *Eunotia bilunaris* (Ehrenberg) Mills var. *mucophila* Lange-Bertalot, Nörpel & Alles)

Municipality: Sever do Vouga (District: Aveiro)

Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)

Reference: Nunes 2007 (as *Eunotia bilunaris* (Ehrenberg) Mills var. *mucophila* Lange-Bertalot, Nörpel & Alles)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia mucophila* (Lange-Bertalot & Nörpel) Lange-Bertalot)

Site: Not specified

Reference: Gonçalves 2008 (as *Eunotia bilunaris* var. *mucophila* Lange-Bertalot, Nörpel & Alles)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia bilunaris* (Ehr.) Mills var. *mucophila* Lange-Bertalot, Nörpel & Alles)

***Eunotia naegelii* Migula in Thomé 1907, p. 203 [CAS ref. 001770]**

Distribution (Fig. 416):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia naegelii* Migula)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia naegelii* Migula)

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Frossos, Carreira Creek (Mondego Basin)

Reference: Almeida 1998 (as *Eunotia naegelii* Migula)

Municipality: Aveiro (District: Aveiro)

Site: Eixo, Horta Stream (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia naegelii* Migula)

Site: Pano, Largo River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia naegelii* Migula)

Site: Requeixo, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia naegelii* Migula)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eunotia naegeli* Migula)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia naegeli* Migula)

***Eunotia neocompacta* Mayama in Mayama & Kawashima 1998, p. 69 [CAS ref. 012652]**

Basionym: *Eunotia exigua* var. *compacta* Hustedt 1930 [CAS ref. 000502]

Distribution (Fig. 417):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Jorge Island

References: Johansson 1977 (as *Eunotia exigua* v. *compacta* (Bréb.) Grun.); Gonçalves et al. 2010 (as *Eunotia neocompacta* Mayama)

***Eunotia paludosa* Grunow 1862, p. 22 (336); pl. 3/6, fig. 10 [CAS ref. 000428]**

Distribution (Fig. 418):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Arganil (District: Coimbra)

Site: Fronhas Reservoir, Alva River (Mondego Basin)

Reference: Santos et al. 2002 (as *Eunotia paludosa* Grunow)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: Pond near Lagoa Comprida

Reference: Santos et al. 2002 (as *Eunotia paludosa* Grunow)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Alpiarça (District: Santarém)

Site: Not specified

References: Silva 1946a (as *Eunotia paludosa* Grun., fossil); Silva 1946b (as *Eunotia paludosa* Grun., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eunotia paludosa* Grunow in Van Heurck)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Eunotia paludosa* Grunow in Van Heurck)

Site: São Jorge Island

References: Johansson 1977 (as *Eunotia paludosa* Grun.); Gonçalves et al. 2010 (as *Eunotia paludosa* Grunow in Van Heurck)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia paludosa* Grunow in Van Heurck)

Site: Not specified

Reference: Gonçalves 2008 (as *Eunotia paludosa* Grunow in Van Heurck)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia paludosa* Grunow in Van Heurck var. *paludosa*)

***Eunotia parallela* Ehrenberg 1843**, p. 414 (126) [CAS ref. 000294]

Distribution (Fig. 419):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia parallela* Ehrenberg)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia parallela* Ehrenberg)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia parallela* Ehrenberg); Gil et al. 1989-1990 (as *Eunotia parallela*)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia parallela* Ehrenberg)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Eunotia parallela* Ehrenberg)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

- Reference: Gil 1988 (as *Eunotia parallela* Ehrenberg)
 Site: Raivo, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia parallela* Ehrenberg)
 Site: Redonda, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia parallela* Ehrenberg)
 Site: Ribeiro, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia parallela* Ehrenberg)
 Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia parallela* Ehrenberg)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia parallela* Ehrenberg)
 Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia parallela* Ehrenberg)
 Site: São João do Monte, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Eunotia parallela* Ehrenberg); Gil et al. 1989-1990 (as *Eunotia parallela*)
 Site: Varzielas, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Eunotia parallela* Ehrenberg); Gil et al. 1989-1990 (as *Eunotia parallela*)
 Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia parallela* Ehrenberg)
 Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia parallela* Ehrenberg)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia parallela* Ehrenberg)
 Subregion: Oeste
 Municipality: Óbidos (District: Leiria)
 Site: Not specified
 Reference: Silva 1946b (as *Eunotia parallela* Ehr., fossil)
 Subregion: Serra da Estrela
 Municipality: Seia (District: Guarda)
 Site: Pond near Lagoa Comprida
 Reference: Santos et al. 2002 (as *Eunotia parallela* Ehrenberg)
- REGION: AUTONOMOUS REGION OF AZORES
 Municipality: Not specified
 Site: Pico Island
 Reference: Gonçalves et al. 2010 (as *Eunotia parallela* Ehrenberg)
 Site: Not specified

Reference: Gonçalves 2008 (as *Eunotia parallela* Ehrenberg)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Tagus riverbanks (Tagus Basin)

Reference: Ehrenberg 1845 (as *Eunotia parallela*)

***Eunotia pectinalis* (Kützing) Rabenhorst 1864**, p. 73 [CAS ref. 000775]

Basionym: *Himantidium pectinale* Kützing 1844 [CAS ref. 000595]

Note: According to Lange-Bertalot et al. 2011, p. 193, *Conferva pectinalis* O. Müller 1788 and *Conferva pectinalis* Dillwyn 1809 are to be excluded from the synonymy with *Eunotia pectinalis* (Kützing) Rabenhorst. Nevertheless, we decided to keep them together since there was no clear evidence of what the Portuguese authors meant.

Synonym: *Eunotia pectinalis* var. *undulata* (Ralfs) Rabenhorst 1864 [CAS ref. 000775], according to Lange-Bertalot et al. 2011, p. 193

Distribution (Fig. 420):

REGION: NORTE

Subregion: Cávado

Municipality: Barcelos (District: Braga)

Site: Barcelos, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Eunotia pectinalis*)

Site: Manhente, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Eunotia pectinalis*)

Municipality: Braga (District: Braga)

Site: Padim da Graça, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Eunotia pectinalis*)

Municipality: Esposende (District: Braga)

Site: Marachão, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Eunotia pectinalis*)

Municipality: Terras de Bouro (District: Braga)

Site: Caldas do Gerês, Vilar da Veiga

Reference: Sampaio 1950 (as *Eunotia pectinalis* (Dillw.?) Rabenh.)

Municipality: Not specified

Site: Entrepontes, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Eunotia pectinalis*)

Site: Homem River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Eunotia pectinalis*)

- Subregion: Entre Douro e Vouga
Municipality: São João da Madeira (District: Aveiro)
Site: Uj River (Vouga Basin)
Reference: Resende et al. 2010 (as *Eunotia pectinalis* (Kützing) Rabenhorst)
- Municipality: Vale de Cambra (District: Aveiro)
Site: Barbeito, Caima River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst)
Site: Vale de Cambra, Caima River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst)
- Subregion: Grande Porto
Municipality: Maia (District: Porto)
Site: Parada
Reference: Silva 1950b (as *Eunotia pectinalis* Rabenh.)
- Municipality: Porto (District: Porto)
Site: Prelada
Reference: Silva 1950b (as *Eunotia pectinalis* Rabenh.)
Site: Not specified
Reference: Colmeiro 1889 (as *Himantidium pectinale* Kg.)
- Subregion: Minho-Lima
Municipality: Caminha (District: Viana do Castelo)
Site: Gondar Stream (Âncora Basin)
Reference: Formigo et al. 1993 (as *Eunotia pectinalis*)
Site: Sains, Âncora River (Âncora Basin)
Reference: Formigo et al. 1993 (as *Eunotia pectinalis*)
Site: Tourim, Âncora River (Âncora Basin)
Reference: Formigo et al. 1993 (as *Eunotia pectinalis*)
- Municipality: Valença (District: Viana do Castelo)
Site: Valença, Minho River (Minho Basin)
Reference: Vasconcelos et al. 2000 (as *Eunotia pectinalis*)
- Municipality: Vila Nova de Cerveira (District: Viana do Castelo)
Site: Barragem de Covas, Coura River (Minho Basin)
Reference: Vasconcelos et al. 2000 (as *Eunotia pectinalis*)
- Municipality: Viana do Castelo (District: Viana do Castelo)
Site: Alhada, Âncora River (Âncora Basin)
Reference: Formigo et al. 1993 (as *Eunotia pectinalis*)
Site: São Lourenço da Montaria, Âncora River (Âncora Basin)
Reference: Formigo et al. 1993 (as *Eunotia pectinalis*)
- Municipality: Not specified
Site: Minho River, international section (Minho Basin)
Reference: Vasconcelos & Cerqueira 2001 (as *Eunotia pectinalis*)
- Subregion: Not specified
Municipality: Not specified
Site: Ave River (Ave Basin)
Reference: Cerqueira da Silva 1991 (as *Eunotia pectinalis*)
Site: Serra do Gerês

References: Henriques 1884 (as *Eunotia pectinalis* Rabenh.); Colmeiro 1889 (as *Himantidium pectinale* Kg.); Sampaio 1950 (as *Himantidium pectinale* Kützing); Silva 1950a (as *Eunotia pectinalis* (Kütz.) Rabh.)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Coimbra (District: Coimbra)

Site: Coimbra

Reference: Zimmermann 1909b (as *Eunotia pectinalis* (Dillw.) Rabenh.)

Municipality: Figueira da Foz (District: Coimbra)

Site: Lagoa da Vela, Quaios

Reference: de Figueiredo et al. 2006 (as *Eunotia pectinalis* (Dillwyn) Rabenhorst)

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Eunotia pectinalis* (Dillwyn) Rabenhorst)

Municipality: Soure (District: Coimbra)

Site: Irrigation channel near Soure

Reference: Santos et al. 2002 (as *Eunotia pectinalis* (Dillwyn) Rabenhorst)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis*)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis*); Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis*)

Site: Bolfiãr, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis*)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Eunotia pectinalis*)

- Site: Óis da Ribeira, Águeda River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis*)
- Site: Raivo, Águeda River (Vouga Basin)
References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis*)
- Site: Redonda, Águeda River (Vouga Basin)
References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis*)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis*)
- Municipality: Albergaria-a-Velha (District: Aveiro)
Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst)
- Municipality: Anadia (District: Aveiro)
Site: Curia, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Eunotia pectinalis*)
- Site: Espairo, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Eunotia pectinalis*)
- Site: Mogofores, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Eunotia pectinalis*)
- Site: São João da Azenha, Cértima River (Vouga Basin)
References: Rino & Gil 1989 (as *Eunotia pectinalis*); Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst)
- Site: Tamengos, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Eunotia pectinalis*)
- Municipality: Aveiro (District: Aveiro)
Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst)
- Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis*)
- Site: Vessada, Fontão Creek (Vouga Basin)
Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst)

- Municipality: Estarreja (District: Aveiro)
 Site: Estarreja, Antuã River (Vouga Basin)
 Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst)
- Site: Minhoteira, Antuã River (Vouga Basin)
 Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst)
- Municipality: Mealhada (District: Aveiro)
 Site: Pampilhosa, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Eunotia pectinalis*)
- Site: Viadouros, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Eunotia pectinalis*)
- Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst)
- Site: Perrães, Cértima River (Vouga Basin)
 References: Rino & Gil 1989 (as *Eunotia pectinalis*); Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst)
- Site: Perrães, Levira River (Vouga Basin)
 Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst)
- Site: Repolão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Eunotia pectinalis*)
- Site: Vila Verde, Levira River (Vouga Basin)
 Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst)
- Municipality: Not specified
 Site: Pateira de Fermentelos (District: Aveiro)
 Reference: Calado 1991 (*Eunotia pectinalis* (Kützing) Rabenhorst)
- Subregion: Beira Interior Norte
 Municipality: Guarda (District: Guarda)
 Site: Alfarazes
 Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh.)
- Site: Caldeirão
 References: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh.); Santos & Carvalho 2001 (as *Eunotia pectinalis* (Dillw.?) Rabenh.)
- Site: Cruz da Faia
 Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh.)
- Site: Cubo
 Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh.)
- Site: Diz River
 Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh.)
- Site: Gonçalo
 Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh.)
- Site: Guarda
 Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh.)
- Site: Meios
 References: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh.); Santos & Carvalho 2001 (as *Eunotia pectinalis* (Dillw.?) Rabenh.)
- Site: Mondego River (Mondego Basin)

- Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh.)
 Site: Nueme
- Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh.)
 Site: Vela
- Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh.)
 Municipality: Seia (District: Guarda)
 Site: Lagoa Comprida Reservoir, Lagoa Stream (Mondego Basin)
 Reference: Santos et al. 2002 (as *Eunotia pectinalis* (Dillwyn) Rabenhorst)
 Site: São Romão, Lagoa do Covão do Curral
 Reference: Santos et al. 2002 (as *Eunotia pectinalis* (Dillwyn) Rabenhorst)
- Subregion: Beira Interior Sul
 Municipality: Castelo Branco (District: Castelo Branco)
 Site: Campo das Navas, São Fiel
 Reference: Zimmermann 1909b (as *Eunotia pectinalis* (Dillw.) Rabenh.)
- Subregion: Cova da Beira
 Municipality: Fundão (District: Castelo Branco)
 Site: Serra da Gardunha
 Reference: Zimmermann 1909b (as *Eunotia pectinalis* (Dillw.) Rabenh.)
- Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis*)
 Site: São João do Monte, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis*)
 Site: Varzielas, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis*)
- Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis*)
 Site: In the proximity of Tondela, Criz River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Eunotia pectinalis* (Dillwyn) Rabenhorst)
- Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil et al. 1989-1990 (as *Eunotia pectinalis*)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rabenhorst)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rabenhorst); Gil et al. 1989-1990 (as *Eunotia pectinalis*)

Subregion: Oeste

Municipality: Torres Vedras (District: Lisboa)

Site: Catefica

Reference: Zimmermann 1909b (as *Eunotia pectinalis* (Dillw.) Rabenh.)

Subregion: Not specified

Municipality: Not specified

Site: Paiva River (Douro Basin)

References: Cerqueira da Silva 1991 (as *Eunotia pectinalis*); Cerqueira da Silva et al. 1993 (as *Eunotia pectinalis*); Cerqueira da Silva 1994 (as *Eunotia pectinalis*)

Site: Not specified

References: Calado 1990 (as *Eunotia pectinalis* (O. Müller) Rabenhorst); Gil et al. 1991 (as *Eunotia pectinalis*)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Alpiarça (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Eunotia pectinalis* (Kütz.) Rabenh., fossil)

Municipality: Rio Maior (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Eunotia pectinalis* (Kütz.) Rabenh., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Calheta (São Jorge Island)

Site: Pico do Calheta

Reference: Mölder 1947 (as *Eunotia pectinalis* (Kütz.) Rabenh.)

Site: Ribeira de São João

Reference: Mölder 1947 (as *Eunotia pectinalis* (Kütz.) Rabenh.)

Municipality: Horta (Faial Island)

Site: Not specified

Reference: Johansson 1977 (as *Eunotia pectinalis* (Kütz.) Rab.)

Municipality: Lajes do Pico (Pico Island)

Site: Lagoa do Caiado

Reference: Mölder 1947 (as *Eunotia pectinalis* (Kütz.) Rabenh.)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Himantidium pectinale* Ktz.)

Site: Pico da Vara

Reference: Mölder 1947 (as *Eunotia pectinalis* (Kütz.) Rabenh.)

Municipality: Praia da Vitória (Terceira Island)

Site: Fonduras

Reference: Mölder 1947 (as *Eunotia pectinalis* (Kütz.) Rabenh.)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Not specified

Reference: Mölder 1947 (as *Eunotia pectinalis* (Kütz.) Rabenh.)

Municipality: Vila do Porto (Santa Maria Island)

Site: Not specified

References: Manguin 1942 (as *Eunotia pectinalis* (Kütz.) Rabh.);
Bourrelly & Manguin 1946a (as *Eunotia pectinalis* (Kütz.) Rabh.)

Municipality: Not specified

Site: Faial Island

Reference: Gonçalves et al. 2010 (as *Eunotia pectinalis* (Kützing)
Rabenhorst)

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eunotia pectinalis* (Kützing)
Rabenhorst)

Site: Pico Island

References: Johansson 1977 (as *Eunotia pectinalis* (Kütz.) Rab.);
Gonçalves et al. 2010 (as *Eunotia pectinalis* (Kützing) Rabenhorst)

Site: Santa Maria Island

Reference: Gonçalves et al. 2010 (as *Eunotia pectinalis* (Kützing)
Rabenhorst)

Site: São Jorge Island

References: Johansson 1977 (as *Eunotia pectinalis* (Kütz.) Rab.);
Gonçalves et al. 2010 (as *Eunotia pectinalis* (Kützing) Rabenhorst)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia pectinalis* (Kützing)
Rabenhorst)

Site: Terceira Island

References: Johansson 1977 (as *Eunotia pectinalis* (Kütz.) Rab.);
Gonçalves et al. 2010 (as *Eunotia pectinalis* (Kützing) Rabenhorst)

Site: Not specified

Reference: Gonçalves 2008 (as *Eunotia pectinalis* (Kützing) Rabenhorst)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia pectinalis* (Dillwyn) Rabenhorst var.
pectinalis)

***Eunotia pectinalis* f. *curta* Van Heurck 1881, p. 143; pl. 33, fig. 15
(1881) [CAS ref. 001035]**

Distribution (Fig. 421):

REGION: NORTE

Subregion: Not specified

Municipality: Not specified

Site: Serra do Gerês

Reference: Sampaio 1950 (as *Eunotia pectinalis* Rabenh. for. *curta*)

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Alfarazes

Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. forma *curta*)

Site: Caldeirão

References: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. forma *curta*); Santos & Carvalho 2001 (as *Eunotia pectinalis* (Dillw.?) Rabenh. fa. *curta*)

Site: Diz River

Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. forma *curta*)

Site: Gonçalo

Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. forma *curta*)

Site: Lameirinhas

Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. forma *curta*)

Site: Meios

References: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. forma *curta*); Santos & Carvalho 2001 (as *Eunotia pectinalis* (Dillw.?) Rabenh. fa. *curta*)

Site: Nueme

Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. forma *curta*)

Site: Vila Patrício

Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. forma *curta*)

***Eunotia pectinalis* f. *elongata* Van Heurck 1882-1885**, p. 143; pl. 33, fig. 16 [CAS ref. 000896]

Distribution (Fig. 422):

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Caldeirão

References: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. forma *elongata*); Santos & Carvalho 2001 (as *Eunotia pectinalis* (Dillw.?) Rabenh. fa. *elongata*)

Site: Gonçalo

- Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. forma *elongata*)
Site: Guarda
Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. forma *elongata*)
Site: Lameirinhas
Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. forma *elongata*)
Site: Nueme
Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. forma *elongata*)
Site: Vila Patrício
Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. forma *elongata*)

***Eunotia pectinalis* var. *minor* f. *affines* Manguin 1942**, p. 127; pl. 1, fig. 20 [CAS ref. 000623]

Distribution (Fig. 423):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Santa Cruz das Flores (Flores Island)

Site: Lagoa Comprida

References: Manguin 1942 (as *Eunotia pectinalis* (Kütz.) Rabh. var. *minor* (Kütz.) fo. *affines*); Bourrelly & Manguin 1946a (as *Eunotia pectinalis* (Kütz.) Rabh. var. *minor* (Kütz.) fo. *affines*)

***Eunotia pectinalis* var. *rostrata* H. Germain 1981**, p. 96; pl. 33, fig. 8-14 [CAS ref. 009183]

Distribution (Fig. 424):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *rostrata* Germain)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *rostrata* Germain)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *rostrata* Germain)

- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *rostrata* Germain)
- Site: Redonda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *rostrata* Germain)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *rostrata* Germain)
- Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *rostrata* Germain)
- Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *rostrata* Germain)
- Municipality: Tondela (District: Viseu)
- Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *rostrata* Germain)
- Municipality: Vouzela (District: Viseu)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *rostrata* Germain)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *rostrata* Germain)

***Eunotia pectinalis* var. *undulata* (Ralfs) Rabenhorst 1864**, p. 74
[CAS ref. 000775]

Basionym: *Fragilaria pectinalis* var. *undulata* Ralfs 1843b [CAS ref. 001482]

Synonym: *Eunotia pectinalis* (Kützing) Rabenhorst 1864 [CAS ref. 000775], according to Lange-Bertalot et al. 2011, p. 193

Distribution (Fig. 425):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

- Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst var. *undulata* (Ralfs) Rabenhorst)
- Site: Vale de Cambra, Caima River (Vouga Basin)
- Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst var. *undulata* (Ralfs) Rabenhorst)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

- Site: Agadão, Agadão River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *undulata* (Ralfs) Rabenhorst)
- Site: Águeda, Águeda River (Vouga Basin)
- References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *undulata* (Ralfs) Rabenhorst); Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst var. *undulata* (Ralfs) Rabenhorst)
- Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)
- Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst var. *undulata* (Ralfs) Rabenhorst)
- Site: Avelal de Baixo, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *undulata* (Ralfs) Rabenhorst)
- Site: Bolfiar, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *undulata* (Ralfs) Rabenhorst)
- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *undulata* (Ralfs) Rabenhorst)
- Site: Óis da Ribeira, Águeda River (Vouga Basin)
- Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst var. *undulata* (Ralfs) Rabenhorst)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *undulata* (Ralfs) Rabenhorst)
- Site: Raivo, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *undulata* (Ralfs) Rabenhorst)
- Site: Redonda, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *undulata* (Ralfs) Rabenhorst)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *undulata* (Ralfs) Rabenhorst)
- Municipality: Albergaria-a-Velha (District: Aveiro)
- Site: Frossos, Carreira Creek (Mondego Basin)

- Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst var. *undulata* (Ralfs) Rabenhorst)
- Municipality: Aveiro (District: Aveiro)
- Site: Eixo, Horta Stream (Vouga Basin)
- Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst var. *undulata* (Ralfs) Rabenhorst)
- Site: Pano, Largo River (Vouga Basin)
- Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst var. *undulata* (Ralfs) Rabenhorst)
- Site: Requeixo, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst var. *undulata* (Ralfs) Rabenhorst)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *undulata* (Ralfs) Rabenhorst)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *undulata* (Ralfs) Rabenhorst)
- Site: Vessada, Fontão Creek (Vouga Basin)
- Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst var. *undulata* (Ralfs) Rabenhorst)
- Municipality: Estarreja (District: Aveiro)
- Site: Estarreja, Antuã River (Vouga Basin)
- Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst var. *undulata* (Ralfs) Rabenhorst)
- Site: Minhoteira, Antuã River (Vouga Basin)
- Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst var. *undulata* (Ralfs) Rabenhorst)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Perrães, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Eunotia pectinalis* (Kützing) Rabenhorst var. *undulata* (Ralfs) Rabenhorst)
- Subregion: Beira Interior Norte
- Municipality: Guarda (District: Guarda)
- Site: Mondego River (Mondego Basin)
- References: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. var. *undulata* Ralfs); Santos & Carvalho 2001 (as *Eunotia pectinalis* (Dillw.?) Rabenh. var. *undulata* Ralfs)
- Site: Nueme
- Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. var. *undulata* Ralfs)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *undulata* (Ralfs) Rabenhorst)

Site: São João do Monte, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *undulata* (Ralfs) Rabenhorst)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *undulata* (Ralfs) Rabenhorst)

Municipality: Tondela (District: Viseu)

Site: Boi, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *undulata* (Ralfs) Rabenhorst)

Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *undulata* (Ralfs) Rabenhorst)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *undulata* (Ralfs) Rabenhorst)

Subregion: Oeste

Municipality: Óbidos (District: Leiria)

Site: Not specified

Reference: Silva 1946b (as *Eunotia pectinalis* var. *undulata* (Ralfs) Rabenh., fossil)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Gil et al. 1991 (as *Eunotia pectinalis* v. *undulata*)

REGION: LISBOA

Subregion: Península de Setúbal

Municipality: Sesimbra (District: Setúbal)

Site: Alfarim diatomite

Reference: Ferreira & Castelo 1957 (as *Eunotia pectinalis* var. *undulata* (Ralfs) Rabenh., fossil)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Alpiarça (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Eunotia pectinalis* var. *undulata* (Ralfs) Rabenh., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Eunotia pectinalis* (Kütz.) Rabh. var. *undulata* Ralfs); Bourrelly & Manguin 1946a (as *Eunotia pectinalis* (Kütz.) Rabh. var. *undulata* Ralfs)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia pectinalis* (Kütz.) Rabhenhorst var. *undulata* (Ralfs) Rabenhorst)

***Eunotia pectinalis* var. *ventralis* (Ehrenberg) Hustedt 1911, p. 276; pl. 3, fig. 26, 17 [CAS ref. 000492]**

Basionym: *Eunotia ventralis* Ehrenberg 1843 [CAS ref. 000294]

Distribution (Fig. 426):

REGION: NORTE

Subregion: Grande Porto

Municipality: Maia (District: Porto)

Site: Parada

Reference: Silva 1950b (as *Eunotia pectinalis* Rabenh. var. *ventralis* (Ehr.) Hust.)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *ventralis* (Ehr.) Hustedt)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *ventralis* (Ehr.) Hustedt); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *ventralis*)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *ventralis* (Ehr.) Hustedt)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *ventralis* (Ehr.) Hustedt)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *ventralis* (Ehr.) Hustedt)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

- References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *ventralis* (Ehr.) Hustedt); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *ventralis*)
- Site: Raivo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *ventralis* (Ehr.) Hustedt)
- Site: Redonda, Águeda River (Vouga Basin)
References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *ventralis* (Ehr.) Hustedt); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *ventralis*)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *ventralis* (Ehr.) Hustedt)
- Municipality: Aveiro (District: Aveiro)
Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *ventralis* (Ehr.) Hustedt)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *ventralis* (Ehr.) Hustedt)
- Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *ventralis* (Ehr.) Hustedt)
- Site: São João do Monte, Águeda River (Vouga Basin)
References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *ventralis* (Ehr.) Hustedt); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *ventralis*)
- Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *ventralis* (Ehr.) Hustedt)
- Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *ventralis* (Ehr.) Hustedt)
- Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *ventralis*)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *ventralis* (Ehr.) Hustedt)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Eunotia pectinalis* (O. Müll.) Rab. v. *ventralis* (Ehr.) Hustedt); Gil et al. 1989-1990 (as *Eunotia pectinalis* v. *ventralis*)
- Subregion: Not specified
Municipality: Not specified

Site: Not specified

Reference: Gil et al. 1991 (as *Eunotia pectinalis* v. *ventralis*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Vila do Porto (Santa Maria Island)

Site: Not specified

References: Manguin 1942 (as *Eunotia pectinalis* (Kütz.) Rabh. var. *ventralis* (Ehr.) Hust.); Bourelly & Manguin 1946a (as *Eunotia pectinalis* (Kütz.) Rabh. var. *ventralis* (Ehr.) Hust.)

***Eunotia pectinalis* var. *ventricosa* (Ehrenberg) Grunow in Van Heurck 1882-1885, pl. 33, fig. 19 B [CAS ref. 000896]**

Basionym: *Heterocampa ventricosa* Ehrenberg 1869 [CAS ref. 000309]

Distribution (Fig. 427):

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Diz River

Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. var. *ventricosa* Grun.)

Site: Gonçalo

Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. var. *ventricosa* Grun.)

Site: Lameirinhas

Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. var. *ventricosa* Grun.)

Site: Mondego River (Mondego Basin)

References: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. var. *ventricosa* Grun.); Santos & Carvalho 2001 (as *Eunotia pectinalis* (Dillw.?) Rabenh. var. *ventricosa* Grun.)

Site: Vila Patrício

Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. var. *ventricosa* Grun.)

***Eunotia pectinoides* C. Zimmermann 1915b, p. 35; pl. 4, fig. 8 [CAS ref. 001930]**

Distribution (Fig. 428):

REGION: CENTRO

Subregion: Beira Interior Sul

Municipality: Castelo Branco (District: Castelo Branco)
Site: Sobral do Campo
Reference: Zimmermann 1915b (as *Eunotia pectinoides* Zimmermann)

***Eunotia praerupta* Ehrenberg 1843**, p. 414 (126) [CAS ref. 000294]

Synonym: *Eunotia inflata* (Grunow) Nörpel-Schempp & Lange-Bertalot in Lange-Bertalot & Metzeltin 1996 [CAS ref. 007048], according to Lange-Bertalot et al. 2011, p. 199

Distribution (Fig. 429):

REGION: NORTE

Subregion: Grande Porto

Municipality: Gondomar (District: Porto)

Site: Gramido

Reference: Silva 1950b (as *Eunotia praerupta* Ehr.)

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Torres Novas (District: Santarém)

Site: Casal da Pinheira, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Eunotia praerupta* Ehr.)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Almeida 1998 (as *Eunotia praerupta* Ehrenberg)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Rio Maior (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Eunotia praerupta* Ehr., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Pico da Vara

References: Manguin 1942 (as *Eunotia praerupta* Ehr.); Bourrelly & Manguin 1946a (as *Eunotia praerupta* Ehr.)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eunotia praerupta* Ehrenberg)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Eunotia praerupta* Ehrenberg)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia praerupta* Ehrenberg)
Site: Not specified
Reference: Gonçalves 2008 (as *Eunotia praerupta* Ehrenberg)

***Eunotia praerupta* var. *muscicola* J.B. Petersen 1928a**, p. 377; fig. 3
[CAS ref. 000742]

Synonym: *Eunotia curtagrunowii* Nörpel-Schempp & Lange-Bertalot in Lange-Bertalot & Metzeltin 1996 [CAS ref. 007048], according to Lange-Bertalot et al. 2011, p. 81

Distribution (Fig. 430):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Eunotia praerupta* Ehr. var. *muscicola* B. Peters); Bourrelly & Manguin 1946a (as *Eunotia praerupta* Ehr. var. *muscicola* B. Peters.)

Municipality: Nordeste (São Miguel Island)

Site: Serra Tronqueira

Reference: Bourrelly & Manguin 1946a (as *Eunotia praerupta* Ehr. var. *muscicola* B. Peters.)

Municipality: Not specified

Site: Lagoa de Cazador (São Miguel Island)

Reference: Bourrelly & Manguin 1946a (as *Eunotia praerupta* Ehr. var. *muscicola* B. Peters.)

***Eunotia rhomboidea* Hustedt 1950**, p. 435; pl. 36, fig. 34-41 [CAS ref. 000522]

Distribution (Fig. 431):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Eunotia rhomboidea* Hustedt)

Site: Ribeira de Fráguas, Palhal Mine, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Eunotia rhomboidea* Hustedt)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Eunotia rhomboidea* Hustedt)

***Eunotia robusta* Ralfs in Pritchard 1861, p. 763 [CAS ref. 001063]**

Synonym: *Eunotia serra* Ehrenberg 1837d [CAS ref. 001178], according to Lange-Bertalot et al. 2011, p. 219

Distribution (Fig. 432):

REGION: NORTE

Subregion: Cávado

Municipality: Not specified

Site: Homem River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Eunotia robusta*)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia robusta* Ralfs)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia robusta* Ralfs); Gil et al. 1989-1990 (as *Eunotia robusta*)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia robusta* Ralfs)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia robusta* Ralfs)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

References: Gil 1988 (as *Eunotia robusta* Ralfs); Gil et al. 1989-1990 (as *Eunotia robusta*)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Eunotia robusta* Ralfs); Gil et al. 1989-1990 (as *Eunotia robusta*)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia robusta* Ralfs)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia robusta* Ralfs)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Eunotia robusta* Ralfs); Gil et al. 1989-1990 (as *Eunotia robusta*)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia robusta* Ralfs)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia robusta* Ralfs)
 Municipality: Not specified
 Site: Pateira de Fermentelos (District: Aveiro)
 Reference: Calado 1991 (as *Eunotia robusta* Ralfs)
 Subregion: Cova da Beira
 Municipality: Fundão (District: Castelo Branco)
 Site: Serra da Gardunha
 Reference: Zimmermann 1909b (as *Eunotia robusta* Ralfs)
 Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Eunotia robusta* Ralfs); Gil et al. 1989-1990 (as *Eunotia robusta*)
 Site: São João do Monte, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Eunotia robusta* Ralfs); Gil et al. 1989-1990 (as *Eunotia robusta*)
 Site: Varzielas, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia robusta* Ralfs)
 Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia robusta* Ralfs)
 Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil et al. 1989-1990 (as *Eunotia robusta*)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia robusta* Ralfs)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Eunotia robusta* Ralfs); Gil et al. 1989-1990 (as *Eunotia robusta*)
 Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: Gil et al. 1991 (as *Eunotia robusta*)

REGION: ALENTEJO

Subregion: Lezíria do Tejo
 Municipality: Rio Maior (District: Santarém)
 Site: Not specified
 Reference: Silva 1946b (as *Eunotia robusta* Ralfs, fossil)

REGION: Not specified

Subregion: Not specified
 Municipality: Not specified
 Site: Not specified

Reference: INAG 2008 (as *Eunotia robusta* Ralfs in Pritchard)

***Eunotia septentrionalis* Østrup 1897**, p. 274; pl. 1, fig. 10 [CAS ref. 000699]

Distribution (Fig. 433):

REGION: NORTE

Subregion: Not specified

Municipality: Not specified

Site: Serra do Gerês

Reference: Silva 1950a (as *Eunotia septentrionalis* Oestrup)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia septentrionalis* Östrup)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia septentrionalis* Östrup); Gil et al. 1989-1990 (as *Eunotia septentrionalis*)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia septentrionalis* Östrup)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia septentrionalis* Östrup)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Eunotia septentrionalis* Östrup)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia septentrionalis* Östrup)

Site: Raivo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia septentrionalis* Östrup); Gil et al. 1989-1990 (as *Eunotia septentrionalis*)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia septentrionalis* Östrup)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Eunotia septentrionalis* Östrup); Gil et al. 1989-1990 (as *Eunotia septentrionalis*)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

References: Gil 1988 (as *Eunotia septentrionalis* Östrup); Gil et al. 1989-1990 (as *Eunotia septentrionalis*)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia septentrionalis* Östrup)
Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia septentrionalis* Östrup)
Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia septentrionalis* Östrup)
Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia septentrionalis* Östrup)
Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia septentrionalis* Östrup)
Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Eunotia septentrionalis* Östrup); Gil et al. 1989-1990 (as *Eunotia septentrionalis*)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Gil et al. 1991 (as *Eunotia septentrionalis*)

***Eunotia serpentina* Ehrenberg 1854b**, p. 6, 12 [CAS ref. 000300]

Distribution:

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Eunotia serpentina* Ehrenberg)

***Eunotia serra* Ehrenberg 1837d**, p. 45 [CAS ref. 001178]

Synonym: *Eunotia robusta* Ralfs in Pritchard 1861 partim. [CAS ref. 001063], according to Lange-Bertalot et al. 2011, p. 219

Distribution (Fig. 434):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia serra* Ehrenberg)

Site: Óis da Ribeira, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia serra* Ehrenberg)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)
Site: Pond near Lagoa Comprida
Reference: Santos et al. 2002 (as *Eunotia serra* Ehrenberg)
Site: São Romão, Lagoa do Covão do Curral
Reference: Santos et al. 2002 (as *Eunotia serra* Ehrenberg)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)
Site: Lagoa da Falca (Terceira Island)
Reference: Gonçalves 1996 (as *Eunotia serra* Ehrenberg)
Site: Lagoa da Joanhina
Reference: Gonçalves 1996 (as *Eunotia serra* Ehrenberg)

Municipality: Praia da Vitória (Terceira Island)
Site: Lagoa do Boi
Reference: Gonçalves 1996 (as *Eunotia serra* Ehrenberg)

Municipality: Not specified
Site: Corvo Island
Reference: Gonçalves et al. 2010 (as *Eunotia serra* Ehrenberg)
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Eunotia serra* Ehrenberg)
Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Eunotia serra* Ehrenberg)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Eunotia serra* Ehrenberg)
Site: Terceira Island
Reference: Gonçalves et al. 2010 (as *Eunotia serra* Ehrenberg)
Site: Not specified
Reference: Gonçalves 2008 (as *Eunotia serra* var. *serra* Ehrenberg)

***Eunotia siolii* Hustedt 1952**, p. 143; fig. 13-15 [CAS ref. 000523]

Distribution:

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Eunotia siolii* Hustedt)

***Eunotia soleirolii* (Kützing) Rabenhorst 1864**, p. 74 [CAS ref. 000775]

Basionym: *Himantidium soleirolii* Kützing 1844 [CAS ref. 000595]

Nomenclatural synonym: *Eunotia pectinalis* var. *soleirolii* (Kützing) Van Heurck 1896, p. 301 [CAS ref. 000897]

Distribution (Fig. 435):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: São João da Madeira (District: Aveiro)

Site: Ui River (Vouga Basin)

Reference: Resende et al. 2010 (as *Eunotia soleirolii* (Kützing) Rabenhorst)

Subregion: Grande Porto

Municipality: Porto (District: Porto)

Site: Not specified

Reference: Colmeiro 1889 (as *Himantidium soleirolii* Kg.)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Eunotia soleirolii* (Kützing) Rabenhorst)

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Gonçalo

Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. var. *soleirolii* Kuetz.)

Site: Guarda

Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. var. *soleirolii* Kuetz.)

Site: Lameirinhas

Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. var. *soleirolii* Kuetz.)

Site: Meios

References: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. var. *soleirolii* Kuetz.); Santos & Carvalho 2001 (as *Eunotia pectinalis* (Dillw.?) Rabenh. var. *soleirolii* Kuetz.)

Site: Nueme

Reference: Carvalho 1913 (as *Eunotia pectinalis* (Dillw.?) Rabenh. var. *soleirolii* Kuetz.)

Subregion: Dão-Lafões

Municipality: Tondela (District: Viseu)

Site: In the proximity of Tondela, Criz River (Mondego Basin)

Reference: Santos et al. 2002 (as *Eunotia soleirolii* (Kützing) Rabenhorst)

Subregion: Pinhal Interior Norte

Municipality: Pampilhosa da Serra (District: Coimbra)

Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)

Reference: Santos et al. 2002 (as *Eunotia soleirolii* (Kützing) Rabenhorst)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Himantidium soleirolii* Ktz.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia soleirolii* (Kützing) Rabenhorst)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia soleirolii* (Kützing) Rabenhorst)

***Eunotia subarcuatooides* Alles, Nörpel-Schempp & Lange-Bertalot
in Alles et al. 1991, v. 53 (1-2): p. 188; pl. 4, fig. 1-36 [CAS ref.
007325]**

Distribution (Fig. 436):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: São João da Madeira (District: Aveiro)

Site: Ui River (Vouga Basin)

Reference: Resende et al. 2010 (as *Eunotia subarcuatooides* Alles, Nörpel & Lange-Bertalot)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Mountain Rivers in the North

Reference: Morais et al. 2009 (as *Eunotia subarcuatooides* Alles, Nörpel & Lange-Bertalot)

Site: Not specified

Reference: INAG 2008 (as *Eunotia subarcuatooides* Alles, Nörpel & Lange-Bertalot)

***Eunotia submonodon* Hustedt emend. Gil 1989**, v. 15 (1-4): p. 269, 271; pl. 2, fig. 1-7 [CAS ref. 008265]

Distribution (Fig. 437):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia submonodon* Hustedt)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia submonodon* Hustedt)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Eunotia submonodon* Hustedt); Gil et al. 1989-1990 (as *Eunotia submonodon*)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia submonodon* Hustedt); Gil et al. 1989-1990 (as *Eunotia submonodon*); Almeida 1998 (as *Eunotia submonodon* Hustedt)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia submonodon* Hustedt)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia submonodon* Hustedt); Gil et al. 1989-1990 (as *Eunotia submonodon*)

Site: Bolfiar, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia submonodon* Hustedt); Gil et al. 1989-1990 (as *Eunotia submonodon*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

References: Gil 1988 (as *Eunotia submonodon* Hustedt); Gil et al. 1989-1990 (as *Eunotia submonodon*)

Site: Óis da Ribeira, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia submonodon* Hustedt)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Eunotia submonodon* Hustedt); Gil et al. 1989-1990 (as *Eunotia submonodon*)

Site: Raivo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia submonodon* Hustedt); Gil et al. 1989-1990 (as *Eunotia submonodon*)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia submonodon* Hustedt); Gil et al. 1989-1990 (as *Eunotia submonodon*)

- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Eunotia submonodon* Hustedt); Gil et al. 1989-1990 (as *Eunotia submonodon*)
- Municipality: Aveiro (District: Aveiro)
Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Eunotia submonodon* Hustedt); Gil et al. 1989-1990 (as *Eunotia submonodon*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Eunotia submonodon* Hustedt); Gil et al. 1989-1990 (as *Eunotia submonodon*)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Eunotia submonodon* Hustedt); Gil et al. 1989-1990 (as *Eunotia submonodon*)
- Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia submonodon* Hustedt)
- Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia submonodon* Hustedt)
- Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia submonodon* Hustedt)
- Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil et al. 1989-1990 (as *Eunotia submonodon*)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Eunotia submonodon* Hustedt)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Eunotia submonodon* Hustedt); Gil et al. 1989-1990 (as *Eunotia submonodon*)
- Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil et al. 1989-1990 (as *Eunotia submonodon*)
- Subregion: Pinhal Interior Norte
- Municipality: Pampilhosa da Serra (District: Coimbra)
Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)
Reference: Santos et al. 2002 (as *Eunotia submonodon* Hustedt)
- Subregion: Not specified
- Municipality: Not specified
Site: Not specified
Reference: Gil et al. 1991 (as *Eunotia submonodon*)

***Eunotia sudetica* O. Müller 1898**, p. 12; pl. 3, fig. 25, 26 [CAS ref. 001398]

Distribution (Fig. 438):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Arouca (District: Aveiro)

Site: Serra da Freita, Arões, Caima River (Vouga Basin)

References: Nunes et al. 2003 (as *Eunotia sudetica* O. Muller); Nunes 2007 (as *Eunotia sudetica* O. Muller); Ferreira da Silva et al. 2009 (as *Eunotia sudetica* O. Muller)

Subregion: Grande Porto

Municipality: Maia (District: Porto)

Site: Parada

Reference: Silva 1950b (as *Eunotia sudetica* (O. Müll.) Hust.)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Eunotia sudetica* (O. Müll.) Hustedt); Gil et al. 1989-1990 (as *Eunotia sudetica*)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia sudetica* (O. Müll.) Hustedt)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia sudetica* (O. Müll.) Hustedt)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia sudetica* (O. Müll.) Hustedt)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Eunotia sudetica* (O. Müll.) Hustedt)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia sudetica* (O. Müll.) Hustedt)

Site: Raivo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia sudetica* (O. Müll.) Hustedt); Gil et al. 1989-1990 (as *Eunotia sudetica*)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia sudetica* (O. Müll.) Hustedt)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia sudetica* (O. Müll.) Hustedt)

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Eunotia sudetica* O. Muller)

Municipality: Aveiro (District: Aveiro)

- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia sudetica* (O. Müll.) Hustedt)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia sudetica* (O. Müll.) Hustedt)
- Municipality: Sever do Vouga (District: Aveiro)
 Site: Silva Escura, upstream of Braçal Mine, Mau River (Vouga Basin)
 Reference: Nunes 2007 (as *Eunotia sudetica* O. Muller)
- Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia sudetica* (O. Müll.) Hustedt)
- Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia sudetica* (O. Müll.) Hustedt)
- Site: Varzielas, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Eunotia sudetica* (O. Müll.) Hustedt); Gil et al. 1989-1990 (as *Eunotia sudetica*)
- Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 References: Gil 1988 (as *Eunotia sudetica* (O. Müll.) Hustedt); Gil et al. 1989-1990 (as *Eunotia sudetica*)
- Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil et al. 1989-1990 (as *Eunotia sudetica*)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia sudetica* (O. Müll.) Hustedt)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia sudetica* (O. Müll.) Hustedt)
- Subregion: Oeste
 Municipality: Óbidos (District: Leiria)
 Site: Not specified
 Reference: Silva 1946b (as *Eunotia sudetica* (O. Müll.) Hust., fossil)
- Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: Gil et al. 1991 (as *Eunotia sudetica*)
- REGION: ALENTEJO
 Subregion: Lezíria do Tejo
 Municipality: Alpiarça (District: Santarém)
 Site: Not specified
 Reference: Silva 1946b (as *Eunotia sudetica* (O. Müll.) Hust., fossil)
- Municipality: Rio Maior (District: Santarém)
 Site: Not specified
 Reference: Silva 1946b (as *Eunotia sudetica* (O. Müll.) Hust., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Mölder 1947 (as *Eunotia sudetica* (Müller) Hust.)

Site: Pico da Vara

References: Manguin 1942 (as *Eunotia sudetica* O. Mül.); Bourrelly & Manguin 1946a (as *Eunotia sudetica* O. Mül.)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eunotia sudetica* O.F. Müller)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia sudetica* O.F. Müller)

Site: Not specified

Reference: Bourrelly & Manguin 1946b (as *Eunotia sudetica*)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

References: Krammer & Lange-Bertalot 1991a (as *Eunotia sudetica* O. Müller); INAG 2008 (as *Eunotia sudetica* O. Müller)

***Eunotia sudetica* var. *bidens* Hustedt in Schmidt et al. 1913a**, pl. 294, fig. 22, 23 [CAS ref. 012496]

Distribution (Fig. 439):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Eunotia sudetica* O. Mül. var. *bidens* Hust.); Bourrelly & Manguin 1946a (as *Eunotia sudetica* O. Mül. var. *bidens* Hust.)

Municipality: Povoação (São Miguel Island)

Site: Pico da Vara

References: Manguin 1942 (as *Eunotia sudetica* O. Mül. var. *bidens* Hust.); Bourrelly & Manguin 1946a (as *Eunotia sudetica* O. Mül. var. *bidens* Hust.)

***Eunotia tenella* (Grunow in Van Heurck) Hustedt in Schmidt et al. 1913b**, pl. 287, fig. 20-25 [CAS ref. 012495]

Basionym: *Eunotia arcus* var. *tenella* Grunow in Van Heurck 1882-1885 [CAS ref. 000896]

Nomenclatural synonym: *Eunotia exigua* var. *tenella* (Grunow) Nörpel-Schempp & Alles in Alles, Nörpel & Lange-Bertalot 1991 [CAS ref. 007325]

Distribution (Fig. 440):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: São Pedro de Castelões, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Eunotia exigua* (Bréb.) Rabenhorst var. *tenella* (Grunow) Nörpel & Alles)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Eunotia tenella* (Grunow) Hustedt)

Subregion: Minho-Lima

Municipality: Caminha (District: Viana do Castelo)

Site: Sains, Âncora River (Âncora Basin)

Reference: Formigo et al. 1993 (as *Eunotia tenella*)

Municipality: Viana do Castelo (District: Viana do Castelo)

Site: São Lourenço da Montaria, Âncora River (Âncora Basin)

Reference: Formigo et al. 1993 (as *Eunotia tenella*)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Eunotia tenella* (Grun.) A. Cleve); Gil et al. 1989-1990 (as *Eunotia tenella*)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia tenella* (Grun.) A. Cleve); Gil et al. 1989-1990 (as *Eunotia tenella*)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia tenella* (Grun.) A. Cleve); Gil et al. 1989-1990 (as *Eunotia tenella*)

Site: Bolfiar, Águeda River (Vouga Basin)

References: Gil 1988 (as *Eunotia tenella* (Grun.) A. Cleve); Gil et al. 1989-1990 (as *Eunotia tenella*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

References: Gil 1988 (as *Eunotia tenella* (Grun.) A. Cleve); Gil et al. 1989-1990 (as *Eunotia tenella*)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Eunotia tenella*)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Eunotia tenella* (Grun.) A. Cleve); Gil et al. 1989-1990 (as *Eunotia tenella*)

Site: Raivo, Águeda River (Vouga Basin)

- References: Gil 1988 (as *Eunotia tenella* (Grun.) A. Cleve); Gil et al. 1989-1990 (as *Eunotia tenella*)
- Site: Redonda, Águeda River (Vouga Basin)
- References: Gil 1988 (as *Eunotia tenella* (Grun.) A. Cleve); Gil et al. 1989-1990 (as *Eunotia tenella*)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Eunotia tenella* (Grun.) A. Cleve); Gil et al. 1989-1990 (as *Eunotia tenella*)
- Municipality: Albergaria-a-Velha (District: Aveiro)
- Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)
- Reference: Nunes 2007 (as *Eunotia exigua* (Bréb.) Rabenhorst var. *tenella* (Grunow) Nörpel & Alles)
- Site: Valmaior, mouth of Filvida River (Vouga Basin)
- Reference: Nunes et al. 2002 (as *Eunotia exigua* (Bréb.) Rabenhorst var. *tenella* (Grunow) Nörpel & Alles)
- Municipality: Anadia (District: Aveiro)
- Site: Tamengos, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Eunotia tenella*)
- Municipality: Aveiro (District: Aveiro)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia tenella* (Grun.) A. Cleve)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia tenella* (Grun.) A. Cleve)
- Municipality: Mealhada (District: Aveiro)
- Site: Pampilhosa, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Eunotia tenella*)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Perrães, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Eunotia tenella*)
- Site: Repolão, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Eunotia tenella*)
- Municipality: Sever do Vouga (District: Aveiro)
- Site: Silva Escura, upstream of Braçal Mine, Mau River (Vouga Basin)
- Reference: Nunes 2007 (as *Eunotia exigua* (Bréb.) Rabenhorst var. *tenella* (Grunow) Nörpel & Alles)
- Municipality: Not specified
- Site: Pateira de Fermentelos (District: Aveiro)
- Reference: Calado 1991 (as *Eunotia tenella* (Grunow) Hustedt)
- Municipality: Aveiro (District: Aveiro)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
- Reference: Gil et al. 1989-1990 (as *Eunotia tenella*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

- Reference: Gil et al. 1989-1990 (as *Eunotia tenella*)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Eunotia tenella* (Grun.) A. Cleve); Gil et al. 1989-1990 (as *Eunotia tenella*)
- Site: São João do Monte, Águeda River (Vouga Basin)
- References: Gil 1988 (as *Eunotia tenella* (Grun.) A. Cleve); Gil et al. 1989-1990 (as *Eunotia tenella*)
- Site: Varzielas, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia tenella* (Grun.) A. Cleve); Gil et al. 1989-1990 (as *Eunotia tenella*)
- Municipality: Tondela (District: Viseu)
- Site: Boi, Agadão River (Vouga Basin)
- References: Gil 1988 (as *Eunotia tenella* (Grun.) A. Cleve); Gil et al. 1989-1990 (as *Eunotia tenella*)
- Site: In the proximity of Tondela, Criz River (Mondego Basin)
- Reference: Santos et al. 2002 (as *Eunotia tenella* (Grunow) Hustedt)
- Municipality: Vouzela (District: Viseu)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
- Reference: Gil et al. 1989-1990 (as *Eunotia tenella*)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Eunotia tenella* (Grun.) A. Cleve)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Eunotia tenella* (Grun.) A. Cleve); Gil et al. 1989-1990 (as *Eunotia tenella*)
- Subregion: Serra da Estrela
- Municipality: Seia (District: Guarda)
- Site: Lagoa Comprida Reservoir, Lagoa Stream (Mondego Basin)
- Reference: Santos et al. 2002 (as *Eunotia tenella* (Grunow) Hustedt)
- Site: Pond near Lagoa Comprida
- Reference: Santos et al. 2002 (as *Eunotia tenella* (Grunow) Hustedt)
- Site: Sabugueiro, Lagoacho Reservoir
- Reference: Santos et al. 2002 (as *Eunotia tenella* (Grunow) Hustedt)
- Site: Sabugueiro, Vale do Rossim Reservoir
- Reference: Santos et al. 2002 (as *Eunotia tenella* (Grunow) Hustedt)
- Site: São Romão, Lagoa do Covão do Curral
- Reference: Santos et al. 2002 (as *Eunotia tenella* (Grunow) Hustedt)
- Subregion: Not specified
- Municipality: Not specified
- Site: Not specified
- References: Calado 1990 (as *Eunotia tenella* (Grunow) Hustedt); Gil et al. 1991 (as *Eunotia tenella*)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Alpiarça (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Eunotia tenella* (Grun.) Hust., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Eunotia tenella* (Grun.) Hust.); Bourrelly & Manguin 1946a (as *Eunotia tenella* (Grun.) Hust.)

Municipality: Povoação (São Miguel Island)

Site: Ferruginous springs, Furnas

Reference: Chaves 1908 (as *Eunotia arcus* var. *tenella* Ehr.)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Eunotia arcus* var. *tenella* Ehr.)

Site: Pico Verde

References: Manguin 1942 (as *Eunotia tenella* (Grun.) Hust.); Bourrelly & Manguin 1946a (as *Eunotia tenella* (Grun.) Hust.)

Site: Tambores, Furnas

Reference: Chaves 1908 (as *Eunotia arcus* var. *tenella* Ehr., fossil)

Municipality: Not specified

Site: Terceira Island

Reference: Johansson 1977 (as *Eunotia tenella* (Grun.) Hust.)

Site: Not specified

Reference: Gonçalves 2008 (as *Eunotia exigua* var. *tenella* (Grunow) Nörpel & Alles)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia exigua* (Bréb.) Rabenhorst var. *tenella* (Grunow) Nörpel et Alles)

***Eunotia tetraodon* Ehrenberg 1838**, p. 192; pl. 21, fig. 25 [CAS ref. 000288]

Nomenclatural synonyms: *Eunotia robusta* var. *tetraodon* (Ehrenberg) Ralfs in Pritchard 1861 [CAS ref. 001063]

Eunotia serra var. *tetraodon* (Ehrenberg) Nörpel-Schempp in Krammer & Lange-Bertalot 1991 [CAS ref. 006521]

Distribution (Fig. 441):

REGION: CENTRO

Subregion: Oeste

Municipality: Óbidos (District: Leiria)
Site: Not specified
Reference: Silva 1946b (as *Eunotia tetraodon* Ehr., fossil)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Rio Maior (District: Santarém)
Site: Espanadal diatomite
Reference: Zbyszewski 1943 (as *Eunotia tetraodon* Bréb., fossil)
Site: Rio Maior diatomite
Reference: Lefébure 1938 (as *Eunotia tetraodon* Bréb., fossil)
Site: Not specified
Reference: Silva 1946b (as *Eunotia tetraodon* Ehr., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Corvo (Corvo Island)
Site: Caldeira
Reference: Mölder 1947 (as *Eunotia robusta* Ralfs var. *tetraodon* (Ehr.) Ralfs)

Municipality: Lajes das Flores (Flores Island)
Site: Lagoa Rasa
References: Manguin 1942 (as *Eunotia robusta* Ralfs var. *tetraodon* (Ehr.) Ralfs); Bourrelly & Manguin 1946a (as *Eunotia robusta* Ralfs var. *tetraodon* (Ehr.) Ralfs)

Municipality: Lajes do Pico (Pico Island)
Site: Lagoa do Caiado
Reference: Mölder 1947 (as *Eunotia robusta* Ralfs var. *tetraodon* (Ehr.) Ralfs)

Municipality: Santa Cruz das Flores (Flores Island)
Site: Lagoa Branca
References: Manguin 1942 (as *Eunotia robusta* Ralfs var. *tetraodon* (Ehr.) Ralfs); Bourrelly & Manguin 1946a (as *Eunotia robusta* Ralfs var. *tetraodon* (Ehr.) Ralfs)

Site: Ribeira Grande
References: Manguin 1942 (as *Eunotia robusta* Ralfs var. *tetraodon* (Ehr.) Ralfs); Bourrelly & Manguin 1946a (as *Eunotia robusta* Ralfs var. *tetraodon* (Ehr.) Ralfs)

Municipality: Not specified
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Eunotia tetraodon* (Ehrenberg) Ralfs)

Site: Lagoa de Cazador (São Miguel Island)
References: Manguin 1942 (as *Eunotia robusta* Ralfs var. *tetraodon* (Ehr.) Ralfs); Bourrelly & Manguin 1946a (as *Eunotia robusta* Ralfs var. *tetraodon* (Ehr.) Ralfs)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Eunotia tetraodon* (Ehrenberg) Ralfs)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia tetraodon* (Ehrenberg) Ralfs)

Site: Not specified

Reference: Gonçalves 2008 (as *Eunotia serra* var. *tetraodon* (Ehrenberg) Nörpel)

***Eunotia torula* M.H. Hohn 1961**, p. 160; pl. 1, fig. 10 [CAS ref. 000485]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia torula* Hohn)

***Eunotia trinacria* Krasske 1929**, p. 349, fig. 1 [CAS ref. 000582]

Nomenclatural synonym: *Eunotia paludosa* var. *trinacria* (Krasske) Nörpel-Schempp & Alles in Alles, Nörpel-Schempp & Lange-Bertalot 1991 [CAS ref. 007325]

Synonym: *Eunotia trinacria* var. *undulata* Hustedt 1930 [CAS ref. 000502], according to Lange-Bertalot et al. 2011, p. 235

Distribution (Fig. 442):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Pico Verde

References: Manguin 1942 (as *Eunotia trinacria* Krasske); Bourrelly & Manguin 1946a (as *Eunotia trinacria* Krasske)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Lagoa Comprida

References: Manguin 1942 (as *Eunotia trinacria* Krasske); Bourrelly & Manguin 1946a (as *Eunotia trinacria* Krasske)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eunotia trinacria* Krasske)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Eunotia paludosa* Grunow var. *trinacria* (Krasske) Nörpel et Alles)

***Eunotia trinacria* var. *undulata* Hustedt 1930**, p. 176; fig. 222 [CAS ref. 000502]

Synonym: *Eunotia trinacria* Krasske 1929 [CAS ref. 000582], according to Lange-Bertalot et al. 2011, p. 235

Distribution (Fig. 443):

REGION: AUTONOMOUS REGION OF AZORES
Municipality: Santa Cruz das Flores (Flores Island)
Site: Lagoa Comprida
References: Manguin 1942 (as *Eunotia trinacria* Krasske var. *undulata* Hust.); Bourrelly & Manguin 1946a (as *Eunotia trinacria* Krasske var. *undulata* Hust.)

***Eunotia triodon* Ehrenberg 1837d**, p. 45 [CAS ref. 001178]

Distribution (Fig. 444):

REGION: NORTE
Subregion: Ave
Municipality: Vila Nova de Famalicão (District: Braga)
Site: Ribeirão de Famalicão
Reference: Zimmermann 1910 (as *Eunotia triodon* Ehr.)
Subregion: Entre Douro e Vouga
Municipality: Santa Maria da Feira (District: Aveiro)
Site: Fornos
Reference: Zimmermann 1910 (as *Eunotia triodon* Ehr.)

REGION: AUTONOMOUS REGION OF AZORES
Municipality: Lajes do Pico (Pico Island)
Site: Lagoa do Caiado
Reference: Mölder 1947 (as *Eunotia triodon* Ehr.)
Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
Reference: Chaves 1908 (as *Eunotia triodon* Ehr.)
Municipality: Not specified

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Eunotia triodon* Ehrenberg)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia triodon* Ehrenberg)

***Eunotia valida* Hustedt 1930**, p. 178; fig. 229 [CAS ref. 000502]

Synonym: *Eunotia gracilis* (Ehrenberg) Rabenhorst 1864 [CAS ref. 000775], according to Lange-Bertalot et al. 2011, p. 238

Distribution (Fig. 445):

REGION: NORTE

Subregion: Grande Porto

Municipality: Maia (District: Porto)

Site: Parada

Reference: Silva 1950b (as *Eunotia valida* Hust.)

Subregion: Not specified

Municipality: Not specified

Site: Serra do Gerês

Reference: Silva 1950a (as *Eunotia valida* Hust.)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Eunotia valida*)

Municipality: Anadia (District: Aveiro)

Site: Mogofores, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Eunotia valida*)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Perrães, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Eunotia valida*)

Site: Repolão, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Eunotia valida*)

Municipality: Not specified

Site: Pateira de Fermentelos (District: Aveiro)

Reference: Calado 1991 (as *Eunotia valida* Hustedt)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Eunotia valida* Hust.); Bourrelly & Manguin 1946a (as *Eunotia valida* Hust.)

Municipality: Nordeste (São Miguel Island)

- Site: Serra Tronqueira
References: Manguin 1942 (as *Eunotia valida* Hust.); Bourrelly & Manguin 1946a (as *Eunotia valida* Hust.)
- Municipality: Povoação (São Miguel Island)
Site: Pico da Vara
References: Manguin 1942 (as *Eunotia valida* Hust.); Bourrelly & Manguin 1946a (as *Eunotia valida* Hust.); Mölder 1947 (as *Eunotia valida* Hust.)
- Municipality: Santa Cruz das Flores (Flores Island)
Site: Lagoa Branca
References: Manguin 1942 (as *Eunotia valida* Hust.); Bourrelly & Manguin 1946a (as *Eunotia valida* Hust.)
- Municipality: Not specified
Site: Pico Island
Reference: Johansson 1977 (as *Eunotia valida* Hust.)
- Site: Terceira Island
Reference: Johansson 1977 (as *Eunotia valida* Hust.)

***Eunotia veneris* (Kützing) De Toni 1892**, p. 794 [CAS ref. 000950]

Basionym: *Himantidium veneris* Kützing 1844 [CAS ref. 000595]

Distribution (Fig. 446):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Eunotia veneris* (Kützing) De Toni)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia veneris* (Kütz.) O. Müller)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia veneris* (Kütz.) O. Müller)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia veneris* (Kütz.) O. Müller)

Site: Bolfiãr, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia veneris* (Kütz.) O. Müller)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Eunotia veneris* (Kütz.) O. Müller)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Eunotia veneris* (Kütz.) O. Müller)

Site: Raivo, Águeda River (Vouga Basin)

- Reference: Gil 1988 (as *Eunotia veneris* (Kütz.) O. Müller)
 Site: Redonda, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia veneris* (Kütz.) O. Müller)
 Site: Ribeiro, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia veneris* (Kütz.) O. Müller)
 Municipality: Albergaria-a-Velha (District: Aveiro)
 Site: Frossos, Carreira Creek (Mondego Basin)
 Reference: Almeida 1998 (as *Eunotia veneris* (Kützing) De Toni)
 Site: Ribeira de Fráguas, Palhal Mine, Caima River (Vouga Basin)
 Reference: Nunes 2007 (as *Eunotia veneris* (Kützing) De Toni)
 Site: Valmaior, mouth of Filvida River (Vouga Basin)
 Reference: Nunes 2007 (as *Eunotia veneris* (Kützing) De Toni)
 Municipality: Aveiro (District: Aveiro)
 Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia veneris* (Kütz.) O. Müller)
 Municipality: Mealhada (District: Aveiro)
 Site: Pampilhosa, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Eunotia veneris*)
 Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Perrães, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Eunotia veneris*)
 Site: Repolão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Eunotia veneris*)
 Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia veneris* (Kütz.) O. Müller)
 Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia veneris* (Kütz.) O. Müller)
 Site: Varzielas, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia veneris* (Kütz.) O. Müller)
 Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia veneris* (Kütz.) O. Müller)
 Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia veneris* (Kütz.) O. Müller)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Eunotia veneris* (Kütz.) O. Müller)
 Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 References: Calado 1990 (as *Eunotia veneris* (Kützing) O. Müller); Gil et al. 1991 (as *Eunotia veneris*)

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Alpiarça (District: Santarém)

Site: Not specified

Reference: Silva 1946b (as *Eunotia veneris* (Kütz.) O. Müll., fossil)

Municipality: Rio Maior (District: Santarém)

Site: Espanadal diatomite

Reference: Zbyszewski 1943 (as *Eunotia veneris* Ktz., fossil)

Site: Rio Maior diatomite

Reference: Lefébure 1938 (as *Eunotia veneris* Ktz., fossil)

Site: Not specified

Reference: Silva 1946b (as *Eunotia veneris* (Kütz.) O. Müll., fossil)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)

Site: Lagoa da Achada

Reference: Mölder 1947 (as *Eunotia veneris* (Kütz.) O. Müller)

Site: Santa Bárbara

Reference: Mölder 1947 (as *Eunotia veneris* (Kütz.) O. Müller)

Municipality: Calheta (São Jorge Island)

Site: Pico do Calheta

Reference: Mölder 1947 (as *Eunotia veneris* (Kütz.) O. Müller)

Site: Ribeira do Salto (São Jorge Island)

Reference: Mölder 1947 (as *Eunotia veneris* (Kütz.) O. Müller)

Site: Ribeira de São João

Reference: Mölder 1947 (as *Eunotia veneris* (Kütz.) O. Müller)

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Eunotia veneris* (Kütz.) O. Müll.);

Bourrelly & Manguin 1946a (as *Eunotia veneris* (Kütz.) O. Müll.)

Municipality: Povoação (São Miguel Island)

Site: Pico da Vara

References: Manguin 1942 (as *Eunotia veneris* (Kütz.) O. Müll.);

Bourrelly & Manguin 1946a (as *Eunotia veneris* (Kütz.) O. Müll.);

Mölder 1947 (as *Eunotia veneris* (Kütz.) O. Müller)

Municipality: Praia da Vitória (Terceira Island)

Site: Lagoa do Negro

Reference: Mölder 1947 (as *Eunotia veneris* (Kütz.) O. Müller)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Lagoa Branca

References: Manguin 1942 (as *Eunotia veneris* (Kütz.) O. Müll.);

Bourrelly & Manguin 1946a (as *Eunotia veneris* (Kütz.) O. Müll.);

Mölder 1947 (as *Eunotia veneris* (Kütz.) O. Müller)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Eunotia veneris* (Kützing) De Toni)

Site: São Jorge Island

Reference: Gonçalves et al. 2010 (as *Eunotia veneris* (Kützing) De Toni)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Eunotia veneris* (Kützing) De Toni)

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Eunotia veneris* (Kützing) De Toni)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia veneris* (Kützing) De Toni)

***Eunotia ventricosa* Ehrenberg 1854 [CAS ref. -]**

Distribution (Fig. 447):

REGION: CENTRO

Subregion: Beira Interior Sul

Municipality: Castelo Branco (District: Castelo Branco)

Site: São Fiel, Ocreza River (Tagus Basin)

Reference: Zimmermann 1909b (as *Eunotia ventricosa* Ehr.)

***Eunotia* sp.**

Distribution (Fig. 448):

REGION: NORTE

Subregion: Ave

Municipality: Fafe (District: Braga)

Site: Travassós, Vizela River (Ave Basin)

Reference: Fidalgo 1990 (as *Eunotia* sp.)

Subregion: Douro

Municipality: Armamar (District: Viseu)

Site: Queimadela, Vizela River (Ave Basin)

Reference: Fidalgo 1990 (as *Eunotia* sp.)

Subregion: Minho-Lima

Municipality: Vila Nova de Cerveira (District: Viana do Castelo)

Site: Barragem de Covas, Coura River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Eunotia* sp.)

Subregion: Not specified

Municipality: Not specified

Site: Ave Reservoirs, Ave River (Ave Basin)

References: Branco et al. 1991a (as *Eunotia* sp.); Branco et al. 1991b (as *Eunotia* sp.)

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Torres Novas (District: Santarém)

Site: Ribeira Branca, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Eunotia* sp.)

REGION: ALENTEJO

Subregion: Alto Alentejo

Municipality: Avis (District: Portalegre)

Site: Maranhão Reservoir, Raia Stream (Tagus Basin)

Reference: Oliveira 1984c (as *Eunotia* spp.)

Municipality: Ponte de Sôr (District: Portalegre)

Site: Montargil Reservoir, Sôr Stream (Tagus Basin)

Reference: Coutinho 1990a (as *Eunotia* sp.)

REGION: ALGARVE

Subregion: Algarve

Municipality: Lagos (District: Faro)

Site: Bravura Reservoir, Odiáxere Stream (Ribeiras do Algarve Basin)

Reference: Oliveira 1984a (as *Eunotia* sp.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Santa Cruz da Graciosa (Graciosa Island)

Site: Fundão, Caldeira

Reference: Azevedo et al. 2005 (as *Eunotia* spp.)

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Eunotia* sp.)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Eunotia* sp.)

***Fallacia* Stickle & D.G. Mann in Round, Crawford & Mann 1990, p. 667 [CAS ref. 003245]**

***Fallacia enigmatica* (H. Germain) Lange-Bertalot & Werum in Werum & Lange-Bertalot 2004, p. 159 [CAS ref. 012889]**

Basionym: *Navicula enigmatica* H. Germain 1980 [CAS ref. 008253]

Distribution (Fig. 449):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Navicula enigmatica* Germain)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula enigmatica* Germain)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula enigmatica* Germain)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Navicula enigmatica* Germain)

Site: Raivo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Navicula enigmatica* Germain); Gil et al. 1989-1990 (as *Navicula enigmatica*)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula enigmatica* Germain)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Navicula enigmatica* Germain)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Navicula enigmatica* Germain)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Navicula enigmatica* Germain)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Navicula enigmatica* Germain)

Site: São João do Monte, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula enigmatica* Germain)

Municipality: Vouzela (District: Viseu)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Navicula enigmatica* Germain); Gil et al. 1989-1990 (as *Navicula enigmatica*)

***Fallacia helensis* (Schulz) D.G. Mann in Round, Crawford & Mann 1990, p. 668 [CAS ref. 003245]**

Basionym: *Navicula helensis* Schulz 1926 [CAS ref. 000812]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Navicula helensis* Schulz)

***Fallacia insociabilis* (Krasske) D.G. Mann in Round, Crawford & Mann 1990, p. 668 [CAS ref. 003245]**

Basionym: *Navicula insociabilis* Krasske 1932 [CAS ref. 000583]

Distribution (Fig. 450):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Santo António, Valmaior, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Fallacia insociabilis* (Krasske) D.G. Mann)

REGION: ALENTEJO

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Ponte do Curval, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Navicula insociabilis* Krasske)

***Fallacia monoculata* (Hustedt) D.G. Mann in Round, Crawford & Mann 1990, p. 668 [CAS ref. 003245]**

Basionym: *Navicula monoculata* Hustedt 1945 [CAS ref. 000518]

Distribution:

REGION: CENTRO

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Almeida 1998 (as *Navicula monoculata* Hustedt)

***Fallacia pygmaea* (Kützing) Stickle & D.G. Mann in Round, Crawford & Mann 1990, p. 668 [CAS ref. 003245]**

Basionym: *Navicula pygmaea* Kützing 1849 [CAS ref. 000596]

Distribution (Fig. 451):

REGION: NORTE

Subregion: Ave

Municipality: Vila Nova de Famalicão (District: Braga)

Site: Ave River (Ave Basin)

Reference: Zimmermann 1909b (as *Navicula pygmaea* Kuetz.)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Marsh near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Navicula pygmaea* Kützing)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula pygmaea* Kützing)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula pygmaea*)

Municipality: Anadia (District: Aveiro)

Site: Espairo, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula pygmaea*)

Site: Mogofóres, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula pygmaea*)

Site: São João de Azenha, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula pygmaea* Kützing)

Site: Tamengos, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula pygmaea*)

Municipality: Aveiro (District: Aveiro)

Site: Pano, Largo River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula pygmaea* Kützing)

Site: Requeixo, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula pygmaea* Kützing)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Navicula pygmaea* Kützing)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Navicula pygmaea* Kützing)

Site: Vessada, Fontão Creek (Vouga Basin)

Reference: Almeida 1998 (as *Navicula pygmaea* Kützing)

Municipality: Mealhada (District: Aveiro)

Site: Pampilhosa, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula pygmaea*)

Site: Viadouros, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula pygmaea*)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula pygmaea* Kützing)

Site: Perrães, Levira River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula pygmaea* Kützing)

Site: Perrães, Cértima River (Vouga Basin)

References: Rino & Gil 1989 (as *Navicula pygmaea*); Almeida 1998 (as *Navicula pygmaea* Kützing)

Site: Repolão, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula pygmaea*)

Site: Vila Verde, Levira River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula pygmaea* Kützing)

Municipality: Not specified

Site: Pateira de Fermentelos (District: Aveiro)

Reference: Calado 1991 (as *Navicula pygmaea* Kützing)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Calado 1990 (as *Navicula pygmaea* Kützing)

REGION: ALENTEJO

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Água Azeda, Água Azeda Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Fallacia pygmaea* (Kützing) Stickle et D.G. Mann)

Site: Jungeiros, Roxo Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Fallacia pygmaea* (Kützing) Stickle et D.G. Mann)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Navicula pygmaea* Kützing)

***Fallacia subhamulata* (Grunow in Van Heurck) Bukhtiyarova 1995, v. 5 (4): p. 422 [CAS ref. 008000]**

Basionym: *Navicula subhamulata* Grunow in Van Heurck 1880 [CAS ref. 000895]

Distribution (Fig. 452):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Aveiro (District: Aveiro)

Site: Aveiro, lake in the municipal park (artificial substrate)

Reference: Gil & Almeida 1993 (as *Navicula subhamulata* Grunow)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Perrães, Levira River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula subhamulata* Grunow)

***Fallacia tenera* (Hustedt) D.G. Mann in Round, Crawford & Mann 1990, p. 669 [CAS ref. 003245]**

Basionym: *Navicula tenera* Hustedt in Schmidt et al. 1936 [CAS ref. 012519]

Distribution (Fig. 453):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Fallacia tenera* (Hustedt) D.G. Mann)

***Fallacia vitrea* (Østrup) D.G. Mann in Round, Crawford & Mann 1990, p. 669-670 [CAS ref. 003245]**

Basionym: *Frustulia vitrea* Østrup 1901 [CAS ref. 000701]

Nomenclatural synonym: *Navicula vitrea* (Østrup) Hustedt 1930 [CAS ref. 000502]

Distribution (Fig. 454):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Navicula vitrea* (Ostr.) Hust.); Bourrelly & Manguin 1946a (as *Navicula vitrea* (Ostr.) Hust.)

Municipality: Nordeste (São Miguel Island)

Site: Serra Tronqueira

References: Manguin 1942 (as *Navicula vitrea* (Ostr.) Hust.); Bourrelly & Manguin 1946a (as *Navicula vitrea* (Ostr.) Hust.)

Municipality: Ponta Delgada (São Miguel Island)

- Site: Lagoa do Canário
Reference: Krieger 1931 (as *Frustulia vitrea* Oestrup)
- Municipality: Povoação (São Miguel Island)
- Site: Lagoa das Furnas
Reference: Manguin 1942 (as *Navicula vitrea* (Ostr.) Hust.)
- Site: Pico da Vara
References: Manguin 1942 (as *Navicula vitrea* (Ostr.) Hust.); Bourrelly & Manguin 1946a (as *Navicula vitrea* (Ostr.) Hust.)
- Site: Pico Verde
References: Manguin 1942 (as *Navicula vitrea* (Ostr.) Hust.); Bourrelly & Manguin 1946a (as *Navicula vitrea* (Ostr.) Hust.)
- Site: Ribeira Quente
Reference: Bourrelly & Manguin 1946a (as *Navicula vitrea* (Ostr.) Hust.)
- Municipality: Santa Cruz das Flores (Flores Island)
- Site: Lagoa Branca
References: Manguin 1942 (as *Navicula vitrea* (Ostr.) Hust.); Bourrelly & Manguin 1946a (as *Navicula vitrea* (Ostr.) Hust.)
- Site: Ribeira Grande
References: Manguin 1942 (as *Navicula vitrea* (Ostr.) Hust.); Bourrelly & Manguin 1946a (as *Navicula vitrea* (Ostr.) Hust.)
- Municipality: Not specified
- Site: Lagoa de Cazador (São Miguel Island)
References: Manguin 1942 (as *Navicula vitrea* (Ostr.) Hust.); Bourrelly & Manguin 1946a (as *Navicula vitrea* (Ostr.) Hust.)

***Fistulifera* Lange-Bertalot 1997, p. 73**

[CAS ref. 007047]

***Fistulifera pelliculosa* (Brébisson ex Kützing) Lange-Bertalot 1997, p. 73; fig. 28-31 [CAS ref. 007047]**

Basionym: *Frustulia pelliculosa* Brébisson ex Kützing 1849 [CAS ref. -]

Nomenclatural synonym: *Navicula pelliculosa* (Brébisson ex Kützing) Hilse 1863 [CAS ref. 009550]

Distribution (Fig. 455):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Anadia (District: Aveiro)

Site: Curia, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Navicula pelliculosa*)

Site: Mogofores, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Navicula pelliculosa*)
Site: São João da Azenha, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Navicula pelliculosa*)
Municipality: Mealhada (District: Aveiro)
Site: Pampilhosa, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Navicula pelliculosa*)
Site: Viadouros, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Navicula pelliculosa*)
Municipality: Oliveira do Bairro (District: Aveiro)
Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Navicula pelliculosa*)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Calado 1990 (as *Navicula pelliculosa* Hilse)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Fistulifera pelliculosa* (Brébisson) Lange-Bertalot)
Site: Not specified
Reference: Gonçalves 2008 (as *Fistulifera pelliculosa* (Brébisson) Lange-Bertalot)

***Fistulifera saprophila* (Lange-Bertalot & Bonik) Lange-Bertalot 1997, p. 73; fig. 32 [CAS ref. 007047]**

Basionym: *Navicula saprophila* Lange-Bertalot & Bonik 1976 [CAS ref. 008469]

Distribution (Fig. 456):

REGION: NORTE

Subregion: Entre Douro e Vouga
Municipality: Vale de Cambra (District: Aveiro)
Site: Barbeito, Caima River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula saprophila* Lange-Bertalot & Bonik)
Site: Vale de Cambra, Caima River (Vouga Basin)
Reference: Almeida 1998 (as *Navicula saprophila* Lange-Bertalot & Bonik)

REGION: CENTRO

Subregion: Baixo Vouga

- Municipality: Águeda (District: Aveiro)
 Site: Agadão, Agadão River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula saprophila* Lange-Bertalot & Bonik)
- Site: Águeda, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Navicula saprophila* Lange-Bertalot & Bonik);
 Almeida 1998 (as *Navicula saprophila* Lange-Bertalot & Bonik)
- Site: Bolfiãr, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula saprophila* Lange-Bertalot & Bonik)
- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers
 (Vouga Basin)
 Reference: Gil 1988 (as *Navicula saprophila* Lange-Bertalot & Bonik)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula saprophila* Lange-Bertalot & Bonik)
- Site: Redonda, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula saprophila* Lange-Bertalot & Bonik)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula saprophila* Lange-Bertalot & Bonik)
- Site: Sernada do Vouga, Vouga River (Vouga Basin)
 References: Nunes 2007 (as *Fistulifera saprophila* (Lange-Bertalot &
 Bonik) Lange-Bertalot); Ferreira da Silva et al. 2009 (as *Fistulifera*
saprophila (Lange-Bertalot & Bonik) Lange-Bertalot)
- Municipality: Anadia (District: Aveiro)
 Site: São João de Azenha, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Navicula saprophila* Lange-Bertalot &
 Bonik)
- Municipality: Aveiro (District: Aveiro)
 Site: Pano, Largo River (Vouga Basin)
 Reference: Almeida 1998 (as *Navicula saprophila* Lange-Bertalot &
 Bonik)
- Site: Requeixo, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Navicula saprophila* Lange-Bertalot &
 Bonik)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima
 River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula saprophila* Lange-Bertalot & Bonik)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima
 River (Vouga Basin)
 Reference: Gil 1988 (as *Navicula saprophila* Lange-Bertalot & Bonik)
- Site: Vessada, Fontão Creek (Vouga Basin)
 Reference: Almeida 1998 (as *Navicula saprophila* Lange-Bertalot &
 Bonik)
- Municipality: Estarreja (District: Aveiro)
 Site: Estarreja, Antuã River (Vouga Basin)
 Reference: Almeida 1998 (as *Navicula saprophila* Lange-Bertalot &
 Bonik)
- Site: Minhoteira, Antuã River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula saprophila* Lange-Bertalot & Bonik)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula saprophila* Lange-Bertalot & Bonik)

Site: Perrães, Levira River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula saprophila* Lange-Bertalot & Bonik)

Site: Perrães, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula saprophila* Lange-Bertalot & Bonik)

Site: Vila Verde, Levira River (Vouga Basin)

Reference: Almeida 1998 (as *Navicula saprophila* Lange-Bertalot & Bonik)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Navicula saprophila* Lange-Bertalot & Bonik)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Navicula saprophila* Lange-Bertalot & Bonik)

Municipality: Tondela (District: Viseu)

Site: Boi, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Navicula saprophila* Lange-Bertalot & Bonik)

Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Navicula saprophila* Lange-Bertalot & Bonik)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Navicula saprophila* Lange-Bertalot & Bonik)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Gil et al. 1991 (as *Navicula saprophila*)

REGION: ALENTEJO

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Água Forte, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Fistulifera saprophila* (Lange-Bertalot et Bonik) Lange-Bertalot)

Site: Porto de Beja, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Fistulifera saprophila* (Lange-Bertalot et Bonik) Lange-Bertalot)

Site: Porto Ferreira, Roxo Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Fistulifera saprophila* (Lange-Bertalot et Bonik) Lange-Bertalot)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

References: Gonçalves 2008 (as *Fistulifera saprophila* (Lange-Bertalot et Bonik) Lange-Bertalot); Gonçalves et al. 2010 (as *Fistulifera saprophila* (Lange-Bertalot & Bonik) Lange-Bertalot, fossil)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Navicula saprophila* Lange-Bertalot & Bonik)

***Fragilaria Lyngbye 1819*, p. 182
[CAS ref. 000620]**

***Fragilaria austriaca* (Grunow) Lange-Bertalot 2000**, p. 581 [CAS ref. -]

Basionym: *Synedra amphicephala* var. *austriaca* Grunow in Van Heurck 1881 [CAS ref. 001035]

Nomenclatural synonyms: *Fragilaria capucina* var. *austriaca* (Grunow) Lange-Bertalot 1980, p. 581 [CAS ref. 008465]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Fragilaria capucina* Desmazières var. *austriaca* (Grunow) Lange-Bertalot)

***Fragilaria bidens* Heiberg 1863**, p. 60; pl. 5, fig. 14 [CAS ref. 000471]

Distribution (Fig. 457):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Fragilaria bidens* Heiberg)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Fragilaria bidens* Heiberg)
Site: Not specified
Reference: Gonçalves 2008 (as *Fragilaria bidens* Heiberg)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Fragilaria bidens* Heiberg)

***Fragilaria capucina* Desmazières 1825**, fasc. 10, No. 453 [CAS ref. 000268]

Distribution (Fig. 458):

REGION: NORTE
Subregion: Entre Douro e Vouga
Municipality: Arouca (District: Aveiro)
Site: Serra da Freita, Arões, Caima River (Vouga Basin)
References: Nunes 2007 (as *Fragilaria capucina* Desmazières var. *capucina*); Ferreira da Silva et al. 2009 (as *Fragilaria capucina* Desmazières var. *capucina*)
Municipality: Oliveira de Azeméis (District: Aveiro)
Site: Bustelo do Caima, Ossela, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria capucina* Desmazières var. *capucina*)
Municipality: São João da Madeira (District: Aveiro)
Site: Ui River (Vouga Basin)
Reference: Resende et al. 2010 (as *Fragilaria capucina* Desmazières)
Municipality: Vale de Cambra (District: Aveiro)
Site: Barbeito, Caima River (Vouga Basin)
References: Almeida 1998 (as *Fragilaria capucina* Desmazières); Almeida 2001 (as *Fragilaria capucina* Desmazières); Nunes 2007 (as *Fragilaria capucina* Desmazières var. *capucina*)
Site: São Pedro de Castelões, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria capucina* Desmazières var. *capucina*)
Site: Vale de Cambra, Caima River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières)
Subregion: Grande Porto
Municipality: Porto (District: Porto)
Site: Not specified
Reference: Colmeiro 1889 (as *Fragilaria capucina* Desmaz.)

Subregion: Minho-Lima

Municipality: Monção (District: Viana do Castelo)

Site: Monção, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Fragilaria capucina*)

Municipality: Not specified

Site: Minho River, international section (Minho Basin)

Reference: Vasconcelos & Cerqueira 2001 (as *Fragilaria capucina*)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Coimbra (District: Coimbra)

Site: Poço do Almegue

Reference: Nauwerck 1959 (as *Fragilaria capucina* Desmazières)

Municipality: Figueira da Foz (District: Coimbra)

Site: Lagoa da Vela, Quiaios

Reference: de Figueiredo et al. 2006 (as *Fragilaria capucina* Desmazières)

Municipality: Mira (District: Coimbra)

Site: Lagoa de Mira

Reference: Nauwerck 1962 (as *Fragilaria capucina* Desmazières)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Fragilaria capucina* Desmazières); Gil et al. 1989-1990 (as *Fragilaria capucina*)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Fragilaria capucina* Desmazières); Gil et al. 1989-1990 (as *Fragilaria capucina*); Almeida 1998 (as *Fragilaria capucina* Desmazières)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Fragilaria capucina* Desmazières); Gil et al. 1989-1990 (as *Fragilaria capucina*)

Site: Bolfiar, Águeda River (Vouga Basin)

References: Gil 1988 (as *Fragilaria capucina* Desmazières); Gil et al. 1989-1990 (as *Fragilaria capucina*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

References: Gil 1988 (as *Fragilaria capucina* Desmazières); Gil et al. 1989-1990 (as *Fragilaria capucina*)

Site: Murta, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Fragilaria capucina*)

Site: Óis da Ribeira, Águeda River (Vouga Basin)

- Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Fragilaria capucina* Desmazières); Gil et al. 1989-1990 (as *Fragilaria capucina*)
- Site: Raivo, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Fragilaria capucina* Desmazières); Gil et al. 1989-1990 (as *Fragilaria capucina*)
- Site: Redonda, Águeda River (Vouga Basin)
- References: Gil 1988 (as *Fragilaria capucina* Desmazières); Gil et al. 1989-1990 (as *Fragilaria capucina*)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Fragilaria capucina* Desmazières); Gil et al. 1989-1990 (as *Fragilaria capucina*)
- Site: Sernada do Vouga, Vouga River (Vouga Basin)
- Reference: Nunes 2007 (as *Fragilaria capucina* Desmazières)
- Municipality: Albergaria-a-Velha (District: Aveiro)
- Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)
- Reference: Nunes 2007 (as *Fragilaria capucina* Desmazières var. *capucina*)
- Site: Frossos, Carreira Creek (Mondego Basin)
- Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières)
- Site: Ribeira de Fráguas, Palhal Mine, Caima River (Vouga Basin)
- Reference: Nunes 2007 (as *Fragilaria capucina* Desmazières var. *capucina*)
- Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)
- Reference: Nunes 2007 (as *Fragilaria capucina* Desmazières var. *capucina*)
- Site: São João de Loure, Vouga River (Vouga Basin)
- Reference: Nauwerck 1959 (as *Fragilaria capucina* Desmazières)
- Site: Santo António, Valmaior, Caima River (Vouga Basin)
- Reference: Nunes 2007 (as *Fragilaria capucina* Desmazières)
- Site: Valmaior, mouth of Filvida River (Vouga Basin)
- References: Nunes et al. 2002 (as *Fragilaria capucina* Desmazières var. *capucina*); Nunes 2007 (as *Fragilaria capucina* Desmazières); Ferreira da Silva et al. 2009 (as *Fragilaria capucina* Desmazières var. *capucina*)
- Site: Valmaior (downstream of the mouth of Filvida River), Caima River (Vouga Basin)
- Reference: Nunes 2007 (as *Fragilaria capucina* Desmazières)
- Municipality: Anadia (District: Aveiro)
- Site: Curia, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Fragilaria capucina*)
- Site: Espairo, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Fragilaria capucina*)
- Site: Mogofôres, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Fragilaria capucina*)

- Site: São João da Azenha, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Fragilaria capucina*); Almeida 1998 (as *Fragilaria capucina* Desmazières)
- Site: Tamengos, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Fragilaria capucina*)
- Municipality: Aveiro (District: Aveiro)
- Site: Aveiro, lake in the municipal park (artificial substrate)
Reference: Gil & Almeida 1993 (as *Fragilaria capucina* Desmazières)
- Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières)
- Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Fragilaria capucina* Desmazières); Gil et al. 1989-1990 (as *Fragilaria capucina*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Fragilaria capucina* Desmazières); Gil et al. 1989-1990 (as *Fragilaria capucina*)
- Site: Vessada, Fontão Creek (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières)
- Municipality: Estarreja (District: Aveiro)
- Site: Estarreja, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières)
- Site: Minhoteira, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières)
- Municipality: Mealhada (District: Aveiro)
- Site: Pampilhosa, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Fragilaria capucina*)
- Site: Viadouros, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Fragilaria capucina*)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Fragilaria capucina*)
- Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières)
- Site: Perrães, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Fragilaria capucina*); Almeida 1998 (as *Fragilaria capucina* Desmazières)
- Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières)
- Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Fragilaria capucina*)

- Site: Vila Verde, Levira River (Vouga Basin)
 Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières)
- Municipality: Sever do Vouga (District: Aveiro)
 Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
 Reference: Nunes 2007 (as *Fragilaria capucina* Desmazières)
- Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)
 Reference: Nunes 2007 (as *Fragilaria capucina* Desmazières)
- Municipality: Vale de Cambra (District: Aveiro)
 Site: São Pedro de Castelões, Caima River (Vouga Basin)
 Reference: Nunes 2007 (as *Fragilaria capucina* Desmazières var. *capucina*)
- Municipality: Not specified
 Site: Filvida River (Vouga Basin)
 Reference: Nunes 2007 (as *Fragilaria capucina* Desmazières var. *capucina*)
- Site: Pateira de Fermentelos (District: Aveiro)
 Reference: Calado 1991 (as *Fragilaria capucina* Desmazières)
- Subregion: Beira Interior Norte
 Municipality: Guarda (District: Guarda)
 Site: Alfarazes
 Reference: Carvalho 1913 (as *Fragilaria capucina* Desmazières)
- Site: Diz River
 Reference: Carvalho 1913 (as *Fragilaria capucina* Desmazières)
- Site: Gonçalo
 Reference: Carvalho 1913 (as *Fragilaria capucina* Desmazières)
- Site: Meios
 References: Carvalho 1913 (as *Fragilaria capucina* Desmazières); Santos & Carvalho 2001 (as *Fragilaria capucina* Desmaz.)
- Site: Mondego River (Mondego Basin)
 Reference: Carvalho 1913 (as *Fragilaria capucina* Desmazières); Santos & Carvalho 2001 (as *Fragilaria capucina* Desmaz.)
- Subregion: Beira Interior Sul
 Municipality: Castelo Branco (District: Castelo Branco)
 Site: Sobral do Campo
 Reference: Zimmermann 1909b (as *Fragilaria capucina* Desmaz.)
- Municipality: Idanha-a-Nova (District: Castelo Branco)
 Site: Idanha Reservoir, Ponsul River (Tagus Basin)
 Reference: Oliveira 1982c (as *Fragilaria capucina*)
- Municipality: Vila Velha de Ródão (District: Castelo Branco)
 Site: downstream of Cedilho Reservoir, Tagus River (Tagus Basin)
 Reference: Fernandes et al. 1987 (as *Fragilaria capucina*)
- Subregion: Cova da Beira
 Municipality: Fundão (District: Castelo Branco)
 Site: Outeiro do Bispo
 Reference: Zimmermann 1909b (as *Fragilaria capucina* Desmaz.)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Fragilaria capucina* Desmazières); Gil et al. 1989-1990 (as *Fragilaria capucina*)

Site: São João do Monte, Águeda River (Vouga Basin)

References: Gil 1988 (as *Fragilaria capucina* Desmazières); Gil et al. 1989-1990 (as *Fragilaria capucina*)

Site: Varzielas, Águeda River (Vouga Basin)

References: Gil 1988 (as *Fragilaria capucina* Desmazières); Gil et al. 1989-1990 (as *Fragilaria capucina*)

Municipality: Tondela (District: Viseu)

Site: Boi, Agadão River (Vouga Basin)

References: Gil 1988 (as *Fragilaria capucina* Desmazières); Gil et al. 1989-1990 (as *Fragilaria capucina*)

Site: In the proximity of Tondela, Criz River (Mondego Basin)

Reference: Santos et al. 2002 (as *Fragilaria capucina* Desmazières)

Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil et al. 1989-1990 (as *Fragilaria capucina*)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria capucina* Desmazières)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Fragilaria capucina* Desmazières); Gil et al. 1989-1990 (as *Fragilaria capucina*)

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Fragilaria capucina*)

Site: Forno Novo, Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Fragilaria capucina*)

Site: Tramagal, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Fragilaria capucina*)

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Cabeçadas et al. 1980 (as *Fragilaria capucina*)

Municipality: Torres Novas (District: Santarém)

Site: Casal da Pinheira, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Fragilaria capucina* Desmazières)

Site: Casal do Feijão, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Fragilaria capucina* Desmazières)

Site: Renova, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Fragilaria capucina* Desmazières)

Site: Ribeira Branca, Almonda River (Tagus Basin)

Reference: Oliveira & Caldas 1971 (as *Fragilaria capucina* Desmazières)

Subregion: Oeste

Municipality: Torres Vedras (District: Lisboa)
Site: Coutada, Sisandro River
Reference: Monteiro & Oliveira 1972 (as *Fragilaria capucina*)

Subregion: Pinhal Interior Norte
Municipality: Arganil (District: Coimbra)
Site: Fronhas Reservoir, Alva River (Mondego Basin)
Reference: Santos et al. 2002 (as *Fragilaria capucina* Desmazières)

Municipality: Pampilhosa da Serra (District: Coimbra)
Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)
Reference: Santos et al. 2002 (as *Fragilaria capucina* Desmazières)

Municipality: Pedrógão Grande (District: Leiria)
Site: Cabril Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Fragilaria capucina*)

Subregion: Pinhal Interior Sul
Municipality: Mação (District: Santarém)
Site: Pracana Reservoir, Ocreza River (Tagus Basin)
Reference: Oliveira 1982b (as *Fragilaria capucina*)

Subregion: Serra da Estrela
Municipality: Seia (District: Guarda)
Site: Sabugueiro, Lagoacho Reservoir
Reference: Santos et al. 2002 (as *Fragilaria capucina* Desmazières)
Site: Sabugueiro, Vale do Rossim Reservoir
Reference: Santos et al. 2002 (as *Fragilaria capucina* Desmazières)

Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Calado 1990 (as *Fragilaria capucina* Desmazières); Gil et al. 1991 (as *Fragilaria capucina*)
Site: Paiva River (Douro Basin)
Reference: Cerqueira da Silva 1994 (as *Fragilaria capucina*)

REGION: LISBOA

Subregion: Grande Lisboa
Municipality: Vila Franca de Xira (District: Lisboa)
Site: Vila Franca de Xira, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Fragilaria capucina*)

REGION: ALENTEJO

Subregion: Alentejo Central
Municipality: Arraiolos (District: Évora)
Site: Divor Reservoir, Divor Stream (Tagus Basin)
Reference: Oliveira 1987 (as *Fragilaria capucina* Desm., fossil)

Municipality: Évora (District: Évora)
Site: Monte Novo Reservoir, Degebe River (Guadiana Basin)

References: Andrade & Brito 1995 (as *Fragilaria capucina*); Oliveira & Monteiro 1995 (as *Fragilaria capucina*); Oliveira 1996 (as *Fragilaria capucina*)

Subregion: Alentejo Litoral

Municipality: Alcácer do Sal (District: Setúbal)

Site: São Romão, Sado River (Sado Basin)

Reference: Coutinho 2003 (as *Fragilaria capucina* (Ehrenberg) Grunow)

Municipality: Arraiolos (District: Évora)

Site: Divor Reservoir, Divor Stream (Tagus Basin)

Reference: Oliveira 1984b (as *Fragilaria capucina*)

Municipality: Odemira (District: Beja)

Site: Santa Clara Reservoir, Mira River (Mira Basin)

Reference: Oliveira 1987 (as *Fragilaria capucina* Desm., fossil)

Municipality: Santiago do Cacém (District: Setúbal)

Site: Campilhas Reservoir, Campilhas Stream (Sado Basin)

Reference: Oliveira 1984a (as *Fragilaria capucina*)

Subregion: Alto Alentejo

Municipality: Avis (District: Portalegre)

Site: Maranhão Reservoir, Raia Stream (Tagus Basin)

Reference: Oliveira 1984c (as *Fragilaria capucina*)

Municipality: Gavião (District: Portalegre)

Site: Belver Reservoir, Tagus River (Tagus Basin)

Reference: INIP 1977 (as *Fragilaria capucina* Desm., fossil); Fernandes et al. 1987 (as *Fragilaria capucina*)

Municipality: Nisa (District: Portalegre)

Site: Barca da Amieira, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Fragilaria capucina*)

Site: Fratel Reservoir, Tagus River (Tagus Basin)

Reference: INIP 1977 (as *Fragilaria capucina* Desm., fossil); Fernandes et al. 1987 (as *Fragilaria capucina*)

Municipality: Ponte de Sôr (District: Portalegre)

Site: Montargil Reservoir, Sôr Stream (Tagus Basin)

Reference: Coutinho 1990a (as *Fragilaria capucina*)

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Ponte do Curval, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Fragilaria capucina* Desmazières)

Subregion: Lezíria do Tejo

Municipality: Cartaxo (District: Santarém)

Site: Valada, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Fragilaria capucina*)

Municipality: Chamusca (District: Santarém)

Site: Chamusca, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Fragilaria capucina*)

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Fragilaria capucina*); Brito & Andrade 1992 (as *Fragilaria capucina*)

Subregion: Médio Tejo

Municipality: Vila Nova da Barquinha (District: Santarém)

Site: Almourol, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Fragilaria capucina*)

Subregion: Not specified

Municipality: Not specified

Site: Rocha da Galé, Guadiana River (Guadiana Basin)

Reference: Andrade & Brito 1991 (as *Fragilaria capucina*)

REGION: ALGARVE

Subregion: Algarve

Municipality: Silves (District: Faro)

Site: Arade Reservoir, Arade River (Ribeiras do Algarve Basin)

Reference: Oliveira 1984a (as *Fragilaria capucina*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)

Site: Lagoa da Falca (Terceira Island)

Reference: Gonçalves 1996 (as *Fragilaria capucina* Desmazières)

Municipality: Lajes das Flores (Flores Island)

Site: Fazenda

Reference: Mölder 1947 (as *Fragilaria capucina* Desmazières)

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa Grande

Reference: Holmboe 1901 (as *Fragilaria capucina* Desmazières)

Municipality: Povoação

Site: Furnas

Reference: Mölder 1947 (as *Fragilaria capucina* Desmazières)

Site: Lagoa das Furnas

References: Chaves 1908 (as *Fragilaria capucina* Desm.); Manguin 1942 (as *Fragilaria capucina* Desmazières); Bourrelly & Manguin 1946a (as *Fragilaria capucina* Desmazières); Mölder 1947 (as *Fragilaria capucina* Desmazières); Gonçalves 1997 (as *Fragilaria capucina*)

Site: Ribeira Quente

References: Manguin 1942 (as *Fragilaria capucina* Desmazières); Bourrelly & Manguin 1946a (as *Fragilaria capucina* Desmazières)

Site: Tambores, Furnas

Reference: Chaves 1908 (as *Fragilaria capucina* Desm., fossil)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Ribeira Grande

References: Manguin 1942 (as *Fragilaria capucina* Desmazières); Bourrelly & Manguin 1946a (as *Fragilaria capucina* Desmazières)

Municipality: Not specified

Site: Corvo Island

Reference: Gonçalves et al. 2010 (as *Fragilaria capucina* Desmazières)
Site: Faial Island
Reference: Gonçalves et al. 2010 (as *Fragilaria capucina* Desmazières)
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Fragilaria capucina* Desmazières)
Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Fragilaria capucina* Desmazières)
Site: São Jorge Island
Reference: Gonçalves et al. 2010 (as *Fragilaria capucina* Desmazières)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Fragilaria capucina* Desmazières)
Site: Terceira Island
Reference: Gonçalves et al. 2010 (as *Fragilaria capucina* Desmazières)
Site: Not specified
Reference: Gonçalves 2008 (as *Fragilaria capucina* Desmazières)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Alto-Douro Rivers

Reference: Morais et al. 2009 (as *Fragilaria capucina* Desmazières var. *capucina*)

Site: Rivers in the North

Reference: Morais et al. 2009 (as *Fragilaria capucina* Desmazières var. *capucina*)

Site: Not specified

Reference: INAG 2008 (as *Fragilaria capucina* Desmazières var. *capucina*)

***Fragilaria capucina* var. *acuta* (Ehrenberg) Rabenhorst 1864**, p. 118 [CAS ref. 000775]

Basionym: *Fragilaria acuta* Ehrenberg 1840a [CAS ref. 000293]

Distribution (Fig. 459):

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Cubo

Reference: Carvalho 1913 (as *Fragilaria capucina* Desmazières var. *acuta* Grun.)

Site: Gonçalo

Reference: Carvalho 1913 (as *Fragilaria capucina* Desmazières var. *acuta* Grun.)

***Fragilaria capucina* subsp. *amphicephala* (Kützing) Lange-Bertalot 1993**, p. 44; Bacill. 2/3, fig. 109: 19-20, fig. 113: 1-2 [CAS ref. 008467]

Basionym: *Synedra amphicephala* Kützing 1844 c [CAS ref. 000595]

Distribution (Fig. 460):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Santa Cruz das Flores (Flores Island)

Site: Not specified

Reference: Mölder 1947 (as *Synedra amphicephala* Kütz.)

***Fragilaria capucina* var. *capitellata* (Grunow in Van Heurck) Lange-Bertalot 1991**, p. 124; pl. 109, figs 25-28 [CAS ref. 006521]

Basionym: *Synedra capitellata* Grunow in Van Heurck 1881 [CAS ref. 001035]

Nomenclatural synonyms: *Synedra vaucheriae* var. *capitellata* (Grunow in Van Heurck) Hustedt 1932 [CAS ref. 000506]

Fragilaria capitellata (Grunow in Van Heurck) J.B. Petersen 1946 [CAS ref. 001465]

Distribution (Fig. 461):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Fragilaria capucina* Desmazières var. *capitellata* (Grunow) Lange-Bertalot)

Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Fragilaria capucina* Desmazières var. *capitellata* (Grunow) Lange-Bertalot)

Municipality: Not specified

Site: Pateira de Fermentelos (District: Aveiro)

Reference: Calado 1991 (as *Synedra vaucheriae* Kg. var. *capitellata* Grun.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Fragilaria capitellata* (Grunow) Petersen)

Site: Santa Maria Island

Reference: Gonçalves et al. 2010 (as *Fragilaria capitellata* (Grunow) Petersen)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Fragilaria capitellata* (Grunow) Petersen)

Site: Not specified

Reference: Gonçalves 2008 (as *Fragilaria capucina* var. *capitellata* (Grunow) Lange-Bertalot)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Fragilaria capucina* Desmazières var. *capitellata* (Grunow) Lange-Bertalot)

***Fragilaria capucina* var. *distans* (Grunow) Lange-Bertalot 1991**, p. 124; pl. 109, fig. 16 [CAS ref. 006521]

Distribution:

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Fragilaria capucina* var. *distans* (Grunow) Lange-Bertalot)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Fragilaria capucina* Desmazières var. *distans* (Grunow) Lange-Bertalot)

***Fragilaria capucina* var. *lanceolata* Grunow in Van Heurck 1881**, pl. 45, fig. 5 [CAS ref. 001035]

Distribution (Fig. 462):

REGION: CENTRO

Subregion: Beira Interior Norte

Municipality: Guarda (District: Guarda)

Site: Alfarazes

Reference: Carvalho 1913 (as *Fragilaria capucina* Desmazières var. *lanceolata* Grun.)

Site: Caldeirão

Reference: Carvalho 1913 (as *Fragilaria capucina* Desmazières var. *lanceolata* Grun.); Santos & Carvalho 2001 (as *Fragilaria capucina* Desmazières var. *lanceolata* Grun.)

Site: Cruz da Faia

Reference: Carvalho 1913 (as *Fragilaria capucina* Desmazières var. *lanceolata* Grun.)

Site: Cubo

Reference: Carvalho 1913 (as *Fragilaria capucina* Desmazières var. *lanceolata* Grun.)

Site: Diz River

Reference: Carvalho 1913 (as *Fragilaria capucina* Desmazières var. *lanceolata* Grun.)

Site: Gonçalves

Reference: Carvalho 1913 (as *Fragilaria capucina* Desmazières var. *lanceolata* Grun.)

Site: Meios

References: Carvalho 1913 (as *Fragilaria capucina* Desmazières var. *lanceolata* Grun.); Santos & Carvalho 2001 (as *Fragilaria capucina* Desmazières var. *lanceolata* Grun.)

Site: Mondego River (Mondego Basin)

Reference: Carvalho 1913 (as *Fragilaria capucina* Desmazières var. *lanceolata* Grun.); Santos & Carvalho 2001 (as *Fragilaria capucina* Desmazières var. *lanceolata* Grun.)

Site: Nueme

Reference: Carvalho 1913 (as *Fragilaria capucina* Desmazières var. *lanceolata* Grun.)

Site: Vela

Reference: Carvalho 1913 (as *Fragilaria capucina* Desmazières var. *lanceolata* Grun.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Fragilaria capucina* Desmazières var. *lanceolata* Grun.); Bourrelly & Manguin 1946a (as *Fragilaria capucina* Desmazières var. *lanceolata* Grun.)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Ribeira Grande

References: Manguin 1942 (as *Fragilaria capucina* Desmazières var. *lanceolata* Grun.); Bourrelly & Manguin 1946a (as *Fragilaria capucina* Desmazières var. *lanceolata* Grun.)

***Fragilaria capucina* fo. *minuscula* sensu Gil 1988 [CAS ref. -]**

Note: We were not able to find this taxon in the literature.

Distribution (Fig. 463):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria capucina* f. *minuscula*)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria capucina* f. *minuscula*)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria capucina* f. *minuscula*)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria capucina* f. *minuscula*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

References: Gil 1988 (as *Fragilaria capucina* f. *minuscula*); Gil et al. 1989-1990 (as *Fragilaria capucina* fo. *minuscula*)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria capucina* f. *minuscula*); Gil et al. 1989-1990 (as *Fragilaria capucina* fo. *minuscula*)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria capucina* f. *minuscula*)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria capucina* f. *minuscula*)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria capucina* f. *minuscula*)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria capucina* f. *minuscula*)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria capucina* f. *minuscula*)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria capucina* f. *minuscula*)

Site: São João do Monte, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria capucina* f. *minuscula*)

Site: Varzielas, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria capucina* f. *minuscula*)

Municipality: Tondela (District: Viseu)

Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria capucina* f. *minuscula*)
Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria capucina* f. *minuscula*)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil et al. 1989-1990 (as *Fragilaria capucina* fo. *minuscula*)
Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria capucina* f. *minuscula*)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Gil et al. 1991 (as *Fragilaria capucina* f. *minuscula*)

***Fragilaria crotonensis* Kitton 1869**, p. 110; text fig. 81 [CAS ref. 001728]

Distribution (Fig. 464):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Macedo de Cavaleiros (District: Bragança)

Site: Azibo Reservoir, Azibo River (Douro Basin)

Reference: Vasconcelos 1991 (as *Fragilaria crotonensis*)

Municipality: Montalegre (District: Vila Real)

Site: Alto Rabagão Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1982a (as *Fragilaria crotonensis*)

Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1982a (as *Fragilaria crotonensis*)

Subregion: Ave

Municipality: Vieira do Minho (District: Braga)

Site: Salamonde Reservoir, Cávado River (Cávado Basin)

Reference: Oliveira 1982a (as *Fragilaria crotonensis*)

Subregion: Entre Douro e Vouga

Municipality: Arouca (District: Aveiro)

Site: Serra da Freita, Arões, Caima River (Vouga Basin)

Reference: Nunes et al. 2003 (as *Fragilaria crotonensis* Kitton)

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Fragilaria crotonensis* Kitton)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria crotonensis* Kitton)

Subregion: Minho-Lima

Municipality: Caminha (District: Viana do Castelo)

Site: Seixas, Minho River (Minho Basin)

- Reference: Vasconcelos et al. 2000 (as *Fragilaria crotonensis*)
Municipality: Melgaço (District: Viana do Castelo)
Site: Melgaço, Minho River (Minho Basin)
- Reference: Vasconcelos et al. 2000 (as *Fragilaria crotonensis*)
Site: São Gregório, Minho River (Minho Basin)
- Reference: Vasconcelos et al. 2000 (as *Fragilaria crotonensis*)
Municipality: Monção (District: Viana do Castelo)
Site: Monção, Minho River (Minho Basin)
- Reference: Vasconcelos et al. 2000 (as *Fragilaria crotonensis*)
Municipality: Valença (District: Viana do Castelo)
Site: Valença, Minho River (Minho Basin)
- Reference: Vasconcelos et al. 2000 (as *Fragilaria crotonensis*)
Municipality: Not specified
Site: Ínsua do Ranhão, Minho River (Minho Basin)
- Reference: Vasconcelos et al. 2000 (as *Fragilaria crotonensis*)
Site: Lima River (Lima Basin)
- Reference: Cerqueira da Silva 1990 (as *Fragilaria crotonensis*)
Site: Minho River (Minho Basin)
- Reference: Cerqueira da Silva & Cunha 1992 (as *Fragilaria crotonensis*)
Site: Minho River, international section (Minho Basin)
- Reference: Vasconcelos & Cerqueira 2001 (as *Fragilaria crotonensis*)
Subregion: Tâmega
Municipality: Marco de Canavezes (District: Porto)
Site: Torrão Reservoir, Tâmega River (Douro Basin)
- Reference: Branco & Guimarães 1991 (as *Fragilaria crotonensis*)
Subregion: Not specified
Municipality: Not specified
Site: Ave Reservoirs, Ave River (Ave Basin)
- References: Branco et al. 1991a (as *Fragilaria crotonensis*); Branco et al. 1991b (as *Fragilaria crotonensis*)
- REGION: CENTRO
Subregion: Baixo Mondego
Municipality: Coimbra (District: Coimbra)
Site: Poço do Almegue
Reference: Nauwerck 1959 (as *Fragilaria crotonensis* Kitton)
- Site: Coimbra Reservoir, Mondego River (Mondego Basin)
References: Craveiro & Santos 1997 (as *Fragilaria crotonensis* Kitton);
Craveiro & Santos 1998 (as *Fragilaria crotonensis*)
- Municipality: Figueira da Foz (District: Coimbra)
Site: Lagoa da Vela, Quiaios
Reference: de Figueiredo et al. 2006 (as *Fragilaria crotonensis* Kitton)
- Municipality: Penacova (District: Coimbra)
Site: Aguieira Reservoir, Mondego River (Mondego Basin)
Reference: Oliveira & Monteiro 1992 (as *Fragilaria crotonensis*)
- Municipality: Soure (District: Coimbra)

- Site: Irrigation channel near Soure
Reference: Santos et al. 2002 (as *Fragilaria crotonensis* Kitton)
- Subregion: Baixo Vouga
Municipality: Águeda (District: Aveiro)
- Site: Agadão, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria crotonensis* Kitton)
- Site: Águeda, Águeda River (Vouga Basin)
References: Gil 1988 (as *Fragilaria crotonensis* Kitton); Gil et al. 1989-1990 (as *Fragilaria crotonensis*); Almeida 1998 (as *Fragilaria crotonensis* Kitton)
- Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria crotonensis* Kitton)
- Site: Aldeia, Segadães, Vouga River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria crotonensis* Kitton)
- Site: Avelal de Baixo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria crotonensis* Kitton)
- Site: Bolfiar, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria crotonensis* Kitton)
- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria crotonensis* Kitton)
- Site: Óis da Ribeira, Águeda River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria crotonensis* Kitton)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria crotonensis* Kitton)
- Site: Raivo, Águeda River (Vouga Basin)
References: Gil 1988 (as *Fragilaria crotonensis* Kitton); Gil et al. 1989-1990 (as *Fragilaria crotonensis*)
- Site: Redonda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria crotonensis* Kitton)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria crotonensis* Kitton)
- Site: Sernada do Vouga, Vouga River (Vouga Basin)
References: Nunes 2007 (as *Fragilaria crotonensis* Kitton); Ferreira da Silva et al. 2009 (as *Fragilaria cf. crotonensis* Kitton)
- Municipality: Albergaria-a-Velha (District: Aveiro)
- Site: Bosturenga, Ribeira de Fráguas, Coval da Mó Stream (Vouga Basin)
References: Nunes 2007 (as *Fragilaria crotonensis* Kitton); Nunes 2007 (as *Fragilaria crotonensis* Kitton, teratological form); Ferreira da Silva et al. 2009 (as *Fragilaria cf. crotonensis* Kitton)
- Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria crotonensis* Kitton)
- Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Fragilaria crotonensis* Kitton)
- Site: Valmaior, mouth of Filvida River (Vouga Basin)

- References: Nunes et al. 2003 (as *Fragilaria crotonensis* Kitton); Nunes 2007 (as *Fragilaria crotonensis* Kitton)
- Municipality: Aveiro (District: Aveiro)
- Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria crotonensis* Kitton)
- Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria crotonensis* Kitton)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria crotonensis* Kitton)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Fragilaria crotonensis* Kitton); Gil et al. 1989-1990 (as *Fragilaria crotonensis*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Fragilaria crotonensis* Kitton); Gil et al. 1989-1990 (as *Fragilaria crotonensis*)
- Municipality: Estarreja (District: Aveiro)
- Site: Estarreja, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria crotonensis* Kitton)
- Site: Minhoteira, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria crotonensis* Kitton)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria crotonensis* Kitton)
- Municipality: Sever do Vouga (District: Aveiro)
- Site: Pessegueiro do Vouga (mouth of Mau River), Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria crotonensis* Kitton)
- Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria crotonensis* Kitton)
- Municipality: Vale de Cambra (District: Aveiro)
- Site: São Pedro de Castelões, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria crotonensis* Kitton)
- Municipality: Not specified
- Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Fragilaria crotonensis* Kitton)
- Subregion: Beira Interior Sul
- Municipality: Idanha-a-Nova (District: Castelo Branco)
- Site: Idanha Reservoir, Ponsul River (Tagus Basin)
Reference: Oliveira 1982c (as *Fragilaria crotonensis*)
- Municipality: Vila Velha de Ródão (District: Castelo Branco)
- Site: downstream of Cedilho Reservoir, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Fragilaria crotonensis*)
- Municipality: Vila Velha de Ródão (District: Castelo Branco)

- Site: Fratel, Tagus River (Tagus Basin)
Reference: Oliveira et al. 1989 (as *Fragilaria crotonensis*)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Fragilaria crotonensis* Kitton); Gil et al. 1989-1990 (as *Fragilaria crotonensis*)
- Site: São João do Monte, Águeda River (Vouga Basin)
References: Gil 1988 (as *Fragilaria crotonensis* Kitton); Gil et al. 1989-1990 (as *Fragilaria crotonensis*)
- Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria crotonensis* Kitton)
- Municipality: Tondela (District: Viseu)
- Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria crotonensis* Kitton)
- Site: In the proximity of Tondela, Criz River (Mondego Basin)
Reference: Santos et al. 2002 (as *Fragilaria crotonensis* Kitton)
- Municipality: Vouzela (District: Viseu)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil et al. 1989-1990 (as *Fragilaria crotonensis*)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria crotonensis* Kitton)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Fragilaria crotonensis* Kitton); Gil et al. 1989-1990 (as *Fragilaria crotonensis*)
- Subregion: Médio Tejo
- Municipality: Abrantes (District: Santarém)
- Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Fragilaria crotonensis*)
- Site: Forno Novo, Tagus River (Tagus Basin)
Reference: Caldas 1988 (as *Fragilaria crotonensis*)
- Site: Pego, Tagus River (Tagus Basin)
Reference: Cerqueira da Silva 1989 (as *Fragilaria crotonensis*)
- Site: Tramagal, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Fragilaria crotonensis*)
- Municipality: Tomar (District: Santarém)
- Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
References: Cabeçadas et al. 1980 (as *Fragilaria crotonensis* Kitton); Ferreira 1986 (as *Fragilaria crotonensis*); Brito & Andrade 1992 (as *Fragilaria crotonensis*)
- Municipality: Vila Nova da Barquinha (District: Santarém)
- Site: Almourol, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Fragilaria crotonensis*)
- Site: Vila Nova da Barquinha, Tagus River (Tagus Basin)
Reference: Oliveira et al. 1989 (as *Fragilaria crotonensis*)
- Subregion: Pinhal Interior Norte

- Municipality: Arganil (District: Coimbra)
 Site: Fronhas Reservoir, Alva River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Fragilaria crotonensis* Kitton)
- Municipality: Pampilhosa da Serra (District: Coimbra)
 Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Fragilaria crotonensis* Kitton)
- Site: Santa Luzia Reservoir, Unhais River (Tagus Basin)
 Reference: Oliveira 1982b (as *Fragilaria crotonensis*)
- Municipality: Pedrógão Grande (District: Leiria)
 Site: Bouçã Reservoir, Zêzere River (Tagus Basin)
 Reference: Oliveira 1982b (as *Fragilaria crotonensis*)
- Site: Cabril Reservoir, Zêzere River (Tagus Basin)
 Reference: Oliveira 1982b (as *Fragilaria crotonensis*)
- Subregion: Pinhal Interior Sul
 Municipality: Mação (District: Santarém)
 Site: Pracana Reservoir, Ocreza River (Tagus Basin)
 Reference: Oliveira 1982b (as *Fragilaria crotonensis*)
- Subregion: Serra da Estrela
 Municipality: Seia (District: Guarda)
 Site: Sabugueiro, Lagoacho Reservoir
 Reference: Santos et al. 2002 (as *Fragilaria crotonensis* Kitton)
- Subregion: Not specified
 Municipality: Not specified
 Site: Paiva River (Douro Basin)
 References: Cerqueira da Silva 1991 (as *Fragilaria crotonensis*);
 Cerqueira da Silva et al. 1993 (as *Fragilaria crotonensis*)
 Site: Not specified
 References Calado 1990 (as *Fragilaria crotonensis* Kitton); Gil et al.
 1991 (as *Fragilaria crotonensis*); Almeida & Gil 2001 (as *Fragilaria
 crotonensis* Kitton)
- REGION: LISBOA
 Subregion: Grande Lisboa
 Municipality: Vila Franca de Xira (District: Lisboa)
 Site: Vila Franca de Xira, Tagus River (Tagus Basin)
 References: Rodrigues & Moita 1979a (as *Fragilaria crotonensis*);
 Rodrigues & Moita 1979b (as *Fragilaria crotonensis*); Fernandes et al.
 1987 (as *Fragilaria crotonensis*)
- Subregion: Not specified
 Municipality: Not specified
 Site: Upper Tagus Estuary (Tagus Basin)
 Reference: Brogueira et al. 2007 (as *Fragilaria crotonensis*)
- REGION: ALENTEJO
 Subregion: Alentejo Central
 Municipality: Arraiolos (District: Évora)

- Site: Divor Reservoir, Divor Stream (Tagus Basin)
References: Oliveira 1984b (as *Fragilaria crotonensis*); Oliveira 1987 (as *Fragilaria crotonensis* (Edw.) Kitt.)
- Subregion: Alentejo Litoral
- Municipality: Alcácer do Sal (District: Setúbal)
- Site: Pêgo do Altar Reservoir, Alcáçovas Stream (Sado Basin)
Reference: Ferreira 1986 (as *Fragilaria crotonensis*)
- Site: São Romão, Sado River (Sado Basin)
Reference: Coutinho 2003 (as *Fragilaria crotonensis* (Edw.) Kitton)
- Municipality: Odemira (District: Beja)
- Site: Santa Clara Reservoir, Mira River (Mira Basin)
Reference: Oliveira 1987 (as *Fragilaria crotonensis* (Edw.) Kitt.)
- Subregion: Alto Alentejo
- Municipality: Avis (District: Portalegre)
- Site: Maranhão Reservoir, Raia Stream (Tagus Basin)
Reference: Oliveira 1984c (as *Fragilaria crotonensis*)
- Municipality: Castelo de Vide (District: Portalegre)
- Site: Póvoa e Meadas Reservoir, Nisa Stream (Tagus Basin)
Reference: Oliveira 1984a (as *Fragilaria crotonensis*)
- Municipality: Elvas, Portalegre (District: Portalegre)
- Site: Caia Reservoir, Caia River (Guadiana Basin)
Reference: Oliveira 1984a (as *Fragilaria crotonensis*)
- Municipality: Gavião (District: Portalegre)
- Site: Belver Reservoir, Tagus River (Tagus Basin)
References: INIP 1977 (as *Fragilaria crotonensis* (Edw.) Kitt.);
Fernandes et al. 1987 (as *Fragilaria crotonensis*)
- Municipality: Marvão (District: Portalegre)
- Site: Sever River (Tagus Basin)
Reference: Oliveira 1975 (as *Fragilaria crotonensis*)
- Municipality: Nisa (District: Portalegre)
- Site: Barca da Amieira, Tagus River (Tagus Basin)
Reference: Fernandes et al. 1987 (as *Fragilaria crotonensis*)
- Site: Fratel Reservoir, Tagus River (Tagus Basin)
References: INIP 1977 (as *Fragilaria crotonensis* (Edw.) Kitt.);
Fernandes et al. 1987 (as *Fragilaria crotonensis*)
- Site: Poio Reservoir, Nisa Stream (Tagus Basin)
Reference: Nauwerck 1962 (as *Fragilaria crotonensis* Kitton)
- Municipality: Ponte de Sôr (District: Portalegre)
- Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
Reference: Oliveira 1984a (as *Fragilaria crotonensis*)
- Subregion: Baixo Alentejo
- Municipality: Almodôvar (District: Beja)
- Site: Monte da Vinha, Guadiana River (Guadiana Basin)
Reference: Andrade & Brito 1991 (as *Fragilaria crotonensis*)
- Municipality: Ferreira do Alentejo (District: Beja)
- Site: Odivelas Reservoir, Odivelas Stream (Sado Basin)

Reference: Oliveira 1984a (as *Fragilaria crotonensis*)

Subregion: Lezíria do Tejo

Municipality: Cartaxo (District: Santarém)

Site: Valada, Tagus River (Tagus Basin)

References: Fernandes et al. 1987 (as *Fragilaria crotonensis*); Oliveira et al. 1989 (as *Fragilaria crotonensis*)

Municipality: Chamusca (District: Santarém)

Site: Chamusca, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Fragilaria crotonensis*)

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Fragilaria crotonensis*); Brito & Andrade 1992 (as *Fragilaria crotonensis*)

Subregion: Not specified

Municipality: Not specified

Site: Rocha da Galé, Guadiana River (Guadiana Basin)

Reference: Andrade & Brito 1991 (as *Fragilaria crotonensis*)

REGION: ALGARVE

Subregion: Algarve

Municipality: Lagos (District: Faro)

Site: Bravura Reservoir, Odiáxere Stream (Ribeiras do Algarve Basin)

Reference: Oliveira 1984a (as *Fragilaria crotonensis*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Calheta (São Jorge Island)

Site: Pico do Calheta

Reference: Mölder 1947 (as *Fragilaria crotonensis* Kitton)

Municipality: Corvo (Corvo Island)

Site: Caldeira

Reference: Mölder 1947 (as *Fragilaria crotonensis* Kitton)

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa do Canário

Reference: Mölder 1947 (as *Fragilaria crotonensis* Kitton)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

References: Krieger 1931 (as *Fragilaria crotonensis* Kitton); Manguin 1942 (as *Fragilaria crotonensis* Kitton); Boursrelly & Manguin 1946a (as *Fragilaria crotonensis* Kitton); Gonçalves 1997 (as *Fragilaria crotonensis*); Gonçalves & Rodrigues 1999 (as *Fragilaria crotonensis*)

Municipality: Praia da Vitória (Terceira Island)

Site: Lagoa do Negro

Reference: Mölder 1947 (as *Fragilaria crotonensis* Kitton)

Municipality: Not specified

Site: Corvo Island

Reference: Gonçalves et al. 2010 (as *Fragilaria crotonensis* Kitton)

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Fragilaria crotonensis* Kitton)

Site: São Jorge Island

Reference: Gonçalves et al. 2010 (as *Fragilaria crotonensis* Kitton)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Fragilaria crotonensis* Kitton)

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Fragilaria crotonensis* Kitton)

Site: Not specified

Reference: Gonçalves 2008 (as *Fragilaria crotonensis* Kitton)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Reservoirs in the North and Centre of Portugal

Reference: Cabecinha et al. 2009 (as *Fragilaria crotonensis*)

Site: Not specified

Reference: INAG 2008 (as *Fragilaria crotonensis* Kitton)

***Fragilaria danica* (Kützing) Lange-Bertalot in Lange-Bertalot & Metzeltin 1996, v. 2: p. 54; pl. 109, fig. 1-1' [CAS ref. 007048]**

Basionym: *Synedra danica* Kützing 1844 [CAS ref. 000595]

Nomenclatural synonyms: *Synedra ulna* var. *danica* (Kützing) Grunow in Van Heurck 1885 [CAS ref. 001040]

Fragilaria ulna var. *danica* (Kützing) Kalinsky 1982 [CAS ref. 004588]

Ulnaria danica (Kützing) Compère & Bukhtiyarova in Bukhtiyarova & Compère 2006 [CAS ref. 013459]

Distribution (Fig. 465):

REGION: NORTE

Subregion: Grande Porto

Municipality: Porto (District: Porto)

Site: Not specified

Reference: Colmeiro 1889 (as *Synedra danica* Kg.)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Figueira da Foz (District: Coimbra)

Site: Lagoa da Vela, Bom-Sucesso

Reference: Nauwerck 1962 (as *Synedra ulna* v. *danica* (Kg.) Grun.)

Municipality: Mira (District: Coimbra)

Site: Lagoa de Mira

- Reference: Nauwerck 1962 (as *Synedra ulna* v. *danica* (Kg.) Grun.)
- Subregion: Baixo Vouga
- Municipality: Águeda (District: Aveiro)
- Site: Águeda, Águeda River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria ulna* (Nitzsch) Lange-Bertalot var. *danica* (Kützing) Lange-Bertalot)
- Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria ulna* (Nitzsch) Lange-Bertalot var. *danica* (Kützing) Lange-Bertalot)
- Site: Aldeia, Segadães, Vouga River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria ulna* (Nitzsch) Lange-Bertalot var. *danica* (Kützing) Lange-Bertalot)
- Site: Óis da Ribeira, Águeda River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria ulna* (Nitzsch) Lange-Bertalot var. *danica* (Kützing) Lange-Bertalot)
- Municipality: Albergaria-a-Velha (District: Aveiro)
- Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Fragilaria ulna* (Nitzsch) Lange-Bertalot var. *danica* (Kützing) Lange-Bertalot)
- Municipality: Anadia (District: Aveiro)
- Site: São João de Azenha, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria ulna* (Nitzsch) Lange-Bertalot var. *danica* (Kützing) Lange-Bertalot)
- Municipality: Aveiro (District: Aveiro)
- Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria ulna* (Nitzsch) Lange-Bertalot var. *danica* (Kützing) Lange-Bertalot)
- Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria ulna* (Nitzsch) Lange-Bertalot var. *danica* (Kützing) Lange-Bertalot)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria ulna* (Nitzsch) Lange-Bertalot var. *danica* (Kützing) Lange-Bertalot)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria ulna* (Nitzsch) Lange-Bertalot var. *danica* (Kützing) Lange-Bertalot)
- Site: Perrães, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria ulna* (Nitzsch) Lange-Bertalot var. *danica* (Kützing) Lange-Bertalot)
- Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria ulna* (Nitzsch) Lange-Bertalot var. *danica* (Kützing) Lange-Bertalot)
- Site: Vila Verde, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria ulna* (Nitzsch) Lange-Bertalot var. *danica* (Kützing) Lange-Bertalot)

- Subregion: Beira Interior Norte
 Municipality: Guarda (District: Guarda)
 Site: Diz River
 Reference: Carvalho 1913 (as *Synedra ulna* (Nitzsch) Ehr. var. *danica* Kuetz.)
- Subregion: Beira Interior Sul
 Municipality: Idanha-a-Nova (District: Castelo Branco)
 Site: Barragem Marechal Carmona, Ponsul River (Tagus Basin)
 Reference: Nauwerck 1962 (as *Synedra ulna* v. *danica* (Kg.) Grun.)
- Subregion: Médio Tejo
 Municipality: Tomar (District: Santarém)
 Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
 References: Nauwerck 1962 (as *Synedra ulna* v. *danica* (Kg.) Grun.);
 Frade 1963 (as *Synedra ulna* var. *danica* (Kg.) Grun.)
- Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: Calado 1990 (as *Synedra ulna* Ehr. var. *danica* (Kützing) Grunow)

REGION: LISBOA

- Subregion: Península de Setúbal
 Municipality: Sesimbra (District: Setúbal)
 Site: Lagoa de Albufeira
 Reference: Nauwerck 1962 (as *Synedra ulna* v. *danica* (Kg.) Grun.)

REGION: ALENTEJO

- Subregion: Alentejo Litoral
 Municipality: Alcácer do Sal (District: Setúbal)
 Site: Pêgo do Altar Reservoir (ancient Salazar Reservoir), Alcáçovas Stream (Sado Basin)
 Reference: Nauwerck 1962 (as *Synedra ulna* v. *danica* (Kg.) Grun.)
 Site: Trigo de Morais Reservoir, Xarrama River (Sado Basin)
 Reference: Nauwerck 1962 (as *Synedra ulna* v. *danica* (Kg.) Grun.)
- Subregion: Alto Alentejo
 Municipality: Nisa (District: Portalegre)
 Site: Poio Reservoir, Nisa Stream (Tagus Basin)
 Reference: Nauwerck 1962 (*Synedra ulna* v. *danica* (Kg.) Grun.)
- Subregion: Lezíria do Tejo
 Municipality: Salvaterra de Magos (District: Santarém)
 Site: Magos Reservoir, Magos Stream (Tagus Basin)
 Reference: Nauwerck 1962 (as *Synedra ulna* v. *danica* (Kg.) Grun.)

REGION: AUTONOMOUS REGION OF AZORES

- Municipality: Vila Franca do Campo (São Miguel Island)
 Site: Lagoa do Congro

References: Manguin 1942 (as *Synedra ulna* (Nitzsch) Ehr. var. *danica* (Kütz.) Grun.); Bourrelly & Manguin 1946a (as *Synedra ulna* (Nitzsch) Ehr. var. *danica* (Kütz.) Grun.)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Ulnaria danica* (Kützing) Compère & Bukhtiyarova)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Ulnaria danica* (Kützing) Compère & Bukhtiyarova)

Site: Not specified

Reference: Gonçalves 2008 (as *Synedra ulna* var. *danica* (Kützing) Grunow)

***Fragilaria dilatata* (Brébisson) Lange-Bertalot 1993**, p. 45; Bacill. 2/3, fig. 123: 1-3 [CAS ref. 008467]

Basionym: *Frustulia dilatata* Brébisson 1838 [CAS ref. 000161]

Distribution (Fig. 466):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Fragilaria dilatata* (Brébisson) Lange-Bertalot)

Subregion: Baixo Vouga

Municipality: Aveiro (District: Aveiro)

Site: Eixo, Horta Stream (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria dilatata* (Brébisson) Lange-Bertalot)

Site: Pano, Largo River (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria dilatata* (Brébisson) Lange-Bertalot)

Site: Requeixo, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria dilatata* (Brébisson) Lange-Bertalot)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Perrães, Levira River (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria dilatata* (Brébisson) Lange-Bertalot)

***Fragilaria exigua* Grunow in Cleve & Möller 1878**, No. 144 [CAS ref. 001976]

Distribution (Fig. 467):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)

Site: Lagoa da Falca

Reference: Gonçalves 1996 (as *Fragilaria exigua* Grunow)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Fragilaria exigua* Grunow)

***Fragilaria famelica* (Kützing) Lange-Bertalot 1980a**, p. 749 [CAS ref. 008465]

Basionym: *Synedra famelica* Kützing 1844 [CAS ref. 000595]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Fragilaria famelica* (Kützing) Lange-Bertalot var. *famelica*)

***Fragilaria fragilarioides* (Grunow in Van Heurck) Chohnoky 1963**, p. 169; pl. 25, fig. 29-30 [CAS ref. 000213]

Basionym: *Synedra rumpens* var. *fragilarioides* Grunow in Van Heurck 1881 [CAS ref. 001035]

Distribution (Fig. 468):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Santa Cruz das Flores (Flores Island)

Site: Ribeira Grande

References: Manguin 1942 (as *Synedra rumpens* Kütz. var. *fragilarioides* Grun.); Bourrelly & Manguin 1946a (as *Synedra rumpens* Kütz. var. *fragilarioides* Grun.)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Fragilaria fragilarioides* (Grunow) Cholnoky)

***Fragilaria gracilis* Østrup 1910**, p. 190; pl. 5, fig. 117 [CAS ref. 000706]

Nomenclatural synonym: *Fragilaria capucina* var. *gracilis* (Østrup) Hustedt 1950 [CAS ref. 000522]

Distribution (Fig. 469):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Oliveira de Azeméis (District: Aveiro)

Site: Bustelo do Caima, Ossela, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Fragilaria capucina* Desmazières var. *gracilis* (Østrup) Hustedt)

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières var. *gracilis* (Østrup) Hustedt)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières var. *gracilis* (Østrup) Hustedt)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Arganil (District: Coimbra)

Site: Fronhas Reservoir, Alva River (Mondego Basin)

Reference: Santos et al. 2002 (as *Fragilaria capucina* Desmazières var. *gracilis* (Østrup) Hustedt)

Subregion: Baixo Vouga

Municipality: Anadia (District: Aveiro)

Site: São João de Azenha, Cértima River (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières var. *gracilis* (Østrup) Hustedt)

Municipality: Águeda (District: Aveiro)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières var. *gracilis* (Østrup) Hustedt)

- Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières var. *gracilis* (Östrup) Hustedt)
- Site: Aldeia, Segadães, Vouga River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières var. *gracilis* (Östrup) Hustedt)
- Site: Óis da Ribeira, Águeda River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières var. *gracilis* (Östrup) Hustedt)
- Municipality: Albergaria-a-Velha (District: Aveiro)
- Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières var. *gracilis* (Östrup) Hustedt)
- Site: Ribeira de Fráguas, Palhal Mine, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria gracilis* Oestrup)
- Site: Santo António, Valmaior, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria capucina* Desmazières var. *gracilis* (Östrup) Hustedt)
- Municipality: Aveiro (District: Aveiro)
- Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières var. *gracilis* (Östrup) Hustedt)
- Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières var. *gracilis* (Östrup) Hustedt)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières var. *gracilis* (Östrup) Hustedt)
- Site: Vessada, Fontão Creek (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières var. *gracilis* (Östrup) Hustedt)
- Municipality: Estarreja (District: Aveiro)
- Site: Estarreja, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières var. *gracilis* (Östrup) Hustedt)
- Site: Minhoteira, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières var. *gracilis* (Östrup) Hustedt)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières var. *gracilis* (Östrup) Hustedt)
- Site: Perrães, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières var. *gracilis* (Östrup) Hustedt)
- Subregion: Pinhal Interior Norte

Municipality: Pampilhosa da Serra (District: Coimbra)

Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)

Reference: Santos et al. 2002 (as *Fragilaria capucina* Desmazières var. *gracilis* (Östrup) Hustedt)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: Almeida & Gil 2001 (as *Fragilaria capucina* Desmazières var. *gracilis* (Östrup) Hustedt)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Corvo Island

Reference: Gonçalves et al. 2010 (as *Fragilaria gracilis* Østrup)

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Fragilaria gracilis* Østrup)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Fragilaria gracilis* Østrup)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Fragilaria gracilis* Østrup)

Site: Not specified

Reference: Gonçalves 2008 (as *Fragilaria gracilis* Østrup)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Fragilaria capucina* Desmazières var. *gracilis* (Ostrup) Hustedt)

***Fragilaria henryi* Lange-Bertalot apud Lange-Bertalot & Genkal 1999, p. 50 [CAS ref. 009014]**

Distribution (Fig. 470):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Corvo Island

Reference: Gonçalves et al. 2010 (as *Fragilaria henryi* Lange-Bertalot)

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Fragilaria henryi* Lange-Bertalot)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Fragilaria henryi* Lange-Bertalot)

Site: Not specified

Reference: Gonçalves 2008 (as *Fragilaria henryi* Lange-Bertalot)

***Fragilaria incisa* (C.S. Boyer) Lange-Bertalot 1980**, p. 748 [CAS ref. 008465]

Basionym: *Synedra incisa* C.S. Boyer 1920 [CAS ref. 000153]

Distribution:

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

References: Gonçalves 2008 (as *Fragilaria incisa* (Boyer) Lange-Bertalot); Gonçalves et al. 2010 (as *Fragilaria incisa* (Boyer) Lange-Bertalot, fossil)

***Fragilaria inflata* (Heiden) Hustedt 1931**, p. 155; fig. 669 [CAS ref. 000505]

Basionym: *Synedra inflata* Heiden 1900 [CAS ref. 000472]

Distribution (Fig. 471):

REGION: CENTRO

Subregion: Pinhal Interior Norte

Municipality: Pedrógão Grande (District: Leiria)

Site: Bouça Reservoir, Zêzere River (Tagus Basin)

Reference: Oliveira 1982b (as *Synedra inflata*)

***Fragilaria intermedia* (Grunow) Grunow in Van Heurck 1881**, pl. 45, fig. 9-11 [CAS ref. 001035]

Basionym: *Staurosira intermedia* Grunow 1882 [CAS ref. 000442]

Synonym: *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot 1980 [CAS ref. 008465], according to Krammer & Lange-Bertalot 1991a, p. 124

Distribution (Fig. 472):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Arouca (District: Aveiro)

Site: Serra da Freita, Arões, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Fragilaria intermedia* Grunow)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria intermedia* Grunow)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria intermedia* Grunow)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria intermedia* Grunow); Gil et al. 1989-1990 (as *Fragilaria intermedia*)

Site: Bolfiar, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria intermedia* Grunow)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria intermedia* Grunow)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria intermedia* Grunow)

Site: Raivo, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria intermedia* Grunow)

Site: Redonda, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria intermedia* Grunow); Gil et al. 1989-1990 (as *Fragilaria intermedia*)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria intermedia* Grunow)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria intermedia* Grunow)

Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria intermedia* Grunow)

Municipality: Mealhada (District: Aveiro)

Site: Pampilhosa, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Fragilaria intermedia*)

Municipality: Oliveira do Bairro (District: Aveiro)

Site: Canha, Casal Estevão, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Fragilaria intermedia*)

Site: Perrães, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Fragilaria intermedia*)

Site: Repolão, Cértima River (Vouga Basin)

Reference: Rino & Gil 1989 (as *Fragilaria intermedia*)

Subregion: Dão-Lafões

Municipality: Oliveira de Frades (District: Viseu)

Site: Destriz, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria intermedia* Grunow)

Site: São João do Monte, Águeda River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria intermedia* Grunow)
Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria intermedia* Grunow)
Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria intermedia* Grunow)
Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil et al. 1989-1990 (as *Fragilaria intermedia*)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria intermedia* Grunow)
Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria intermedia* Grunow)
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: Calado 1990 (as *Fragilaria intermedia* Grun.); Gil et al. 1991
(as *Fragilaria intermedia*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)
Site: Lagoa da Achada
Reference: Mölder 1947 (as *Fragilaria intermedia* Grun.)
Municipality: Ponta Delgada (São Miguel Island)
Site: Lagoa do Canário
Reference: Mölder 1947 (as *Fragilaria intermedia* Grun.)
Site: Lagoa Grande
Reference: Mölder 1947 (as *Fragilaria intermedia* Grun.)
Site: Lagoa das Sete Cidades
Reference: Mölder 1947 (as *Fragilaria intermedia* Grun.)
Municipality: Povoação (São Miguel Island)
Site: Furnas
Reference: Mölder 1947 (as *Fragilaria intermedia* Grun.)
Site: Lagoa das Furnas
Reference: Mölder 1947 (as *Fragilaria intermedia* Grun.)
Municipality: Praia da Vitória (Terceira Island)
Site: Fonduras
Reference: Mölder 1947 (as *Fragilaria intermedia* Grun.)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Ponta do Sol (Madeira Island)
Site: Rabaçal (Madeira Island)
Reference: Mölder 1947 (as *Fragilaria intermedia* Grun.)

***Fragilaria islandica* Grunow in Van Heurck 1881**, pl. 45, fig. 37
[CAS ref. 001035]

Distribution (Fig. 473):

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Fragilaria islandica*)

***Fragilaria lapponica* Grunow in Van Heurck 1881**, pl. 45, fig. 35
[CAS ref. 001035]

Nomenclatural synonym: *Staurosira lapponica* (Grunow) Lange-Bertalot 2000, p. 586 [CAS ref. -]

Distribution (Fig. 474):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Tambores, Furnas

Reference: Chaves 1908 (as *Fragilaria lapponica*, fossil)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Staurosira lapponica* (Grunow) Lange-Bertalot, fossil)

***Fragilaria mesolepta* Rabenhorst 1861c**, no. 1041 [CAS ref. 011622]

Nomenclatural synonym: *Fragilaria capucina* var. *mesolepta* (Rabenhorst) Rabenhorst 1864 [CAS ref. 000775]

Distribution (Fig. 475):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Fragilaria capucina* Desmazières var. *mesolepta* Rabenhorst)

Site: Águeda, Águeda River (Vouga Basin)

- Reference: Gil 1988 (as *Fragilaria capucina* Desmazières var. *mesolepta* Rabenhorst)
- Municipality: Anadia (District: Aveiro)
 Site: Mogofores, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Fragilaria capucina* v. *mesolepta*)
- Municipality: Aveiro (District: Aveiro)
 Site: Requeixo, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Fragilaria capucina* Desmazières var. *mesolepta* (Rabenhorst) Rabenhorst)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Fragilaria capucina* Desmazières var. *mesolepta* Rabenhorst)
- Municipality: Mealhada (District: Aveiro)
 Site: Pampilhosa, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Fragilaria capucina* v. *mesolepta*)
- Municipality: Oliveira do Bairro (District: Aveiro)
 Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Fragilaria capucina* v. *mesolepta*)
- Site: Perrães, Cértima River (Vouga Basin)
 Reference: Rino & Gil 1989 (as *Fragilaria capucina* v. *mesolepta*)
- Municipality: Not specified
 Site: Pateira de Fermentelos (District: Aveiro)
 Reference: Calado 1991 (as *Fragilaria capucina* Desmazières var. *mesolepta* (Rabh.) Grunow)
- Subregion: Dão-Lafões
 Municipality: Vouzela (District: Viseu)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Fragilaria capucina* Desmazières var. *mesolepta* Rabenhorst)
- Subregion: Médio Tejo
 Municipality: Torres Novas (District: Santarém)
 Site: Casal da Pinheira, Almonda River (Tagus Basin)
 Reference: Oliveira & Caldas 1971 (as *Fragilaria capucina* Desmazières var. *mesolepta* Rabenhorst)
- Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: Calado 1990 (as *Fragilaria capucina* Desmazières var. *mesolepta* Rabenhorst)
- REGION: AUTONOMOUS REGION OF AZORES
 Municipality: Not specified
 Site: São Miguel Island
 Reference: Gonçalves et al. 2010 (as *Fragilaria mesolepta* Rabenhorst)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Fragilaria capucina* Desmazières var. *mesolepta* (Rabenhorst) Rabenhorst)

***Fragilaria minuscula* (Grunow in Van Heurck) D.M. Williams & Round 1987**, v. 2 (2): p. 269 [CAS ref. 003171]

Basionym: *Synedra (famelica* var.?) *minuscula* Grunow in Van Heurck 1881 [CAS ref. 001035]

Distribution (Fig. 476):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Cabeçadas et al. 1980 (as *Synedra minuscula*)

***Fragilaria montana* (Krasske ex Hustedt) Lange-Bertalot 1980**, p. 747 [CAS ref. 008465]

Basionym: *Synedra montana* Krasske ex Hustedt 1932 [CAS ref. 000506]

Distribution:

REGION: CENTRO

Subregion: Not specified

Municipality: Not specified

Site: Alfusqueiro River (Vouga Basin)

Reference: Gil 1989 (as *Synedra montana* Krasske)

***Fragilaria mutabilis* (W. Smith) Grunow 1862**, p. 55 (369) [CAS ref. 000428]

Basionym: *Odontidium mutabile* W. Smith 1856 [CAS ref. 001007]

Distribution (Fig. 477):

REGION: NORTE

Subregion: Ave

Municipality: Vila Nova de Famalicão (District: Braga)

Site: Ave River (Ave Basin)

Reference: Zimmermann 1909b (as *Odontidium mutabile* W. Sm.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra (Terceira Island)

Reference: Trelease 1897 (as *Odontidium mutabile* W. Sm.)

Municipality: Povoação (São Miguel Island)

Site: Ferruginous springs, Furnas

Reference: Chaves 1908 (as *Fragilaria mutabilis* Grun.)

Site: Lagoa das Furnas

Reference: Chaves 1908 (as *Fragilaria mutabilis* Grun.)

Site: Salto do Bargado, Furnas

Reference: Chaves 1908 (as *Fragilaria mutabilis* Grun., fossil)

Site: Tambores, Furnas

Reference: Chaves 1908 (as *Fragilaria mutabilis* Grun., fossil)

Municipality: Not specified

Site: Terceira Island

Reference: Holmboe 1901 (as *Fragilaria mutabilis* (W. Sm.) Grun.)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Porto Santo (Porto Santo Island)

Site: Porto Santo

Reference: Zimmermann 1910-1911 (as *Odontidium mutabile* W. Sm.)

Site: Serra de Dentro Stream

Reference: Zimmermann 1910-1911 (as *Odontidium mutabile* W. Sm.)

***Fragilaria nana* (F. Meister) Lange-Bertalot 1980**, p. 746 [CAS ref. 008465]

Basionym: *Synedra nana* F. Meister 1912 [CAS ref. 000642]

Distribution (Fig. 478):

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Penacova (District: Coimbra)

Site: Aguieira Reservoir, Mondego River (Mondego Basin)

Reference: Oliveira & Monteiro 1992 (as *Synedra nana*)

Subregion: Pinhal Interior Norte

Municipality: Pampilhosa da Serra (District: Coimbra)

Site: Santa Luzia Reservoir, Unhais River (Tagus Basin)

Reference: Oliveira 1982b (as *Synedra nana*)

Municipality: Pedrógão Grande (District: Leiria)

- Site: Bouçã Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Synedra nana*)
- Site: Cabril Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Synedra nana*)
- Subregion: Pinhal Interior Sul
Municipality: Mação (District: Santarém)
Site: Pracana Reservoir, Ocreza River (Tagus Basin)
Reference: Oliveira 1982b (as *Synedra nana*)
- REGION: ALENTEJO
- Subregion: Alentejo Central
Municipality: Évora (District: Évora)
Site: Monte Novo Reservoir, Degebe River (Guadiana Basin)
References: Oliveira & Monteiro 1995 (as *Synedra nana*); Oliveira 1996 (as *Synedra nana*)
- Subregion: Alentejo Litoral
Municipality: Alcácer do Sal (District: Setúbal)
Site: São Romão, Sado River (Sado Basin)
Reference: Coutinho 2003 (as *Synedra nana* Meister)
- Subregion: Alto Alentejo
Municipality: Avis (District: Portalegre)
Site: Maranhão Reservoir, Raia Stream (Tagus Basin)
Reference: Oliveira 1984c (as *Synedra nana*)
- Municipality: Castelo de Vide (District: Portalegre)
Site: Póvoa e Meadas Reservoir, Nisa Stream (Tagus Basin)
Reference: Oliveira 1984a (as *Synedra nana*)
- Municipality: Gavião (District: Portalegre)
Site: Belver Reservoir, Tagus River (Tagus Basin)
Reference: INIP 1977 (as *Synedra nana* Mstr.)
- Municipality: Nisa (District: Portalegre)
Site: Fratel Reservoir, Tagus River (Tagus Basin)
Reference: INIP 1977 (as *Synedra nana* Mstr.)
- Site: Poio Reservoir, Nisa Stream (Tagus Basin)
Reference: Nauwerck 1962 (*Synedra* cf. *nana* Meister)
- Municipality: Ponte de Sôr (District: Portalegre)
Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
References: Oliveira 1984a (as *Synedra nana*); Coutinho 1990a (as *Synedra nana*)
- Subregion: Lezíria do Tagus
Municipality: Santarém (District: Santarém)
Site: Ómnias, Tagus River (Tagus Basin)
Reference: Brito & Andrade 1992 (as *Synedra nana*)

REGION: ALGARVE

Subregion: Algarve

Municipality: Lagos (District: Faro)

Site: Bravura Reservoir, Odiáxere Stream (Ribeiras do Algarve Basin)
Reference: Oliveira 1984a (as *Synedra nana*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes do Pico (Pico Island)

Site: Lagoa do Caiado

Reference: Mölder 1947 (as *Synedra nana* Meister)

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa do Canário

Reference: Mölder 1947 (as *Synedra nana* Meister)

Site: Lagoa das Sete Cidades

Reference: Oliveira 1989 (as *Synedra nana*)

Municipality: Povoação (São Miguel Island)

Site: Furnas

Reference: Mölder 1947 (as *Synedra nana* Meister)

Site: Lagoa das Furnas

Reference: Mölder 1947 (as *Synedra nana* Meister)

Site: Pico da Vara

Reference: Mölder 1947 (as *Synedra nana* Meister)

Site: Ribeira Quente

Reference: Mölder 1947 (as *Synedra nana* Meister)

***Fragilaria nanana* Lange-Bertalot in Krammer & Lange-Bertalot
1991a, p. 130 [CAS ref. 006521]**

Distribution (Fig. 479):

REGION: ALENTEJO

Subregion: Baixo Alentejo

Municipality: Mértola (District: Beja)

Site: Reservoir in the abandoned São Domingos mine

Reference: Gerhardt et al. 2008 (as *Fragilaria nanana* Lange-Bertalot)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Fragilaria nanana* Lange-Bertalot)

Site: Pico Island

Reference: Gonçalves et al. 2010 (as *Fragilaria nanana* Lange-Bertalot)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Fragilaria nanana* Lange-Bertalot)

Site: Not specified

Reference: Gonçalves 2008 (as *Fragilaria nanana* Lange-Bertalot)

***Fragilaria neoproducta* Lange-Bertalot in Krammer & Lange-Bertalot 1991**, p. 136; pl. 127, figs. 1-5A; pl. 125, fig. 3 [CAS ref. 006521]

Distribution (Fig. 480):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Fragilaria neoproducta* Lange-Bertalot)

Site: Not specified

Reference: Gonçalves 2008 (as *Fragilaria neoproducta* Lange-Bertalot)

***Fragilaria pinnata* var. *robusta* Manguin 1964**, p. 60; pl. 4, fig. 4 a-b [CAS ref. 001370]

Distribution (Fig. 481):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Fragilaria pinnata* var. *robusta*)

Site: Forno Novo, Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Fragilaria pinnata* var. *robusta*)

***Fragilaria punctatostriata* Manguin 1942**, p. 123; pl. 1, fig. 5 [CAS ref. 000623]

Distribution (Fig. 482):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Fragilaria punctato-striata* Manguin); Bourrelly & Manguin 1946a (as *Fragilaria punctato-striata* Manguin)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Fragilaria punctato-striata* Manguin)

***Fragilaria radians* (Kützing) D.M. Williams & Round 1987**, p. 269
[CAS ref. 003171]

Basionym: *Synedra radians* Kützing 1844 [CAS ref. 000595]

Nomenclatural synonyms: *Synedra acus* var. *radians* (Kützing) Hustedt 1930
[CAS ref. 000502]

Fragilaria capucina var. *radians* (Kützing) Lange-Bertalot 1991a

Distribution (Fig. 483):

REGION: LISBOA

Subregion: Península de Setúbal

Municipality: Setúbal (District: Setúbal)

Site: Not specified

Reference: Zimmermann 1909b (as *Synedra radians* Kütz.)

REGION: ALENTEJO

Subregion: Alto Alentejo

Municipality: Avis (District: Portalegre)

Site: Maranhão Reservoir, Raia Stream (Tagus Basin)

Reference: Oliveira 1984c (as *Synedra acus* var. *radians*)

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Roxo Reservoir, Roxo Stream (Sado Basin)

Reference: Oliveira 1984a (as *Synedra acus* var. *radians*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)

Site: Not specified

Reference: Trelease 1897 (as *Synedra radians* Kütz.)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

References: Chaves 1908 (as *Synedra radians* Sm.); Manguin 1942 (as *Synedra acus* Kütz. var. *radians* (Kütz.) Hust.); Bourrelly & Manguin 1946a (as *Synedra acus* Kütz. var. *radians* (Kütz.) Hust.)

Site: Tambores, Furnas

Reference: Chaves 1908 (as *Synedra radians* Sm., fossil)

Municipality: Not specified

Site: Lagoa de Cazador (São Miguel Island)

References: Manguin 1942 (as *Synedra acus* Kütz. var. *radians* (Kütz.) Hust.); Bourrelly & Manguin 1946a (as *Synedra acus* Kütz. var. *radians* (Kütz.) Hust.); Gonçalves 2008 (as *Fragilaria capucina* var. *radians* (Kützing) Lange-Bertalot)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Fragilaria radians* (Kützing) Williams & Round)

Site: Terceira Island

Reference: Holmboe 1901 (as *Synedra radians* Kütz.)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Santa Luzia Stream

Reference: Zimmermann 1909a (as *Synedra radians* Kuetz.)

Site: Sítio da Pena

Reference: Zimmermann 1909a (as *Synedra radians* Kuetz.)

***Fragilaria rhabdosoma* Ehrenberg 1832a**, p. 105 [CAS ref. 000281]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Tagus riverbanks (Tagus Basin)

Reference: Ehrenberg 1845 (as *Fragilaria rhabdosoma*)

***Fragilaria rumpens* (Kützing) G.W.F. Carlson 1913**, p. 29 [CAS ref. 000188]

Basionym: *Synedra rumpens* Kützing 1844 [CAS ref. 000595]

Nomenclatural synonym: *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot ex Bukhtiyarova 1995 [CAS ref. 008000]

Distribution (Fig. 484):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Oliveira de Azeméis (District: Aveiro)

Site: Bustelo do Caima, Ossela, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot)

Municipality: São João da Madeira (District: Aveiro)

Site: Ui River (Vouga Basin)

Reference: Resende et al. 2010 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot)

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot)

Site: Sernada do Vouga, Vouga River (Vouga Basin)

References: Nunes 2007 (as *Fragilaria capucina* Desmazières var. *rumpens* (Kützing) Lange-Bertalot); Ferreira da Silva et al. 2009 (as *Fragilaria capucina* Desmazières var. *rumpens* (Kütz.) Lange-Bertalot)

Municipality: Albergaria-a-Velha (District: Aveiro)

Site: Bosturenga, Ribeira de Fráguas, Coval da Mó Stream (Vouga Basin)

References: Nunes et al. 2003 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot); Nunes 2007 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot); Nunes 2007 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot, teratological form); Ferreira da Silva et al. 2009 (as *Fragilaria capucina* Desmazières var. *rumpens* (Kütz.) Lange-Bertalot); Ferreira da Silva et al. 2009 (as *Fragilaria capucina* Desmazières var. *rumpens* (Kütz.) Lange-Bertalot, teratological form)

Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot)

Site: Frossos, Carreira Creek (Mondego Basin)

Reference: Almeida 1998 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot)

Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot)

Site: Ribeira de Fráguas, Palhal Mine, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot)

Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot)

Site: Santo António, Valmaior, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot)

- Site: Valmaior (downstream of the mouth of Filvida River), Caima River (Vouga Basin)
 References: Nunes et al. 2003 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot); Nunes 2007 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot); Nunes 2007 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot, teratological form); Ferreira da Silva et al. 2009 (as *Fragilaria capucina* Desmazières var. *rumpens* (Kütz.) Lange-Bertalot)
- Site: Valmaior, mouth of Filvida River (Vouga Basin)
 References: Nunes et al. 2002 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot); Nunes et al. 2003 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot); Nunes 2007 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot); Nunes 2007 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot, teratological form); Ferreira da Silva et al. 2009 (as *Fragilaria capucina* Desmazières var. *rumpens* (Kütz.) Lange-Bertalot)
- Municipality: Aveiro (District: Aveiro)
 Site: Requeixo, Cértima River (Vouga Basin)
 Reference: Almeida 1998 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot)
 Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Synedra rumpens* Kützing)
- Municipality: Sever do Vouga (District: Aveiro)
 Site: Pessegueiro do Vouga (mouth of Mau River), Vouga River (Vouga Basin)
 Reference: Nunes 2007 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot)
 Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
 Reference: Nunes 2007 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot)
 Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)
 References: Nunes 2007 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot); Nunes 2007 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot, teratological form)
 Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)
 Reference: Nunes 2007 (as *Fragilaria capucina* var. *rumpens* (Kützing) Lange-Bertalot)
- Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: São João do Monte, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Synedra rumpens* Kützing)
- Subregion: Médio Tejo
 Municipality: Abrantes (District: Santarém)

- Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Synedra rumpens*)
- Site: Forno Novo, Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Synedra rumpens*)
- Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: Calado 1990 (as *Synedra rumpens* Kützing)
- REGION: AUTONOMOUS REGION OF AZORES
- Municipality: Angra do Heroísmo (Terceira Island)
 Site: Lagoa da Achada
 Reference: Mölder 1947 (as *Synedra rumpens* Kütz.)
- Municipality: Ponta Delgada (São Miguel Island)
 Site: Lagoa do Canário
 Reference: Mölder 1947 (as *Synedra rumpens* Kütz.)
- Municipality: Povoação (São Miguel Island)
 Site: Lagoa das Furnas
 References: Manguin 1942 (as *Synedra rumpens* Kütz.); Bourrelly & Manguin 1946a (as *Synedra rumpens* Kütz.)
- Site: Pico da Vara
 Reference: Mölder 1947 (as *Synedra rumpens* Kütz.)
- Municipality: Santa Cruz das Flores (Flores Island)
 Site: Ribeira Grande
 References: Manguin 1942 (as *Synedra rumpens* Kütz.); Bourrelly & Manguin 1946a (as *Synedra rumpens* Kütz.)
- Site: Not specified
 Reference: Mölder 1947 (as *Synedra rumpens* Kütz.)
- Municipality: Vila do Porto (Santa Maria Island)
 Site: Not specified
 References: Manguin 1942 (as *Synedra rumpens* Kütz.); Bourrelly & Manguin 1946a (as *Synedra rumpens* Kütz.)
- Municipality: Not specified
 Site: Flores Island
 Reference: Gonçalves et al. 2010 (as *Fragilaria rumpens* Carlson)
- Site: Santa Maria Island
 Reference: Gonçalves et al. 2010 (as *Fragilaria rumpens* Carlson)
- Site: São Miguel Island
 Reference: Gonçalves et al. 2010 (as *Fragilaria rumpens* Carlson)
- Site: Terceira Island
 Reference: Gonçalves et al. 2010 (as *Fragilaria rumpens* Carlson)
- Site: Not specified
 Reference: Gonçalves 2008 (as *Fragilaria rumpens* (Kützing) G. W. F. Carlson)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Rivers in the North

Reference: Morais et al. 2009 (as *Fragilaria capucina* Desmazières var. *rumpens* (Kützing) Lange-Bertalot)

Site: Not specified

Reference: INAG 2008 (as *Fragilaria capucina* Desmazières var. *rumpens* (Kützing) Lange-Bertalot)

***Fragilaria socia* (N.M. Wallace) Lange-Bertalot 1980**, v. 33: p. 749
9 [CAS ref. 008465]

Basionym: *Synedra socia* N.M. Wallace 1955 [CAS ref. 005729]

Distribution (Fig. 485):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Synedra socia*)

Site: Forno Novo, Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Synedra socia*)

***Fragilaria tenera* (W. Smith) Lange-Bertalot 1980**, p. 746 [CAS ref. 008465]

Basionym: *Synedra tenera* W. Smith 1856 [CAS ref. 001007]

Distribution (Fig. 486):

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Vila Nova da Barquinha (District: Santarém)

Site: Almourol, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Synedra tenera*)

REGION: ALENTEJO

Subregion: Alentejo Litoral

Municipality: Alcácer do Sal (District: Setúbal)

Site: São Romão, Sado River (Sado Basin)

Reference: Coutinho 2003 (as *Synedra tenera* W. Smith)

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Ponte do Curval, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Fragilaria tenera* (W. Smith) Lange-Bertalot)

Subregion: Lezíria do Tejo

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Synedra tenera*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Fragilaria tenera* (W. Smith) Lange-Bertalot)

Site: Not specified

Reference: Gonçalves 2008 (as *Fragilaria* cf. *tenera* (W. Smith) Lange-Bertalot morfol)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Fragilaria tenera* (W. Smith) Lange-Bertalot)

***Fragilaria tenuicollis* Heiberg 1863**, p. 62; pl. 5, fig. 13 [CAS ref. 000471]

Distribution (Fig. 487):

REGION: CENTRO

Subregion: Beira Interior Sul

Municipality: Castelo Branco (District: Castelo Branco)

Site: São Fiel, Ocreza River (Tagus Basin)

Reference: Zimmermann 1906 (as *Fragilaria tenuicollis* Heib.)

***Fragilaria ulna* Sippen *angustissima* (Grunow) Lange-Bertalot 1991**, p. 144; pl. 122, figs 15, 16; pl. 114, fig. 21 [CAS ref. 006521]

Distribution:

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Fragilaria ulna* Sippen *angustissima* (Grun.) Lange-Bertalot)

***Fragilaria utermoehlii* (Hustedt) Lange-Bertalot 1993**, p. 52; Bacill. 2/3, fig. 111: 23-24 [CAS ref. 008467]

Basionym: *Synedra utermoehlii* Hustedt 1932 [CAS ref. 000506]

Nomenclatural synonym: *Synedra tenera* var. *utermoehlii* (Hustedt) Cleve-Euler 1953 [CAS ref. 001041]

Distribution (Fig. 488):

REGION: ALENTEJO

Subregion: Lezíria do Tejo

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Synedra tenera* var. *utermöhlii*)

Subregion: Not specified

Municipality: Not specified

Site: Rocha da Galé, Guadiana River (Guadiana Basin)

Reference: Andrade & Brito 1991 (as *Synedra utermoehlii*)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Reservoirs in the North and Centre of Portugal

Reference: Cabecinha et al. 2009 (as *Synedra utermoehlii*)

***Fragilaria vaucheriae* (Kützing) J.B. Petersen 1938**, p. 167; fig. 1 a-g [CAS ref. 000783]

Basionym: *Exilaria vaucheriae* Kützing 1833b [CAS ref. 000593]

Nomenclatural synonyms: *Synedra vaucheriae* (Kützing) Kützing 1844 [CAS ref. 000595]

Fragilaria capucina var. *vaucheriae* (Kützing) Lange-Bertalot 1980 [CAS ref. 008465]

Synonym: *Fragilaria intermedia* (Grunow) Grunow in Van Heurck 1881 [CAS ref. 001035], according to Krammer & Lange-Bertalot 1991a, p. 124

Distribution (Fig. 489):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Oliveira de Azeméis (District: Aveiro)

Site: Bustelo do Caima, Ossela, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)

Municipality: São João da Madeira (District: Aveiro)

Site: Ui River (Vouga Basin)

Reference: Resende et al. 2010 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

References: Almeida 1998 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot); Nunes 2007 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Synedra vaucheriae* Kützing); Gil et al. 1989-1990 (as *Synedra vaucheriae*)

Site: Águeda, Águeda River (Vouga Basin)

Reference: Gil et al. 1989-1990 (as *Synedra vaucheriae*)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Synedra vaucheriae* Kützing); Almeida 1998 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Synedra vaucheriae* Kützing); Gil et al. 1989-1990 (as *Synedra vaucheriae*)

Site: Bolfiãr, Águeda River (Vouga Basin)

References: Gil 1988 (as *Synedra vaucheriae* Kützing); Gil et al. 1989-1990 (as *Synedra vaucheriae*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

References: Gil 1988 (as *Synedra vaucheriae* Kützing); Gil et al. 1989-1990 (as *Synedra vaucheriae*)

- Site: Murta, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Synedra vaucheriae*)
- Site: Óis da Ribeira, Águeda River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Synedra vaucheriae* Kützing); Gil et al. 1989-1990 (as *Synedra vaucheriae*)
- Site: Raivo, Águeda River (Vouga Basin)
References: Gil 1988 (as *Synedra vaucheriae* Kützing); Gil et al. 1989-1990 (as *Synedra vaucheriae*)
- Site: Redonda, Águeda River (Vouga Basin)
References: Gil 1988 (as *Synedra vaucheriae* Kützing); Gil et al. 1989-1990 (as *Synedra vaucheriae*)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Synedra vaucheriae* Kützing); Gil et al. 1989-1990 (as *Synedra vaucheriae*)
- Site: Sernada do Vouga, Vouga River (Vouga Basin)
References: Nunes 2007 (as *Fragilaria capucina* Desmazières var. *vaucheriae* (Kützing) Lange-Bertalot); Ferreira da Silva et al. 2009 (as *Fragilaria capucina* Desmazières var. *vaucheriae* (Kütz.) Lange-Bertalot)
- Municipality: Albergaria-a-Velha (District: Aveiro)
- Site: Bosturenga, Ribeira de Fráguas, Coval da Mó Stream (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Site: Ribeira de Fráguas, Palhal Mine, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Site: Santo António, Valmaior, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Site: Valmaior, mouth of Filvida River (Vouga Basin)

- References: Nunes et al. 2002 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot); Nunes 2007 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot); Ferreira da Silva et al. 2009 (as *Fragilaria capucina* Desmazières var. *vaucheriae* (Kütz.) Lange-Bertalot)
- Site: Valmaior (downstream of the mouth of Filvida River), Caima River (Vouga Basin)
- References: Nunes 2007 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot); Ferreira da Silva et al. 2009 (as *Fragilaria capucina* Desmazières var. *vaucheriae* (Kütz.) Lange-Bertalot)
- Municipality: Anadia (District: Aveiro)
- Site: Curia, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Synedra vaucheriae*)
- Site: Espairo, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Synedra vaucheriae*)
- Site: Mogofores, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Synedra vaucheriae*)
- Site: São João de Azenha, Cértima River (Vouga Basin)
- References: Rino & Gil 1989 (as *Synedra vaucheriae*); Almeida 1998 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Municipality: Aveiro (District: Aveiro)
- Site: Pano, Largo River (Vouga Basin)
- Reference: Almeida 1998 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Site: Requeixo, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
- Reference: Gil 1988 (as *Synedra vaucheriae* Kützing); Gil et al. 1989-1990 (as *Synedra vaucheriae*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
- References: Gil 1988 (as *Synedra vaucheriae* Kützing); Gil et al. 1989-1990 (as *Synedra vaucheriae*)
- Site: Vagueira, Canal de Mira
- Reference: Resende et al. 2005 (as *Fragilaria vaucheriae*)
- Site: Vessada, Fontão Creek (Vouga Basin)
- Reference: Almeida 1998 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Municipality: Estarreja (District: Aveiro)
- Site: Minhoteira, Antuã River (Vouga Basin)
- Reference: Almeida 1998 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Municipality: Mealhada (District: Aveiro)
- Site: Pampilhosa, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Synedra vaucheriae*)

- Site: Viadouros, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Synedra vaucheriae*)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Synedra vaucheriae*)
- Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Site: Perrães, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Site: Vila Verde, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Municipality: Sever do Vouga (District: Aveiro)
- Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Site: Silva Escura (upstream of Braçal Mine), Mau River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Site: Silva Escura (downstream of the Malhada Mine), Mau River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Municipality: Vale de Cambra (District: Aveiro)
- Site: São Pedro de Castelões, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Synedra vaucheriae* Kützing); Gil et al. 1989-1990 (as *Synedra vaucheriae*)
- Site: São João do Monte, Águeda River (Vouga Basin)
References: Gil 1988 (as *Synedra vaucheriae* Kützing); Gil et al. 1989-1990 (as *Synedra vaucheriae*)
- Site: Varzielas, Águeda River (Vouga Basin)

References: Gil 1988 (as *Synedra vaucheriae* Kützing); Gil et al. 1989-1990 (as *Synedra vaucheriae*)

Municipality: Tondela (District: Viseu)

Site: Boi, Agadão River (Vouga Basin)

References: Gil 1988 (as *Synedra vaucheriae* Kützing); Gil et al. 1989-1990 (as *Synedra vaucheriae*)

Site: In the proximity of Tondela, Criz River (Mondego Basin)

Reference: Santos et al. 2002 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)

Municipality: Vouzela (District: Viseu)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil et al. 1989-1990 (as *Synedra vaucheriae*)

Site: Cambra, Alfusqueiro River (Vouga Basin)

Reference: Gil 1988 (as *Synedra vaucheriae* Kützing)

Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Synedra vaucheriae* Kützing); Gil et al. 1989-1990 (as *Synedra vaucheriae*)

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)

Reference: Caldas 1988 (as *Synedra vaucheriae*)

Subregion: Pinhal Interior Norte

Municipality: Pampilhosa da Serra (District: Coimbra)

Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)

Reference: Santos et al. 2002 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)

Subregion: Not specified

Municipality: Not specified

Site: Not specified

References: Calado 1990 (as *Synedra vaucheriae* Kützing); Gil et al. 1991 (as *Synedra vaucheriae*)

REGION: ALENTEJO

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Água Forte, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)

Site: Porto de Beja, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)

Site: Porto Ferreira, Roxo Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Horta (Faial Island)

Site: Not specified

Reference: Johansson 1977 (as *Synedra vaucheriae* Kütz.)

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa do Canário

Reference: Mölder 1947 (as *Synedra vaucheriae* Kütz.)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

References: Manguin 1942 (as *Synedra vaucheriae* Kütz.); Bourrelly & Manguin 1946a (as *Synedra vaucheriae* Kütz.)

Site: Pico da Vara

References: Manguin 1942 (as *Synedra vaucheriae* Kütz.); Bourrelly & Manguin 1946a (as *Synedra vaucheriae* Kütz.)

Site: Ribeira Quente

References: Manguin 1942 (as *Synedra vaucheriae* Kütz.); Bourrelly & Manguin 1946a (as *Synedra vaucheriae* Kütz.)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Ribeira Grande

References: Manguin 1942 (as *Synedra vaucheriae* Kütz.); Bourrelly & Manguin 1946a (as *Synedra vaucheriae* Kütz.)

Municipality: Vila Franca do Campo (São Miguel Island)

Site: Lagoa do Congro

References: Manguin 1942 (as *Synedra vaucheriae* Kütz.); Bourrelly & Manguin 1946a (as *Synedra vaucheriae* Kütz.)

Municipality: Not specified

Site: São Jorge Island

Reference: Johansson 1977 (as *Synedra vaucheriae* Kütz.)

Site: Not specified

Reference: Gonçalves 2008 (as *Fragilaria capucina* var. *vaucheriae* (Kützing) Lange-Bertalot)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Alto-Douro Rivers

Reference: Morais et al. 2009 (as *Fragilaria capucina* Desmazières var. *vaucheriae* (Kützing) Lange-Bertalot)

Site: Mountain Rivers in the North

Reference: Morais et al. 2009 (as *Fragilaria capucina* Desmazières var. *vaucheriae* (Kützing) Lange-Bertalot)

Site: North-South Transition Rivers and Mountain Rivers in the South

Reference: Morais et al. 2009 (as *Fragilaria capucina* Desmazières var. *vaucheriae* (Kützing) Lange-Bertalot)

Site: Rivers in the North

Reference: Morais et al. 2009 (as *Fragilaria capucina* Desmazières var. *vaucheriae* (Kützing) Lange-Bertalot)

Site: Rivers in the South

Reference: Morais et al. 2009 (as *Fragilaria capucina* Desmazières var. *vaucheriae* (Kützing) Lange-Bertalot)

Site: Not specified

Reference: INAG 2008 (as *Fragilaria capucina* Desmazières var. *vaucheriae* (Kützing) Lange-Bertalot)

***Fragilaria* sp.**

Distribution (Fig. 490):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Montalegre (District: Vila Real)

Site: Alto Rabagão Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira et al. 1985 (as *Fragilaria* spp.)

Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1985 (as *Fragilaria* spp.)

Subregion: Ave

Municipality: Vieira do Minho (District: Braga)

Site: Salamonde Reservoir, Cávado River (Cávado Basin)

Reference: Oliveira 1985 (as *Fragilaria* spp.)

Subregion: Minho-Lima

Municipality: Melgaço (District: Viana do Castelo)

Site: São Gregório, Minho River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Fragilaria* sp.)

REGION: CENTRO

Subregion: Médio Tejo

Municipality: Abrantes (District: Santarém)

Site: Tramagal, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Fragilaria* sp.)

Municipality: Tomar (District: Santarém)

Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Fragilaria* spp.)

Municipality: Vila Nova da Barquinha (District: Santarém)

Site: Almourol, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Fragilaria* sp.)

Subregion: Not specified

Municipality: Not specified

Site: Paiva River (Douro Basin)

References: Cerqueira da Silva 1991 (as *Fragilaria* sp.); Cerqueira da Silva et al. 1993 (as *Fragilaria* sp.)

REGION: ALENTEJO

Subregion: Alto Alentejo

Municipality: Nisa (District: Portalegre)

Site: Barca da Amieira, Tagus River (Tagus Basin)

Reference: Fernandes et al. 1987 (as *Fragilaria* sp.)

Subregion: Baixo Alentejo

Municipality: Almodôvar (District: Beja)

Site: Monte da Vinha, Guadiana River (Guadiana Basin)

Reference: Andrade & Brito 1991 (as *Fragilaria* spp.)

Subregion: Lezíria do Tejo

Municipality: Santarém (District: Santarém)

Site: Ómnias, Tagus River (Tagus Basin)

Reference: Brito & Andrade 1992 (as *Fragilaria* sp.)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Not specified

Reference: Gonçalves 2008 (as *Fragilaria* sp.)

***Fragilariforma* D.M. Williams & Round 1988, p. 265**
[CAS ref. 003205]

***Fragilariforma constricta* (Ehrenberg) D.M. Williams & Round 1988, p. 265 [CAS ref. 003205]**

Basionym: *Fragilaria constricta* Ehrenberg 1854a [CAS ref. 000966]

Distribution (Fig. 491):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Povoação (São Miguel Island)

Site: Salto do Bargado, Furnas

Reference: Chaves 1908 (as *Fragilaria constricta*, fossil)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Fragilariforma constricta* (Ehrenberg) Williams & Round, fossil)

***Fragilariforma virescens* (Ralfs) D.M. Williams & Round 1988, p. 265 [CAS ref. 003205]**

Basionym: *Fragilaria virescens* Ralfs 1843b [CAS ref. 001482]

Distribution (Fig. 492):

REGION: NORTE

Subregion: Ave

Municipality: Vieira do Minho (District: Braga)

Site: Guilhofrei Reservoir, Ave River (Ave Basin)

Reference: Nauwerck 1962 (as *Fragilaria virescens* Ralfs)

Subregion: Entre Douro e Vouga

Municipality: Arouca (District: Aveiro)

Site: Serra da Freita, Arões, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Fragilaria virescens* Ralfs)

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria virescens* Ralfs)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria virescens* Ralfs)

Subregion: Grande Porto

Municipality: Porto (District: Porto)

Site: Not specified

Reference: Colmeiro 1889 (as *Fragilaria virescens* Ralfs)

Site: Porto

Reference: Tempère & Peragallo 1907-1915 (as *Fragilaria virescens* Ralfs)

Subregion: Tâmega

Municipality: Castelo de Paiva (District: Aveiro)

Site: Raiva

Reference: Tempère & Peragallo 1907-1915 (as *Fragilaria virescens*)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Fragilaria virescens* Ralfs); Gil et al. 1989-1990 (as *Fragilaria virescens*)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Fragilaria virescens* Ralfs); Gil et al. 1989-1990 (as *Fragilaria virescens*); Almeida 1998 (as *Fragilaria virescens* Ralfs)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria virescens* Ralfs)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

Reference: Almeida 1998 (as *Fragilaria virescens* Ralfs)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Fragilaria virescens* Ralfs); Gil et al. 1989-1990 (as *Fragilaria virescens*)

Site: Bolfiar, Águeda River (Vouga Basin)

- References: Gil 1988 (as *Fragilaria virescens* Ralfs); Gil et al. 1989-1990 (as *Fragilaria virescens*)
- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
- References: Gil 1988 (as *Fragilaria virescens* Ralfs); Gil et al. 1989-1990 (as *Fragilaria virescens*)
- Site: Óis da Ribeira, Águeda River (Vouga Basin)
- Reference: Almeida 1998 (as *Fragilaria virescens* Ralfs)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Fragilaria virescens* Ralfs); Gil et al. 1989-1990 (as *Fragilaria virescens*)
- Site: Raivo, Águeda River (Vouga Basin)
- References: Gil 1988 (as *Fragilaria virescens* Ralfs); Gil et al. 1989-1990 (as *Fragilaria virescens*)
- Site: Redonda, Águeda River (Vouga Basin)
- References: Gil 1988 (as *Fragilaria virescens* Ralfs); Gil et al. 1989-1990 (as *Fragilaria virescens*)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Fragilaria virescens* Ralfs); Gil et al. 1989-1990 (as *Fragilaria virescens*)
- Municipality: Anadia (District: Aveiro)
- Site: São João da Azenha, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Fragilaria virescens*)
- Municipality: Aveiro (District: Aveiro)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
- References: Gil 1988 (as *Fragilaria virescens* Ralfs); Gil et al. 1989-1990 (as *Fragilaria virescens*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
- References: Gil 1988 (as *Fragilaria virescens* Ralfs); Gil et al. 1989-1990 (as *Fragilaria virescens*)
- Municipality: Estarreja (District: Aveiro)
- Site: Estarreja, Antuã River (Vouga Basin)
- Reference: Almeida 1998 (as *Fragilaria virescens* Ralfs)
- Site: Minhoteira, Antuã River (Vouga Basin)
- Reference: Almeida 1998 (as *Fragilaria virescens* Ralfs)
- Municipality: Mealhada (District: Aveiro)
- Site: Pampilhosa, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Fragilaria virescens*)
- Site: Viadouros, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Fragilaria virescens*)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Perrães, Cértima River (Vouga Basin)
- Reference: Rino & Gil 1989 (as *Fragilaria virescens*)
- Site: Repolão, Cértima River (Vouga Basin)

- Reference: Rino & Gil 1989 (as *Fragilaria virescens*)
Municipality: Sever do Vouga (District: Aveiro)
Site: Pessegueiro do Vouga (upstream of the mouth of Mau River), Vouga River (Vouga Basin)
Reference: Nunes 2007 (as *Fragilaria virescens* Ralfs)
- Subregion: Beira Interior Norte
Municipality: Guarda (District: Guarda)
Site: Cruz da Faia
Reference: Carvalho 1913 (as *Fragilaria virescens* Ralfs)
Site: Cubo
Reference: Carvalho 1913 (as *Fragilaria virescens* Ralfs)
Site: Diz River
Reference: Carvalho 1913 (as *Fragilaria virescens* Ralfs)
Site: Gonçalo
Reference: Carvalho 1913 (as *Fragilaria virescens* Ralfs)
Site: Guarda
Reference: Carvalho 1913 (as *Fragilaria virescens* Ralfs)
Site: Meios
References: Carvalho 1913 (as *Fragilaria virescens* Ralfs); Santos & Carvalho 2001 (as *Fragilaria virescens* Ralfs)
Site: Mondego River (Mondego Basin)
References: Carvalho 1913 (as *Fragilaria virescens* Ralfs); Santos & Carvalho 2001 (as *Fragilaria virescens* Ralfs)
Site: Nueme
Reference: Carvalho 1913 (as *Fragilaria virescens* Ralfs)
Site: Porto da Carne
Reference: Carvalho 1913 (as *Fragilaria virescens* Ralfs)
Site: Vila Patrício
Reference: Carvalho 1913 (as *Fragilaria virescens* Ralfs)
- Subregion: Beira Interior Sul
Municipality: Castelo Branco (District: Castelo Branco)
Site: São Fiel, Ocreza River (Tagus Basin)
Reference: Zimmermann 1906 (as *Fragilaria virescens* Ralfs)
Municipality: Idanha-a-Nova (District: Castelo Branco)
Site: Idanha Reservoir, Ponsul River (Tagus Basin)
Reference: Oliveira 1982c (as *Fragilaria virescens*)
Municipality: Vila Velha de Ródão (District: Castelo Branco)
Site: Fratel, Tagus River (Tagus Basin)
Reference: Oliveira et al. 1989 (as *Fragilaria virescens*)
- Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Fragilaria virescens* Ralfs); Gil et al. 1989-1990 (as *Fragilaria virescens*)
Site: São João do Monte, Águeda River (Vouga Basin)

- References: Gil 1988 (as *Fragilaria virescens* Ralfs); Gil et al. 1989-1990 (as *Fragilaria virescens*)
 Site: Varzielas, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Fragilaria virescens* Ralfs); Gil et al. 1989-1990 (as *Fragilaria virescens*)
 Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 References: Gil 1988 (as *Fragilaria virescens* Ralfs); Gil et al. 1989-1990 (as *Fragilaria virescens*)
 Site: In the proximity of Tondela, Criz River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Fragilaria virescens* Ralfs)
 Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil et al. 1989-1990 (as *Fragilaria virescens*)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Fragilaria virescens* Ralfs)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Fragilaria virescens* Ralfs); Gil et al. 1989-1990 (as *Fragilaria virescens*)
 Subregion: Médio Tejo
 Municipality: Abrantes (District: Santarém)
 Site: Bexiga (Mouriscas), Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Fragilaria virescens*)
 Site: Forno Novo, Tagus River (Tagus Basin)
 Reference: Caldas 1988 (as *Fragilaria virescens*)
 Municipality: Vila Nova da Barquinha (District: Santarém)
 Site: Vila Nova da Barquinha, Tagus River (Tagus Basin)
 Reference: Oliveira et al. 1989 (as *Fragilaria virescens*)
 Subregion: Oeste
 Municipality: Óbidos (District: Leiria)
 Site: Not specified
 Reference: Silva 1946b (as *Fragilaria virescens* Ralfs, fossil)
 Subregion: Pinhal Interior Norte
 Municipality: Pampilhosa da Serra (District: Coimbra)
 Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Fragilaria virescens* Ralfs)
 Municipality: Pedrógão Grande (District: Leiria)
 Site: Cabril Reservoir, Zêzere River (Tagus Basin)
 Reference: Oliveira 1982b (as *Fragilaria virescens*)
 Subregion: Serra da Estrela
 Municipality: Seia (District: Guarda)
 Site: Covão do Vidoal Reservoir (Mondego Basin)
 References: Nauwerck 1962 (as *Fragilaria virescens* Ralfs); Santos & Carvalho 2001 (as *Fragilaria virescens* Ralfs)
 Subregion: Not specified
 Municipality: Not specified

Site: Paiva River (Douro Basin)

References: Cerqueira da Silva 1991 (as *Fragilaria virescens*); Cerqueira da Silva et al. 1993 (as *Fragilaria virescens*)

Site: Not specified

References: Reference: Calado 1990 (as *Fragilaria virescens* Ralfs); Gil et al. 1991 (as *Fragilaria virescens*)

REGION: LISBOA

Subregion: Grande Lisboa

Municipality: Mafra (District: Lisboa)

Site: Tapada de Mafra, Sobral da Abelheira

Reference: Oliveira 1971b (as *Fragilaria virescens*)

REGION: ALENTEJO

Subregion: Alentejo Litoral

Municipality: Alcácer do Sal (District: Setúbal)

Site: São Romão, Sado River (Sado Basin)

Reference: Coutinho 2003 (as *Fragilaria virescens* Ralfs)

Subregion: Alto Alentejo

Municipality: Avis (District: Portalegre)

Site: Maranhão Reservoir, Raia Stream (Tagus Basin)

Reference: Oliveira 1984c (as *Fragilaria virescens*)

Municipality: Marvão (District: Portalegre)

Site: Sever River (Tagus Basin)

Reference: Oliveira 1975 (as *Fragilaria virescens*)

Municipality: Nisa (District: Portalegre)

Site: Fratel Reservoir, Tagus River (Tagus Basin)

Reference: INIP 1977 (as *Fragilaria virescens* Ralfs)

Subregion: Baixo Alentejo

Municipality: Ferreira do Alentejo (District: Beja)

Site: Odivelas Reservoir, Odivelas Stream (Sado Basin)

Reference: Oliveira 1984a (as *Fragilaria virescens*)

Subregion: Lezíria do Tejo

Municipality: Cartaxo (District: Santarém)

Site: Valada, Tagus River (Tagus Basin)

Reference: Oliveira et al. 1989 (as *Fragilaria virescens*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)

Site: Lagoa da Achada

Reference: Mölder 1947 (as *Fragilaria virescens* Ralfs)

Municipality: Calheta (São Jorge Island)

Site: Pico do Calheta

Reference: Mölder 1947 (as *Fragilaria virescens* Ralfs)

Municipality: Lajes do Pico (Pico Island)

Site: Lagoa do Caiado

Reference: Mölder 1947 (as *Fragilaria virescens* Ralfs)
Municipality: Ponta Delgada (São Miguel Island)
Site: Lagoa Grande
Reference: Holmboe 1901 (as *Fragilaria virescens* Ralfs)
Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas
Reference: Chaves 1908 (as *Fragilaria virescens* Ralfs); Mölder 1947 (as
Fragilaria virescens Ralfs)
Site: Pico da Vara
Reference: Holmboe 1901 (as *Fragilaria virescens* Ralfs)
Municipality: Santa Cruz das Flores (Flores Island)
Site: Lagoa Branca
Reference: Mölder 1947 (as *Fragilaria virescens* Ralfs)
Municipality: Not specified
Site: Flores Island
Reference: Gonçalves et al. 2010 (as *Fragilaria virescens* Ralfs)
Site: Pico Island
Reference: Gonçalves et al. 2010 (as *Fragilaria virescens* Ralfs)
Site: São Jorge Island
Reference: Gonçalves et al. 2010 (as *Fragilaria virescens* Ralfs)
Site: São Miguel Island
Reference: Gonçalves et al. 2010 (as *Fragilaria virescens* Ralfs)
Site: Terceira Island
Reference: Gonçalves et al. 2010 (as *Fragilaria virescens* Ralfs)
Site: Not specified
Reference: Gonçalves 2008 (as *Fragilaria virescens* Ralfs)

REGION: Not specified
Subregion: Not specified
Municipality: Not specified
Site: Not specified
Reference: INAG 2008 (as *Fragilaria virescens* Ralfs)

***Fragilariforma virescens* var. *elliptica* (Hustedt) Aboal in Aboal et al. 2003**, p. 81 [CAS ref. 012666]

Basionym: *Fragilaria virescens* var. *elliptica* Hustedt 1914 [CAS ref. 000493]

Distribution (Fig. 493):

REGION: CENTRO
Subregion: Baixo Vouga
Municipality: Águeda (District: Aveiro)
Site: Agadão, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria virescens* Ralfs v. *elliptica* Hustedt)

- Site: Águeda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria virescens* Ralfs v. *elliptica* Hustedt)
- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria virescens* Ralfs v. *elliptica* Hustedt)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria virescens* Ralfs v. *elliptica* Hustedt)
- Site: Raivo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria virescens* Ralfs v. *elliptica* Hustedt)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria virescens* Ralfs v. *elliptica* Hustedt)
- Municipality: Aveiro (District: Aveiro)
Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria virescens* Ralfs v. *elliptica* Hustedt)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria virescens* Ralfs v. *elliptica* Hustedt)
- Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria virescens* Ralfs v. *elliptica* Hustedt)
- Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria virescens* Ralfs v. *elliptica* Hustedt)
- Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria virescens* Ralfs v. *elliptica* Hustedt)
- Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria virescens* Ralfs v. *elliptica* Hustedt)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Fragilaria virescens* Ralfs v. *elliptica* Hustedt)

***Frustulia Rabenhorst* 1853, p. 50**
[CAS ref. 000772]

***Frustulia amosseana* Lange-Bertalot in Rumrich, Lange-Bertalot & Rumrich 2000, p. 129 [CAS ref. 009156]**

Distribution (Fig. 494):

REGION: AUTONOMOUS REGION OF AZORES
Municipality: Not specified

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Frustulia amosseana* Lange-Bertalot)

***Frustulia amphipleuroides* (Grunow in Cleve & Grunow) Cleve-Euler 1934**, p. 87 [CAS ref. 000249]

Basionym: *Navicula rhomboides* var. *amphipleuroides* Grunow in Cleve & Grunow 1880 [CAS ref. 000241]

Nomenclatural synonym: *Frustulia rhomboides* var. *amphipleuroides* (Grunow in Cleve & Grunow) De Toni 1891 [CAS ref. 000271]

Distribution:

REGION: NORTE

Subregion: Not specified

Municipality: Not specified

Site: Serra do Gerês

References: Zimmermann 1910 (as *Frustulia rhomboides* (Ehr.) De-Toni var. *amphipleuroides* Grun.); Sampaio 1950 (as *Frustulia rhomboides* (Ehrenb.) De-Toni var. *amphipleuroides* Grun.)

***Frustulia crassinervia* (Brébisson in W. Smith) Lange-Bertalot & Krammer in Lange-Bertalot & Metzeltin 1996**, v. 2: p. 57-58; pl. 38, fig. 7-9 [CAS ref. 007048]

Basionym: *Navicula crassinervia* Brébisson in W. Smith 1853 [CAS ref. 000863]

Nomenclatural synonyms: *Vanheurckia rhomboides* var. *crassinervia* f. *crassinervia* Grunow in Van Heurck 1885 [CAS ref. 001040]

Frustulia rhomboides var. *crassinervia* (Brébisson in W. Smith) R. Ross 1947 [CAS ref. 000796]

Distribution (Fig. 495):

REGION: CENTRO

Subregion: Pinhal Interior Norte

Municipality: Pampilhosa da Serra (District: Coimbra)

Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)

Reference: Santos et al. 2002 (as *Frustulia rhomboides* var. *crassinervia* (Bréb.) Ross)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: Pond near Lagoa Comprida

Reference: Santos et al. 2002 (as *Frustulia rhomboides* var. *crassinervia* (Bréb.) Ross)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa das Sete Cidades

Reference: Holmboe 1901 (as *Vanheurckia rhomboides* (Ehr.) Bréb. var. *crassinervia* (Bréb.) V.H.)

Municipality: Povoação (São Miguel Island)

Site: Ferruginous springs, Furnas

Reference: Chaves 1908 (as *Navicula crassinervia* Bréb.)

Site: Furnas

Reference: Holmboe 1901 (as *Vanheurckia rhomboides* (Ehr.) Bréb. var. *crassinervia* (Bréb.) V.H.)

Site: Inferno Grote near Lagoa das Furnas (São Miguel Island)

Reference: Holmboe 1901 (as *Vanheurckia rhomboides* (Ehr.) Bréb. var. *crassinervia* (Bréb.) V.H.)

Site: Lagoa das Furnas

References: Holmboe 1901 (as *Vanheurckia rhomboides* (Ehr.) Bréb. var. *crassinervia* (Bréb.) V.H.); Chaves 1908 (as *Navicula crassinervia* Bréb.)

Site: Pico do Gafanhoto

Reference: Holmboe 1901 (as *Vanheurckia rhomboides* (Ehr.) Bréb. var. *crassinervia* (Bréb.) V.H.)

Site: Pico da Vara

Reference: Holmboe 1901 (as *Vanheurckia rhomboides* (Ehr.) Bréb. var. *crassinervia* (Bréb.) V.H.)

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Frustulia crassinervia* (Brébisson) Lange-Bertalot & Krammer)

Site: Not specified

Reference: Gonçalves 2008 (as *Frustulia crassinervia* (Brébisson) Lange-Bertalot & Krammer)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Frustulia rhomboides* (Ehr.) De Toni var. *crassinervia* (Brébisson) Ross)

***Frustulia elongata* (Willi Krieger) Lange-Bertalot in Lange-Bertalot & Jahn 2000, p. 258 [CAS ref. 011606]**

Basionym: *Frustulia rhomboides* var. *elongata* Willi Krieger in Kolkwitz & Krieger 1936 [CAS ref. 002065]

Distribution (Fig. 496):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *elongata* Krieger); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *elongata* Krieger)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Frustulia elongata* (W. Krieger) Lange-Bertalot)

Site: Not specified

Reference: Bourrelly & Manguin 1946b (as *Frustulia rhomboides* v. *elongata*)

***Frustulia erifuga* Lange-Bertalot & Krammer in Lange-Bertalot & Metzeltin 1996, v. 2: p. 58; pl. 39, fig. 1-4, pl. 120, fig. 1-3 [CAS ref. 007048]**

Distribution (Fig. 497):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Frustulia erifuga* Lange-Bertalot & Krammer)

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Frustulia erifuga* Lange-Bertalot & Krammer)

Site: Not specified

Reference: Gonçalves 2008 (as *Frustulia erifuga* Lange-Bertalot & Krammer)

***Frustulia krammeri* Lange-Bertalot & Metzeltin in Metzeltin & Lange-Bertalot 1998, p. 96; fig. 37: 1-3, 120: 4 [CAS ref. 007051]**

Synonym: *Frustulia rhomboides* auct. non *Navicula rhomboides* Ehrenberg 1843, according to Metzeltin & Lange-Bertalot 1998 [CAS ref. 007051]

Distribution (Fig. 498):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Montalegre (District: Vila Real)

Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1982a (as *Frustulia rhomboides*)

Subregion: Cávado

Municipality: Barcelos (District: Braga)

Site: Barcelos, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Frustulia rhomboides*)

Site: Manhente, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Frustulia rhomboides*)

Municipality: Braga (District: Braga)

Site: Padim da Graça, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Frustulia rhomboides*)

Municipality: Esposende (District: Braga)

Site: Marachão, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Frustulia rhomboides*)

Municipality: Not specified

Site: Entrepontes, Cávado River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Frustulia rhomboides*)

Site: Homem River (Cávado Basin)

Reference: Cerqueira da Silva 1992 (as *Frustulia rhomboides*)

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Frustulia rhomboides* (Ehrenberg) De Toni)

Subregion: Grande Porto

Municipality: Vila Nova de Gaia (District: Porto)

Site: Febros River (Douro Basin)

Reference: Cerqueira da Silva 1993 (as *Frustulia rhomboides*)

Subregion: Minho-Lima

Municipality: Caminha (District: Viana do Castelo)

Site: Gondar Stream (Âncora Basin)

Reference: Formigo et al. 1993 (as *Frustulia rhomboides*)

Site: Sains, Âncora River (Âncora Basin)

Reference: Formigo et al. 1993 (as *Frustulia rhomboides*)

Site: Tourim, Âncora River (Âncora Basin)

Reference: Formigo et al. 1993 (as *Frustulia rhomboides*)
Municipality: Viana do Castelo (District: Viana do Castelo)
Site: Alhada, Âncora River (Âncora Basin)
Reference: Formigo et al. 1993 (as *Frustulia rhomboides*)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Coimbra (District: Coimbra)

Site: Coimbra

Reference: Zimmermann 1909b (as *Frustulia rhomboides* (Ehr.) De Toni)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) de Toni); Gil et al. 1989-1990 (as *Frustulia rhomboides*)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) de Toni); Gil et al. 1989-1990 (as *Frustulia rhomboides*)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) de Toni); Gil et al. 1989-1990 (as *Frustulia rhomboides*)

Site: Bolfiar, Águeda River (Vouga Basin)

References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) de Toni); Gil et al. 1989-1990 (as *Frustulia rhomboides*)

Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)

References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) de Toni); Gil et al. 1989-1990 (as *Frustulia rhomboides*)

Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) de Toni); Gil et al. 1989-1990 (as *Frustulia rhomboides*)

Site: Raivo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) de Toni); Gil et al. 1989-1990 (as *Frustulia rhomboides*)

Site: Redonda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) de Toni); Gil et al. 1989-1990 (as *Frustulia rhomboides*)

Site: Ribeiro, Alfusqueiro River (Vouga Basin)

References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) de Toni); Gil et al. 1989-1990 (as *Frustulia rhomboides*)

Municipality: Aveiro (District: Aveiro)

Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)

References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) de Toni); Gil et al. 1989-1990 (as *Frustulia rhomboides*)

- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) de Toni); Gil et al. 1989-1990 (as *Frustulia rhomboides*)
 Municipality: Not specified
 Site: Pateira de Fermentelos (District: Aveiro)
 Reference: Calado 1991 (as *Frustulia rhomboides* (Ehrenberg) De Toni)
- Subregion: Beira Interior Norte
 Municipality: Guarda (District: Guarda)
 Site: Mondego River (Mondego Basin)
 References: Carvalho 1913 (as *Frustulia rhomboides* (Ehr.) De Toni); Santos & Carvalho 2001 (as *Frustulia rhomboides* (Ehr.) De Toni)
 Site: Diz River
 Reference: Carvalho 1913 (as *Frustulia rhomboides* (Ehr.) De Toni)
- Subregion: Dão-Lafões
 Municipality: Oliveira de Frades (District: Viseu)
 Site: Destriz, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) de Toni); Gil et al. 1989-1990 (as *Frustulia rhomboides*)
 Site: São João do Monte, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) de Toni); Gil et al. 1989-1990 (as *Frustulia rhomboides*)
 Site: Varzielas, Águeda River (Vouga Basin)
 References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) de Toni); Gil et al. 1989-1990 (as *Frustulia rhomboides*)
- Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) de Toni); Gil et al. 1989-1990 (as *Frustulia rhomboides*)
 Site: In the proximity of Tondela, Criz River (Mondego Basin)
 Reference: Santos et al. 2002 (as *Frustulia rhomboides* (Ehr.) De Toni)
- Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil et al. 1989-1990 (as *Frustulia rhomboides*)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) de Toni)
 Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) de Toni); Gil et al. 1989-1990 (as *Frustulia rhomboides*)
- Subregion: Médio Tejo
 Municipality: Tomar (District: Santarém)
 Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
 Reference: Cabeçadas et al. 1980 (as *Frustulia rhomboides*)
- Subregion: Pinhal Interior Norte
 Municipality: Pedrógão Grande (District: Leiria)
 Site: Cabril Reservoir, Zêzere River (Tagus Basin)

Reference: Oliveira 1982b (as *Frustulia rhomboides*)

Subregion: Serra da Estrela

Municipality: Seia (District: Guarda)

Site: Pond near Lagoa Comprida

Reference: Santos et al. 2002 (as *Frustulia rhomboides* (Ehr.) De Toni)

Site: Sabugueiro, Lagoacho Reservoir

Reference: Santos et al. 2002 (as *Frustulia rhomboides* (Ehr.) De Toni)

Site: São Romão, Lagoa do Covão do Curral

Reference: Santos et al. 2002 (as *Frustulia rhomboides* (Ehr.) De Toni)

Subregion: Not specified

Municipality: Not specified

Site: Paiva River (Douro Basin)

Reference: Cerqueira da Silva 1994 (as *Frustulia rhomboides*)

Site: Not specified

References: Calado 1990 (as *Frustulia rhomboides* (Ehrenberg) De Toni);

Gil et al. 1991 (as *Frustulia rhomboides*); Almeida 1998 (as *Frustulia rhomboides* (Ehrenberg) De Toni)

REGION: ALENTEJO

Subregion: Alentejo Central

Municipality: Arraiolos (District: Évora)

Site: Divor Reservoir, Divor Stream (Tagus Basin)

References: Oliveira 1984a (as *Frustulia rhomboides*); Oliveira 1987 (as *Frustulia rhomboides* (Ehr.) de Toni)

Municipality: Évora (District: Évora)

Site: Monte Novo Reservoir, Degebe River (Gadiana Basin)

References: Oliveira & Monteiro 1995 (as *Frustulia rhomboides*);
Oliveira 1996 (as *Frustulia rhomboides*)

Subregion: Alto Alentejo

Municipality: Avis (District: Portalegre)

Site: Maranhão Reservoir, Raia Stream (Tagus Basin)

Reference: Oliveira 1984c (as *Frustulia rhomboides*)

Municipality: Ponte de Sôr (District: Portalegre)

Site: Montargil Reservoir, Sôr Stream (Tagus Basin)

Reference: Coutinho 1990a (as *Frustulia rhomboides*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Calheta (São Jorge Island)

Site: Pico do Calheta

Reference: Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni)

Site: Ribeira de São João

Reference: Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni)

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni);
Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni)

- Municipality: Lajes do Pico (Pico Island)
 Site: Lagoa do Caiado
 Reference: Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni)
- Municipality: Nordeste (São Miguel Island)
 Site: Serra Tronqueira
 References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni);
 Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni)
- Municipality: Ponta Delgada (São Miguel Island)
 Site: Lagoa das Sete Cidades
 Reference: Holmboe 1901 (as *Vanheurckia rhomboides* (Ehr.) Bréb.)
 Site: Pico do Carvão
 Reference: Holmboe 1901 (as *Vanheurckia rhomboides* (Ehr.) Bréb.)
 Site: Pico da Cruz
 Reference: Holmboe 1901 (as *Vanheurckia rhomboides* (Ehr.) Bréb.)
- Municipality: Povoação (São Miguel Island)
 Site: Pico da Vara
 References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni);
 Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni);
 Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni)
 Site: Pico Verde
 References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni);
 Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni)
- Municipality: Santa Cruz das Flores (Flores Island)
 Site: Lagoa Branca
 Reference: Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni)
 Site: Ribeira Grande
 References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni);
 Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni)
- Municipality: Vila do Porto (Santa Maria Island)
 Site: Not specified
 References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni);
 Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni)
- Municipality: Not specified
 Site: Corvo Island
 Reference: Gonçalves et al. 2010 (as *Frustulia rhomboides* (Ehrenberg) de Toni)
 Site: Flores Island
 Reference: Gonçalves et al. 2010 (as *Frustulia rhomboides* (Ehrenberg) de Toni)
 Site: Lagoa de Cazador (São Miguel Island)
 References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni);
 Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni)
 Site: Pico Island
 Reference: Gonçalves et al. 2010 (as *Frustulia rhomboides* (Ehrenberg) de Toni)
 Site: Santa Maria Island

Reference: Gonçalves et al. 2010 (as *Frustulia rhomboides* (Ehrenberg) de Toni)

Site: São Jorge Island

Reference: Gonçalves et al. 2010 (as *Frustulia rhomboides* (Ehrenberg) de Toni)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Frustulia rhomboides* (Ehrenberg) de Toni)

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Frustulia rhomboides* (Ehrenberg) de Toni)

Site: Not specified

Reference: Gonçalves 2008 (as *Frustulia rhomboides* (Ehrenberg) de Toni)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Frustulia rhomboides* (Ehr.) De Toni)

***Frustulia rhomboides* var. *saxonica* f. *capitata* (Ant. Mayer) Hustedt 1930, p. 221 [CAS ref. 000502]**

Basionym: *Frustulia saxonica* var. *capitata* Ant. Mayer 1917 [CAS ref. 000636]

Distribution (Fig. 499):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni f. *capitata* A. Mayer); Gil et al. 1989-1990 (as *Frustulia rhomboides* v. *saxonica* f. *capitata*)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni f. *capitata* A. Mayer); Gil et al. 1989-1990 (as *Frustulia rhomboides* v. *saxonica* f. *capitata*)

Site: Avelal de Baixo, Águeda River (Vouga Basin)

References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni f. *capitata* A. Mayer); Gil et al. 1989-1990 (as *Frustulia rhomboides* v. *saxonica* f. *capitata*)

Site: Bolfiar, Águeda River (Vouga Basin)

- References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni f. *capitata* A. Mayer); Gil et al. 1989-1990 (as *Frustulia rhomboides* v. *saxonica* f. *capitata*)
- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
- References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni f. *capitata* A. Mayer); Gil et al. 1989-1990 (as *Frustulia rhomboides* v. *saxonica* f. *capitata*)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni f. *capitata* A. Mayer)
- Site: Raivo, Águeda River (Vouga Basin)
- References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni f. *capitata* A. Mayer); Gil et al. 1989-1990 (as *Frustulia rhomboides* v. *saxonica* f. *capitata*)
- Site: Redonda, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni f. *capitata* A. Mayer)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni f. *capitata* A. Mayer); Gil et al. 1989-1990 (as *Frustulia rhomboides* v. *saxonica* f. *capitata*)
- Municipality: Aveiro (District: Aveiro)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
- References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni f. *capitata* A. Mayer); Gil et al. 1989-1990 (as *Frustulia rhomboides* v. *saxonica* f. *capitata*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
- References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni f. *capitata* A. Mayer); Gil et al. 1989-1990 (as *Frustulia rhomboides* v. *saxonica* f. *capitata*)
- Municipality: Not specified
- Site: Pateira de Fermentelos (District: Aveiro)
- Reference: Calado 1991 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni f. *capitata* Mayer)
- Subregion: Dão-Lafões
- Municipality: Oliveira de Frades (District: Viseu)
- Site: Destriz, Alfusqueiro River (Vouga Basin)
- References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni f. *capitata* A. Mayer); Gil et al. 1989-1990 (as *Frustulia rhomboides* v. *saxonica* f. *capitata*)
- Site: São João do Monte, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni f. *capitata* A. Mayer)

- Site: Varzielas, Águeda River (Vouga Basin)
 Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni f. *capitata* A. Mayer)
- Municipality: Tondela (District: Viseu)
 Site: Boi, Agadão River (Vouga Basin)
 References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni f. *capitata* A. Mayer); Gil et al. 1989-1990 (as *Frustulia rhomboides* v. *saxonica* f. *capitata*)
- Municipality: Vouzela (District: Viseu)
 Site: Cambra, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni f. *capitata* A. Mayer); Gil et al. 1989-1990 (as *Frustulia rhomboides* v. *saxonica* f. *capitata*)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
 Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni f. *capitata* A. Mayer)
- Subregion: Not specified
 Municipality: Not specified
 Site: Not specified
 Reference: Gil et al. 1991 (as *Frustulia rhomboides* v. *saxonica* f. *capitata*)

REGION: AUTONOMOUS REGION OF AZORES

- Municipality: Angra do Heroísmo (Terceira Island)
 Site: Santa Bárbara
 Reference: Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* (Rabenh.) de Toni for. *capitata* Mayer)
- Municipality: Corvo (Corvo Island)
 Site: Caldeira
 Reference: Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* (Rabenh.) de Toni for. *capitata* Mayer)
- Municipality: Lajes das Flores (Flores Island)
 Site: Lagoa Rasa
 References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *capitata* A. Mayer); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *capitata* A. Mayer)
- Municipality: Lajes do Pico (Pico Island)
 Site: Lagoa do Caiado
 Reference: Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* (Rabenh.) de Toni for. *capitata* Mayer)
- Municipality: Nordeste (São Miguel Island)
 Site: Serra Tronqueira
 References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *capitata* A. Mayer); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *capitata* A. Mayer)
- Municipality: Povoação (São Miguel Island)

- Site: Lagoa das Furnas
References: Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *capitata* A. Mayer); Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* (Rabenh.) de Toni for. *capitata* Mayer)
- Site: Pico da Vara
References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *capitata* A. Mayer); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *capitata* A. Mayer)
- Site: Pico Verde
References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *capitata* A. Mayer); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *capitata* A. Mayer)
- Municipality: Santa Cruz das Flores (Flores Island)
Site: Lagoa Branca
References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *capitata* A. Mayer); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *capitata* A. Mayer)
- Site: Ribeira Grande
References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *capitata* A. Mayer); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *capitata* A. Mayer)
- Site: Not specified
Reference: Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* (Rabenh.) de Toni for. *capitata* Mayer)
- Municipality: Not specified
Site: Lagoa de Cazador (São Miguel Island)
References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *capitata* A. Mayer); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *capitata* A. Mayer); Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* (Rabenh.) de Toni for. *capitata* Mayer)
- Site: São Jorge Island
Reference: Johansson 1977 (as *Frustulia rhomboides* v. *saxonica* fo. *capitata* Mayer)
- Site: Terceira Island
Reference: Johansson 1977 (as *Frustulia rhomboides* v. *saxonica* fo. *capitata* Mayer)

***Frustulia rhomboides* var. *saxonica* f. *undulata* Hustedt 1930, p. 221 [CAS ref. 000502]**

Distribution (Fig. 500):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *undulata* (Thw.) de Toni); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *undulata* (Thw.) de Toni)

Municipality: Nordeste (São Miguel Island)

Site: Serra Tronqueira

References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *undulata* (Thw.) de Toni); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *undulata* (Thw.) de Toni)

Municipality: Povoação (São Miguel Island)

Site: Lagoa das Furnas

Reference: Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *undulata* (Thw.) de Toni)

Site: Pico da Vara

Reference: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *undulata* (Thw.) de Toni)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Lagoa Branca

References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *undulata* (Thw.) de Toni); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *undulata* (Thw.) de Toni)

Site: Ribeira Grande

References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *undulata* (Thw.) de Toni); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *undulata* (Thw.) de Toni)

Municipality: Not specified

Site: Lagoa de Cazador (São Miguel Island)

References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *undulata* (Thw.) de Toni); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* f. *undulata* (Thw.) de Toni)

***Frustulia rostratiformis* Lange-Bertalot in Lange-Bertalot & Jahn 2000, p. 258 [CAS ref. 011606]**

Basionym: *Frustulia rhomboides* var. *rostrata* Manguin 1942 [CAS ref. 000623]

Distribution (Fig. 501):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *rostrata*); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *rostrata*)

Municipality: Santa Cruz das Flores (Flores Island)

Site: Lagoa Comprida

References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *rostrata*); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *rostrata*)

Municipality: Not specified

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Frustulia rostratiformis* Lange-Bertalot)

***Frustulia saxonica* Rabenhorst 1848-1860**, Alg. Sach. Nr. 42 [CAS ref. 000771]

Nomenclatural synonym: *Frustulia rhomboides* var. *saxonica* (Rabenhorst) De Toni 1891 [CAS ref. 000271]

Distribution (Fig. 502):

REGION: NORTE

Subregion: Entre Douro e Vouga

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Frustulia rhomboides* (Ehrenberg) De Toni var. *saxonica* (Rabenhorst) De Toni)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Frustulia rhomboides* (Ehrenberg) De Toni var. *saxonica* (Rabenhorst) De Toni)

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni v. *saxonica* (Rab.) De Toni)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni v. *saxonica* (Rab.) De Toni); Almeida 1998 (as *Frustulia rhomboides* (Ehrenberg) De Toni var. *saxonica* (Rabenhorst) De Toni)

Site: Aldeia, Segadães, Vouga River (Vouga Basin)

- Reference: Almeida 1998 (as *Frustulia rhomboides* (Ehrenberg) De Toni var. *saxonica* (Rabenhorst) De Toni)
- Site: Avelal de Baixo, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni v. *saxonica* (Rab.) De Toni)
- Site: Bolfiar, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni v. *saxonica* (Rab.) De Toni)
- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
- Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni v. *saxonica* (Rab.) De Toni)
- Site: Óis da Ribeira, Águeda River (Vouga Basin)
- Reference: Almeida 1998 (as *Frustulia rhomboides* (Ehrenberg) De Toni var. *saxonica* (Rabenhorst) De Toni)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni v. *saxonica* (Rab.) De Toni)
- Site: Raivo, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni v. *saxonica* (Rab.) De Toni)
- Site: Redonda, Águeda River (Vouga Basin)
- Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni v. *saxonica* (Rab.) De Toni)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
- Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni v. *saxonica* (Rab.) De Toni)
- Municipality: Albergaria-a-Velha (District: Aveiro)
- Site: Frossos, Carreira Creek (Mondego Basin)
- Reference: Almeida 1998 (as *Frustulia rhomboides* (Ehrenberg) De Toni var. *saxonica* (Rabenhorst) De Toni)
- Municipality: Aveiro (District: Aveiro)
- Site: Eixo, Horta Stream (Vouga Basin)
- Reference: Almeida 1998 (as *Frustulia rhomboides* (Ehrenberg) De Toni var. *saxonica* (Rabenhorst) De Toni)
- Site: Pano, Largo River (Vouga Basin)
- Reference: Almeida 1998 (as *Frustulia rhomboides* (Ehrenberg) De Toni var. *saxonica* (Rabenhorst) De Toni)
- Site: Requeixo, Cértima River (Vouga Basin)
- Reference: Almeida 1998 (as *Frustulia rhomboides* (Ehrenberg) De Toni var. *saxonica* (Rabenhorst) De Toni)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
- Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni v. *saxonica* (Rab.) De Toni)

- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
 Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni v. *saxonica* (Rab.) De Toni)
- Site: Vessada, Fontão Creek (Vouga Basin)
 Reference: Almeida 1998 (as *Frustulia rhomboides* (Ehrenberg) De Toni var. *saxonica* (Rabenhorst) De Toni)
- Municipality: Estarreja (District: Aveiro)
 Site: Minhoteira, Antuã River (Vouga Basin)
 Reference: Almeida 1998 (as *Frustulia rhomboides* (Ehrenberg) De Toni var. *saxonica* (Rabenhorst) De Toni)
- Municipality: Sever do Vouga (District: Aveiro)
 Site: Silva Escura, upstream of the Braçal Mine, Mau River (Vouga Basin)
 Reference: Nunes 2007 (as *Frustulia saxonica* Rabenhorst)
- Subregion: Baixo Mondego
 Municipality: Coimbra (District: Coimbra)
 Site: Coimbra
 Reference: Zimmermann 1909b (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni)
- Subregion: Beira Interior Norte
 Municipality: Guarda (District: Guarda)
 Site: Alfarazes
 Reference: Carvalho 1913 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rabenh.) De Toni)
- Site: Diz River
 Reference: Carvalho 1913 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rabenh.) De Toni)
- Site: Porto da Carne
 Reference: Carvalho 1913 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rabenh.) De Toni)
- Site: Vela
 Reference: Carvalho 1913 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rabenh.) De Toni)
- Subregion: Beira Interior Sul
 Municipality: Castelo Branco (District: Castelo Branco)
 Site: São Fiel
 Reference: Zimmermann 1909b (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni)
- Site: São Fiel, Ocreza River (Tagus Basin)
 Reference: Zimmermann 1909b (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni)
- Subregion: Cova da Beira
 Municipality: Fundão (District: Castelo Branco)
 Site: Castelo Novo, Alpreade Stream (Tagus Basin)
 Reference: Zimmermann 1909b (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni)

- Site: Serra da Gardunha
Reference: Zimmermann 1909b (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rab.) De Toni)
- Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni v. *saxonica* (Rab.) De Toni)
- Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni v. *saxonica* (Rab.) De Toni)
- Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni v. *saxonica* (Rab.) De Toni)
- Municipality: Tondela (District: Viseu)
Site: Boi, Agadão River (Vouga Basin)
Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni v. *saxonica* (Rab.) De Toni)
- Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni v. *saxonica* (Rab.) De Toni)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Frustulia rhomboides* (Ehr.) De Toni v. *saxonica* (Rab.) De Toni)
- Subregion: Pinhal Interior Norte
Municipality: Pampilhosa da Serra (District: Coimbra)
Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)
Reference: Santos et al. 2002 (as *Frustulia rhomboides* var. *saxonica* (Rabenhorst) De Toni)
- Subregion: Serra da Estrela
Municipality: Seia (District: Guarda)
Site: Pond near Lagoa Comprida
Reference: Santos et al. 2002 (as *Frustulia rhomboides* var. *saxonica* (Rabenhorst) De Toni)
- Site: São Romão, Lagoa do Covão do Curral
Reference: Santos et al. 2002 (as *Frustulia rhomboides* var. *saxonica* (Rabenhorst) De Toni)
- Subregion: Not specified
Municipality: Not specified
Site: Not specified
References: Calado 1990 (as *Frustulia rhomboides* (Ehr.) De Toni var. *saxonica* (Rabenhorst) De Toni); Gil et al. 1991 (as *Frustulia rhomboides* v. *saxonica*)

REGION: ALENTEJO

Subregion: Alto Alentejo

Municipality: Ponte de Sôr (District: Portalegre)

Site: Montargil Reservoir, Sôr Stream (Tagus Basin)

Reference: Coutinho 1990a (as *Frustulia saxonica*)

Subregion: Baixo Alentejo

Municipality: Aljustrel (District: Beja)

Site: Água Forte, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Frustulia saxonica* Rabenhorst)

Site: Porto de Beja, Água Forte Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Frustulia saxonica* Rabenhorst)

Site: Porto Ferreira, Roxo Stream (Sado Basin)

Reference: Luís et al. 2009 (as *Frustulia saxonica* Rabenhorst)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Angra do Heroísmo (Terceira Island)

Site: Lagoa da Falca (Terceira Island)

Reference: Gonçalves 1996 (as *Frustulia rhomboides* (Ehrenberg) De Toni var. *saxonica* (Rabenhorst) De Toni)

Site: Lagoa da Joanhina

Reference: Gonçalves 1996 (as *Frustulia rhomboides* (Ehrenberg) De Toni var. *saxonica* (Rabenhorst) De Toni)

Site: Santa Bárbara

Reference: Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* (Rabenh.) de Toni)

Municipality: Calheta (São Jorge Island)

Site: Pico do Calheta

Reference: Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* (Rabenh.) de Toni)

Site: Ribeira do Salto (São Jorge Island)

Reference: Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* (Rabenh.) de Toni)

Site: Ribeira de São João

Reference: Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* (Rabenh.) de Toni)

Municipality: Lajes das Flores (Flores Island)

Site: Lagoa Rasa

References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica*); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica*)

Municipality: Nordeste (São Miguel Island)

Site: Serra Tronqueira

References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica*); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica*)

Municipality: Ponta Delgada (São Miguel Island)

Site: Lagoa do Canário

- References: Krieger 1931 (as *Frustulia rhomboides* var. *saxonica* Rab.); Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* (Rabenh.) de Toni)
- Municipality: Povoação (São Miguel Island)
- Site: Furnas
- Reference: Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* (Rabenh.) de Toni)
- Site: Pico da Vara
- References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica*); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica*); Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* (Rabenh.) de Toni)
- Site: Pico Verde
- References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica*); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica*)
- Municipality: Praia da Vitória (Terceira Island)
- Site: Lagoa do Boi
- Reference: Gonçalves 1996 (as *Frustulia rhomboides* (Ehrenberg) De Toni var. *saxonica* (Rabenhorst) De Toni)
- Site: Lagoa do Negro
- References: Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* (Rabenh.) de Toni); Gonçalves 1996 (as *Frustulia rhomboides* (Ehrenberg) De Toni var. *saxonica* (Rabenhorst) De Toni)
- Municipality: Santa Cruz das Flores (Flores Island)
- Site: Lagoa Branca
- References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica*); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica*); Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* (Rabenh.) de Toni)
- Site: Lagoa Comprida
- References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica*); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica*)
- Site: Ribeira Grande
- References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica*); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica*)
- Municipality: Vila Franca do Campo (São Miguel Island)
- Site: Lagoa do Congro
- References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica*); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica*)
- Municipality: Not specified
- Site: Corvo Island
- Reference: Gonçalves et al. 2010 (as *Frustulia saxonica* Rabenhorst)

Site: Flores Island

Reference: Gonçalves et al. 2010 (as *Frustulia saxonica* Rabenhorst)

Site: Lagoa de Cazador (São Miguel Island)

References: Manguin 1942 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica*); Bourrelly & Manguin 1946a (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica*)

Site: Pico Island

References: Johansson 1977 (as *Frustulia rhomboides* v. *saxonica* (Rab.) de Toni); Gonçalves et al. 2010 (as *Frustulia saxonica* Rabenhorst)

Site: Santa Maria Island

Reference: Gonçalves et al. 2010 (as *Frustulia saxonica* Rabenhorst)

Site: São Jorge Island

References: Johansson 1977 (as *Frustulia rhomboides* v. *saxonica* (Rab.) de Toni); Gonçalves et al. 2010 (as *Frustulia saxonica* Rabenhorst)

Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Frustulia saxonica* Rabenhorst)

Site: Terceira Island

References: Johansson 1977 (as *Frustulia rhomboides* v. *saxonica* (Rab.) de Toni); Gonçalves et al. 2010 (as *Frustulia saxonica* Rabenhorst)

Site: Not specified

Reference: Gonçalves 2008 (as *Frustulia saxonica* Rabenhorst)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Ponta do Sol (Madeira Island)

Site: Rabaçal (Madeira Island)

Reference: Mölder 1947 (as *Frustulia rhomboides* (Ehr.) de Toni var. *saxonica* (Rabenh.) de Toni)

Municipality: Ribeira Brava (Madeira Island)

Site: Pico Stream, Serra da Ribeira Brava

Reference: Zimmermann 1909a (as *Frustulia rhomboides* (Ehr.) De-Toni var. *saxonica* (Rab.) de Toni)

Site: Pomar de Ambrosio, Campanário

Reference: Zimmermann 1909a (as *Frustulia rhomboides* (Ehr.) De-Toni var. *saxonica* (Rab.) de Toni)

Site: Sítio da Chamorra, Campanário

Reference: Zimmermann 1909a (as *Frustulia rhomboides* (Ehr.) De-Toni var. *saxonica* (Rab.) de Toni)

Municipality: Santa Cruz (Madeira Island)

Site: Fonte do Mestre Henrique, Caniço

Reference: Zimmermann 1909a (as *Frustulia rhomboides* (Ehr.) De-Toni var. *saxonica* (Rab.) de Toni)

***Frustulia viridula* (Brébisson ex Kützing) De Toni 1891**, p. 278 [CAS ref. 000271]

Basionym: *Colletonema viridulum* Brébisson in litt. Kützing 1849 [CAS ref. 000596]

Nomenclatural synonym: *Frustulia rhomboides* var. *viridula* (Brébisson ex Kützing) Cleve 1894a [CAS ref. 000232]

Distribution (Fig. 503):

REGION: CENTRO

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Sernada do Vouga, Vouga River (Vouga Basin)

Reference: Nunes 2007 (as *Frustulia rhomboides* (Ehrenberg) De Toni var. *viridula* (Brébisson) Cleve)

REGION: ALENTEJO

Subregion: Alentejo Central

Municipality: Évora (District: Évora)

Site: Monte Novo Reservoir, Degebe River (Gadiana Basin)

References: Oliveira & Monteiro 1995 (as *Frustulia viridula*); Oliveira 1996 (as *Frustulia viridula*)

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Terceira Island

Reference: Johansson 1977 (as *Frustulia rhomboides* v. *viridula* Bréb.)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Frustulia rhomboides* (Ehr.) De Toni var. *viridula* (Brébisson) Cleve)

***Frustulia vulgaris* (Thwaites) De Toni 1891**, p. 280 [CAS ref. 000271]

Basionym: *Schizonema vulgare* Thwaites 1848 [CAS ref. 000886]

Nomenclatural synonym: *Navicula vulgaris* (Thwaites) Heiberg 1863 [CAS ref. 000471]

Distribution (Fig. 504):

REGION: NORTE

Subregion: Alto Trás-os-Montes

Municipality: Montalegre (District: Vila Real)

Site: Alto Rabagão Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1982a (as *Frustulia vulgaris*)

Site: Venda Nova Reservoir, Rabagão River (Cávado Basin)

Reference: Oliveira 1982a (as *Frustulia vulgaris*)

Subregion: Entre Douro e Vouga

Municipality: Oliveira de Azeméis (District: Aveiro)

Site: Bustelo do Caima, Ossela, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Frustulia vulgaris* (Thwaites) De Toni)

Municipality: São João da Madeira (District: Aveiro)

Site: Ui River (Vouga Basin)

Reference: Resende et al. 2010 (as *Frustulia vulgaris* (Thwaites) De Toni)

Municipality: Vale de Cambra (District: Aveiro)

Site: Barbeito, Caima River (Vouga Basin)

References: Nunes 2007 (as *Frustulia vulgaris* (Thwaites) De Toni);

Almeida 1998 (as *Frustulia vulgaris* (Thwaites) De Toni)

Site: São Pedro de Castelões, Caima River (Vouga Basin)

Reference: Nunes 2007 (as *Frustulia vulgaris* (Thwaites) De Toni)

Site: Vale de Cambra, Caima River (Vouga Basin)

Reference: Almeida 1998 (as *Frustulia vulgaris* (Thwaites) De Toni)

Subregion: Grande Porto

Municipality: Vila Nova de Gaia (District: Porto)

Site: Febros River (Douro Basin)

Reference: Cerqueira da Silva 1993 (as *Frustulia vulgaris*)

REGION: CENTRO

Subregion: Baixo Mondego

Municipality: Montemor-o-Velho (District: Coimbra)

Site: Irrigation channel near Montemor-o-Velho

Reference: Santos et al. 2002 (as *Frustulia vulgaris* (Thwaites) De Toni)

Subregion: Baixo Vouga

Municipality: Águeda (District: Aveiro)

Site: Agadão, Agadão River (Vouga Basin)

References: Gil 1988 (as *Frustulia vulgaris* (Thwaites) De Toni); Gil et al. 1989-1990 (as *Frustulia vulgaris*)

Site: Águeda, Águeda River (Vouga Basin)

References: Gil 1988 (as *Frustulia vulgaris* (Thwaites) De Toni); Gil et al. 1989-1990 (as *Frustulia vulgaris*); Almeida 1998 (as *Frustulia vulgaris* (Thwaites) De Toni)

Site: Aldeia, Segadães, Mestra Creek (Vouga Basin)

Reference: Almeida 1998 (as *Frustulia vulgaris* (Thwaites) De Toni)

- Site: Aldeia, Segadães, Vouga River (Vouga Basin)
Reference: Almeida 1998 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Avelal de Baixo, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Bolfiar, Águeda River (Vouga Basin)
References: Gil 1988 (as *Frustulia vulgaris* (Thwaites) De Toni); Gil et al. 1989-1990 (as *Frustulia vulgaris*)
- Site: Castanheira do Vouga, confluence of Agadão and Águeda Rivers (Vouga Basin)
Reference: Gil 1988 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Murta, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Frustulia vulgaris*)
- Site: Óis da Ribeira, Águeda River (Vouga Basin)
Reference: Almeida 1998 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Ponte dos Diabos, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Frustulia vulgaris* (Thwaites) De Toni); Gil et al. 1989-1990 (as *Frustulia vulgaris*)
- Site: Raivo, Águeda River (Vouga Basin)
Reference: Gil et al. 1989-1990 (as *Frustulia vulgaris*)
- Site: Redonda, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Ribeiro, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Municipality: Albergaria-a-Velha (District: Aveiro)
- Site: Carvalhal, Ribeira de Fráguas, Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Frossos, Carreira Creek (Mondego Basin)
Reference: Almeida 1998 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Ribeira de Fráguas (downstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Ribeira de Fráguas (upstream of the Palhal Mine), Caima River (Vouga Basin)
Reference: Nunes 2007 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Santo António, Valmaior, Caima River (Vouga Basin)
References: Nunes et al. 2003 (as *Frustulia vulgaris* (Thwaites) De Toni); Nunes 2007 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Municipality: Anadia (District: Aveiro)
- Site: Curia, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Frustulia vulgaris*)
- Site: Espairo, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Frustulia vulgaris*)
- Site: Mogofões, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Frustulia vulgaris*)
- Site: São João da Azenha, Cértima River (Vouga Basin)

- References: Rino & Gil 1989 (as *Frustulia vulgaris*); Almeida 1998 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Tamengos, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Frustulia vulgaris*)
- Municipality: Aveiro (District: Aveiro)
- Site: Eixo, Horta Stream (Vouga Basin)
Reference: Almeida 1998 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Pano, Largo River (Vouga Basin)
Reference: Almeida 1998 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Requeixo, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Requeixo 1, Águeda River, upstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Frustulia vulgaris* (Thwaites) De Toni); Gil et al. 1989-1990 (as *Frustulia vulgaris*)
- Site: Requeixo 2, Águeda River, downstream of the confluence with Cértima River (Vouga Basin)
References: Gil 1988 (as *Frustulia vulgaris* (Thwaites) De Toni); Gil et al. 1989-1990 (as *Frustulia vulgaris*)
- Site: Vessada, Fontão Creek (Vouga Basin)
Reference: Almeida 1998 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Municipality: Estarreja (District: Aveiro)
- Site: Estarreja, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Minhoteira, Antuã River (Vouga Basin)
Reference: Almeida 1998 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Municipality: Mealhada (District: Aveiro)
- Site: Pampilhosa, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Frustulia vulgaris*)
- Site: Viadouros, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Frustulia vulgaris*)
- Municipality: Oliveira do Bairro (District: Aveiro)
- Site: Canha, Casal Estevão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Frustulia vulgaris*)
- Site: Canha, Vale de Estevão, Cértima River (Vouga Basin)
Reference: Almeida 1998 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Perrães, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Perrães, Cértima River (Vouga Basin)
References: Rino & Gil 1989 (as *Frustulia vulgaris*); Almeida 1998 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Repolão, Cértima River (Vouga Basin)
Reference: Rino & Gil 1989 (as *Frustulia vulgaris*)
- Site: Vila Verde, Levira River (Vouga Basin)
Reference: Almeida 1998 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Municipality: Sever do Vouga (District: Aveiro)

- Site: Silva Escura, Braçal Mine, Mau River (Vouga Basin)
Reference: Nunes 2007 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Silva Escura (upstream of the Braçal Mine), Mau River (Vouga Basin)
Reference: Nunes 2007 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Municipality: Not specified
Site: Pateira de Fermentelos (District: Aveiro)
Reference: Calado 1991 (as *Frustulia vulgaris* Thwaites)
- Subregion: Beira Interior Norte
Municipality: Guarda (District: Guarda)
Site: Alfarazes
Reference: Carvalho 1913 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Cubo
Reference: Carvalho 1913 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Diz River
Reference: Carvalho 1913 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Gonçalo
Reference: Carvalho 1913 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Mondego River (Mondego Basin)
References: Carvalho 1913 (as *Frustulia vulgaris* (Thwaites) De Toni); Santos & Carvalho 2001 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Vila Patrício
Reference: Carvalho 1913 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Subregion: Beira Interior Sul
Municipality: Castelo Branco (District: Castelo Branco)
Site: São Fiel, Ocreza River (Tagus Basin)
Reference: Zimmermann 1909b (as *Frustulia vulgaris* (Thwait.) De Toni)
- Municipality: Idanha-a-Nova (District: Castelo Branco)
Site: Idanha Reservoir, Ponsul River (Tagus Basin)
Reference: Oliveira 1982c (as *Frustulia vulgaris*)
- Municipality: Vila Velha de Ródão (District: Castelo Branco)
Site: Fratel, Tagus River (Tagus Basin)
Reference: Oliveira et al. 1989 (as *Frustulia vulgaris*)
- Subregion: Cova da Beira
Municipality: Fundão (District: Castelo Branco)
Site: Serra da Gardunha
Reference: Zimmermann 1909b (as *Frustulia vulgaris* (Thwait.) De Toni)
- Subregion: Dão-Lafões
Municipality: Oliveira de Frades (District: Viseu)
Site: Destriz, Alfusqueiro River (Vouga Basin)
References: Gil 1988 (as *Frustulia vulgaris* (Thwaites) De Toni); Gil et al. 1989-1990 (as *Frustulia vulgaris*)
- Site: São João do Monte, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Varzielas, Águeda River (Vouga Basin)
Reference: Gil 1988 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Municipality: Tondela (District: Viseu)

- Site: Boi, Agadão River (Vouga Basin)
References: Gil 1988 (as *Frustulia vulgaris* (Thwaites) De Toni); Gil et al. 1989-1990 (as *Frustulia vulgaris*)
- Site: In the proximity of Tondela, Criz River (Mondego Basin)
Reference: Santos et al. 2002 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Municipality: Vouzela (District: Viseu)
Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil et al. 1989-1990 (as *Frustulia vulgaris*)
- Site: Cambra, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Ponte da Várzea, Alfusqueiro River (Vouga Basin)
Reference: Gil 1988 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Subregion: Médio Tejo
Municipality: Tomar (District: Santarém)
Site: Castelo de Bode Reservoir, Zêzere River (Tagus Basin)
Reference: Cabeçadas et al. 1980 (as *Frustulia vulgaris*)
- Municipality: Torres Novas (District: Santarém)
Site: Casal da Pinheira, Almonda River (Tagus Basin)
Reference: Oliveira & Caldas 1971 (as *Navicula vulgaris* (Thw.) H.v.H.)
- Municipality: Vila Nova da Barquinha (District: Santarém)
Site: Vila Nova da Barquinha, Tagus River (Tagus Basin)
Reference: Oliveira et al. 1989 (as *Frustulia vulgaris*)
- Subregion: Oeste
Municipality: Óbidos (District: Leiria)
Site: Not specified
Reference: Silva 1946b (as *Frustulia vulgaris* (Thwait.) De-Toni, fossil)
- Subregion: Pinhal Interior Norte
Municipality: Pedrógão Grande (District: Leiria)
Site: Cabril Reservoir, Zêzere River (Tagus Basin)
Reference: Oliveira 1982b (as *Frustulia vulgaris*)
- Municipality: Pampilhosa da Serra (District: Coimbra)
Site: Alto Ceira Reservoir, Ceira River (Mondego Basin)
Reference: Santos et al. 2002 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Subregion: Pinhal Interior Sul
Municipality: Mação (District: Santarém)
Site: Pracana Reservoir, Ocreza River (Tagus Basin)
Reference: Oliveira 1982b (as *Frustulia vulgaris*)
- Subregion: Not specified
Municipality: Not specified
Site: Not specified
References: Calado 1990 (as *Frustulia vulgaris* (Thwaites) De Toni); Gil et al. 1991 (as *Frustulia vulgaris*)
- REGION: ALENTEJO
Subregion: Alentejo Central
Municipality: Arraiolos (District: Évora)

- Site: Divor Reservoir, Divor Stream (Tagus Basin)
References: Oliveira 1984b (as *Frustulia vulgaris*); Oliveira 1987 (as *Frustulia vulgaris* (Thw.) Cl.)
- Subregion: Alto Alentejo
Municipality: Avis (District: Portalegre)
Site: Maranhão Reservoir, Raia Stream (Tagus Basin)
Reference: Oliveira 1984c (as *Frustulia vulgaris*)
- Municipality: Gavião (District: Portalegre)
Site: Belver Reservoir, Tagus River (Tagus Basin)
Reference: INIP 1977 (as *Frustulia vulgaris* (Thw.) Cl.)
- Municipality: Nisa (District: Portalegre)
Site: Fratel Reservoir, Tagus River (Tagus Basin)
Reference: INIP 1977 (as *Frustulia vulgaris* (Thw.) Cl.)
- Municipality: Ponte de Sôr (District: Portalegre)
Site: Montargil Reservoir, Sôr Stream (Tagus Basin)
Reference: Coutinho 1990a (as *Frustulia vulgaris*)
- Subregion: Lezíria do Tejo
Municipality: Cartaxo (District: Santarém)
Site: Valada, Tagus River (Tagus Basin)
Reference: Oliveira et al. 1989 (as *Frustulia vulgaris*)

REGION: ALGARVE

- Subregion: Algarve
Municipality: Silves (District: Faro)
Site: Arade Reservoir, Arade River (Ribeiras do Algarve Basin)
Reference: Oliveira 1987 (as *Frustulia vulgaris* (Thw.) Cl.)

REGION: AUTONOMOUS REGION OF AZORES

- Municipality: Angra do Heroísmo (Terceira Island)
Site: Lagoa da Achada
Reference: Mölder 1947 (as *Frustulia vulgaris* Thwaites)
- Site: Lagoa da Falca (Terceira Island)
Reference: Gonçalves 1996 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Municipality: Calheta (São Jorge Island)
Site: Ribeira de São João
Reference: Mölder 1947 (as *Frustulia vulgaris* Thwaites)
- Municipality: Ponta Delgada (São Miguel Island)
Site: Lagoa do Canário
Reference: Mölder 1947 (as *Frustulia vulgaris* Thwaites)
- Site: Lagoa Grande
Reference: Mölder 1947 (as *Frustulia vulgaris* Thwaites)
- Site: Lagoa das Sete Cidades
Reference: Mölder 1947 (as *Frustulia vulgaris* Thwaites)
- Municipality: Povoação (São Miguel Island)
Site: Lagoa das Furnas

- References: Chaves 1908 (as *Navicula vulgaris* Ehr.); Manguin 1942 (as *Frustulia vulgaris* (Thwaites) De Toni); Bourrelly & Manguin 1946a (as *Frustulia vulgaris* (Thwaites) De Toni); Mölder 1947 (as *Frustulia vulgaris* Thwaites)
- Site: Ribeira Quente
- References: Manguin 1942 (as *Frustulia vulgaris* (Thwaites) De Toni); Bourrelly & Manguin 1946a (as *Frustulia vulgaris* (Thwaites) De Toni)
- Municipality: Praia da Vitória (Terceira Island)
- Site: Fonduras
- Reference: Mölder 1947 (as *Frustulia vulgaris* Thwaites)
- Site: Lagoa do Boi
- Reference: Gonçalves 1996 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Municipality: Santa Cruz das Flores (Flores Island)
- Site: Ribeira Grande
- References: Manguin 1942 (as *Frustulia vulgaris* (Thwaites) De Toni); Bourrelly & Manguin 1946a (as *Frustulia vulgaris* (Thwaites) De Toni)
- Municipality: Vila do Porto (Santa Maria Island)
- Site: Not specified
- References: Manguin 1942 (as *Frustulia vulgaris* (Thwaites) De Toni); Bourrelly & Manguin 1946a (as *Frustulia vulgaris* (Thwaites) De Toni)
- Municipality: Not specified
- Site: Corvo Island
- Reference: Gonçalves et al. 2010 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Flores Island
- Reference: Gonçalves et al. 2010 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Graciosa Island
- Reference: Gonçalves et al. 2010 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Lagoa de Cazador (São Miguel Island)
- References: Manguin 1942 (as *Frustulia vulgaris* (Thwaites) De Toni); Bourrelly & Manguin 1946a (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Pico Island
- Reference: Gonçalves et al. 2010 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Santa Maria Island
- Reference: Gonçalves et al. 2010 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: São Jorge Island
- References: Johansson 1977 (as *Frustulia vulgaris* Thwaites); Gonçalves et al. 2010 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: Not specified
- Reference: Gonçalves 2008 (as *Frustulia vulgaris* (Thwaites) De Toni)
- Site: São Miguel Island

Reference: Gonçalves et al. 2010 (as *Frustulia vulgaris* (Thwaites) De Toni)

Site: Terceira Island

Reference: Gonçalves et al. 2010 (as *Frustulia vulgaris* (Thwaites) De Toni)

REGION: AUTONOMOUS REGION OF MADEIRA

Municipality: Funchal (Madeira Island)

Site: Levada do Bom Sucesso

Reference: Zimmermann 1910-1911 (as *Frustulia vulgaris* (Thwaites) De Toni)

Site: Sítio da Pena

Reference: Zimmermann 1909a (as *Frustulia vulgaris* (Thwaites) De Toni)

Municipality: Ponta do Sol (Madeira Island)

Site: Rabaçal (Madeira Island)

Reference: Mölder 1947 (as *Frustulia vulgaris* Thwaites)

Municipality: Santana (Madeira Island)

Site: Ribeiro Frio

Reference: Mölder 1947 (as *Frustulia vulgaris* Thwaites)

REGION: Not specified

Subregion: Not specified

Municipality: Not specified

Site: Not specified

Reference: INAG 2008 (as *Frustulia vulgaris* (Thwaites) De Toni)

***Frustulia vulgaris* var. *capitata* Krasske 1923**, p. 196; fig. 5 [CAS ref. 000579]

Distribution (Fig. 505):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Terceira Island

Reference: Johansson 1977 (as *Frustulia vulgaris* v. *capitata* Krasske)

***Frustulia vulgaris* var. *typica* f. *parva* Cleve-Euler 1952**, p. 9; fig. 1329 c [CAS ref. 001044]

Distribution (Fig. 506):

REGION: AUTONOMOUS REGION OF AZORES

Municipality: Not specified

Site: Terceira Island

Reference: Johansson 1977 (as *Frustulia vulgaris* v. *parva* Cleve)

***Frustulia* sp.**

Distribution (Fig. 507):

REGION: NORTE

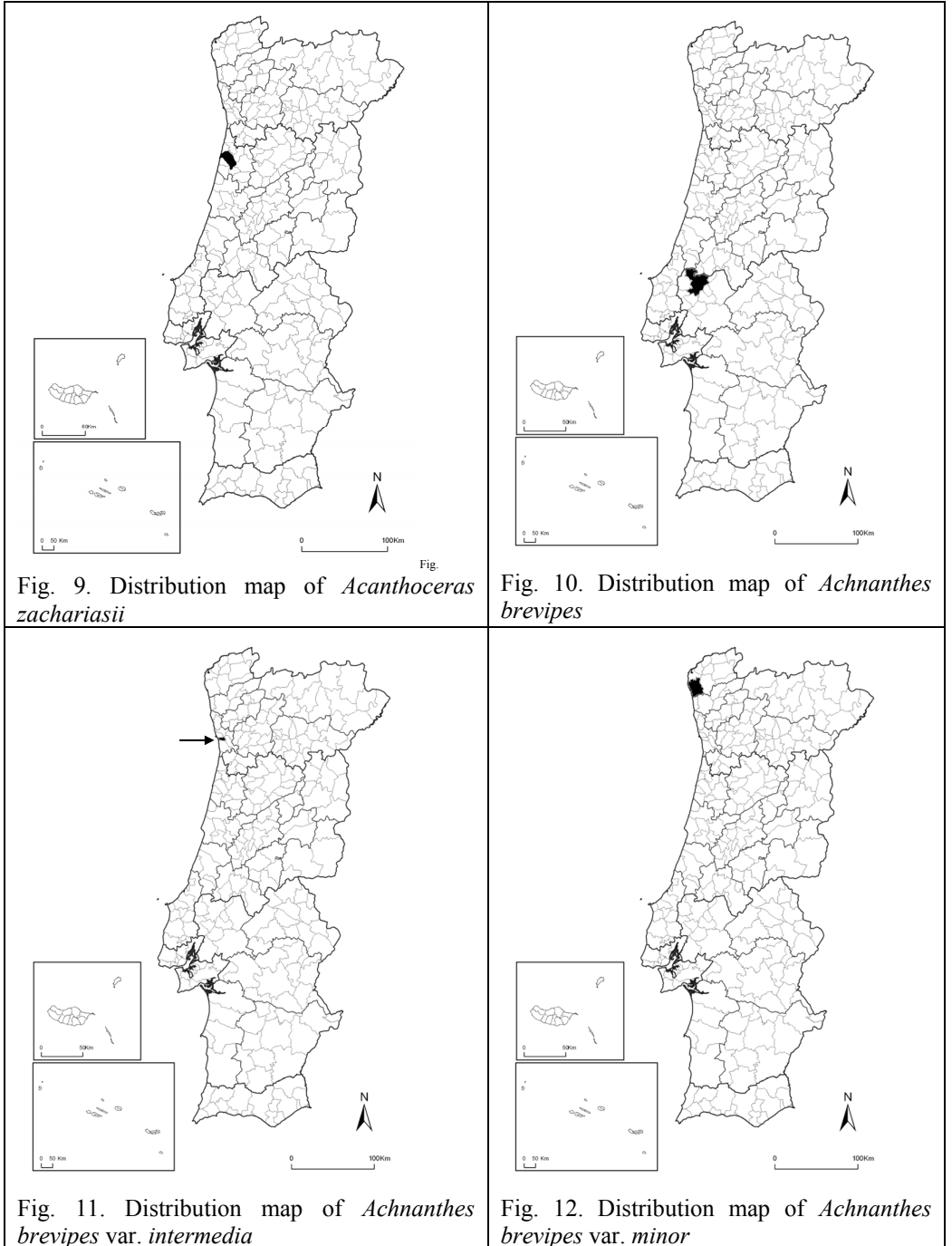
Subregion: Minho-Lima

Municipality: Vila Nova de Cerveira (District: Viana do Castelo)

Site: Barragem de Covas, Coura River (Minho Basin)

Reference: Vasconcelos et al. 2000 (as *Frustulia* sp.)

4. DISTRIBUTION MAPS



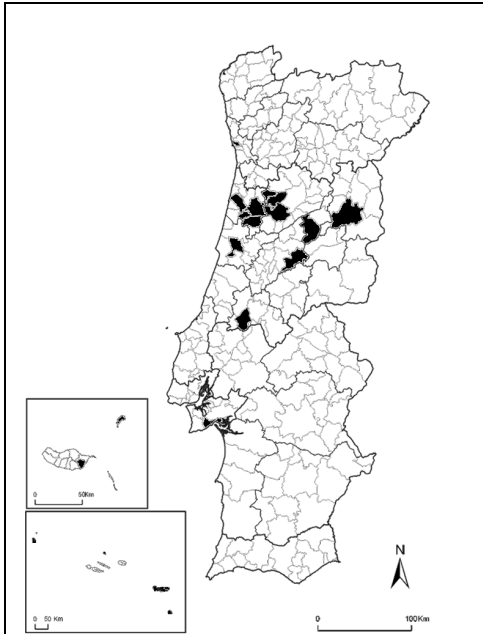


Fig. 13. Distribution map of *Achnanthes coarctata*

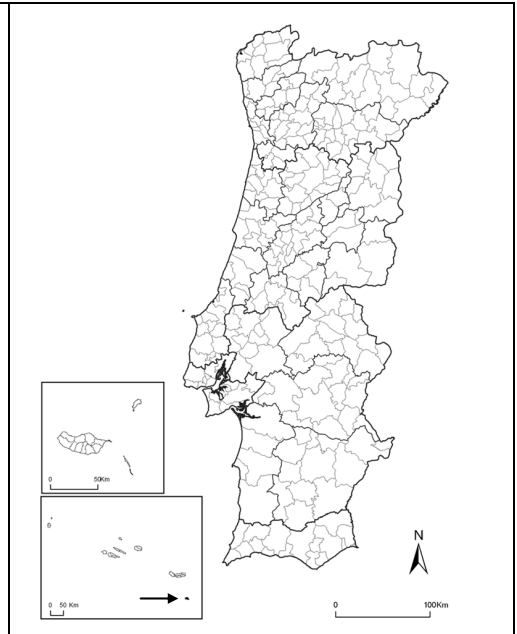


Fig. 14. Distribution map of *Achnanthes coarctata* var. *elliptica*

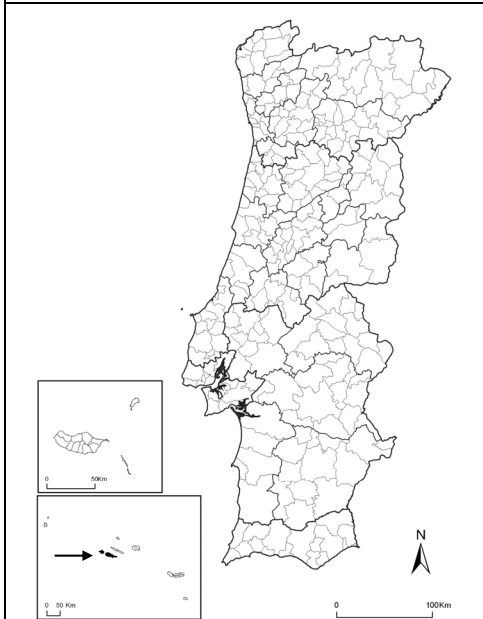


Fig. 15. Distribution map of *Achnanthes conspicua* var. *brevistriata*

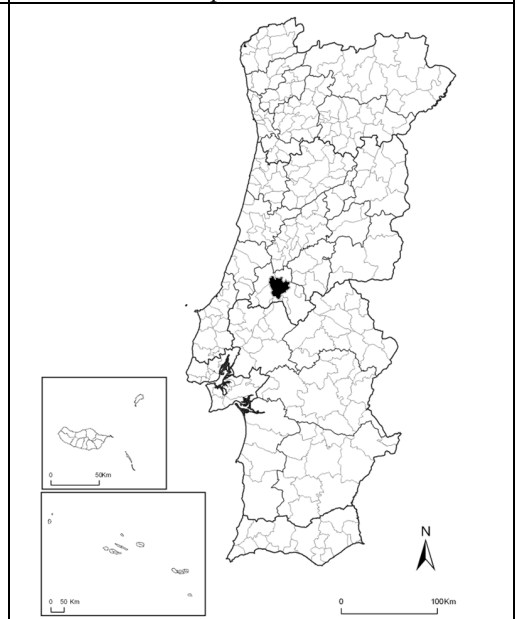


Fig. 16. Distribution map of *Achnanthes crucifera*

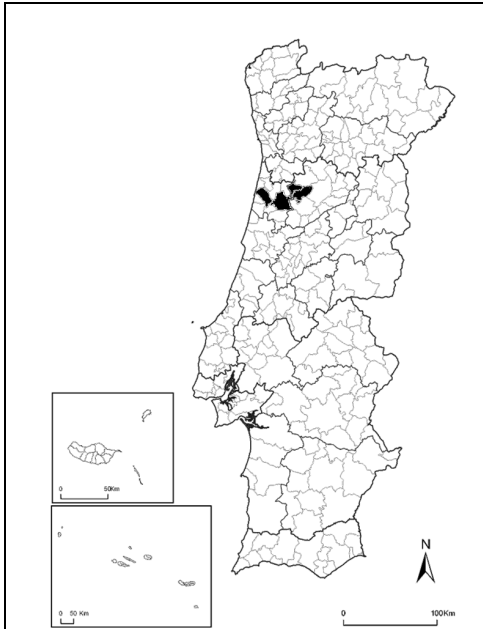


Fig. 17. Distribution map of *Achnanthes gibberula*

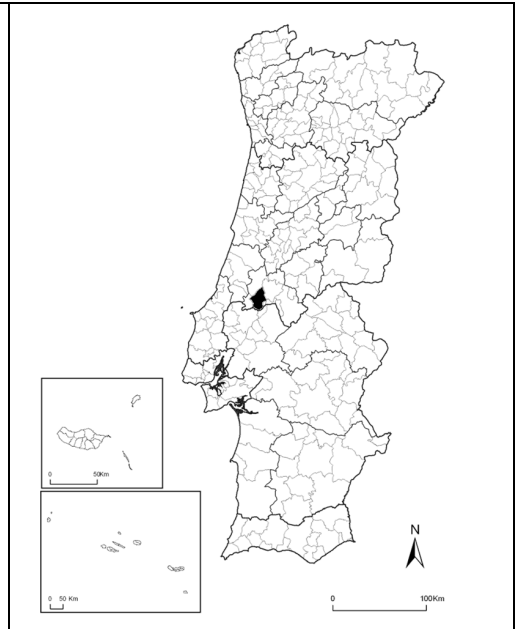


Fig. 18. Distribution map of *Achnanthes grimmei*

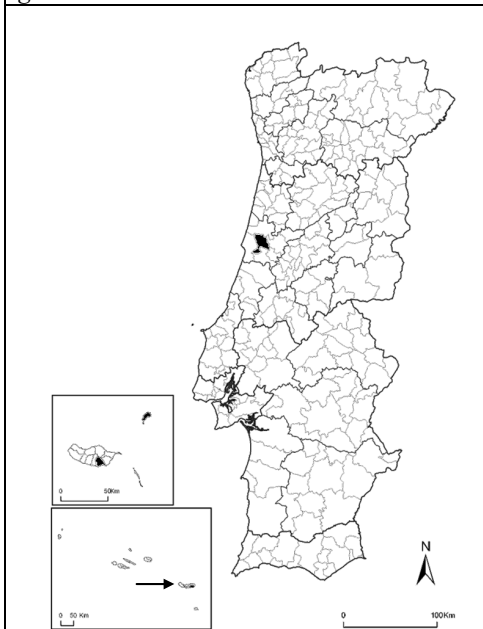


Fig. 19. Distribution map of *Achnanthes inflata*

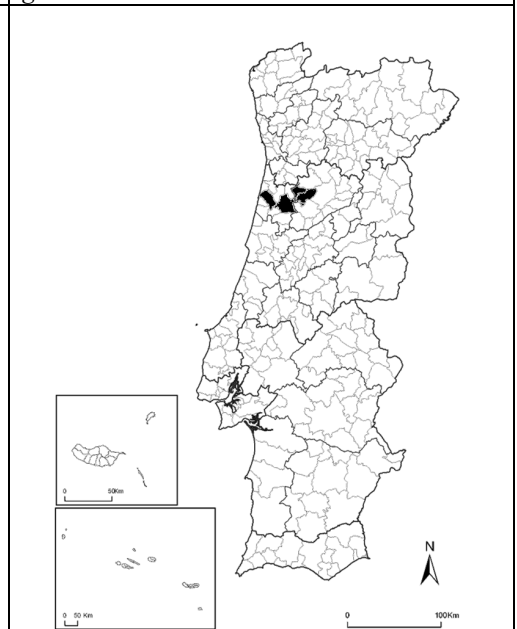


Fig. 20. Distribution map of *Achnanthes lanceolata* var. *capitata*

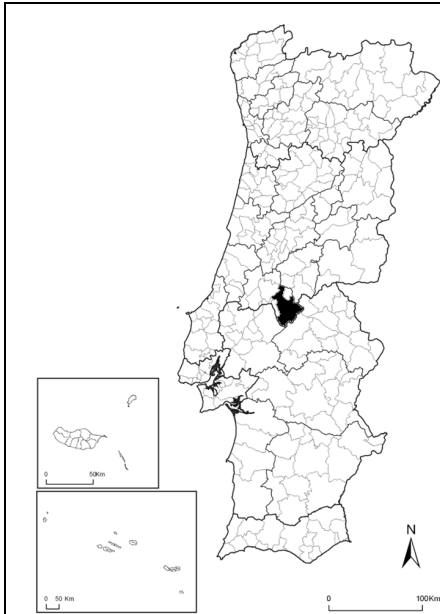


Fig. 21. Distribution map of *Achnanthes lanceolata* var. *omissa*

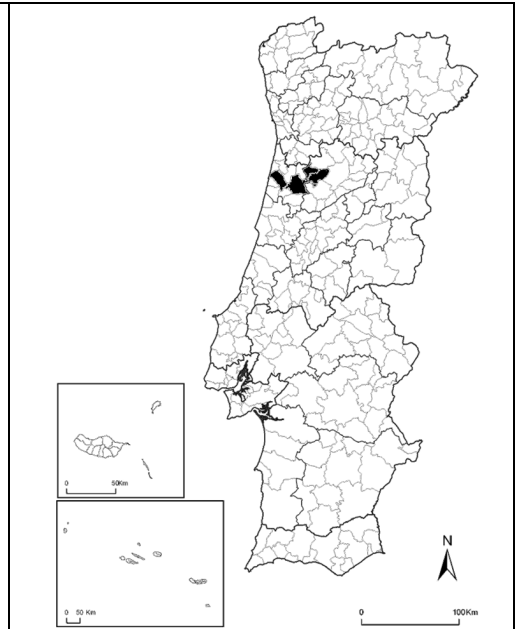


Fig. 22. Distribution map of *Achnanthes lanceolata* var. *ventricosa*

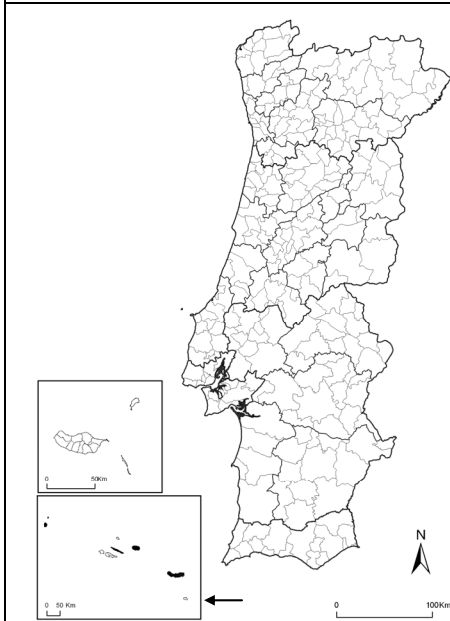


Fig. 23. Distribution map of *Achnanthes lineariformis*

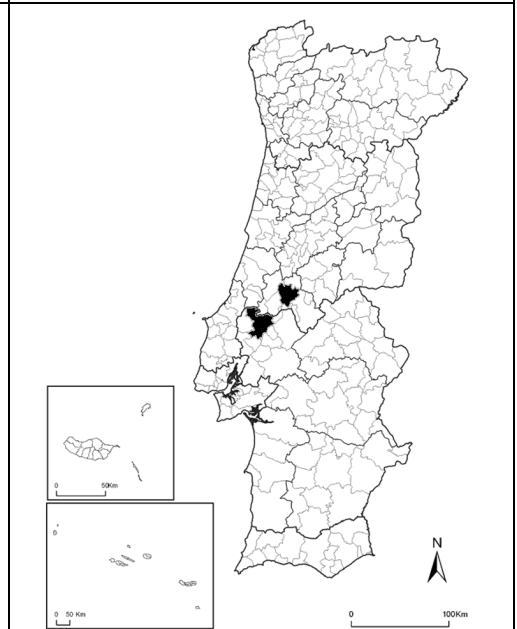


Fig. 24. Distribution map of *Achnanthes longipes*

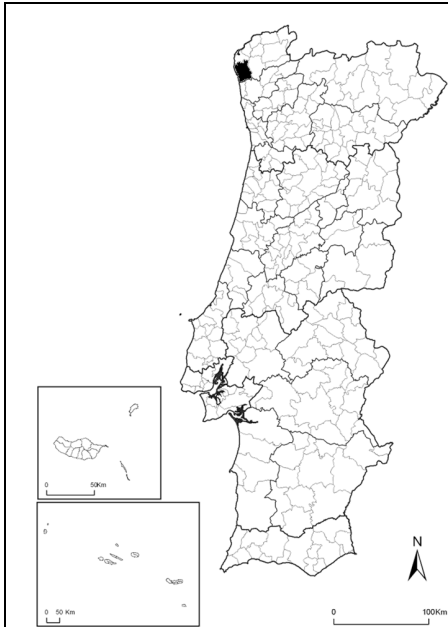


Fig. 25. Distribution map of *Achnanthes longipes* f. *lata*

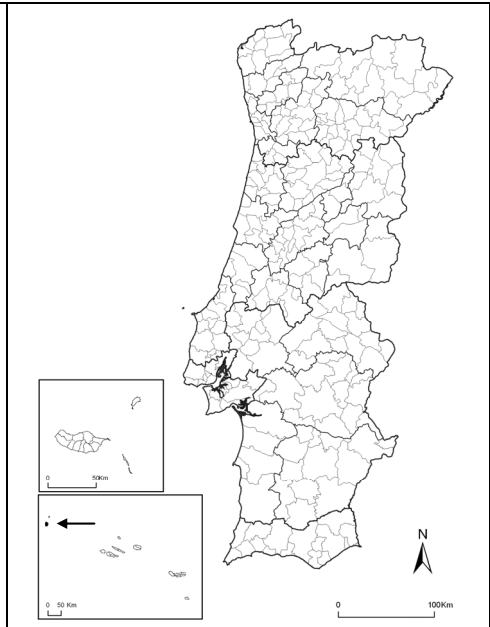


Fig. 26. Distribution map of *Achnanthes lutheri*

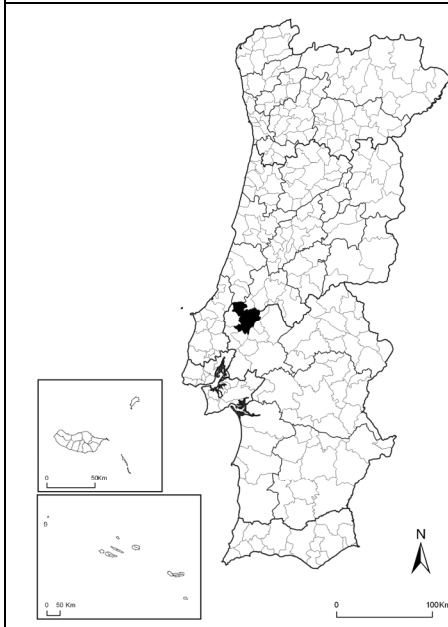


Fig. 27. Distribution map of *Achnanthes minima*

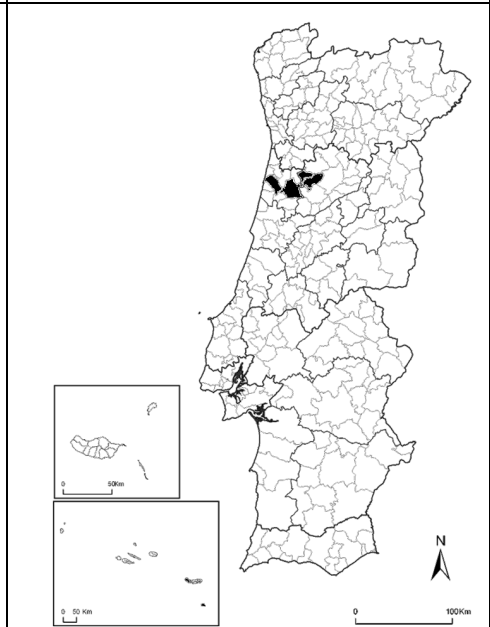


Fig. 28. Distribution map of *Achnanthes minutissima* var. *cryptocephala*

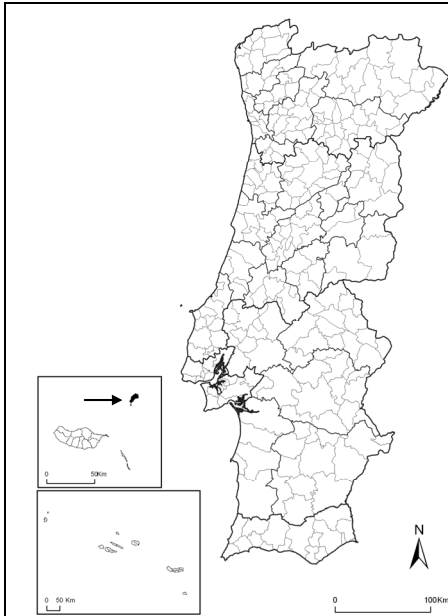


Fig. 29. Distribution map of *Achnanthes parvula*

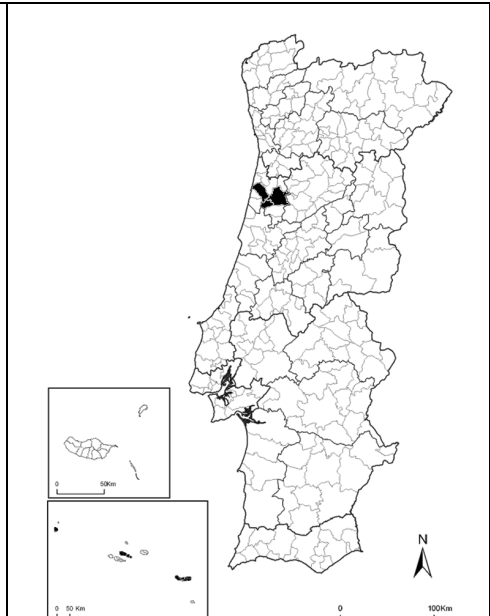


Fig. 30. Distribution map of *Achnanthes rupestoides*

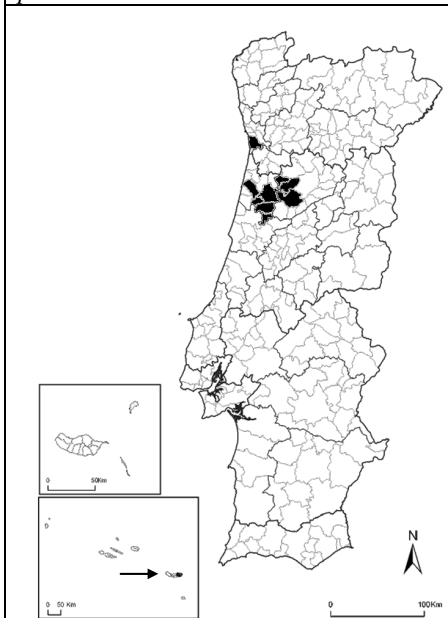


Fig. 31. Distribution map of *Achnanthes saxonica*

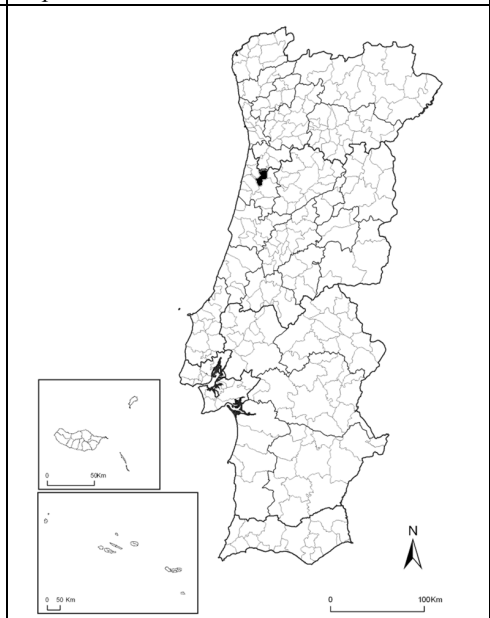


Fig. 32. Distribution map of *Achnanthes sphacelata*

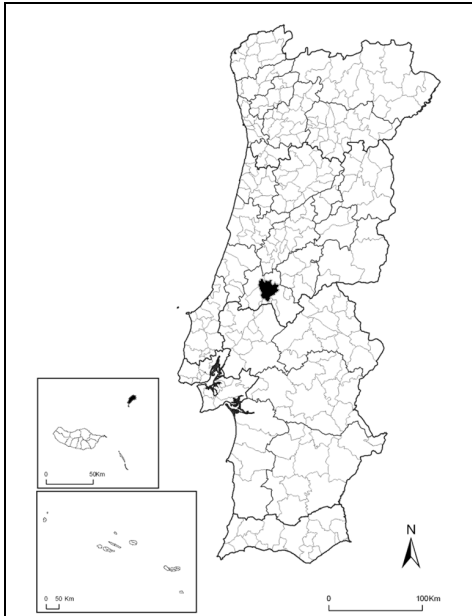


Fig. 33. Distribution map of *Achnanthes subsessilis*

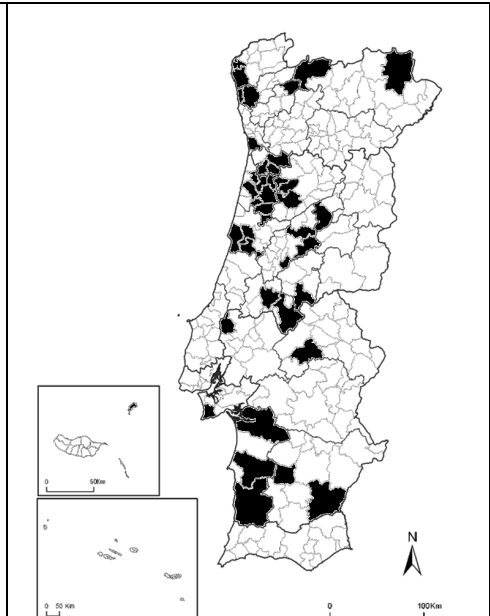


Fig. 34. Distribution map of *Achnanthes* sp.

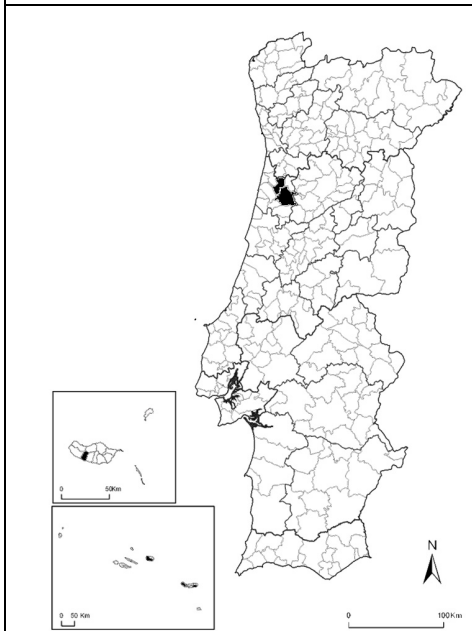


Fig. 35. Distribution map of *Achnanthidium biasolettianum*

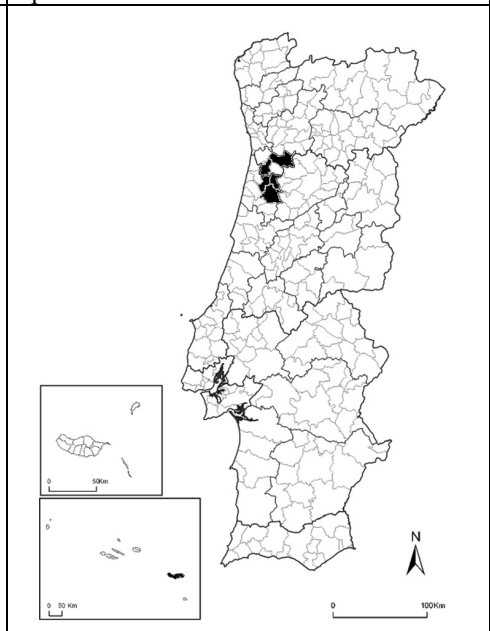


Fig. 36. Distribution map of *Achnanthidium bioretii*

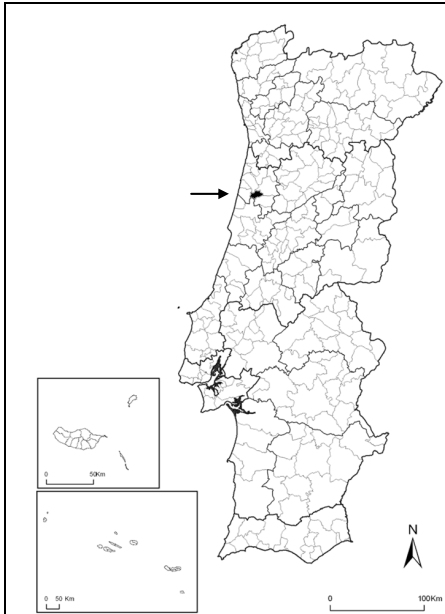


Fig. 37. Distribution map of *Achnanthydium catenatum*

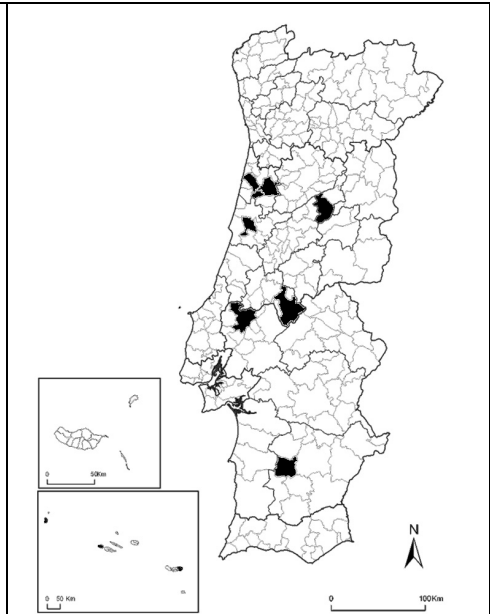


Fig. 38. Distribution map of *Achnanthydium exiguum*

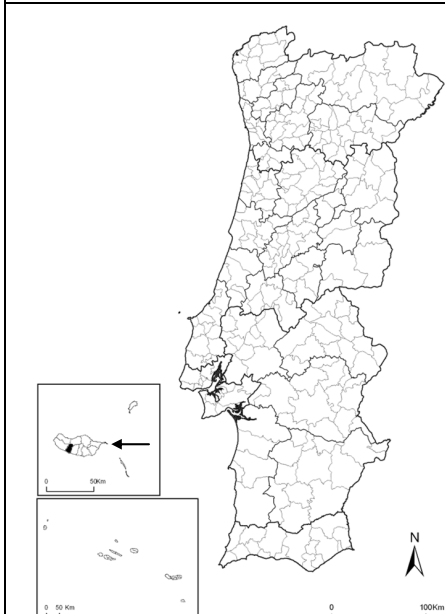


Fig. 39. Distribution map of *Achnanthydium exiguum* var. *constrictum*

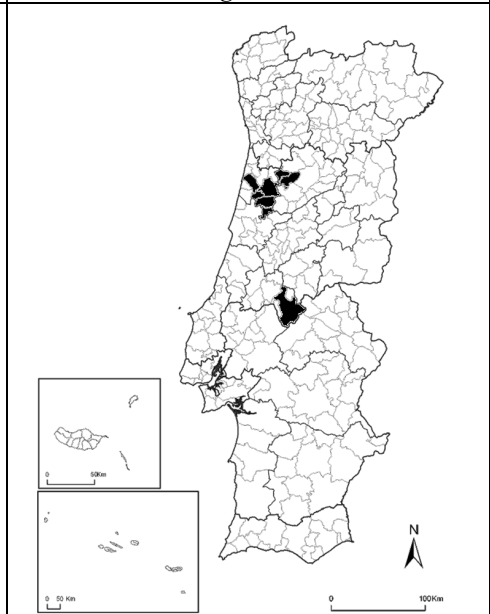


Fig. 40. Distribution map of *Achnanthydium exiguum* var. *heterovalvum*

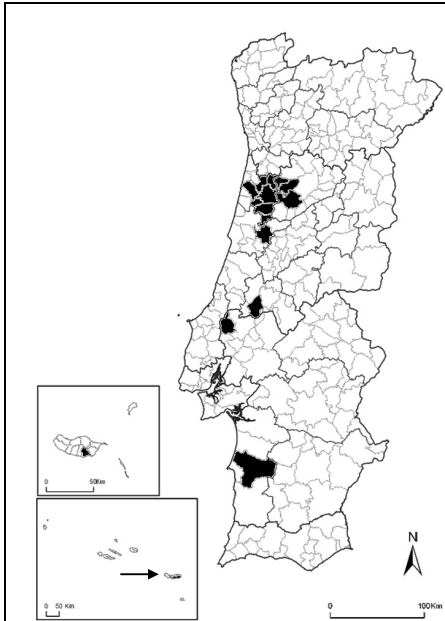


Fig. 41. Distribution map of *Achnanthydium exile*

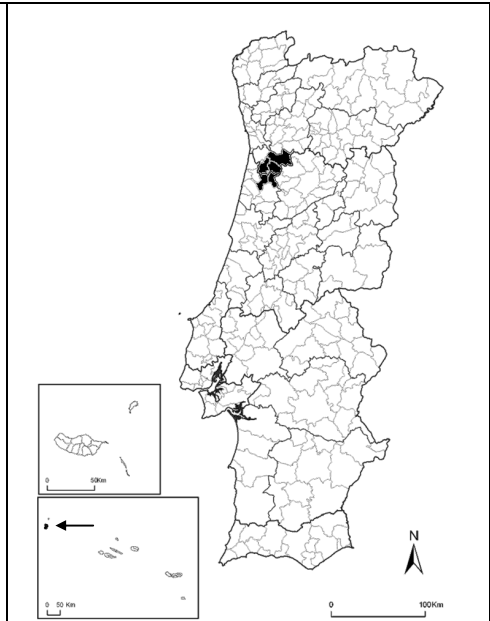


Fig. 42. Distribution map of *Achnanthydium helveticum*

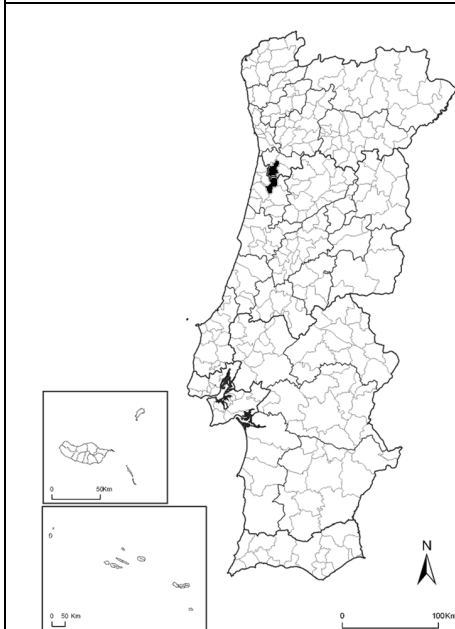


Fig. 43. Distribution map of *Achnanthydium jackii*

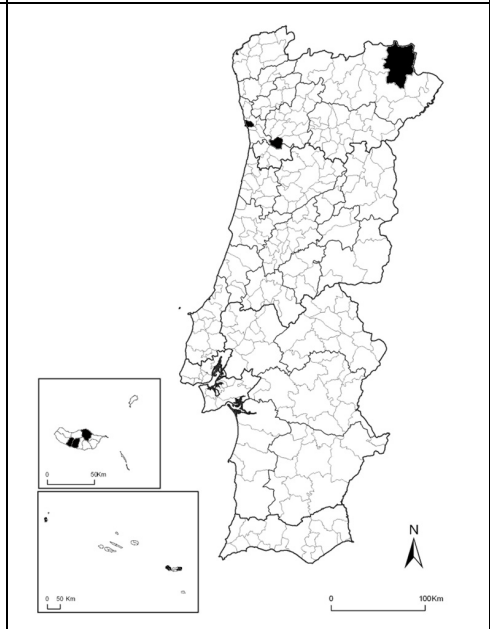


Fig. 44. Distribution map of *Achnanthydium lineare*

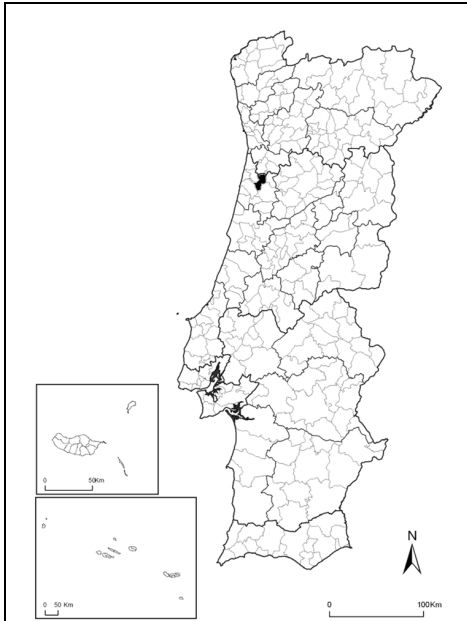


Fig. 45. Distribution map of *Achnanthydium macrocephalum*

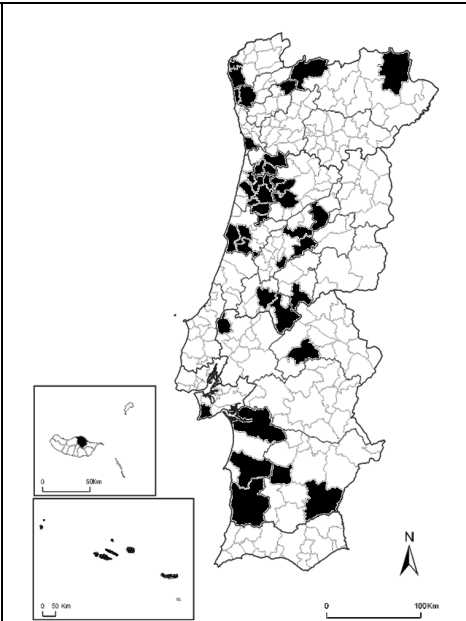


Fig. 46. Distribution map of *Achnanthydium minutissimum*

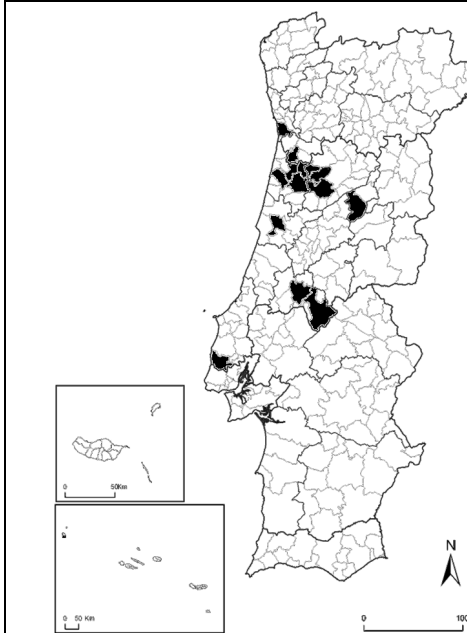


Fig. 47. Distribution map of *Achnanthydium minutissimum* var. *affinis*

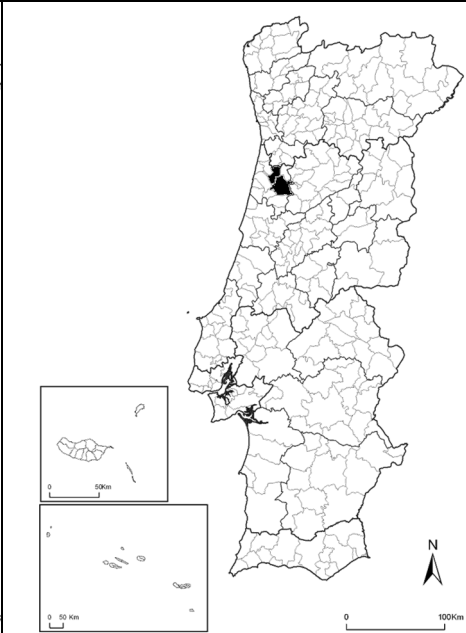


Fig. 48. Distribution map of *Achnanthydium minutissimum* f. *inconspicuum*

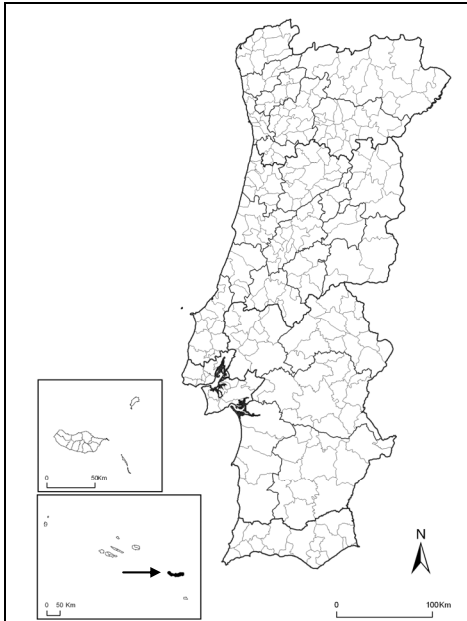


Fig. 49. Distribution map of *Achnanthidium rosenstockii*

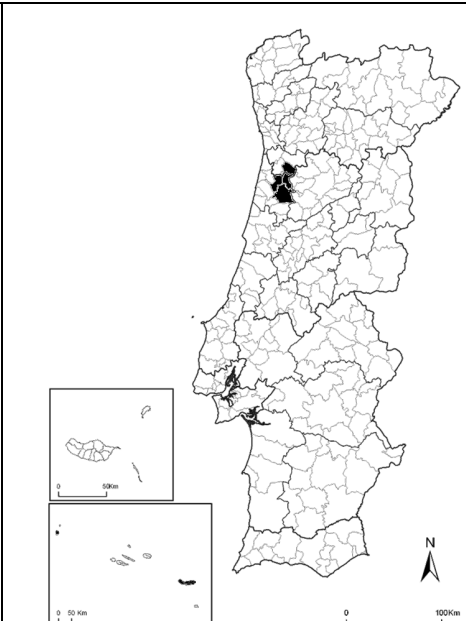


Fig. 50. Distribution map of *Achnanthidium saprophilum*

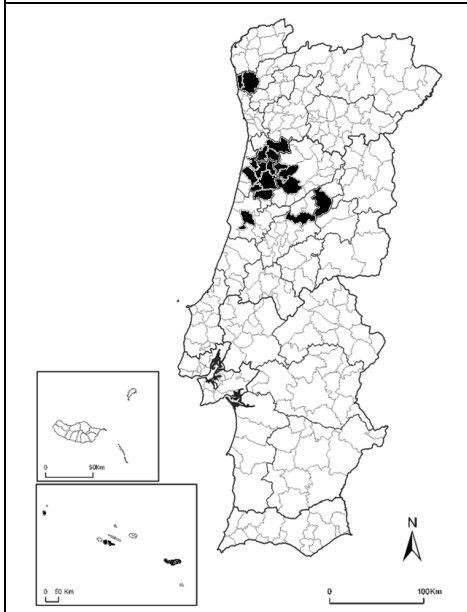


Fig. 51. Distribution map of *Achnanthidium subatomoides*

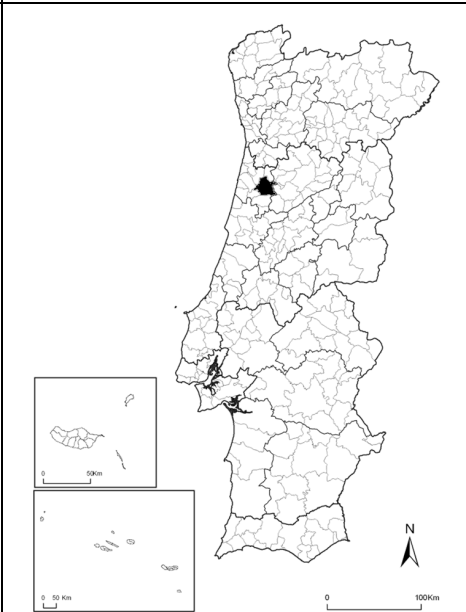


Fig. 52. Distribution map of *Achnanthidium subatomus*

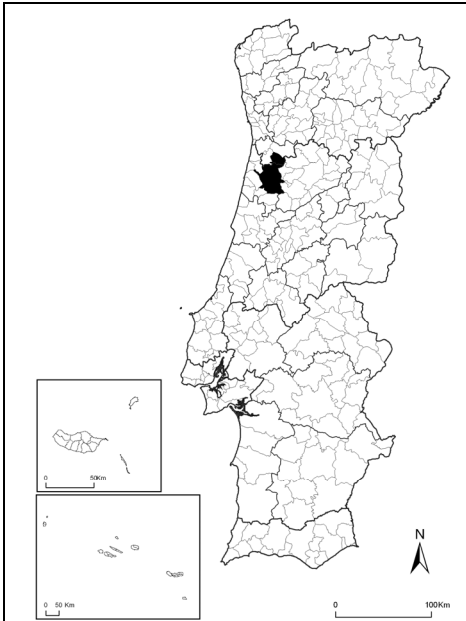


Fig. 53. Distribution map of *Achnanthydium subhudsonis*

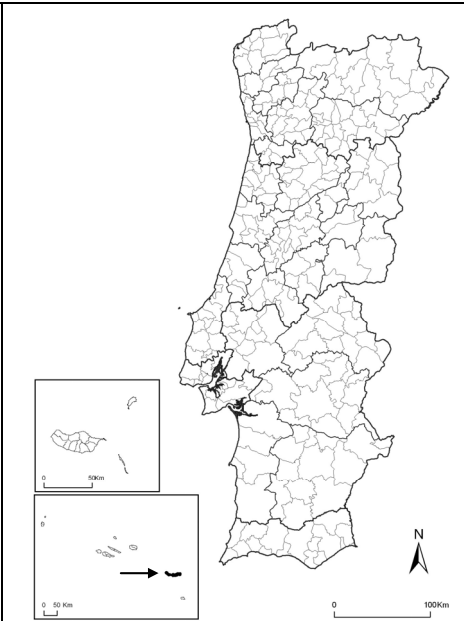


Fig. 54. Distribution map of *Achnanthydium thermale*

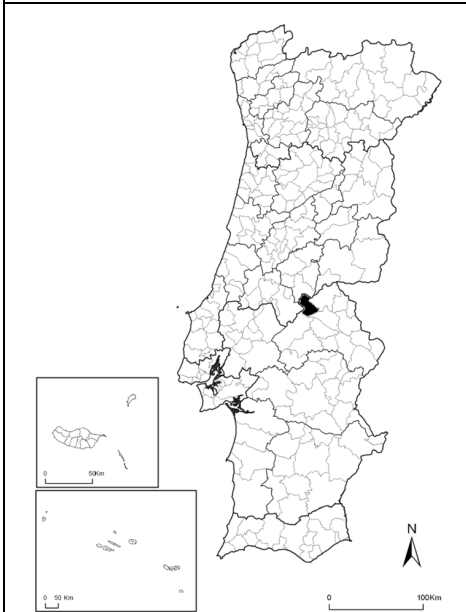


Fig. 55. Distribution map of *Actinocyclus normanii*

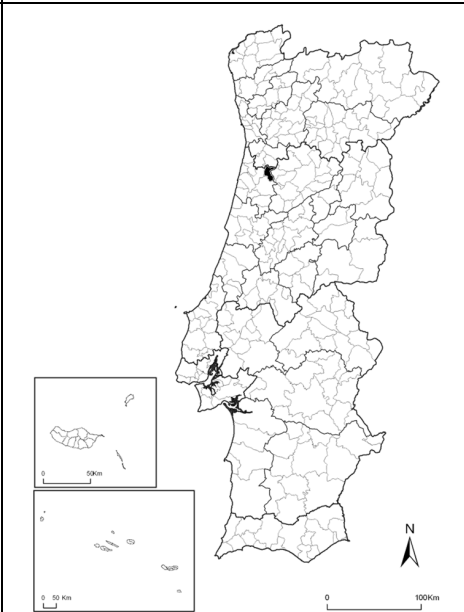


Fig. 56. Distribution map of *Actinocyclus subtilis*

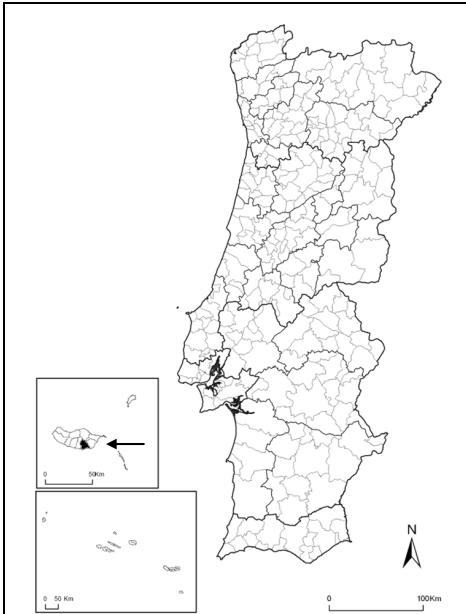


Fig. 57. Distribution map of *Actinoptychus undulatus*

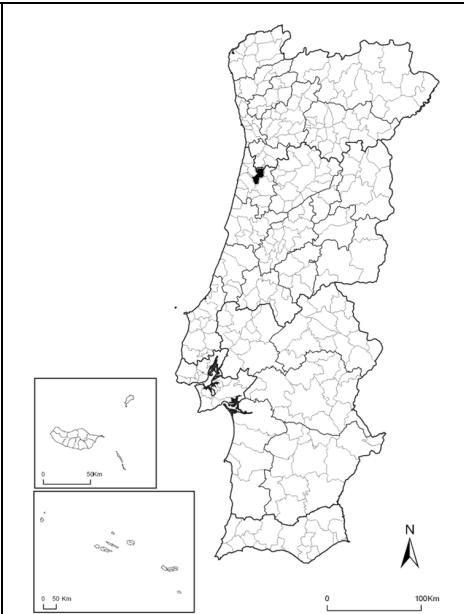


Fig. 58. Distribution map of *Actinoptychus* sp.

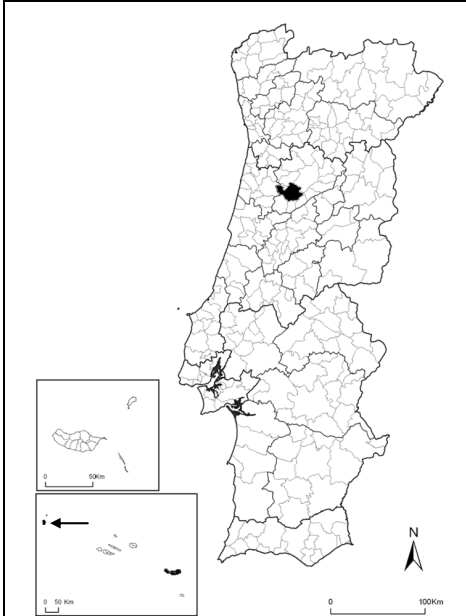


Fig. 59. Distribution map of *Adlafia bryophila*

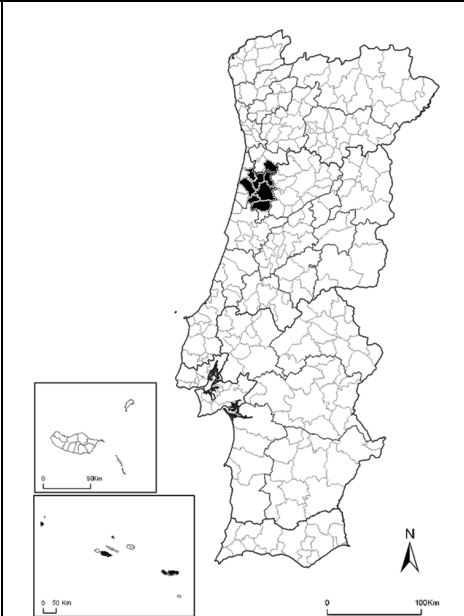


Fig. 60. Distribution map of *Adlafia minuscula*

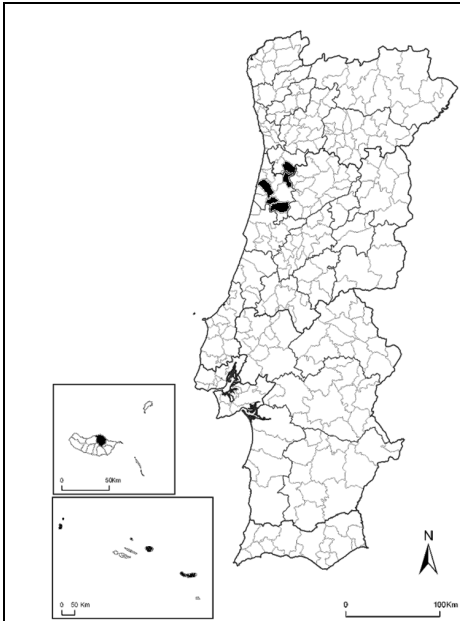


Fig. 61. Distribution map of *Adlafia minuscula* var. *muralis*

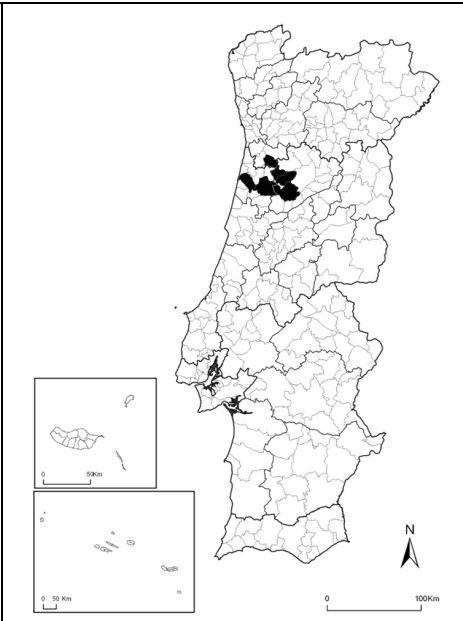


Fig. 62. Distribution map of *Amphipleura lindheimeri*

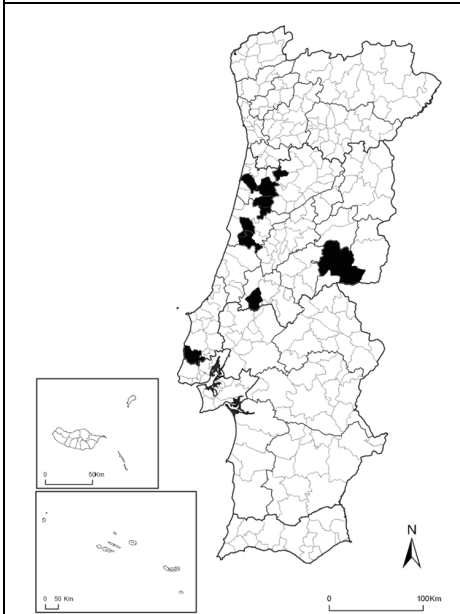


Fig. 63. Distribution map of *Amphipleura pellucida*

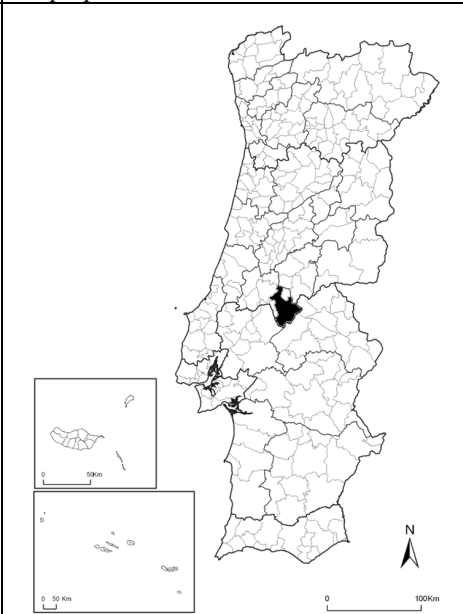


Fig. 64. Distribution map of *Amphora birugula*

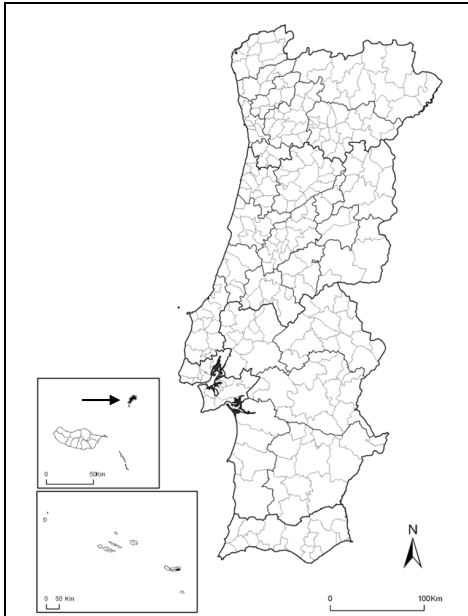


Fig. 65. Distribution map of *Amphora coffeaeformis* var. *acutiuscula*

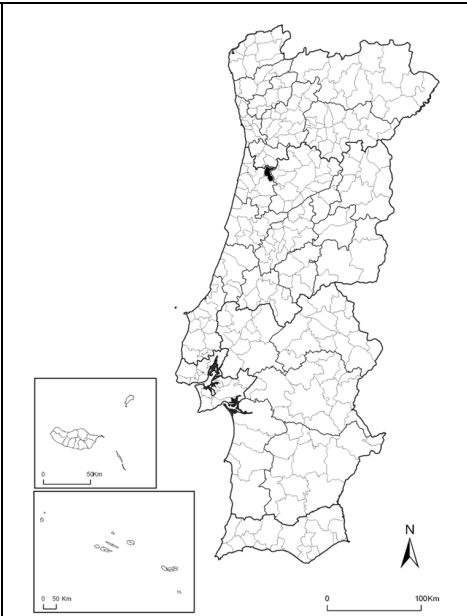


Fig. 66. Distribution map of *Amphora copulata*

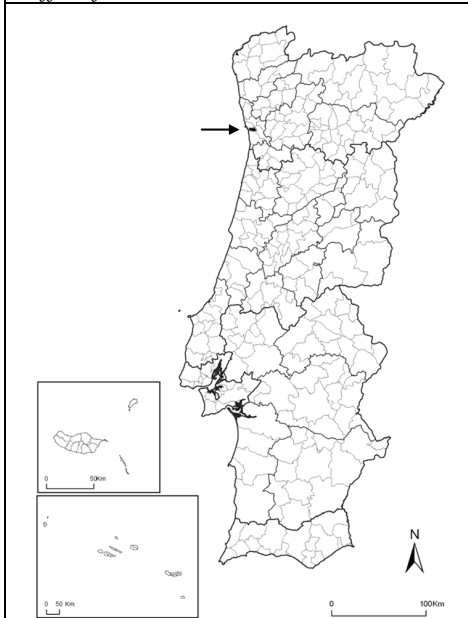


Fig. 67. Distribution map of *Amphora delicatissima*

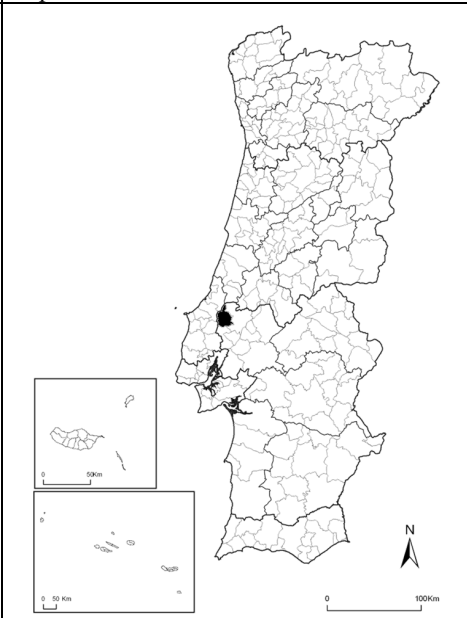


Fig. 68. Distribution map of *Amphora dubia*

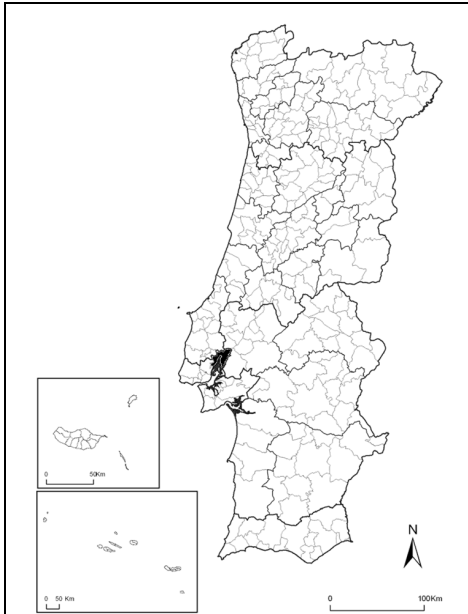


Fig. 69. Distribution map of *Amphora exigua*

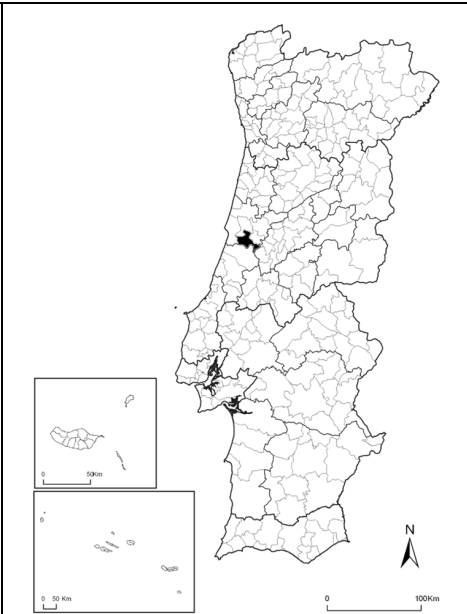


Fig. 70. Distribution map of *Amphora fogediana*

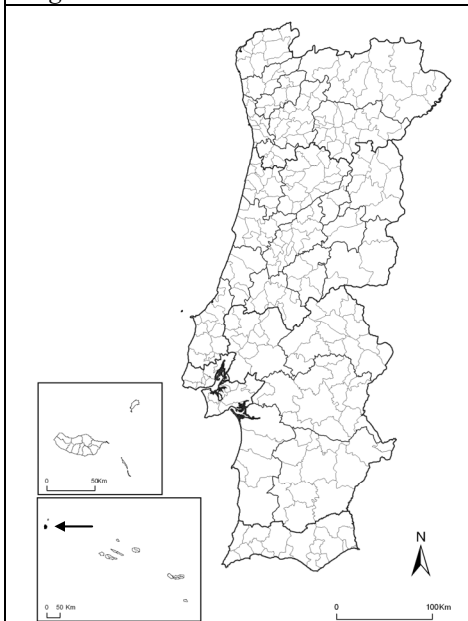


Fig. 71. Distribution map of *Amphora inariensis*

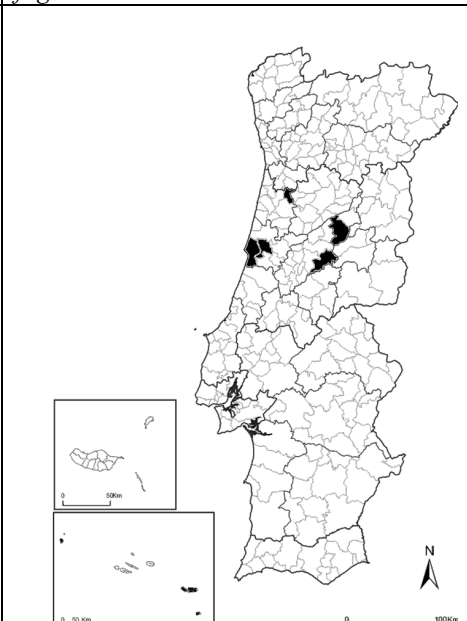


Fig. 72. Distribution map of *Amphora libyca*

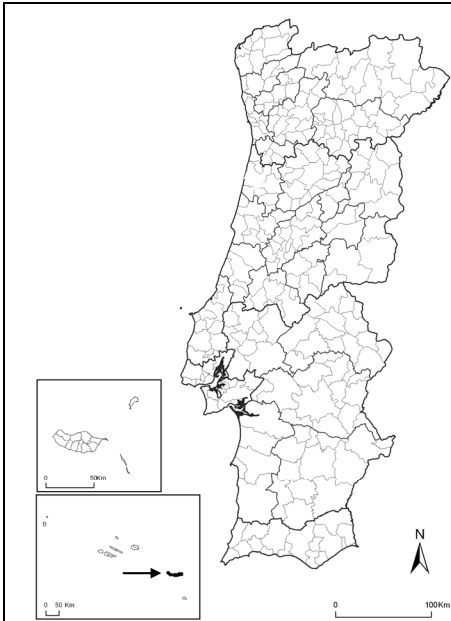


Fig. 73. Distribution map of *Amphora lineolata*

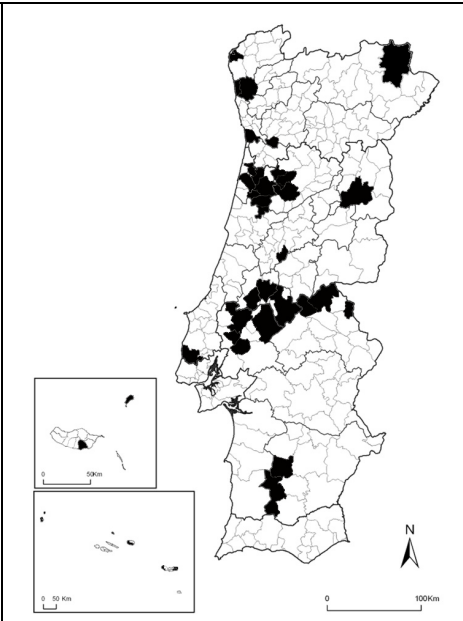


Fig. 74. Distribution map of *Amphora ovalis*

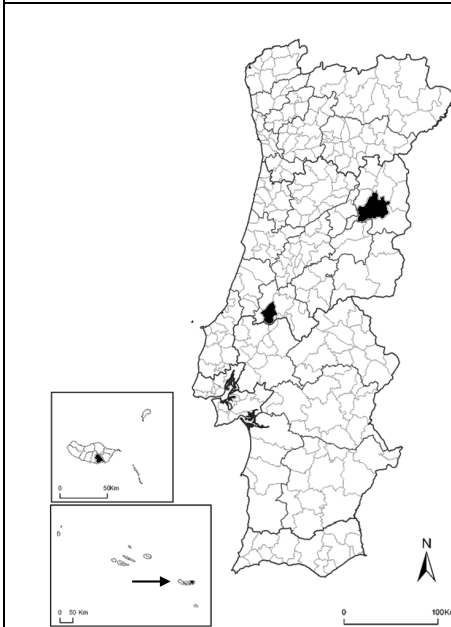


Fig. 75. Distribution map of *Amphora ovalis* var. *affinis*

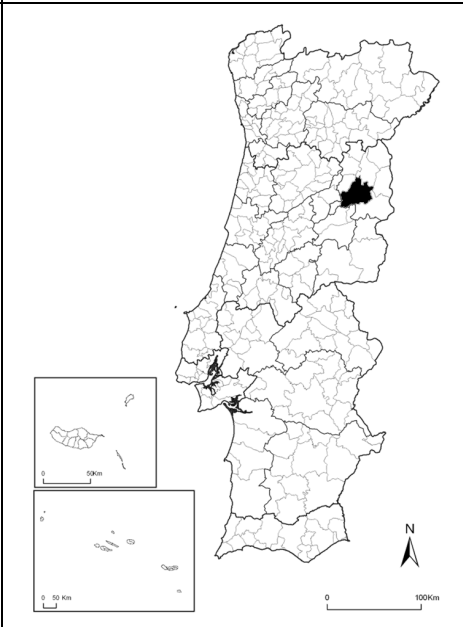


Fig. 76. Distribution map of *Amphora ovalis* f. *minor*

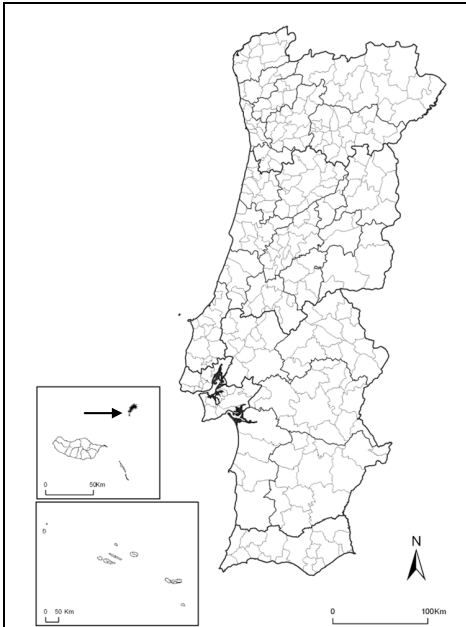


Fig. 77. Distribution map of *Amphora ovalis* var. *gracilis*

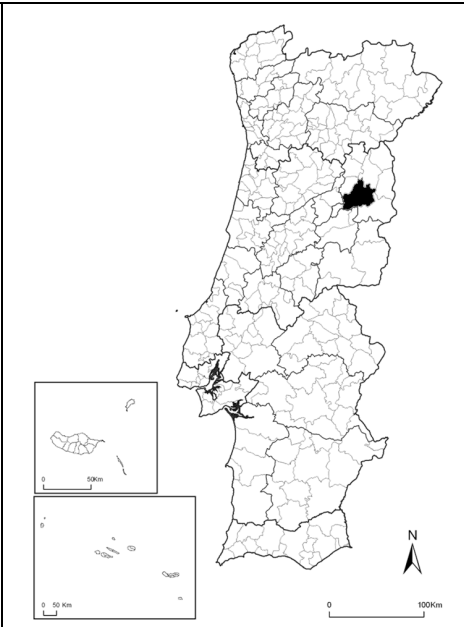


Fig. 78. Distribution map of *Amphora ovalis* var. *minor*

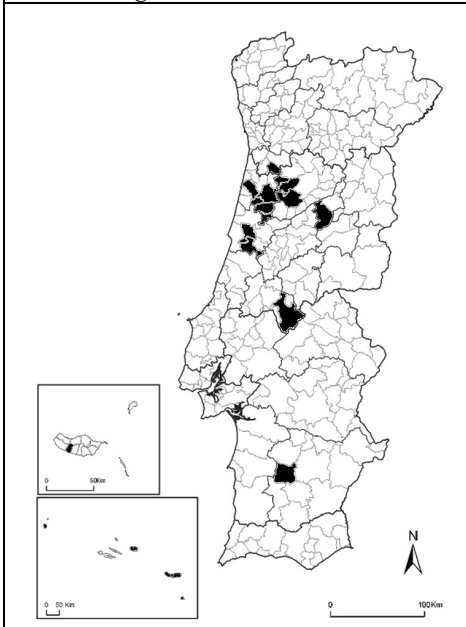


Fig. 79. Distribution map of *Amphora pediculus*

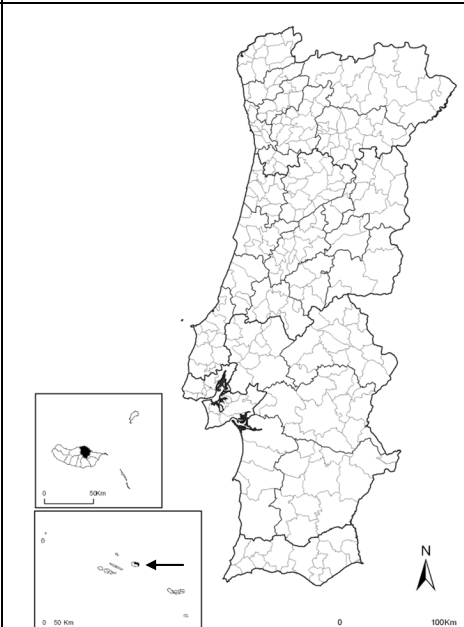


Fig. 80. Distribution map of *Amphora perpusilla*

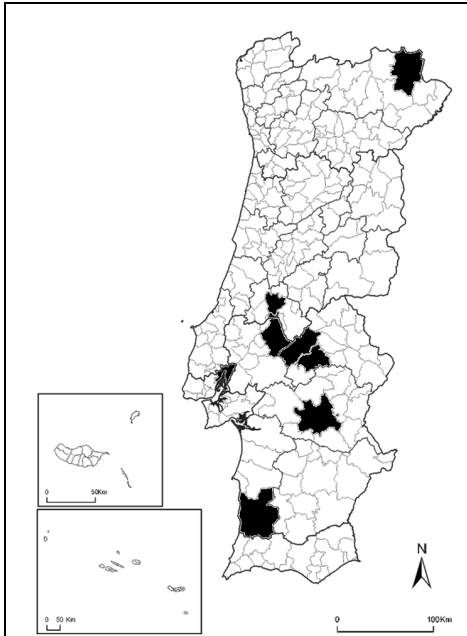


Fig. 81. Distribution map of *Amphora* sp.

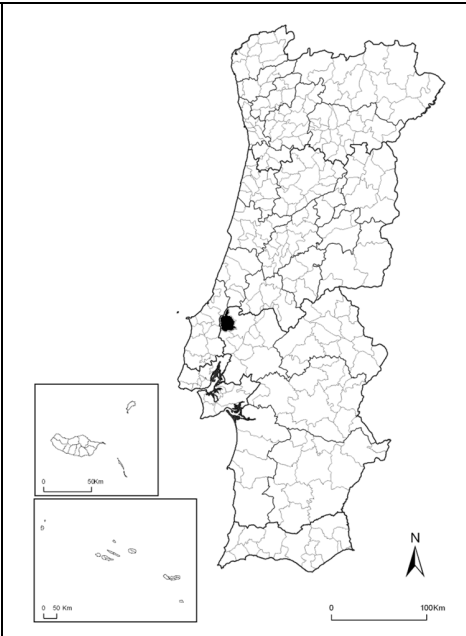


Fig. 82. Distribution map of *Aneumastus laetus*

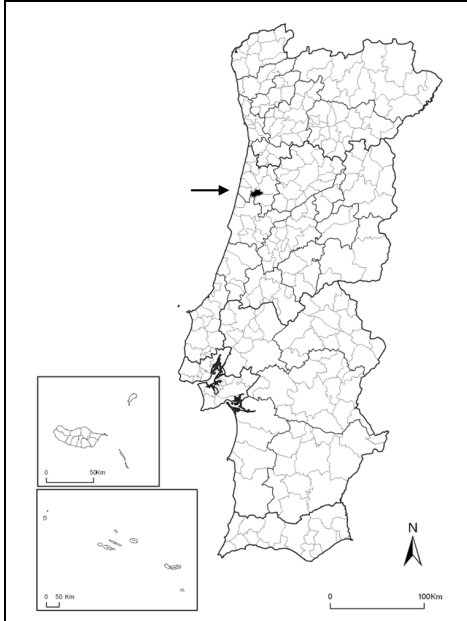


Fig. 83. Distribution map of *Aneumastus minor*

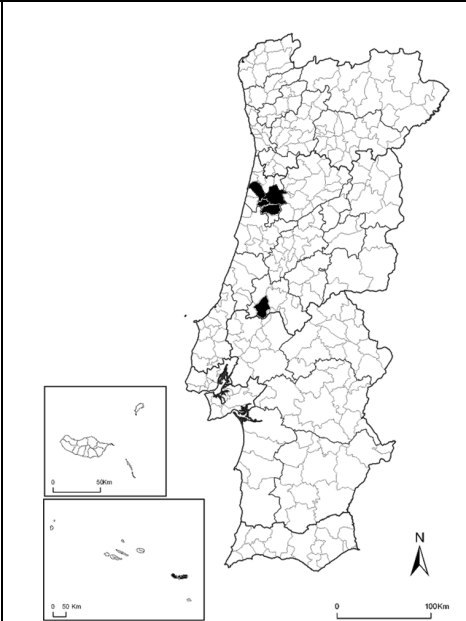


Fig. 84. Distribution map of *Aneumastus tuscula*

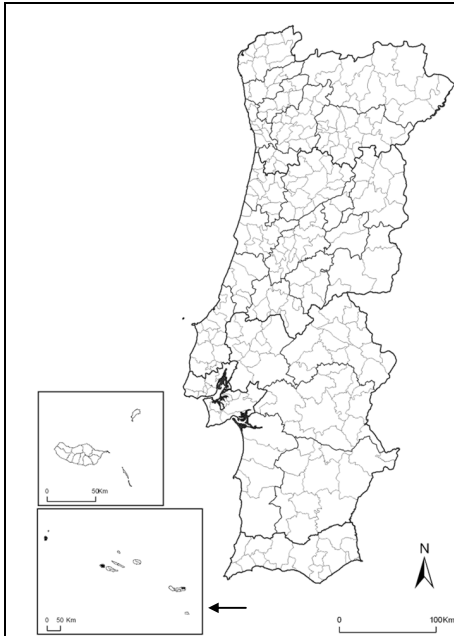


Fig. 85. Distribution map of *Anomoeoneis exilis* var. *azorica*

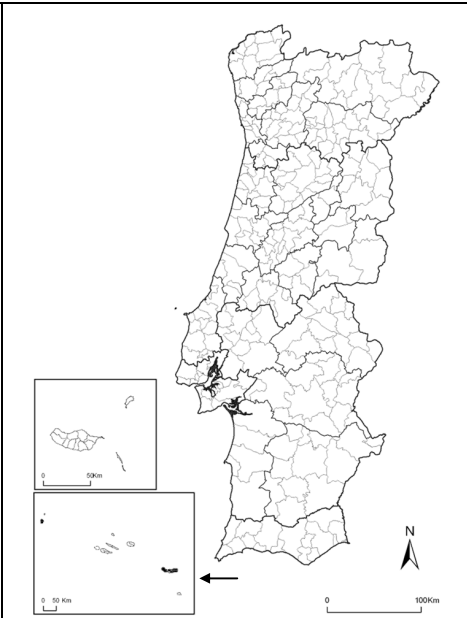


Fig. 86. Distribution map of *Anomoeoneis exilis* var. *lanceolata*

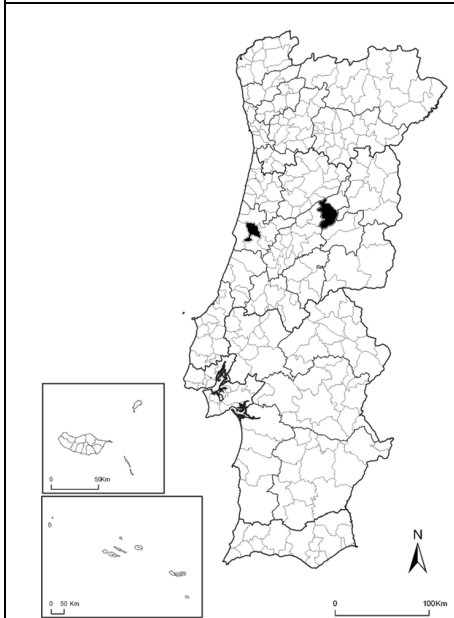


Fig. 87. Distribution map of *Anomoeoneis sculpta*

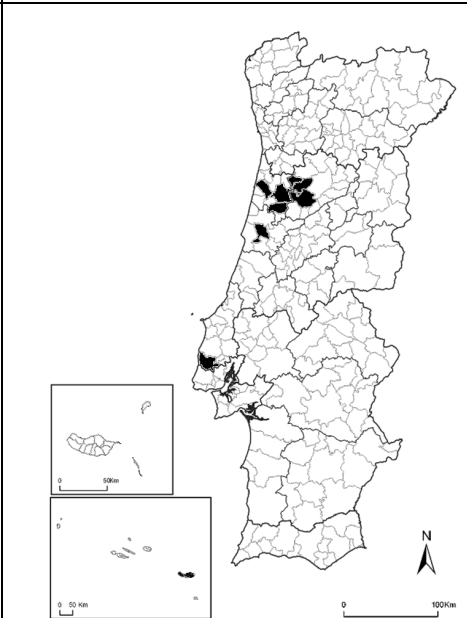


Fig. 88. Distribution map of *Anomoeoneis sphaerophora*

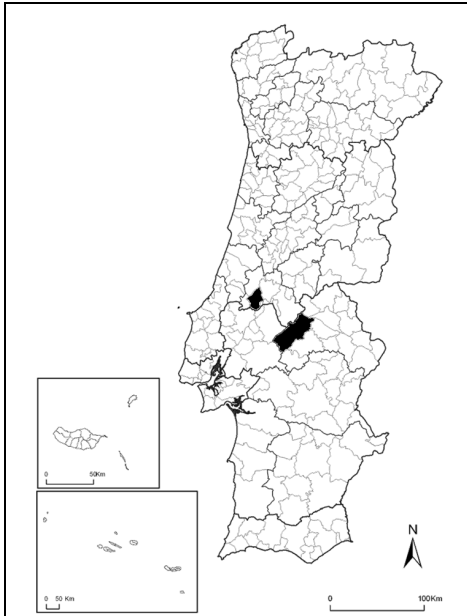


Fig. 89. Distribution map of *Anomoeoneis* sp.

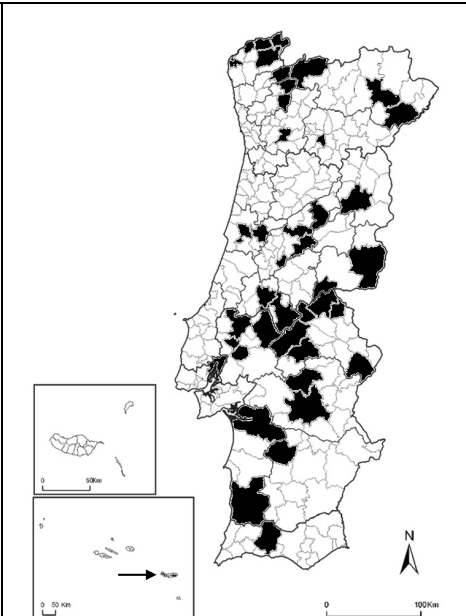


Fig. 90. Distribution map of *Asterionella formosa*

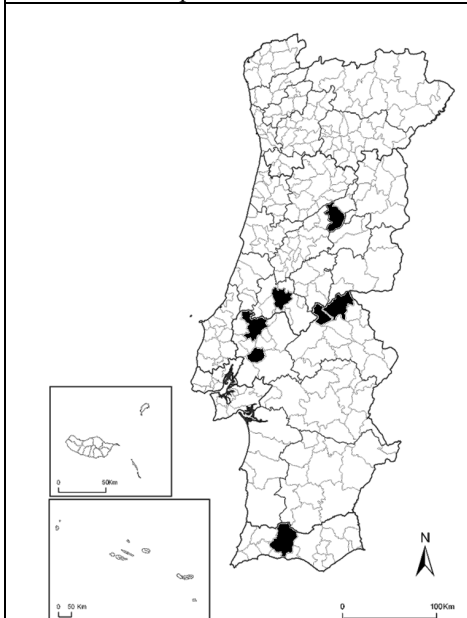


Fig. 91. Distribution map of *Asterionella gracillima*

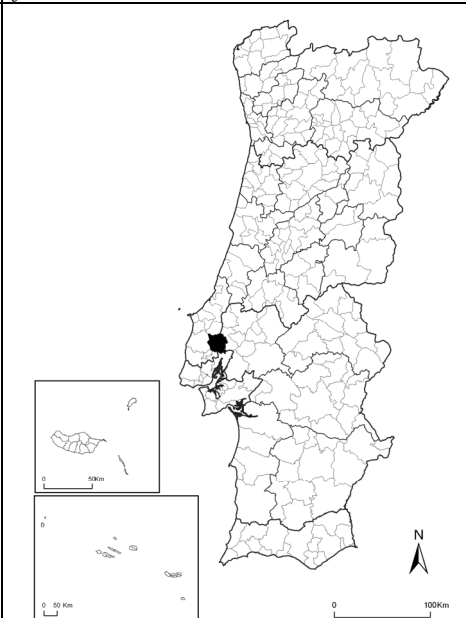


Fig. 92. Distribution map of *Asterionella* sp.

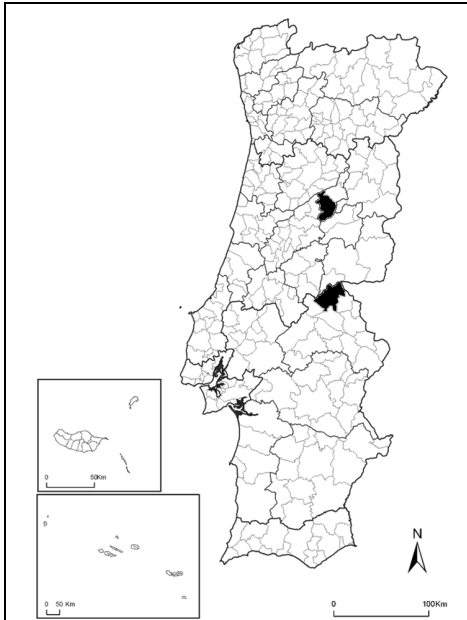


Fig. 93. Distribution map of *Aulacoseira alpigena*

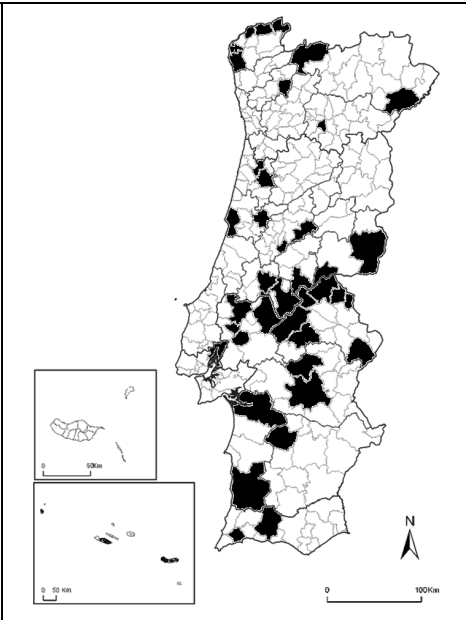


Fig. 94. Distribution map of *Aulacoseira ambigua*

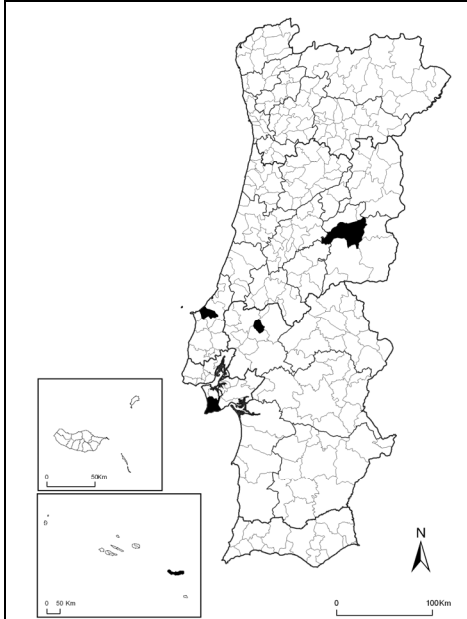


Fig. 95. Distribution map of *Aulacoseira crenulata*

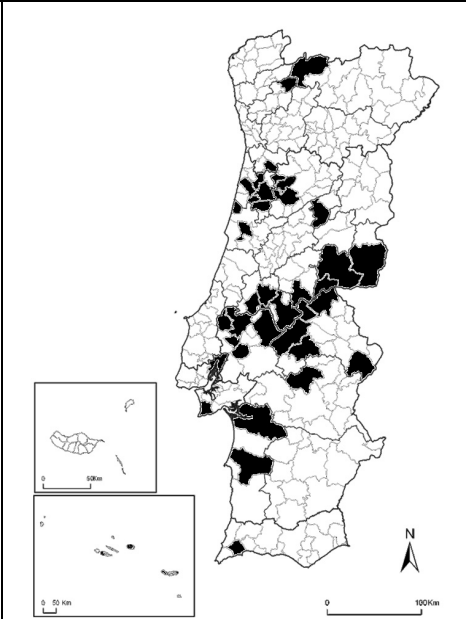


Fig. 96. Distribution map of *Aulacoseira distans*

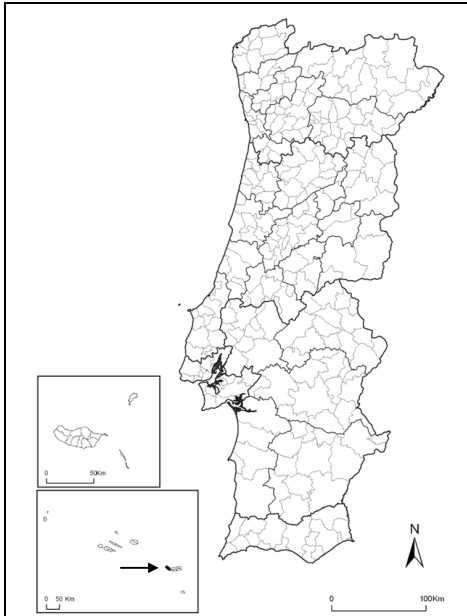


Fig. 97. Distribution map of *Aulacoseira distans* var. *africana*

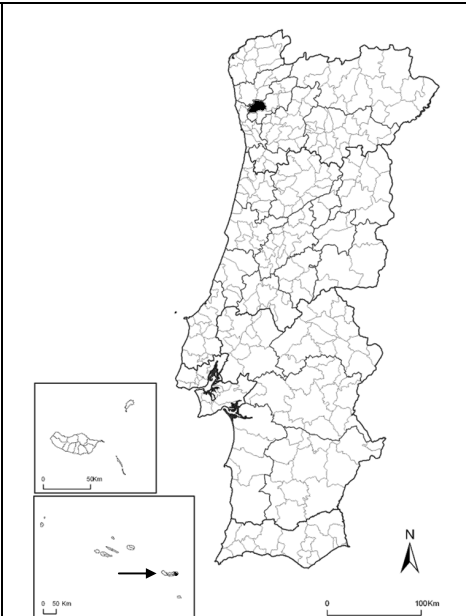


Fig. 98. Distribution map of *Aulacoseira distans* var. *nivalis*

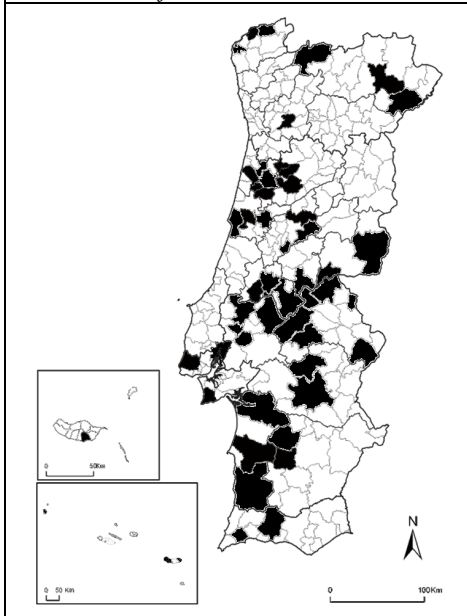


Fig. 99. Distribution map of *Aulacoseira granulata*

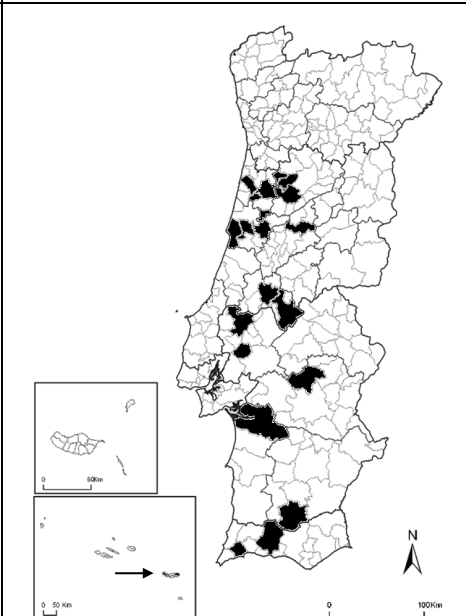


Fig. 100. Distribution map of *Aulacoseira granulata* var. *angustissima*

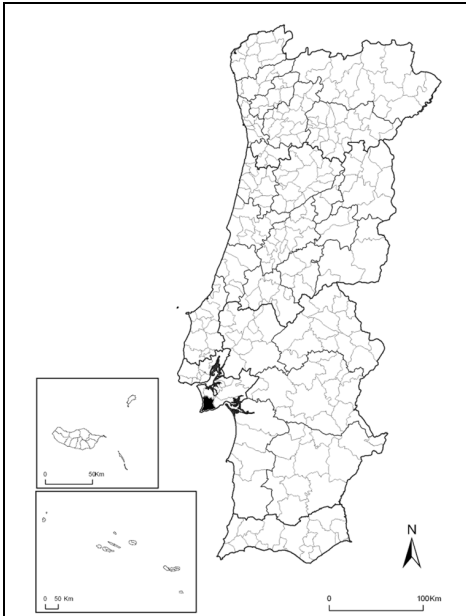


Fig. 101. Distribution map of *Aulacoseira granulata f. curvata*

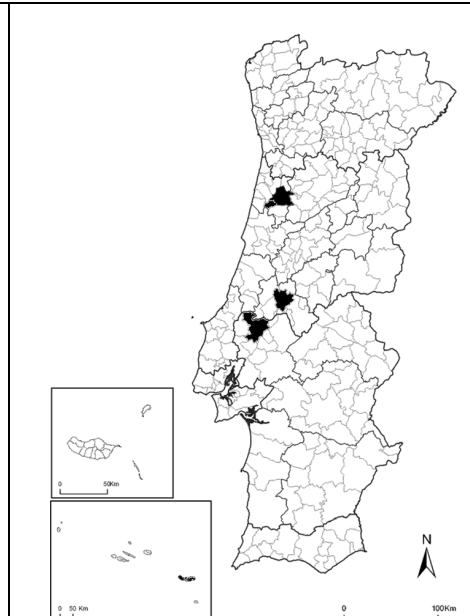


Fig. 102. Distribution map of *Aulacoseira islandica*

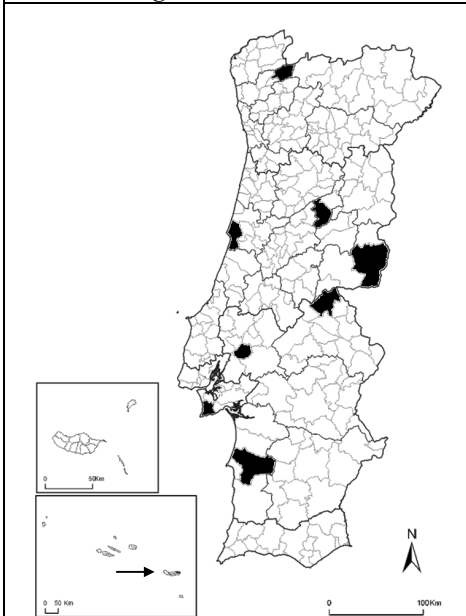


Fig. 103. Distribution map of *Aulacoseira islandica subsp. helvetica*

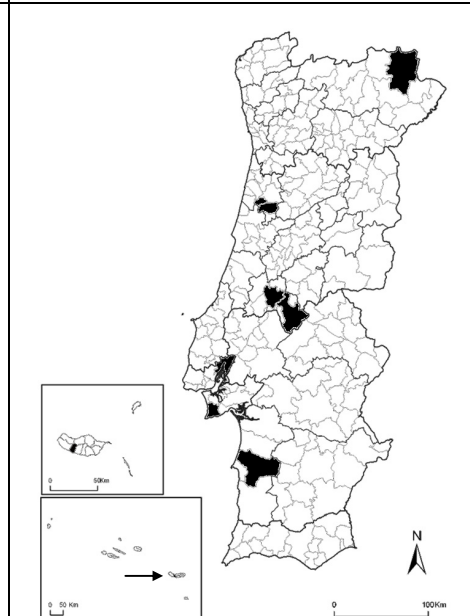


Fig. 104. Distribution map of *Aulacoseira italica*

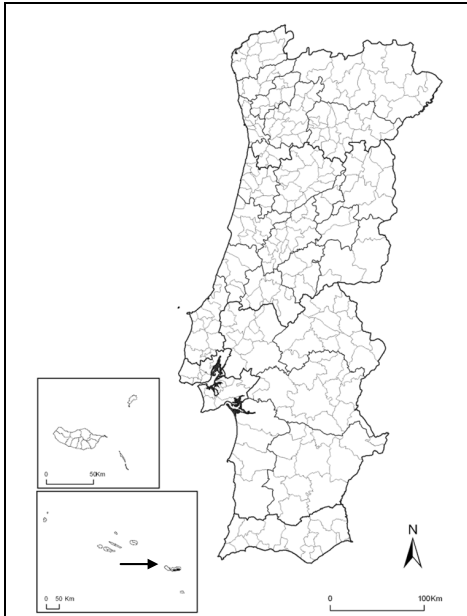


Fig. 105. Distribution map of *Aulacoseira italica* var. *tenuissima*

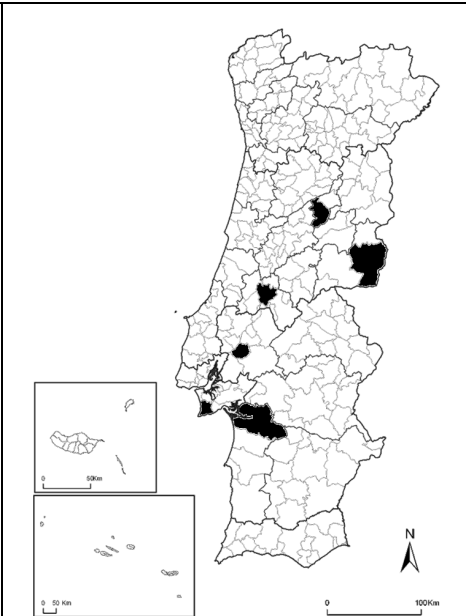


Fig. 106. Distribution map of *Aulacoseira lirata*

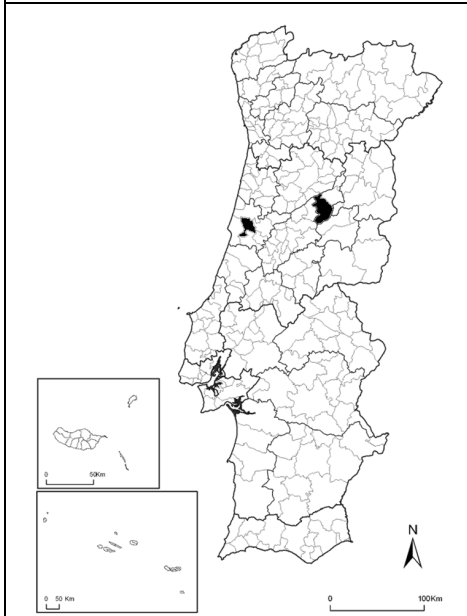


Fig. 107. Distribution map of *Aulacoseira muzzanensis*

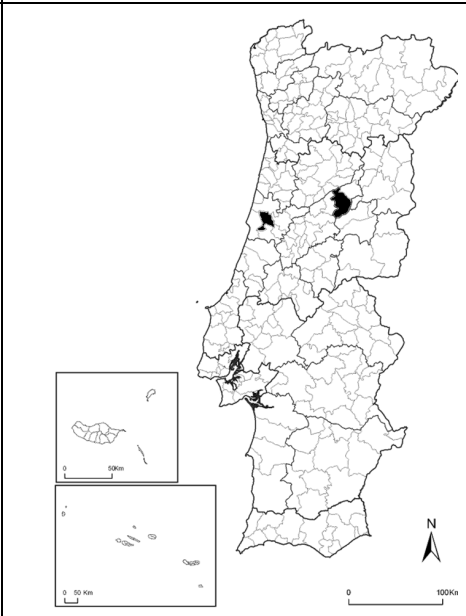


Fig. 108. Distribution map of *Aulacoseira perglabra*

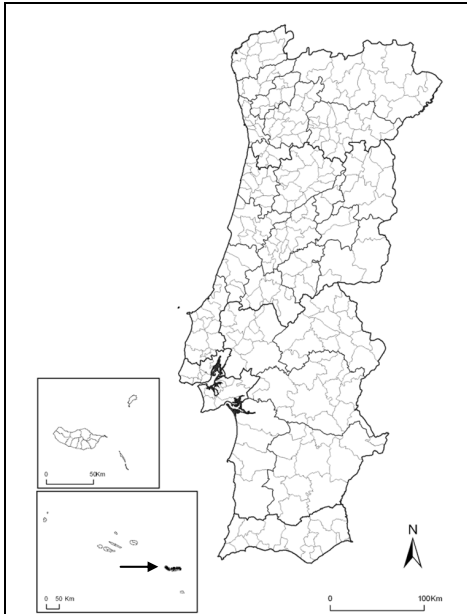


Fig. 109. Distribution map of *Aulacoseira pfaffiana*

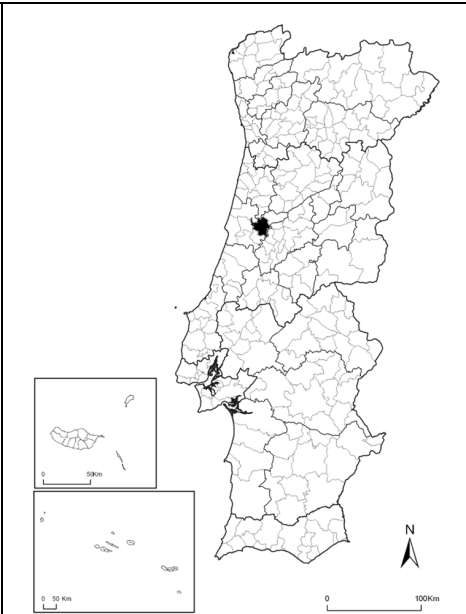


Fig. 110. Distribution map of *Aulacoseira subarctica f. recta*

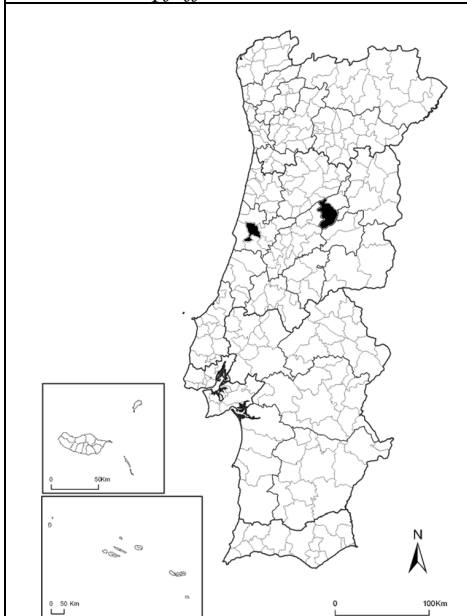


Fig. 111. Distribution map of *Aulacoseira tethera*

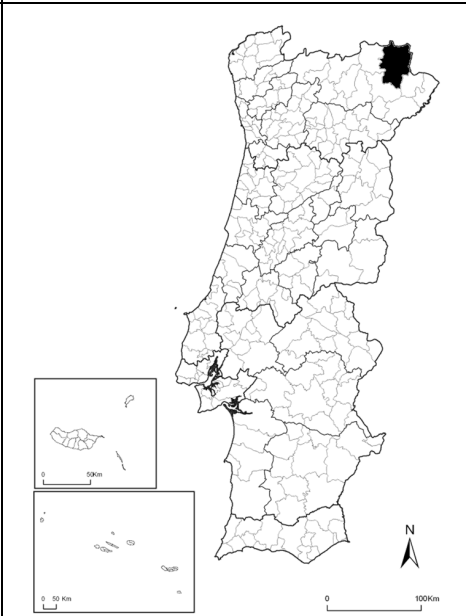


Fig. 112. Distribution map of *Aulacoseira* sp.

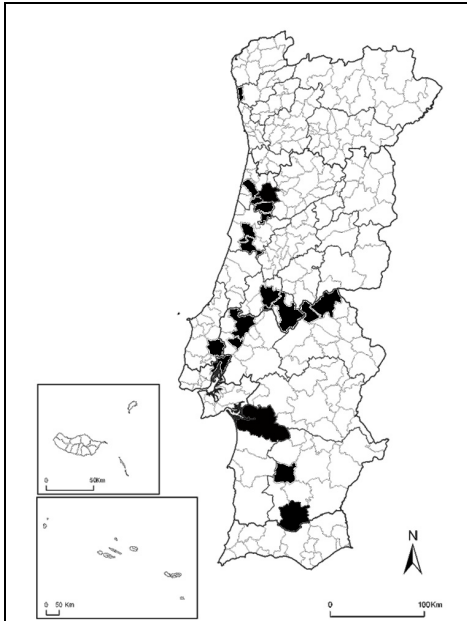


Fig. 113. Distribution map of *Bacillaria paxillifera*

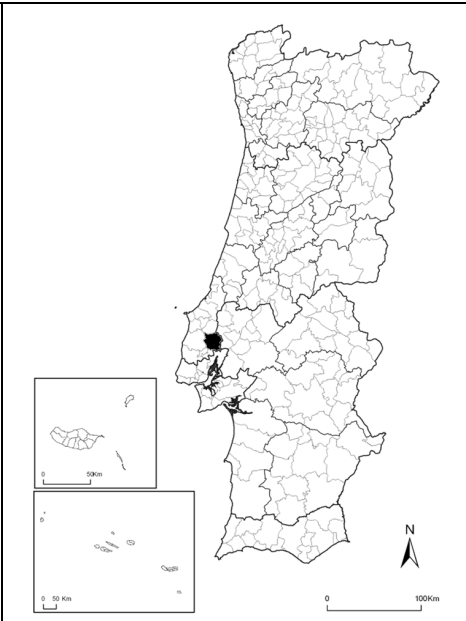


Fig. 114. Distribution map of *Bacillaria* sp.

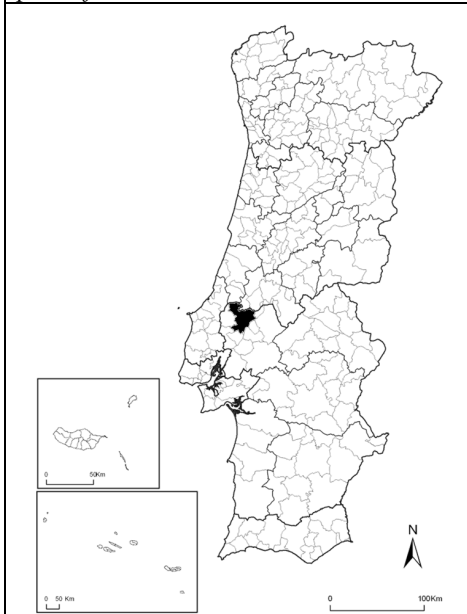


Fig. 115. Distribution map of *Belonastrum berolinensis*

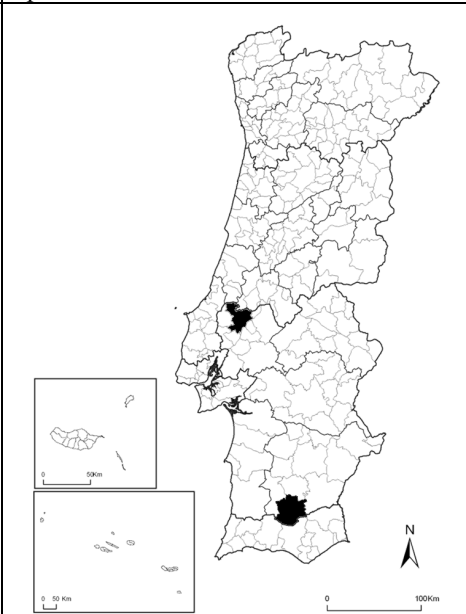


Fig. 116. Distribution map of *Bidulphia* sp.

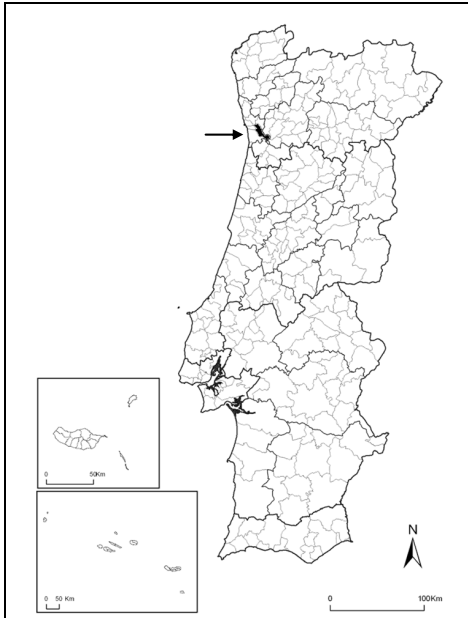


Fig. 117. Distribution map of *Biremis zachariasii*

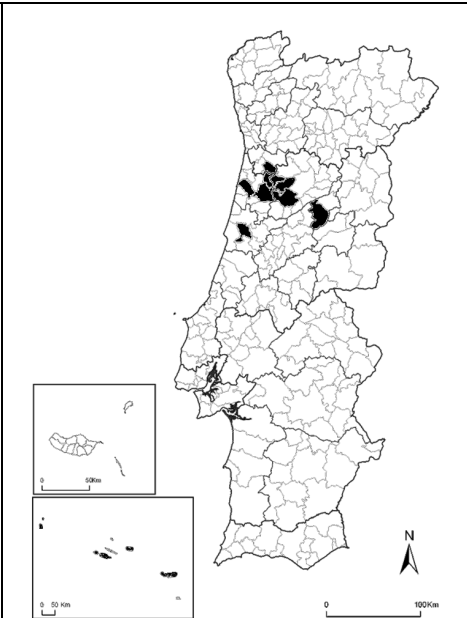


Fig. 118. Distribution map of *Brachysira brebissonii*

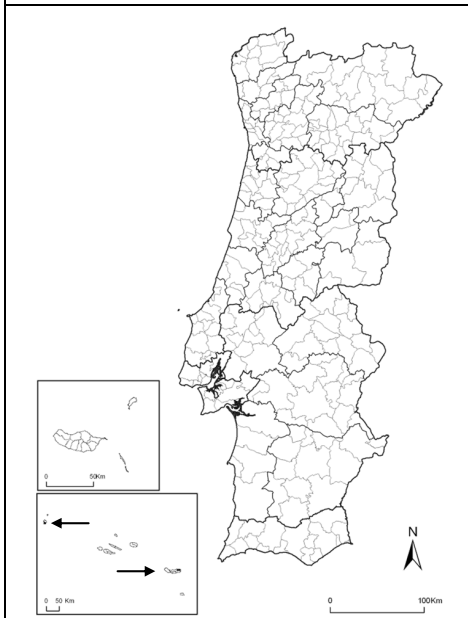


Fig. 119. Distribution map of *Brachysira brebissonii* f. *thermalis*

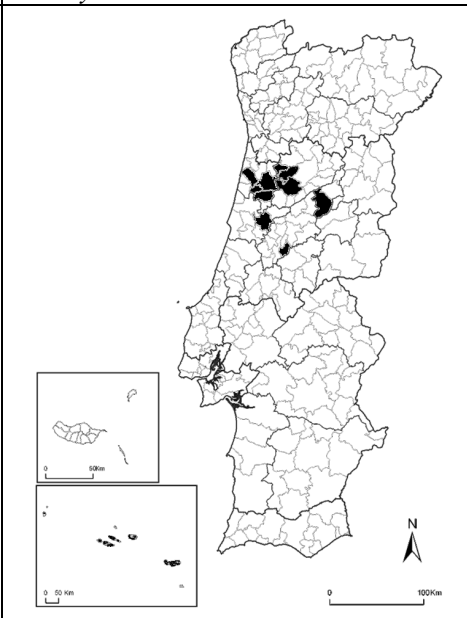


Fig. 120. Distribution map of *Brachysira exilis*

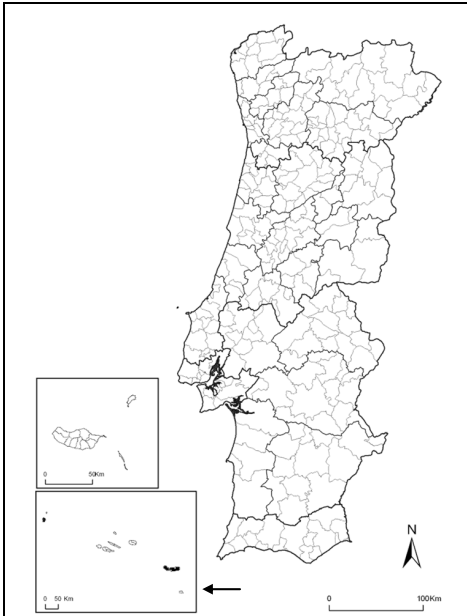


Fig. 121. Distribution map of *Brachysira liliana*

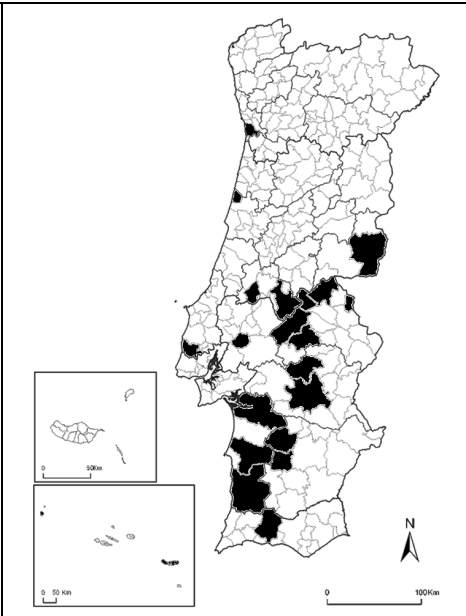


Fig. 122. Distribution map of *Brachysira microcephala*

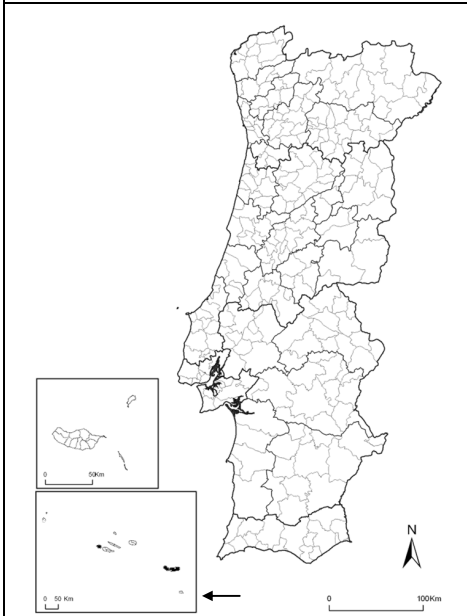


Fig. 123. Distribution map of *Brachysira procera*

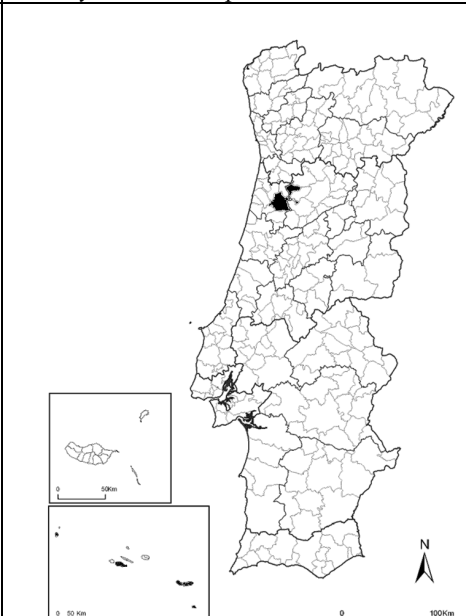


Fig. 124. Distribution map of *Brachysira serians*

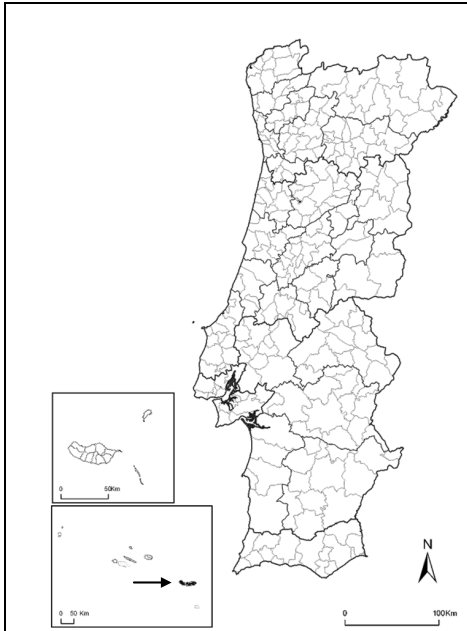


Fig. 125. Distribution map of *Brachysira spectabilis*

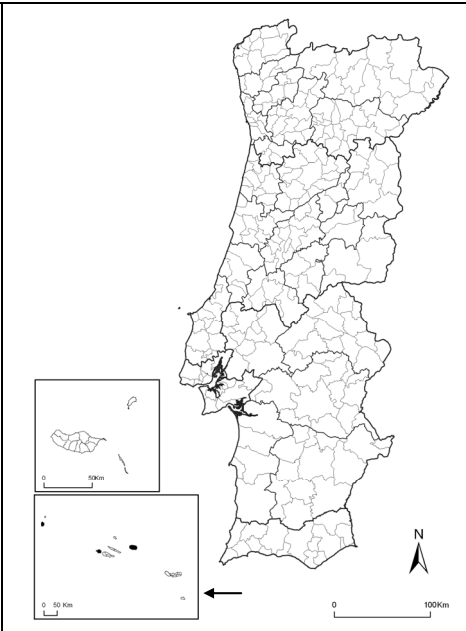


Fig. 126. Distribution map of *Brachysira styriaca*

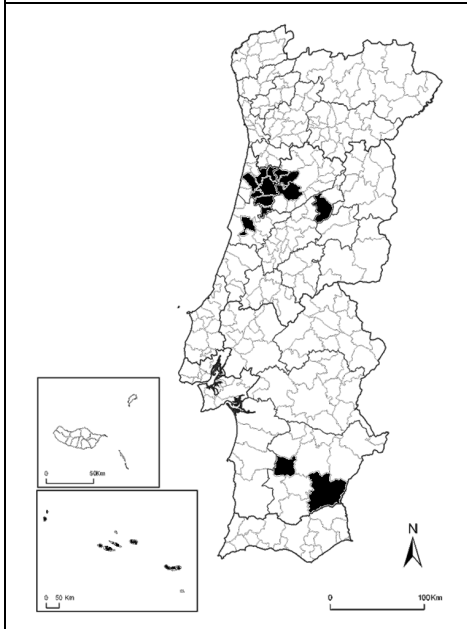


Fig. 127. Distribution map of *Brachysira vitrea*

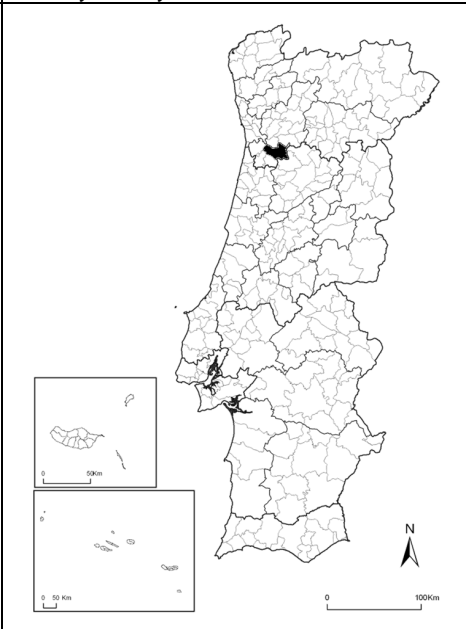


Fig. 128. Distribution map of *Brachysira zellensis*

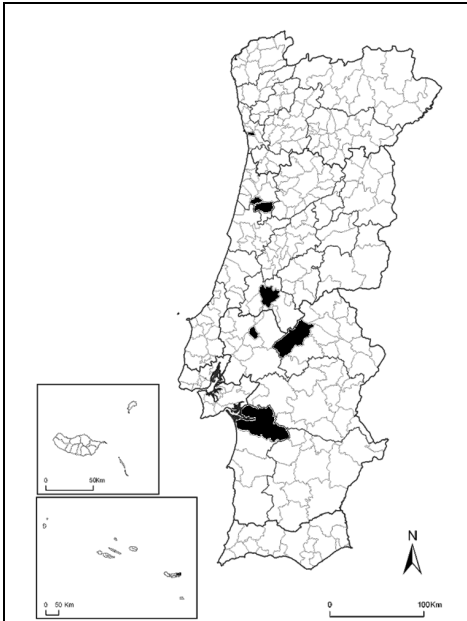


Fig. 129. Distribution map of *Caloneis amphisbaena*

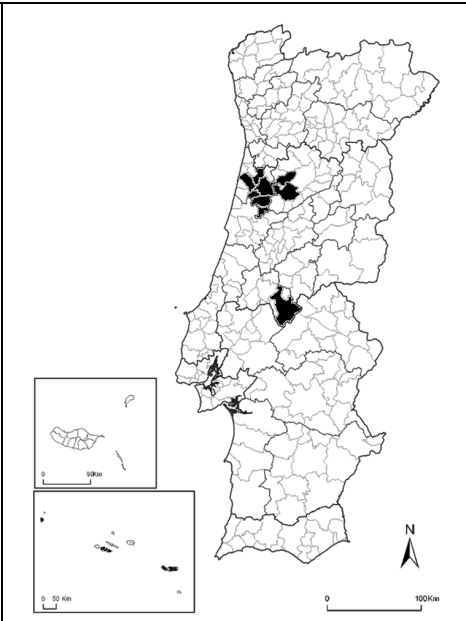


Fig. 130. Distribution map of *Caloneis bacillum*

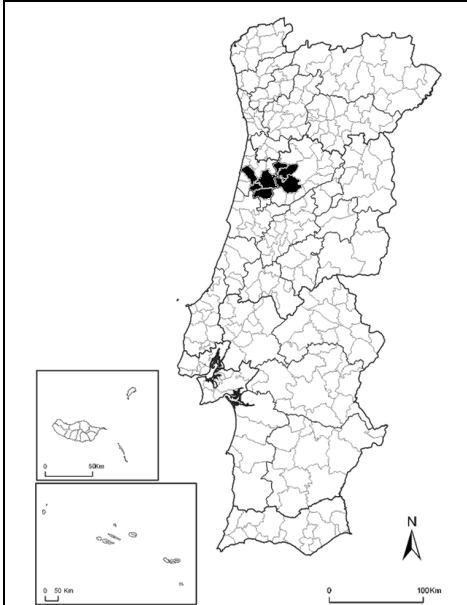


Fig. 131. Distribution map of *Caloneis bacillum* var. *fontinalis*

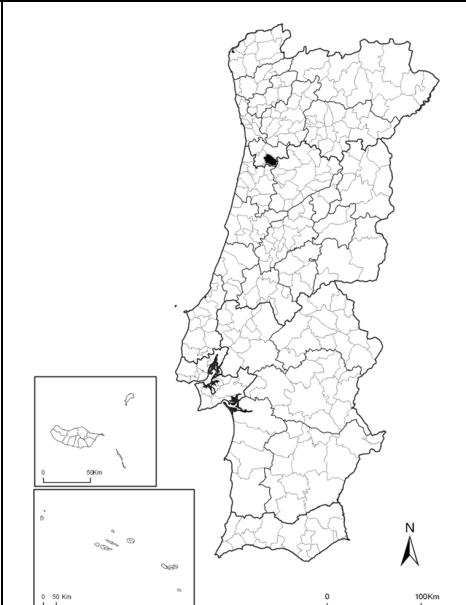


Fig. 132. Distribution map of *Caloneis branderii*

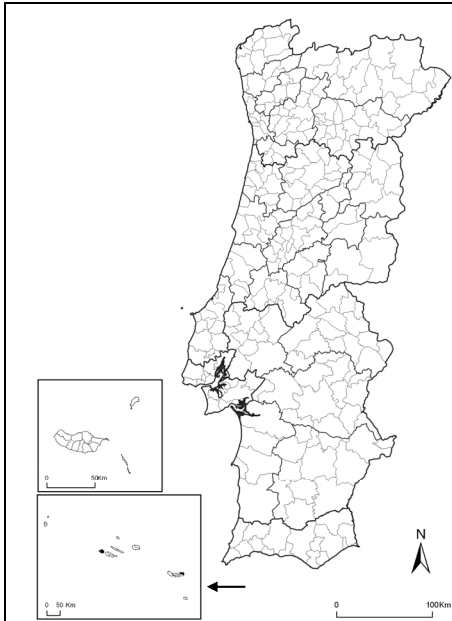


Fig. 133. Distribution map of *Caloneis clevei* var. *undulata* f. *inaequalis*

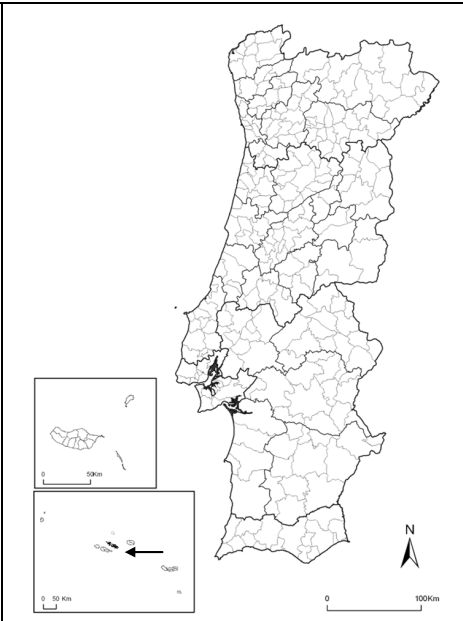


Fig. 134. Distribution map of *Caloneis dubia*

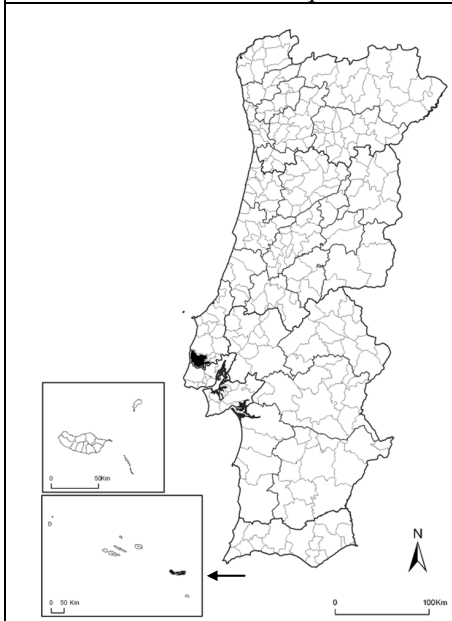


Fig. 135. Distribution map of *Caloneis fontinalis*

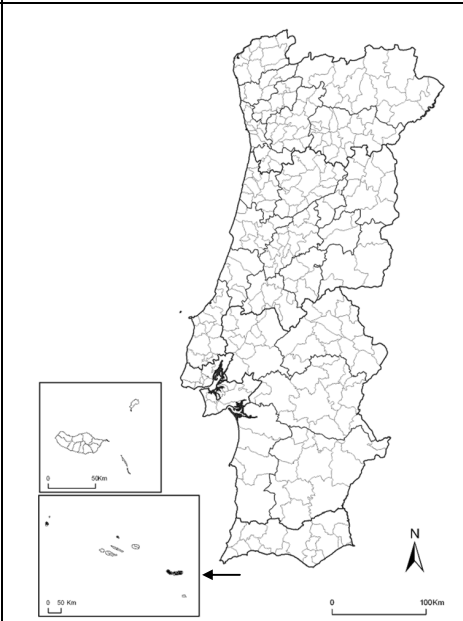


Fig. 136. Distribution map of *Caloneis hyalina*

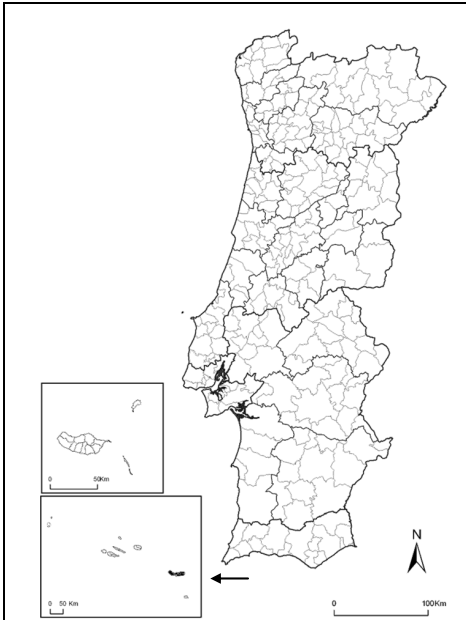


Fig. 137. Distribution map of *Caloneis lagerstedtii*

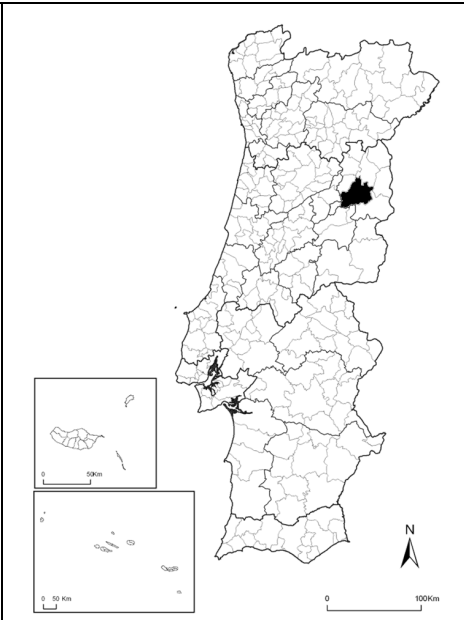


Fig. 138. Distribution map of *Caloneis lepidula*

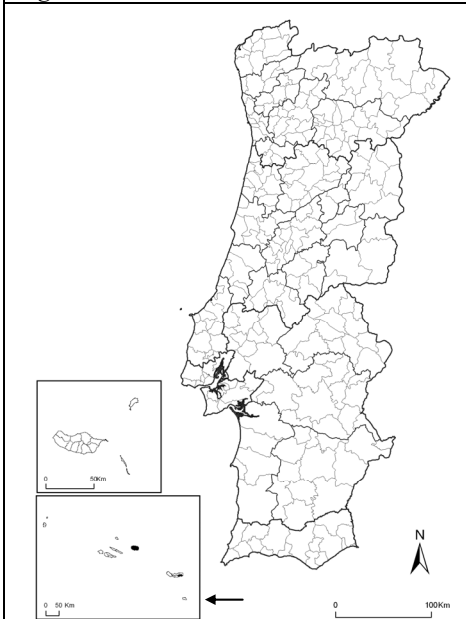


Fig. 139. Distribution map of *Caloneis leptosoma*

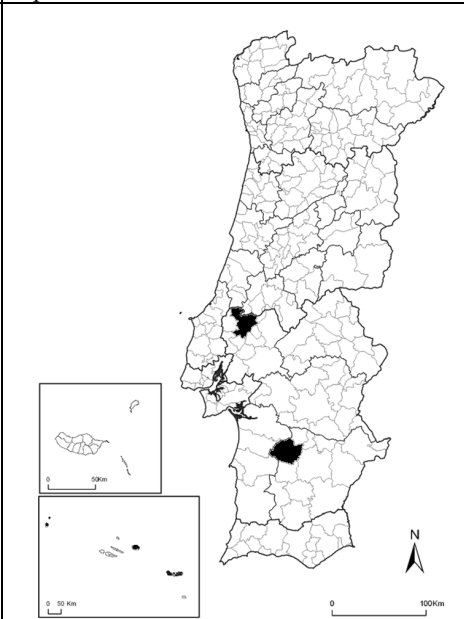


Fig. 140. Distribution map of *Caloneis molaris*

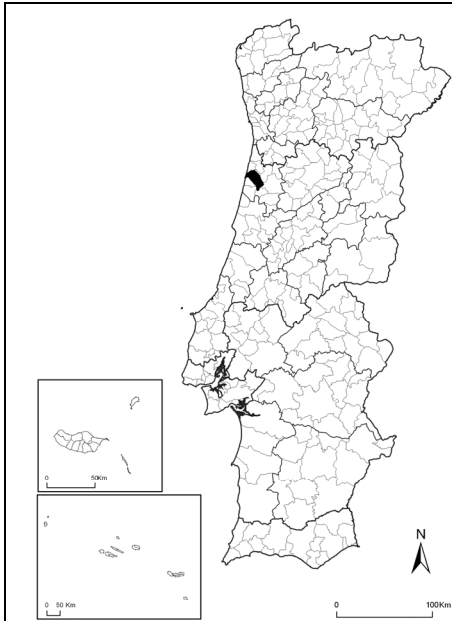


Fig. 141. Distribution map of *Caloneis permagna*

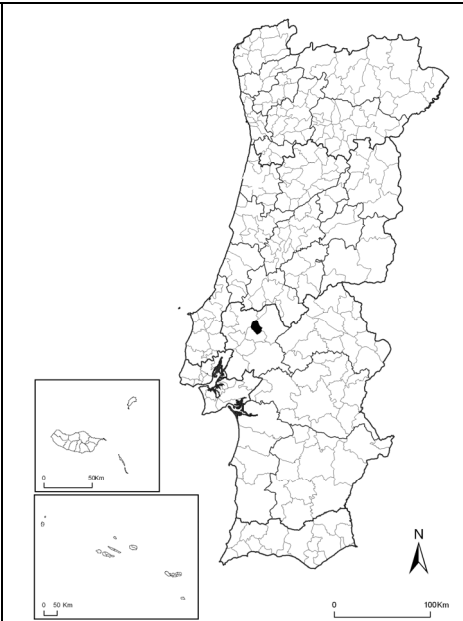


Fig. 142. Distribution map of *Caloneis pulchra*

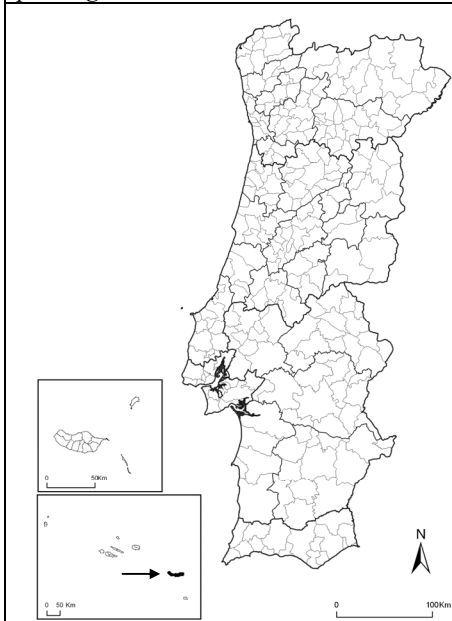


Fig. 143. Distribution map of *Caloneis schumanniana*

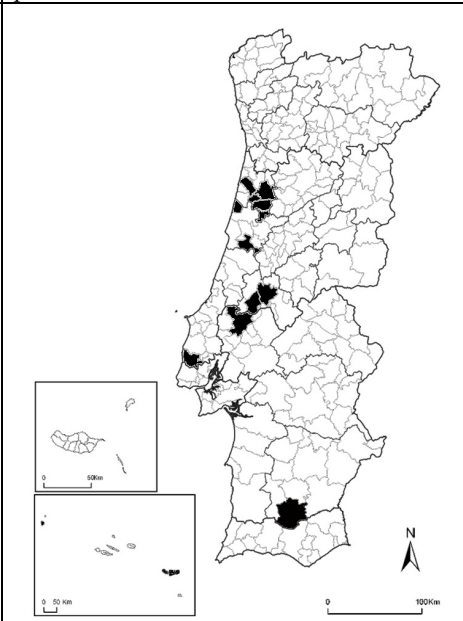


Fig. 144. Distribution map of *Caloneis silicula*

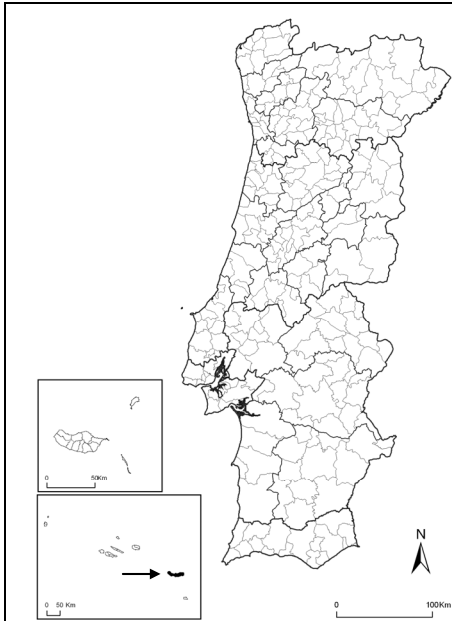


Fig. 145. Distribution map of *Caloneis silicula* f. *alpina*

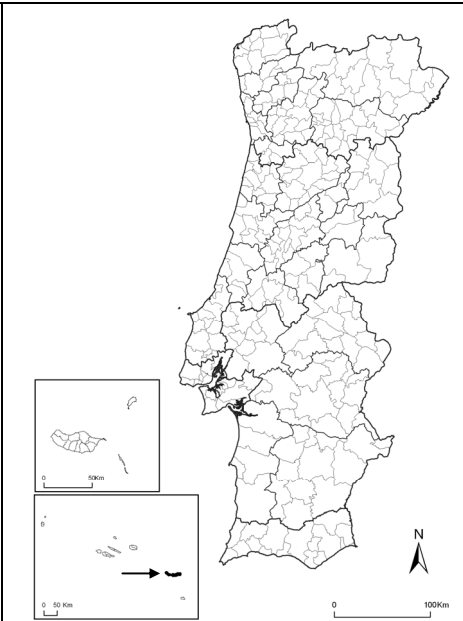


Fig. 146. Distribution map of *Caloneis silicula* var. *genuina*

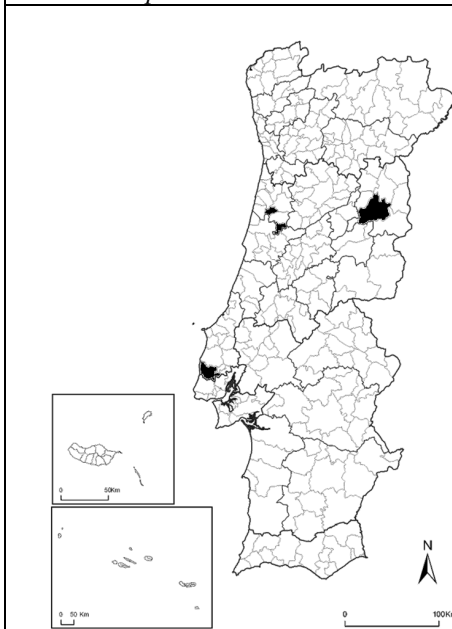


Fig. 147. Distribution map of *Caloneis silicula* var. *gibberula*

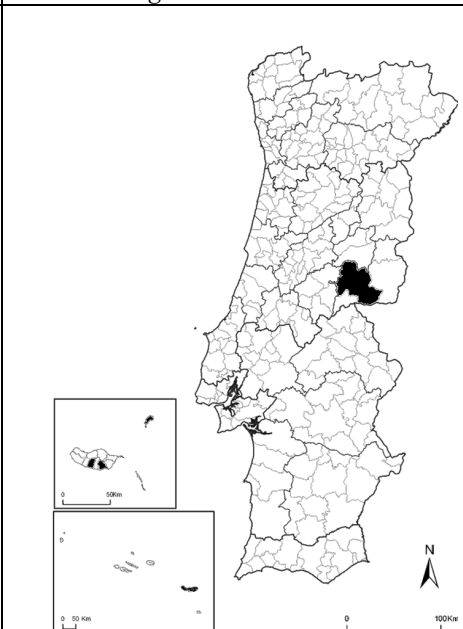


Fig. 148. Distribution map of *Caloneis silicula* var. *limosa*

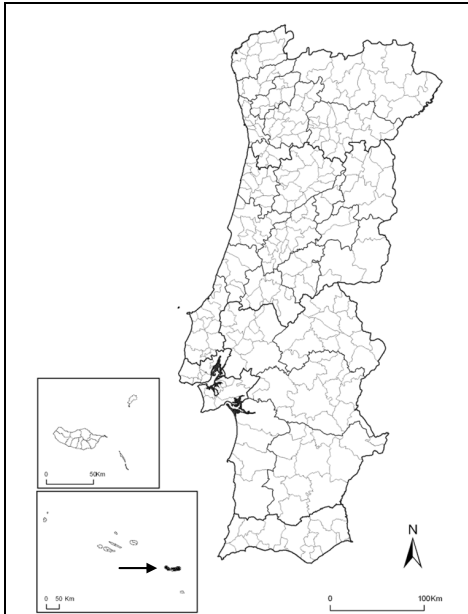


Fig. 149. Distribution map of *Caloneis thermalis*

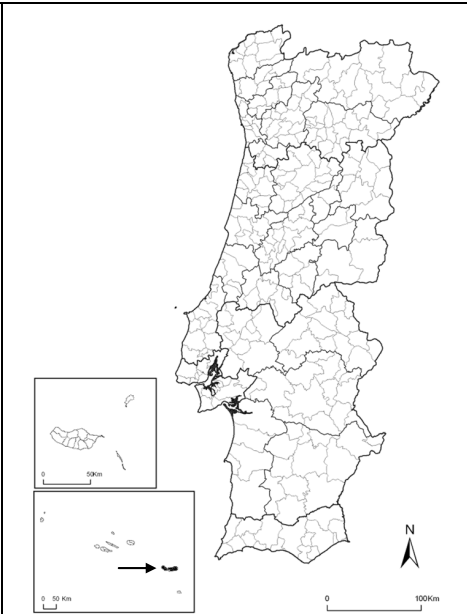


Fig. 150. Distribution map of *Caloneis undosa*

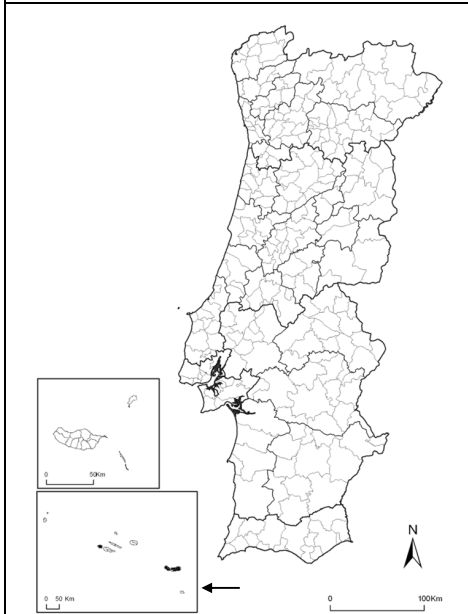


Fig. 151. Distribution map of *Caloneis undulatiformis*

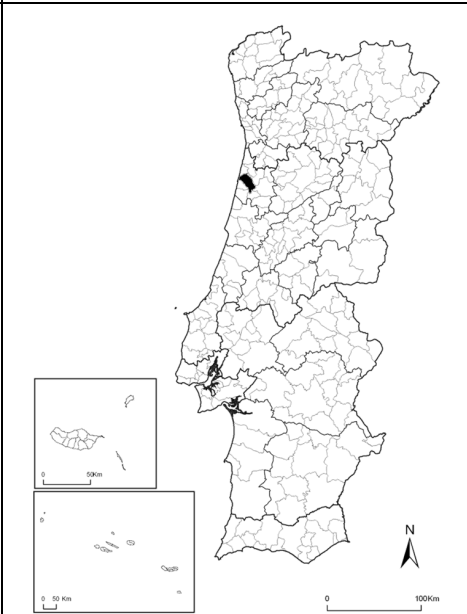


Fig. 152. Distribution map of *Caloneis ventricosa*

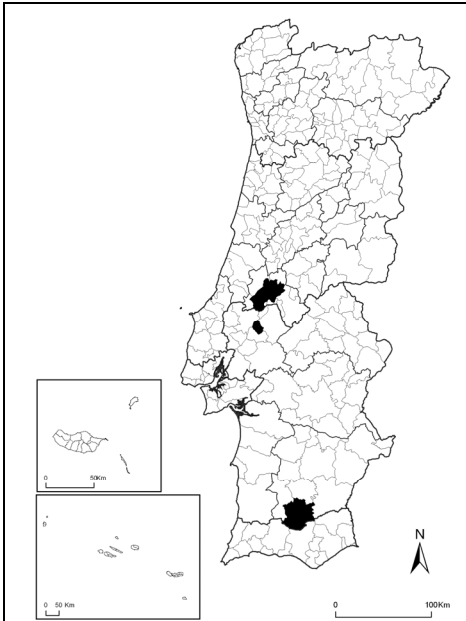


Fig. 153. Distribution map of *Caloneis* sp.

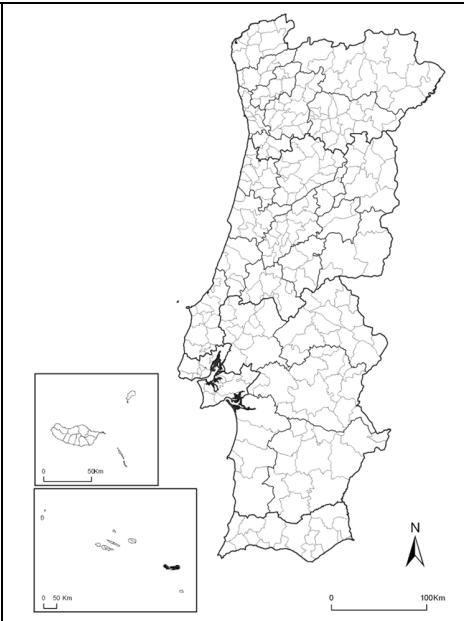


Fig. 154. Distribution map of *Campylodiscus costatus*

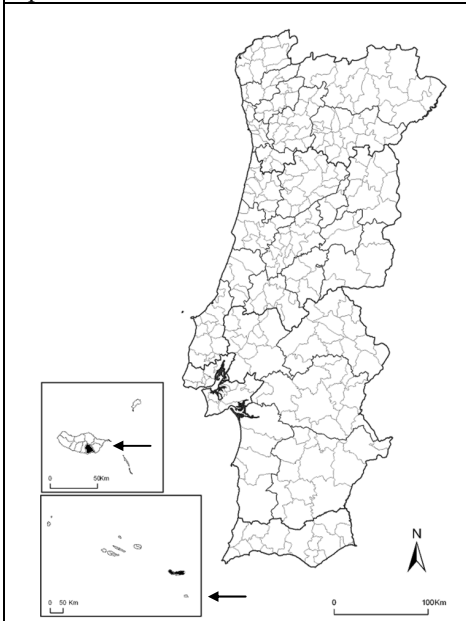


Fig. 155. Distribution map of *Campylodiscus hibernicus*

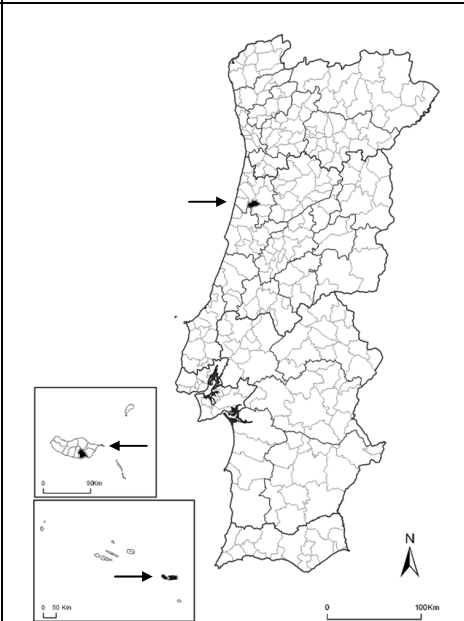


Fig. 156. Distribution map of *Campylodiscus noricus*

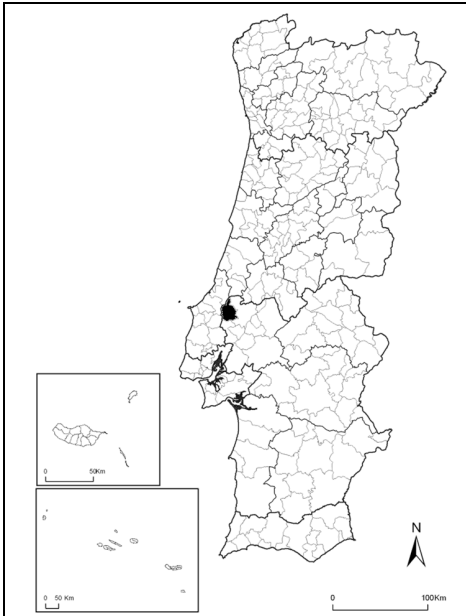


Fig. 157. Distribution map of *Campylosira cymbelliformis*

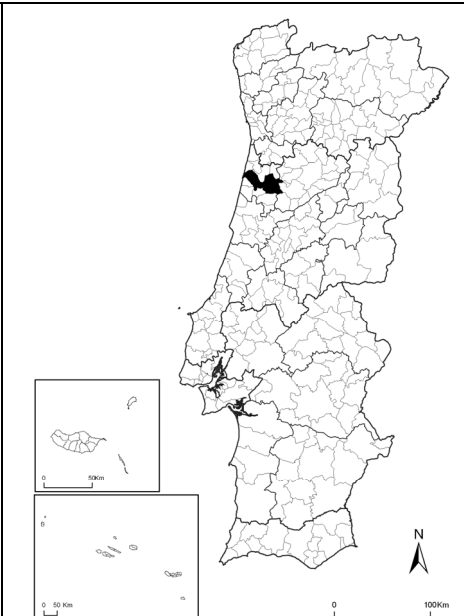


Fig. 158. Distribution map of *Capartogramma crucicula*

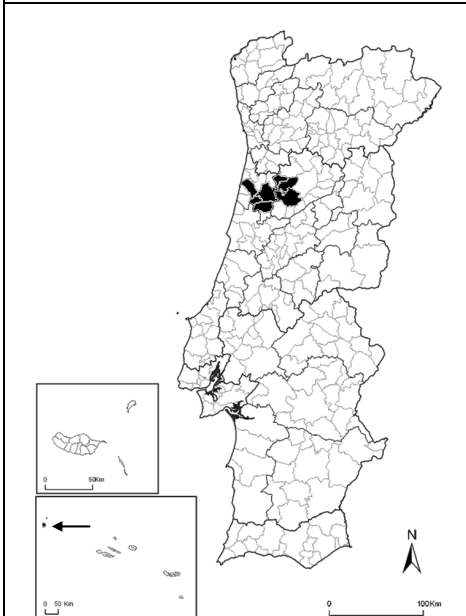


Fig. 159. Distribution map of *Cavinula cocconeiformis*

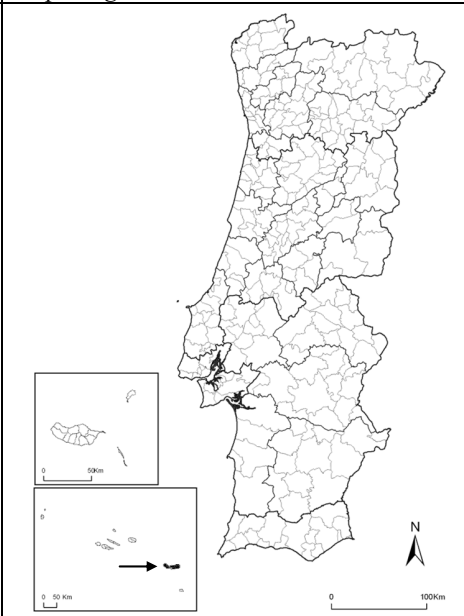


Fig. 160. Distribution map of *Cavinula jaernefeltii*

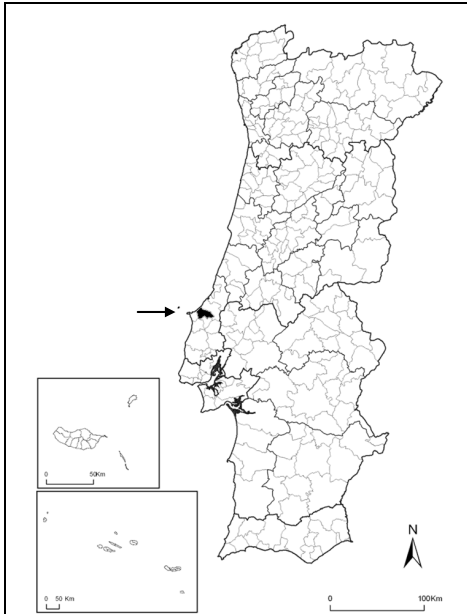


Fig. 161. Distribution map of *Cavinula lacustris*

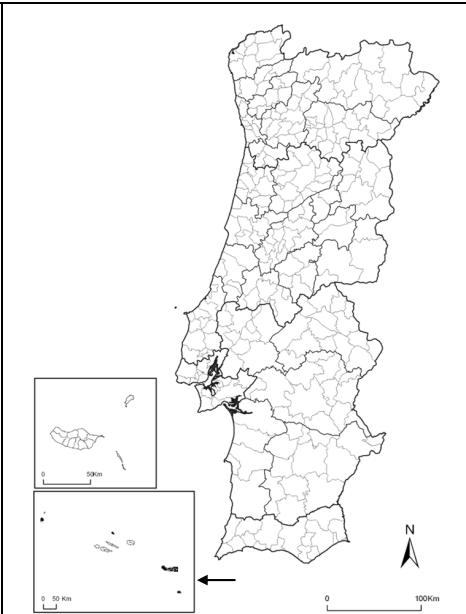


Fig. 162. Distribution map of *Cavinula lapidosa*

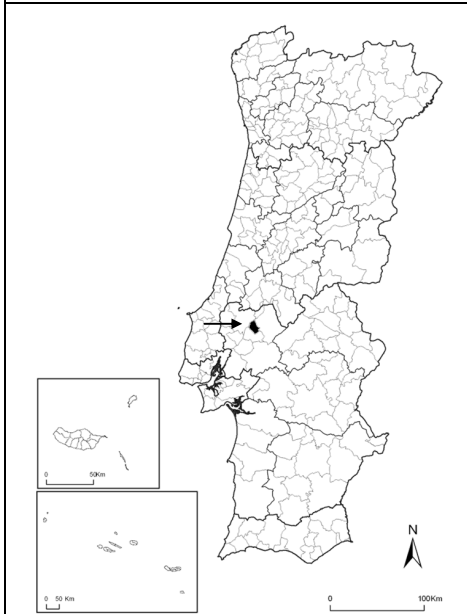


Fig. 163. Distribution map of *Cavinula scutiformis*

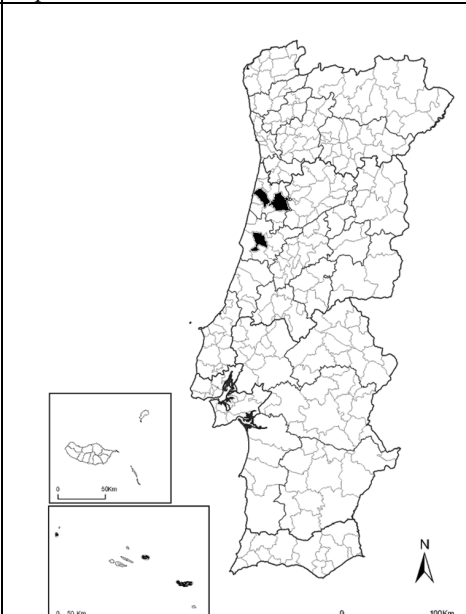


Fig. 164. Distribution map of *Cavinula variostrata*

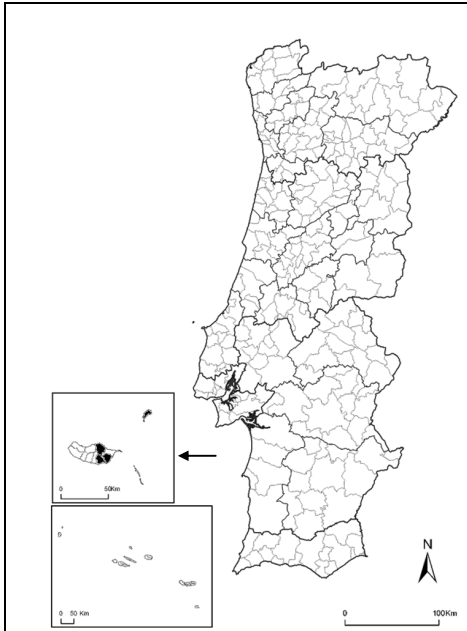


Fig. 165. Distribution map of *Cerataulus thermalis*

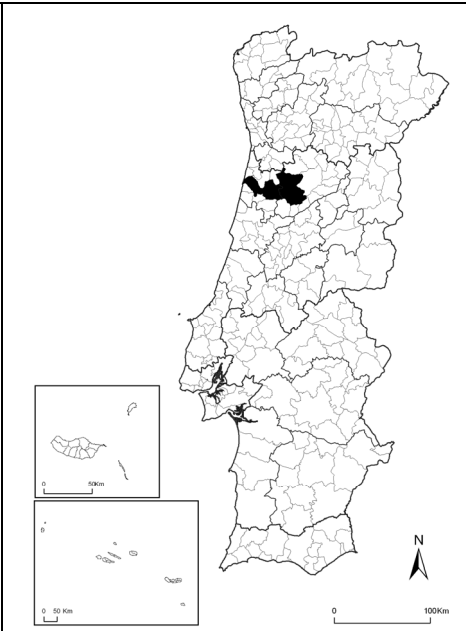


Fig. 166. Distribution map of *Ceratoneis arcus* var. *amphioxys*

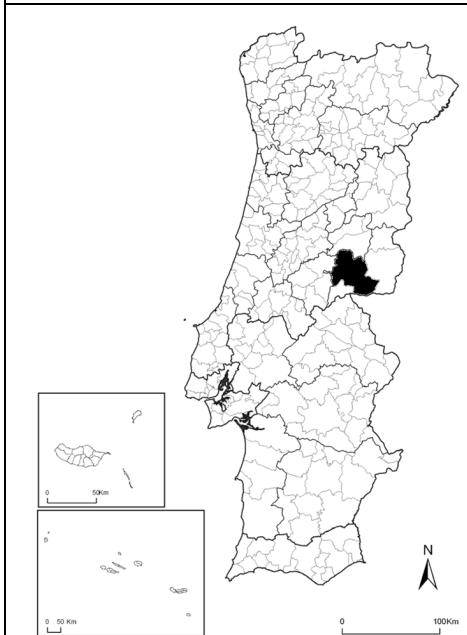


Fig. 167. Distribution map of *Ceratoneis arcus* f. *arcuata*

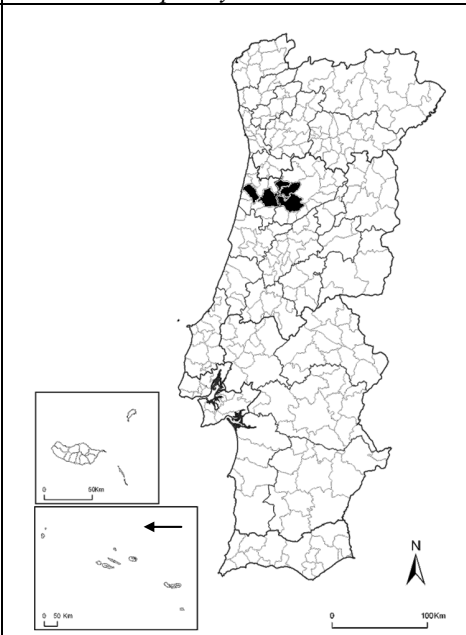


Fig. 168. Distribution map of *Ceratoneis arcus* var. *linearis*

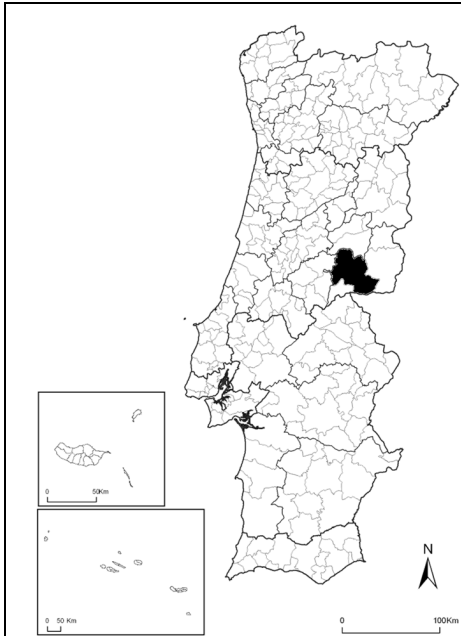


Fig. 169. Distribution map of *Ceratoneis arcus* f. *semirecta*

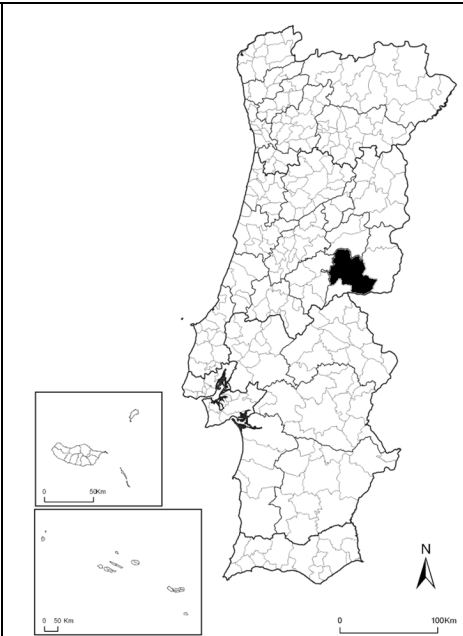


Fig. 170. Distribution map of *Ceratoneis arcus* f. *trigibba*

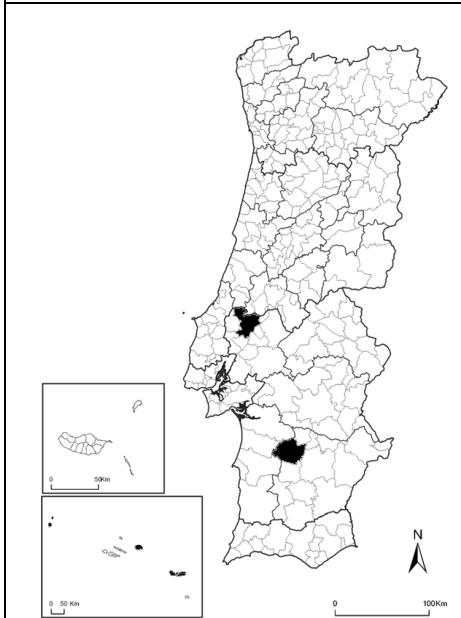


Fig. 171. Distribution map of *Chaetoceros* sp.

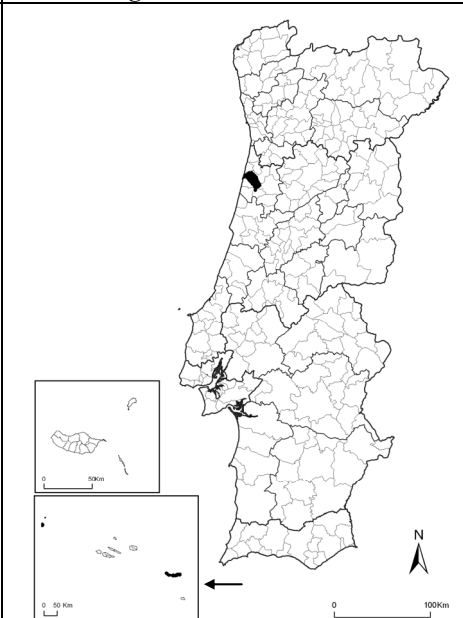


Fig. 172. Distribution map of *Chamaepinnularia evanida*

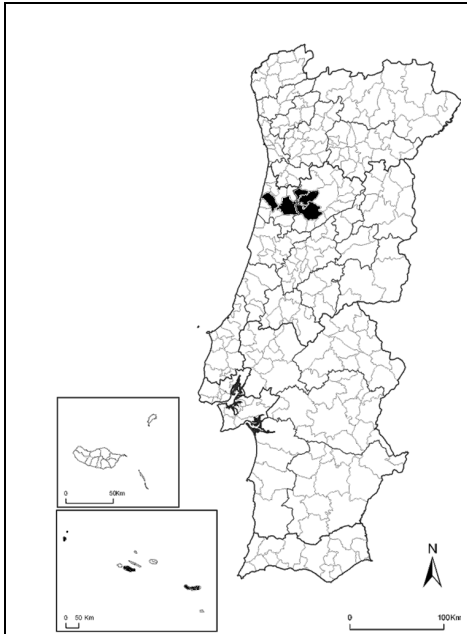


Fig. 173. Distribution map of *Chamaepinnularia mediocris*

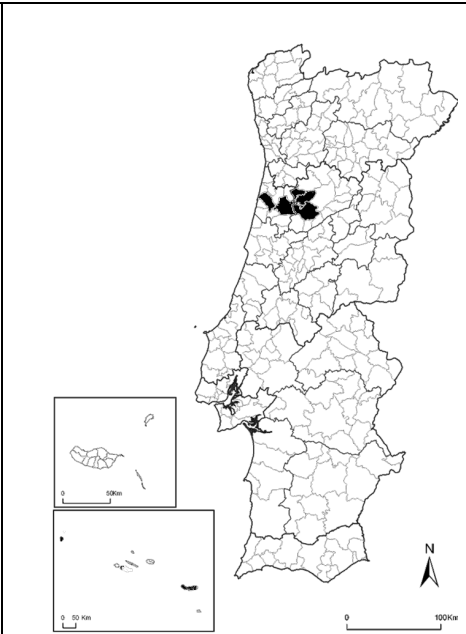


Fig. 174. Distribution map of *Chamaepinnularia soehrensensis*

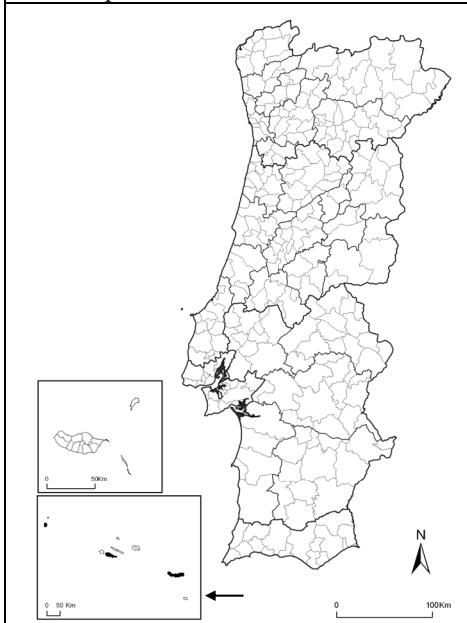


Fig. 175. Distribution map of *Chamaepinnularia submuscicola*

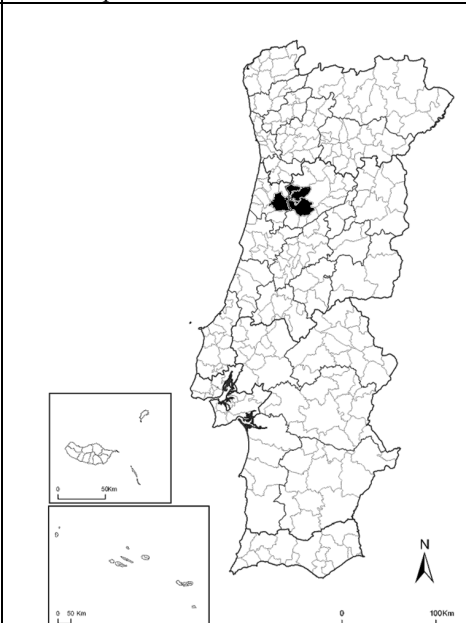


Fig. 176. Distribution map of *Cocconeis disculus*

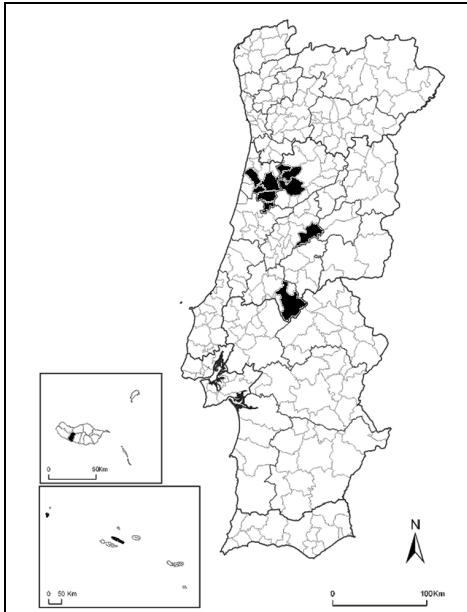


Fig. 177. Distribution map of *Cocconeis euglypta*

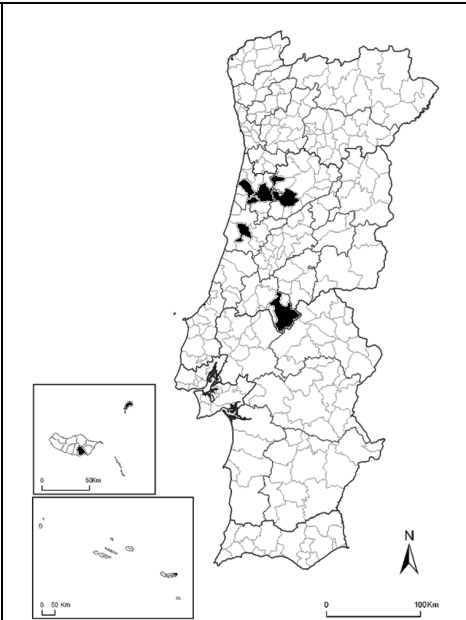


Fig. 178. Distribution map of *Cocconeis lineata*

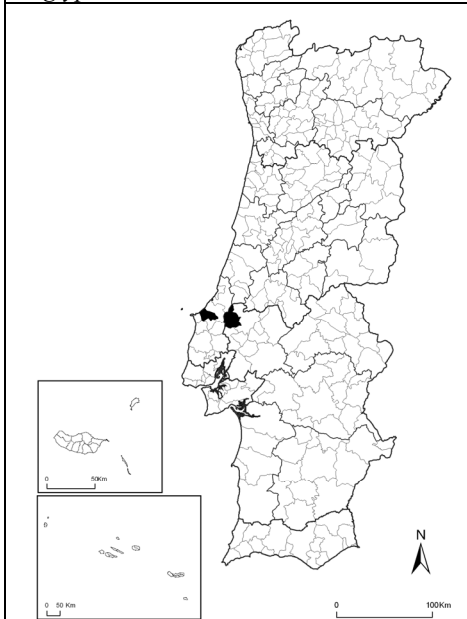


Fig. 179. Distribution map of *Cocconeis molesta*

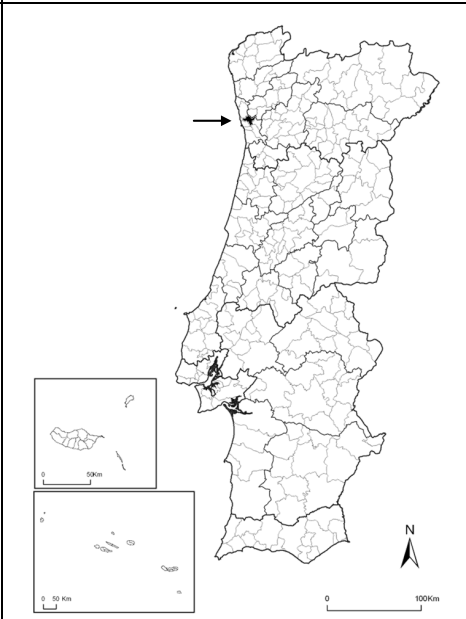


Fig. 180. Distribution map of *Cocconeis molesta* var. *amygdalina*

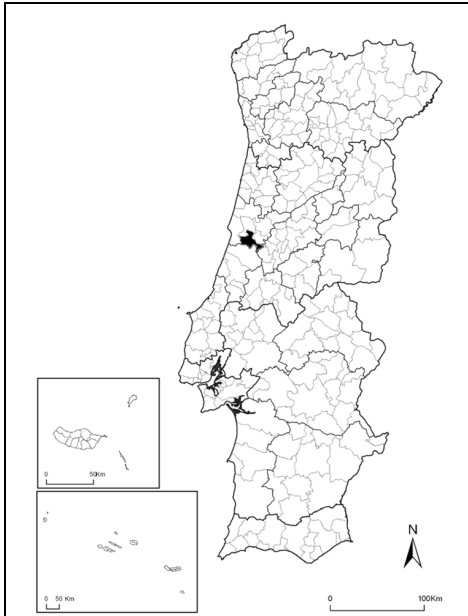


Fig. 181. Distribution map of *Cocconeis neodiminuta*

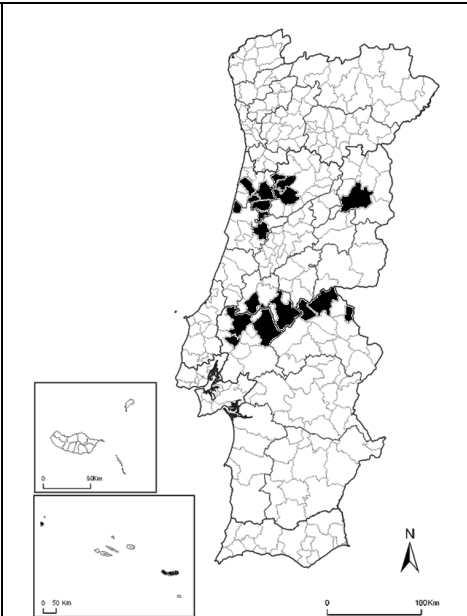


Fig. 182. Distribution map of *Cocconeis pediculus*

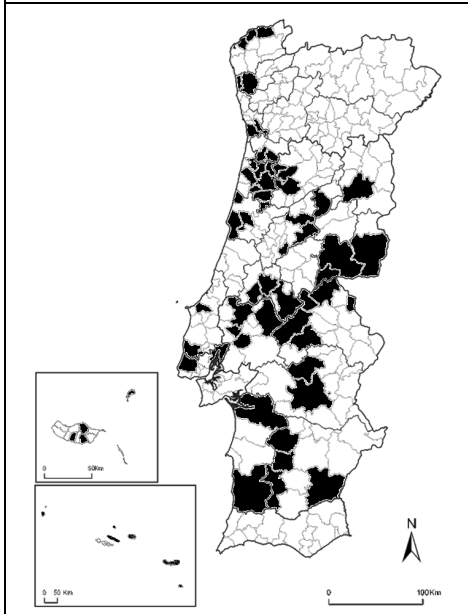


Fig. 183. Distribution map of *Cocconeis placentula*

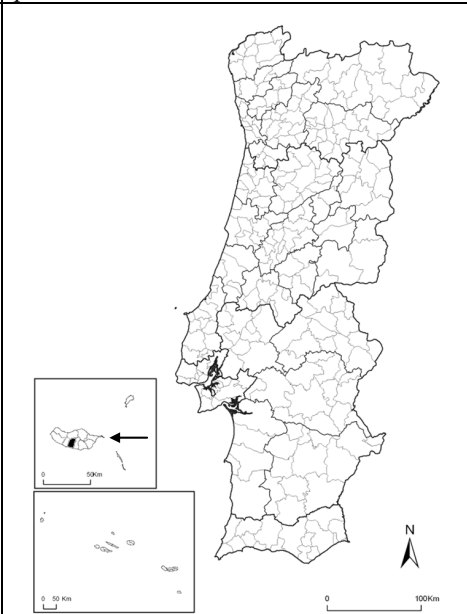


Fig. 184. Distribution map of *Cocconeis placentula* var. *klinoraphis*

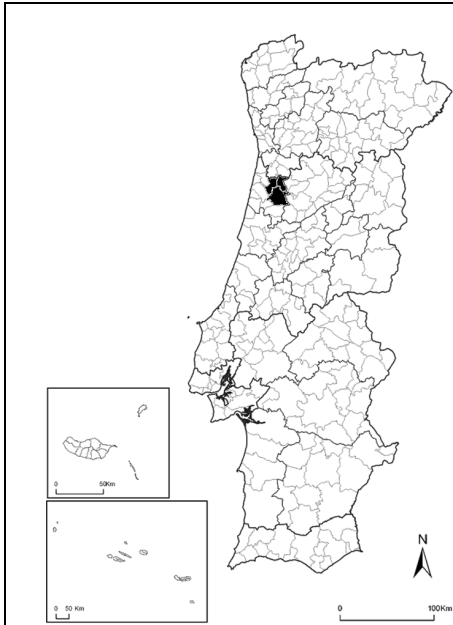


Fig. 185. Distribution map of *Cocconeis pseudolineata*

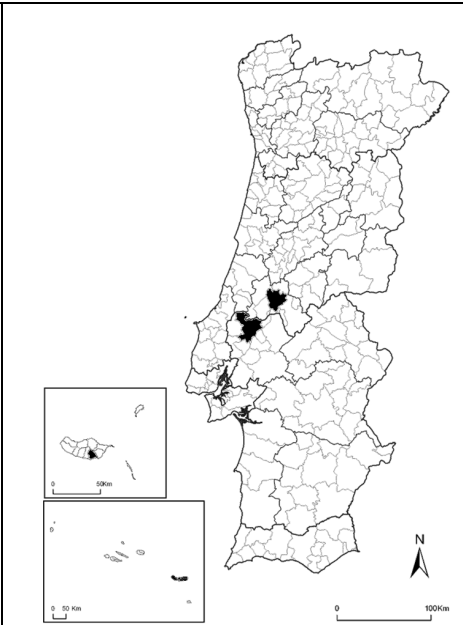


Fig. 186. Distribution map of *Cocconeis scutellum*

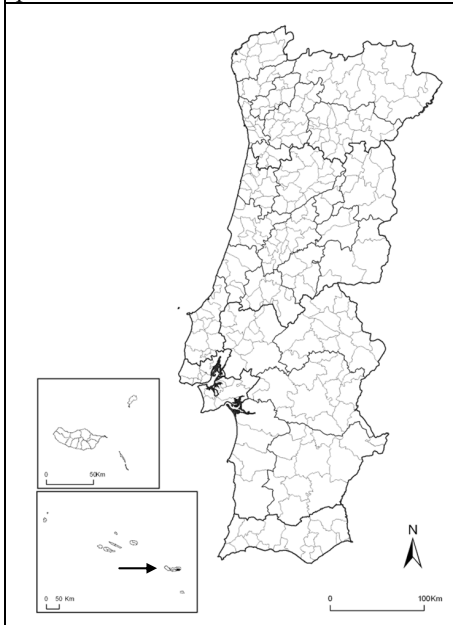


Fig. 187. Distribution map of *Cocconeis scutellum* var. *genuina*

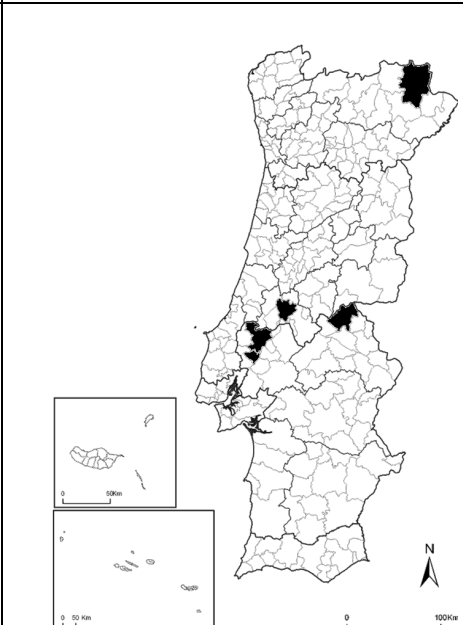


Fig. 188. Distribution map of *Cocconeis* sp.

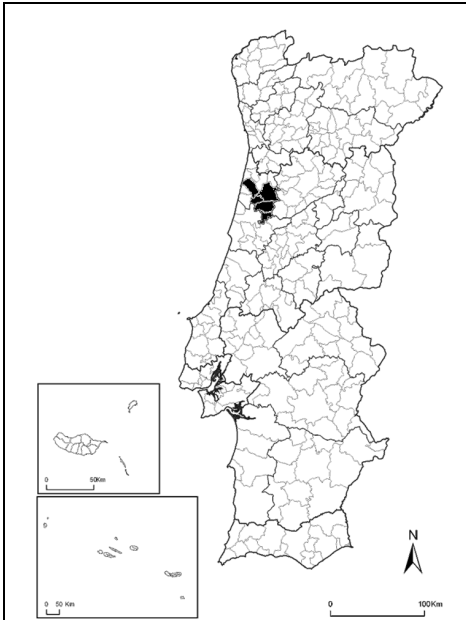


Fig. 189. Distribution map of *Conticribra weissflogii*

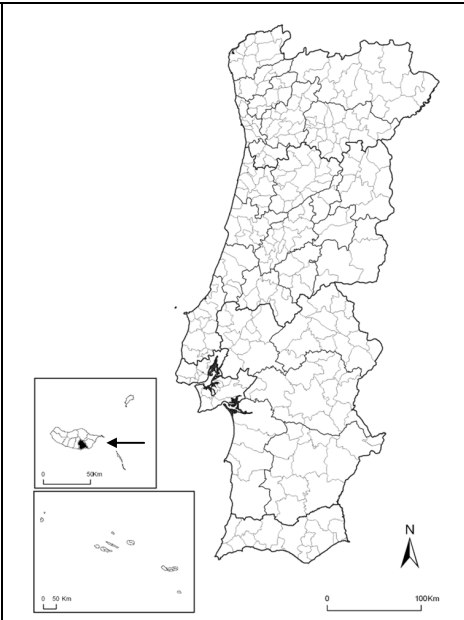


Fig. 190. Distribution map of *Coscinodiscus africanus*

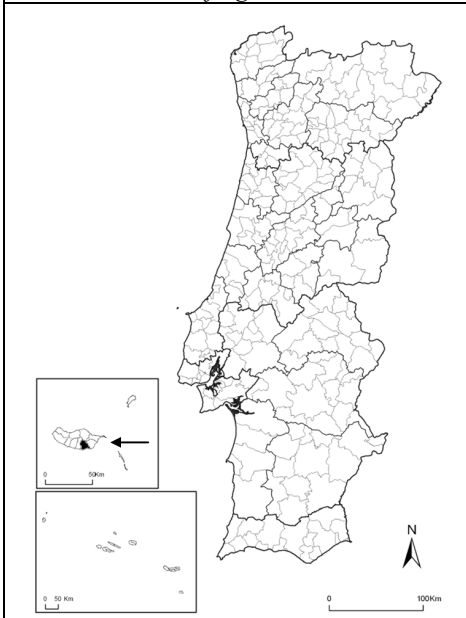


Fig. 191. Distribution map of *Coscinodiscus curvatulus*

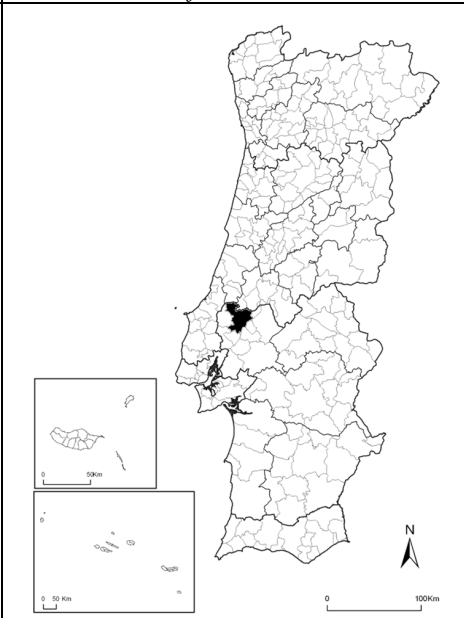


Fig. 192. Distribution map of *Coscinodiscus decipiens*

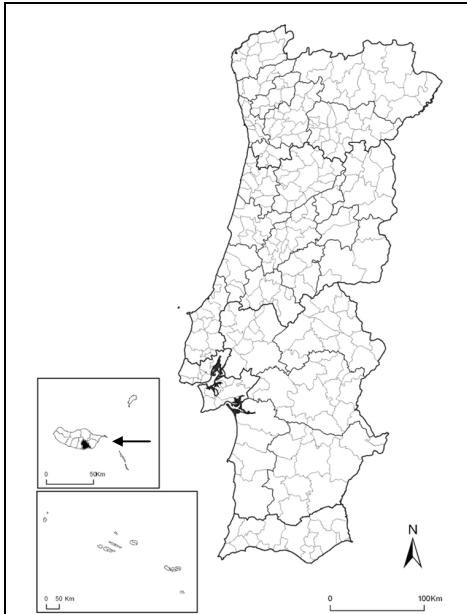


Fig. 193. Distribution map of *Coscinodiscus excentricus*

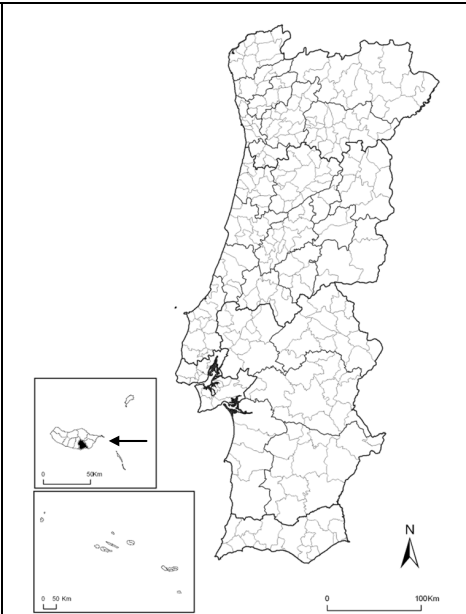


Fig. 194. Distribution map of *Coscinodiscus lineatus*

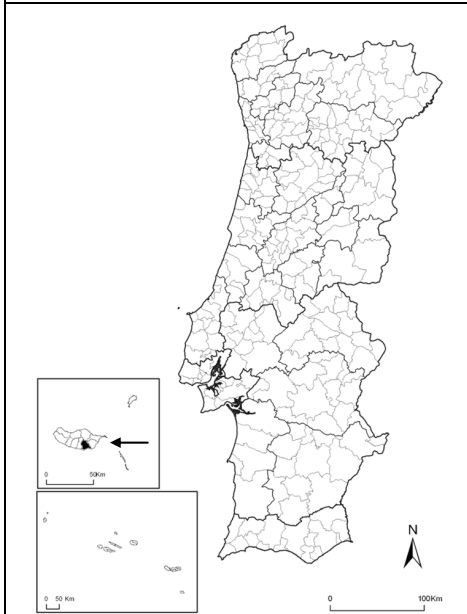


Fig. 195. Distribution map of *Coscinodiscus nodulifer*

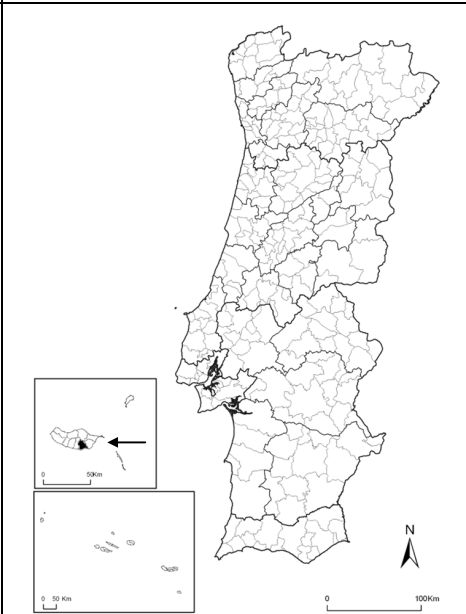


Fig. 196. Distribution map of *Coscinodiscus nodulifer* f. *minor*

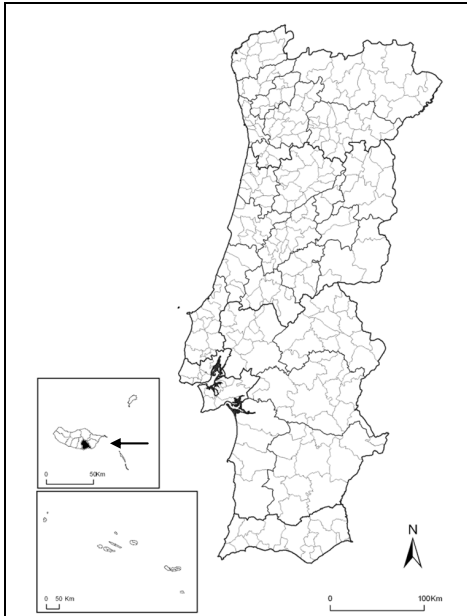


Fig. 197. Distribution map of *Coscinodiscus oculus-iridis*

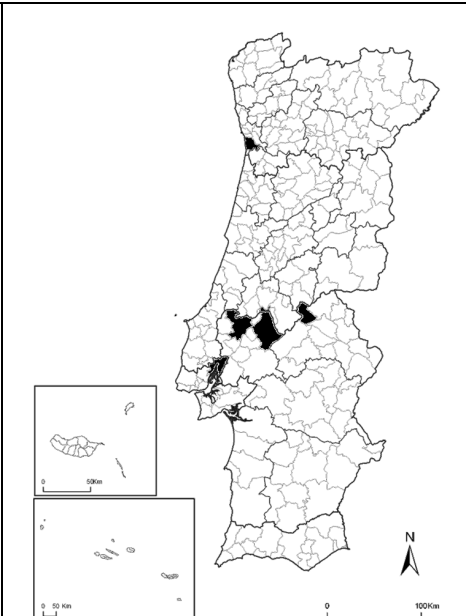


Fig. 198. Distribution map of *Coscinodiscus* sp.

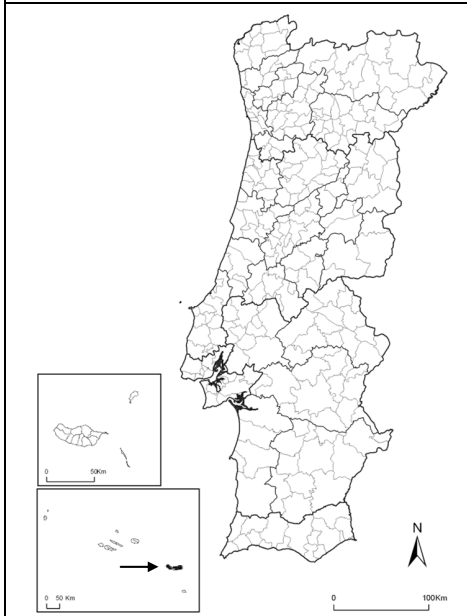


Fig. 199. Distribution map of *Cosmioneis incognita*

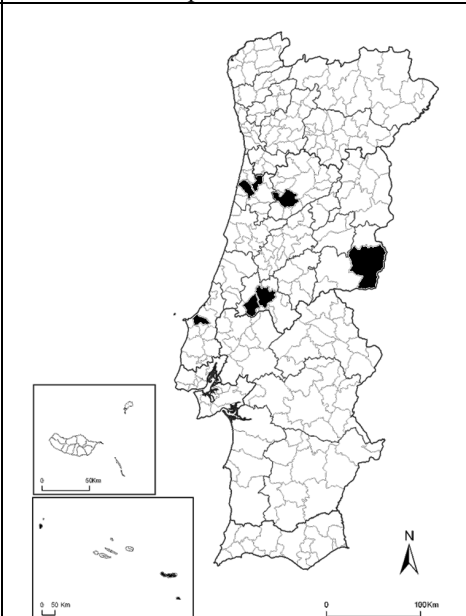


Fig. 200. Distribution map of *Cosmioneis pusilla*

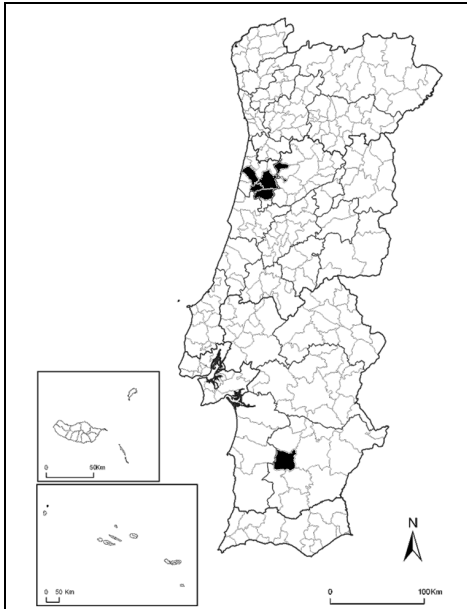


Fig. 201. Distribution map of *Craticula accomoda*

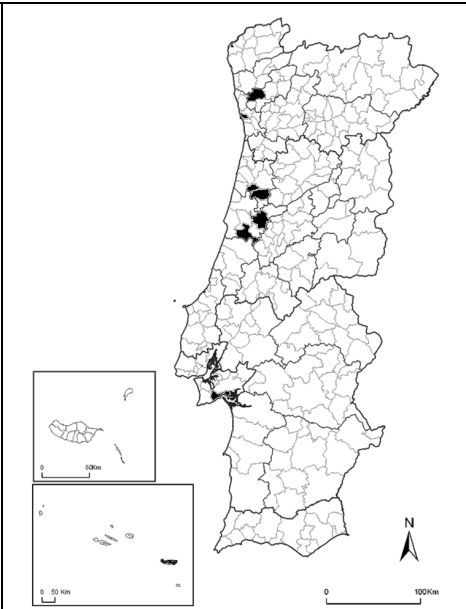


Fig. 202. Distribution map of *Craticula ambigua*

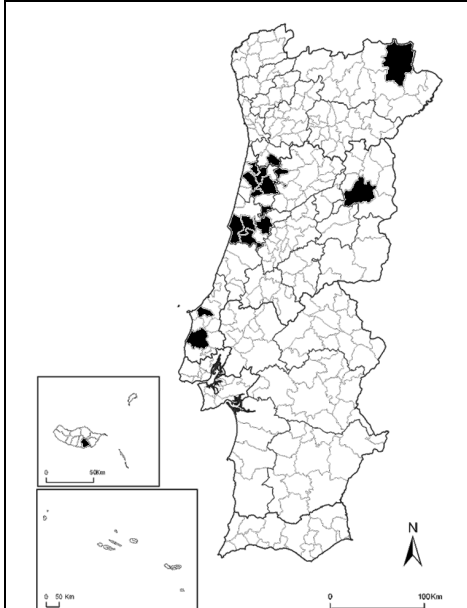


Fig. 203. Distribution map of *Craticula cuspidata*

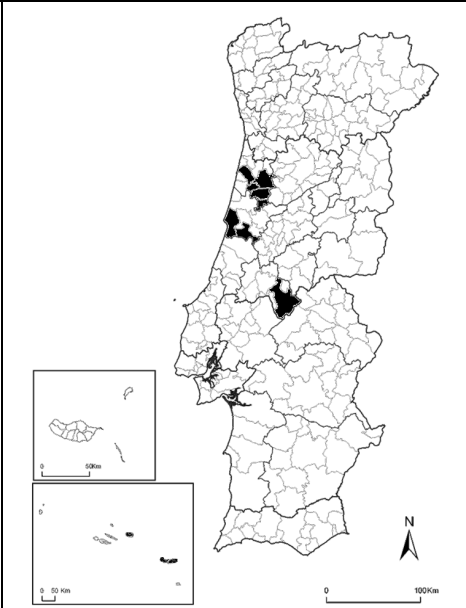


Fig. 204. Distribution map of *Craticula halophila*

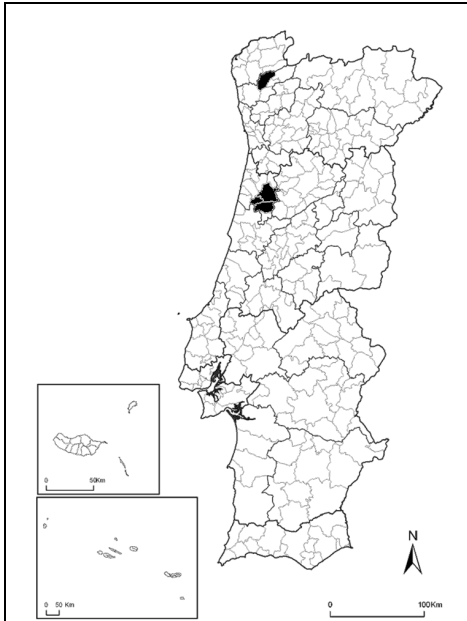


Fig. 205. Distribution map of *Craticula halophilioides*

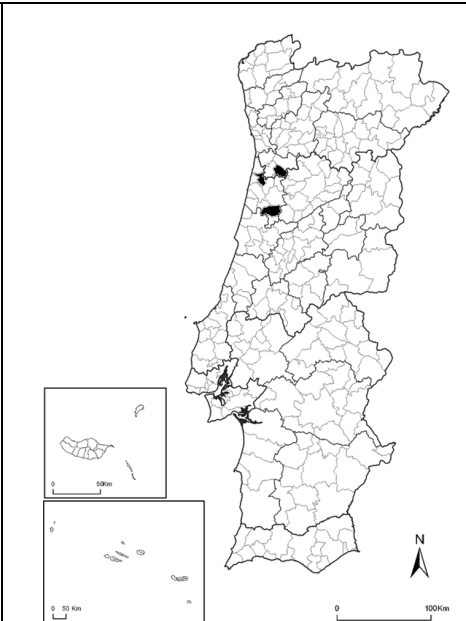


Fig. 206. Distribution map of *Craticula minusculoides*

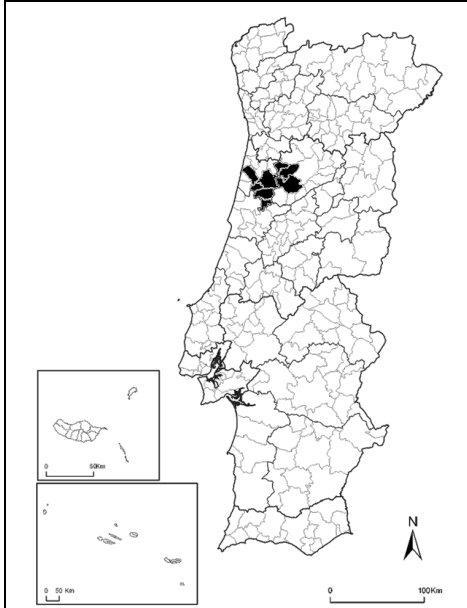


Fig. 207. Distribution map of *Craticula molesta*

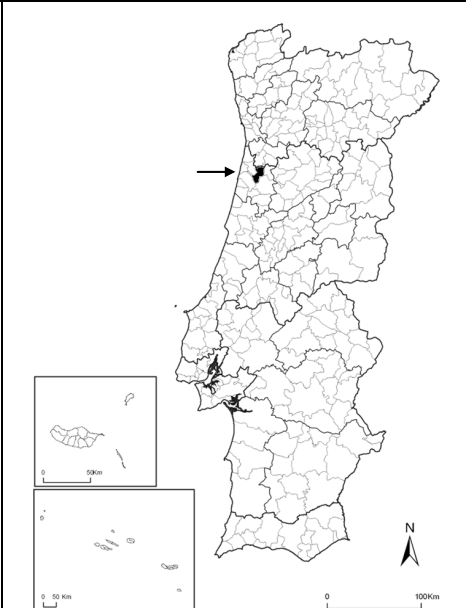


Fig. 208. Distribution map of *Craticula molestiformis*

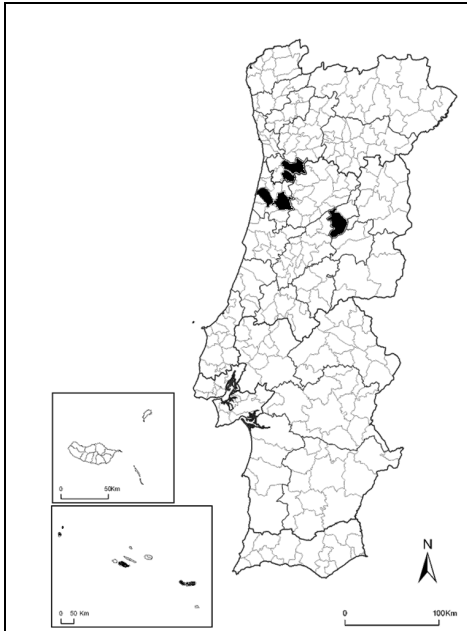


Fig. 209. Distribution map of *Craticula submolesta*

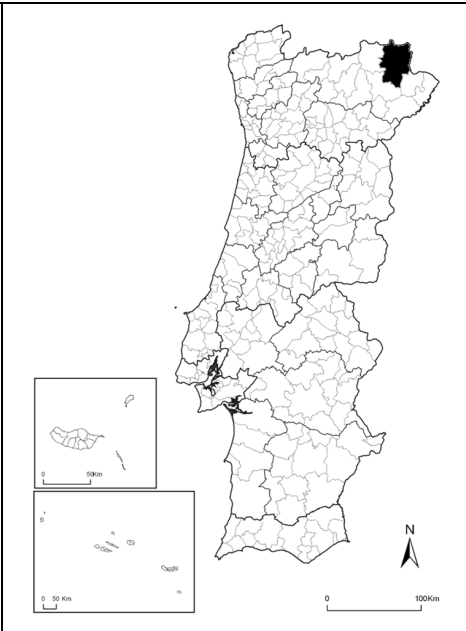


Fig. 210. Distribution map of *Craticula* sp.

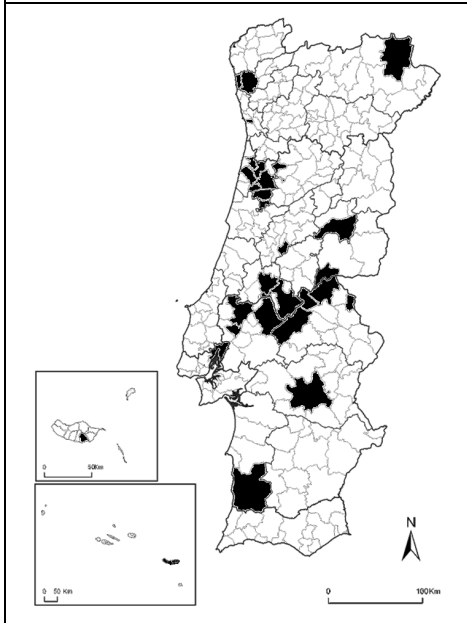


Fig. 211. Distribution map of *Ctenophora pulchella*

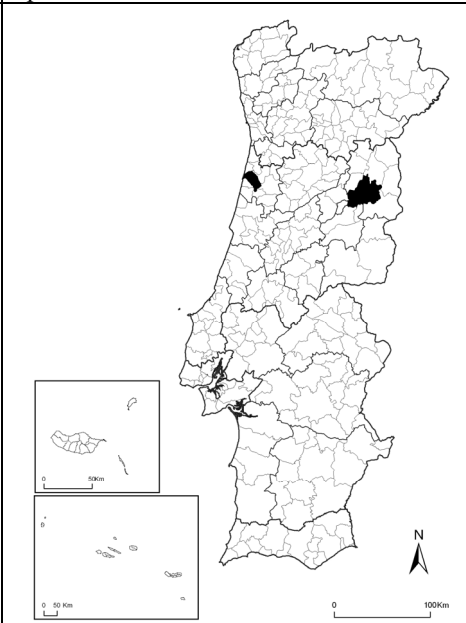


Fig. 212. Distribution map of *Ctenophora pulchella* var. *lanceolata*

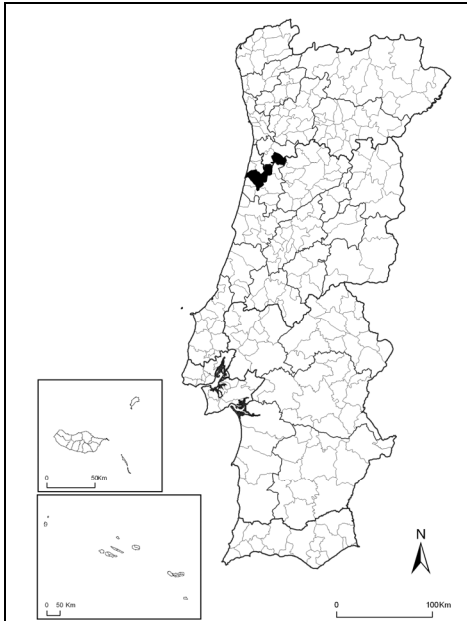


Fig. 213. Distribution map of *Cyclostephanos dubius*

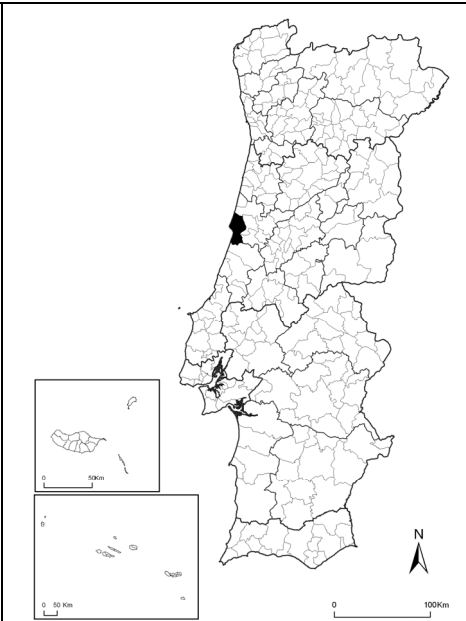


Fig. 214. Distribution map of *Cyclostephanos invisitatus*

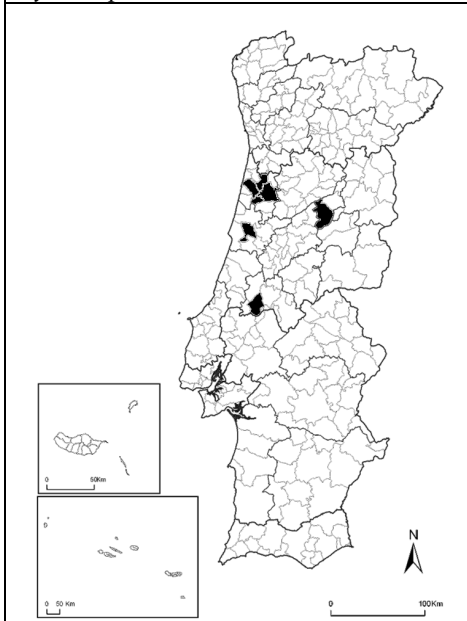


Fig. 215. Distribution map of *Cyclotella atomus*

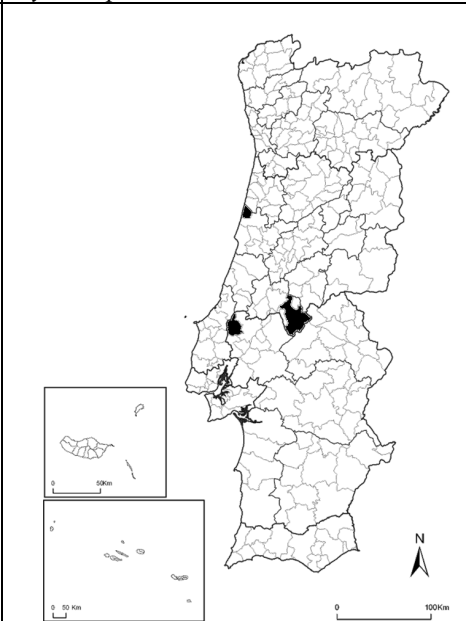


Fig. 216. Distribution map of *Cyclotella catenata*

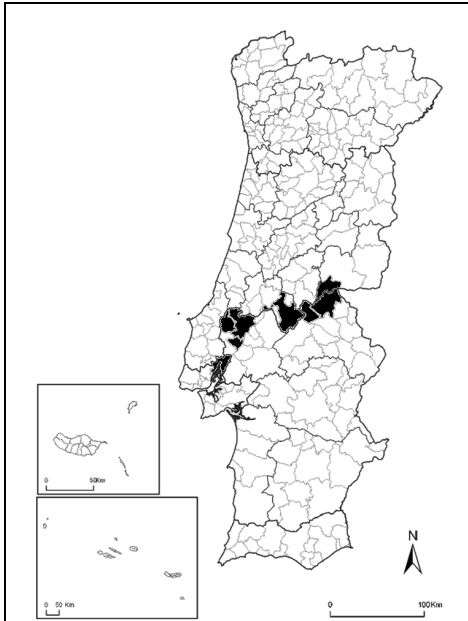


Fig. 217. Distribution map of *Cyclotella chaetoceras*

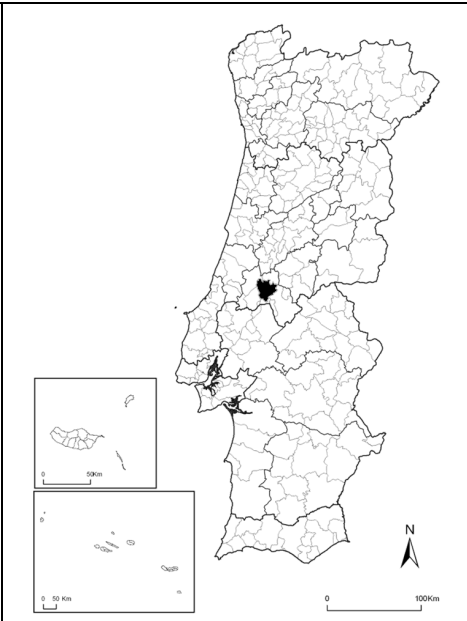


Fig. 218. Distribution map of *Cyclotella comensis*

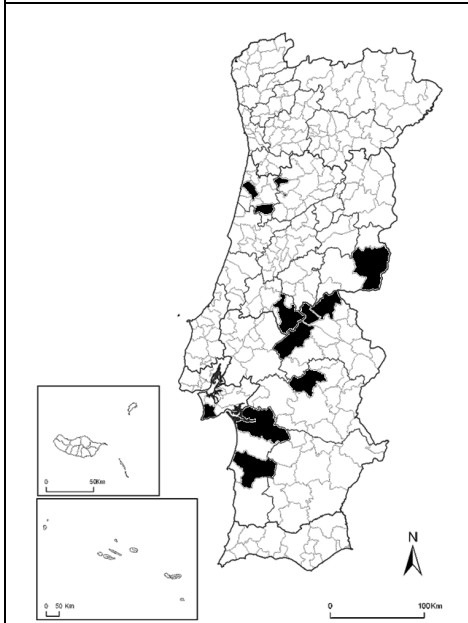


Fig. 219. Distribution map of *Cyclotella comta*

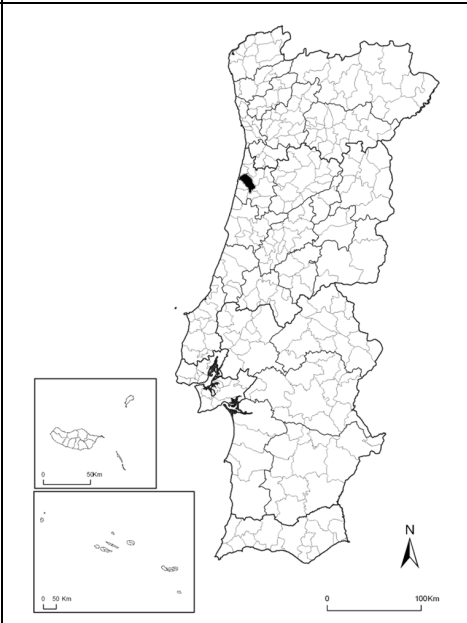


Fig. 220. Distribution map of *Cyclotella cryptica*

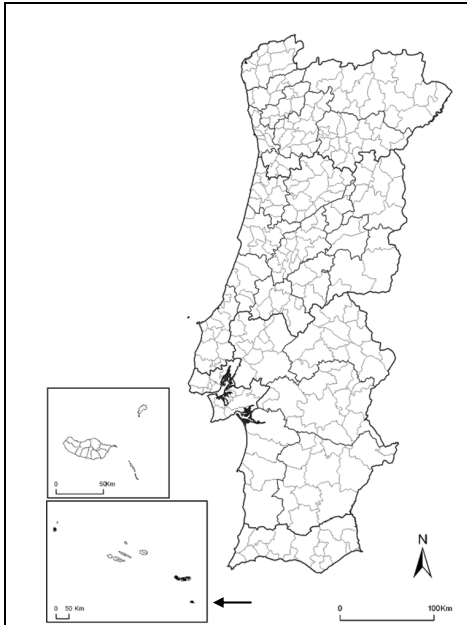


Fig. 221. Distribution map of *Cyclotella iris*

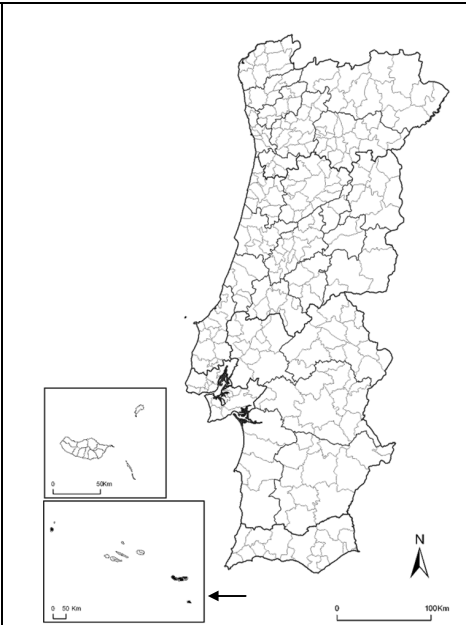


Fig. 222. Distribution map of *Cyclotella iris* var. *ovalis*

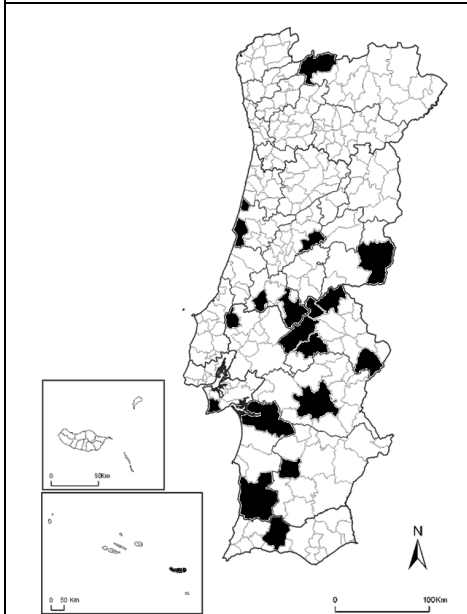


Fig. 223. Distribution map of *Cyclotella kuetzingiana*

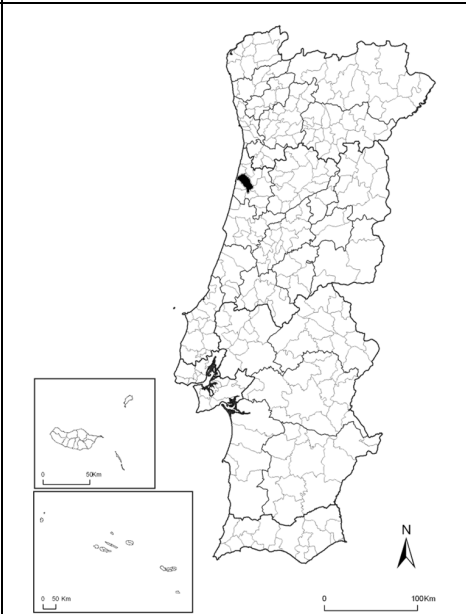


Fig. 224. Distribution map of *Cyclotella meduanae*

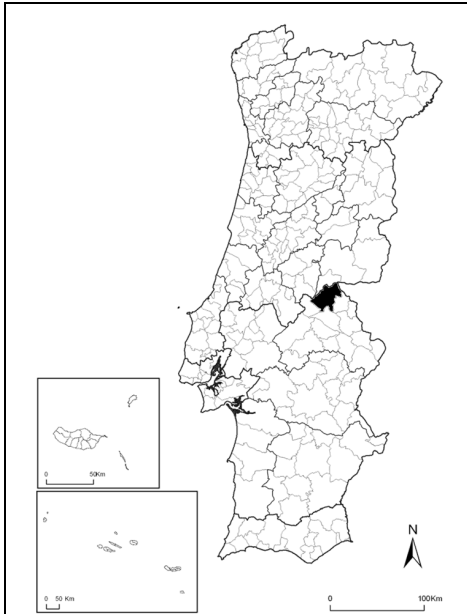


Fig. 225. Distribution map of *Cyclotella melosiroides*

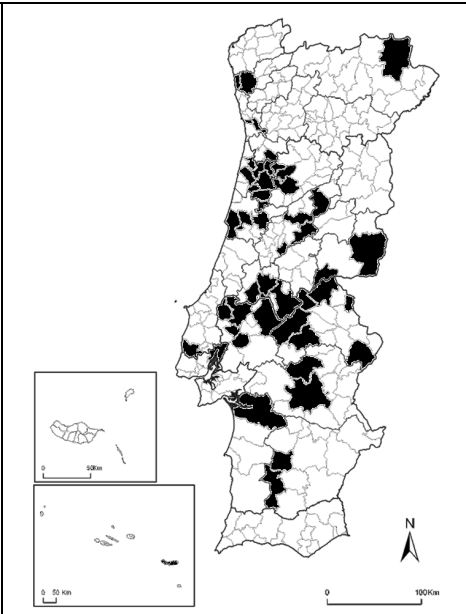


Fig. 226. Distribution map of *Cyclotella meneghiniana*

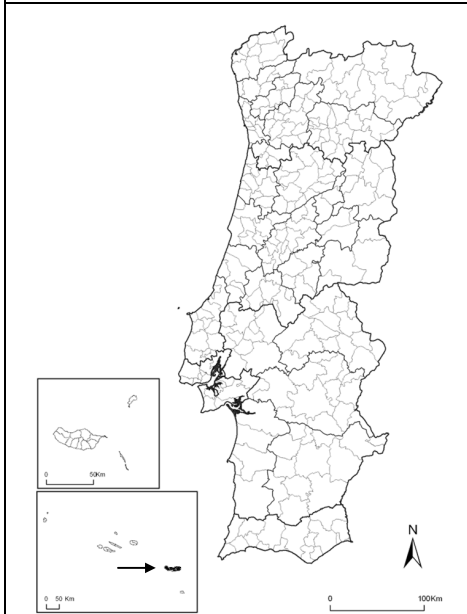


Fig. 227. Distribution map of *Cyclotella meneghiniana* var. *rectangularata*

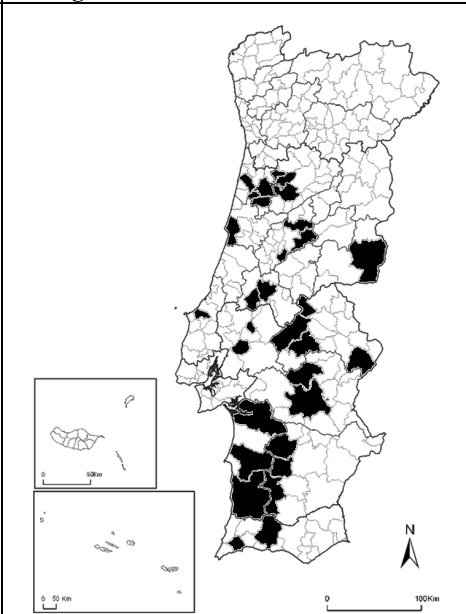


Fig. 228. Distribution map of *Cyclotella ocellata*

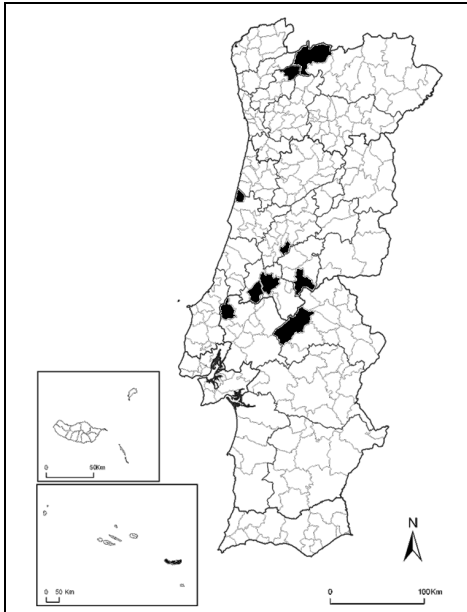


Fig. 229. Distribution map of *Cyclotella operculata*

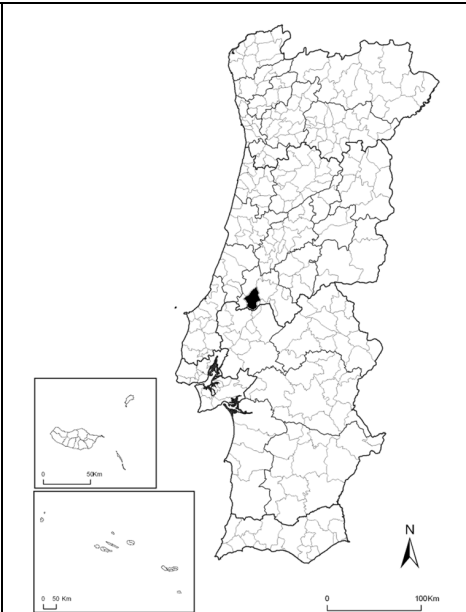


Fig. 230. Distribution map of *Cyclotella planctonica*

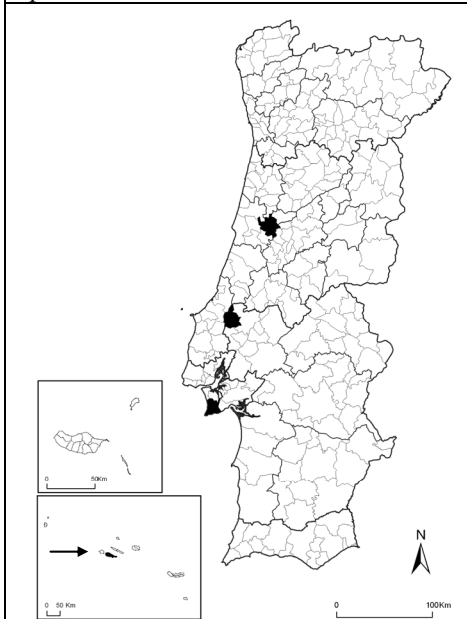


Fig. 231. Distribution map of *Cyclotella striata*

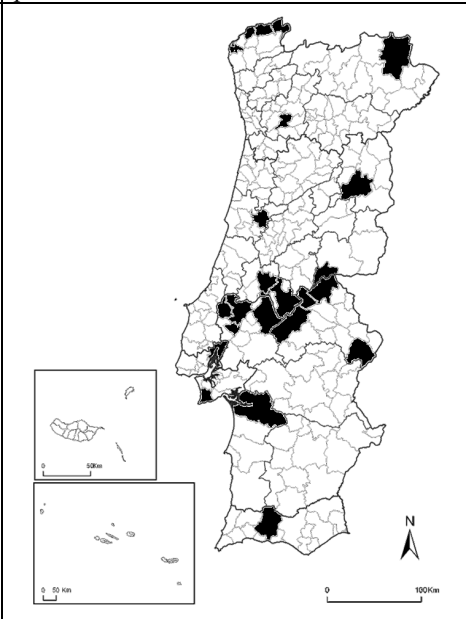


Fig. 232. Distribution map of *Cyclotella* sp.

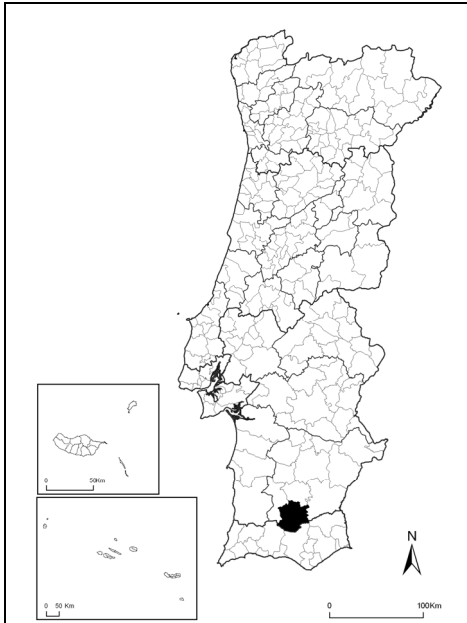


Fig. 233. Distribution map of *Cylindrotheca gracilis*

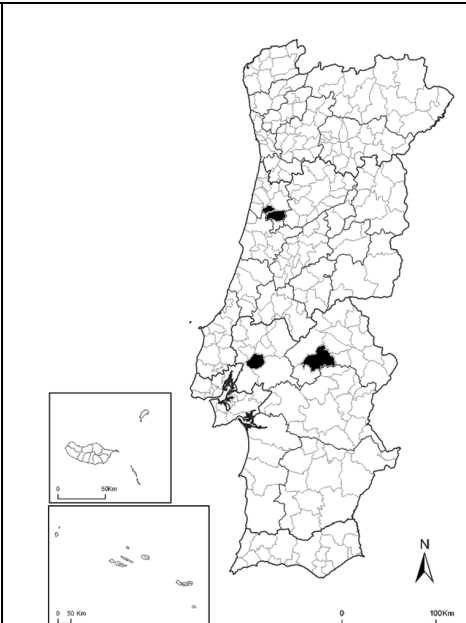


Fig. 234. Distribution map of *Cymatopleura elliptica*

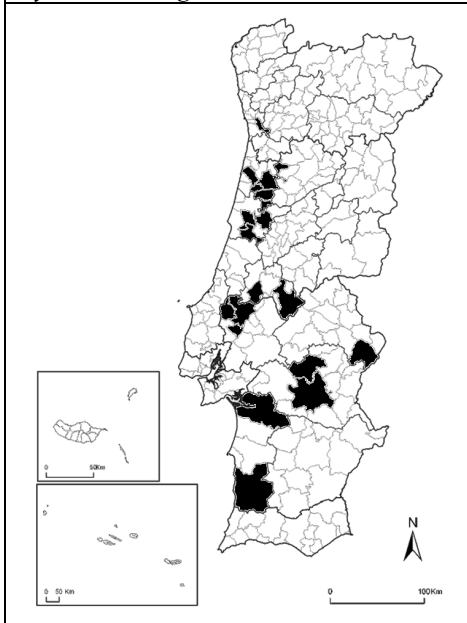


Fig. 235. Distribution map of *Cymatopleura solea*

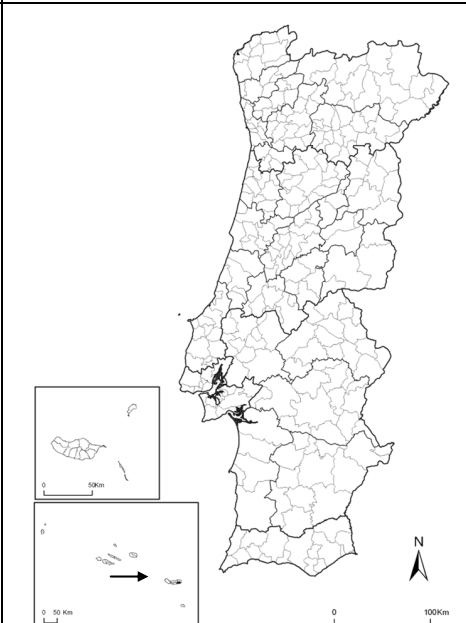


Fig. 236. Distribution map of *Cymatosira belgica*

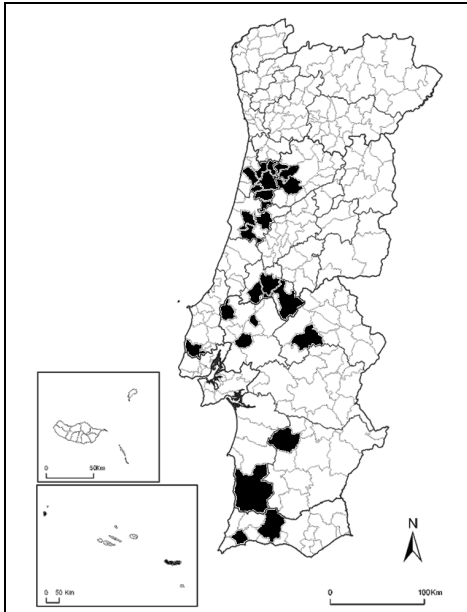


Fig. 237. Distribution map of *Cymbella affinis*

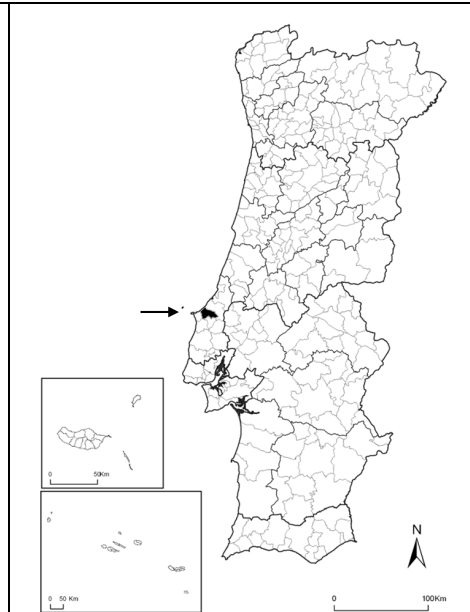


Fig. 238. Distribution map of *Cymbella amphioxys*

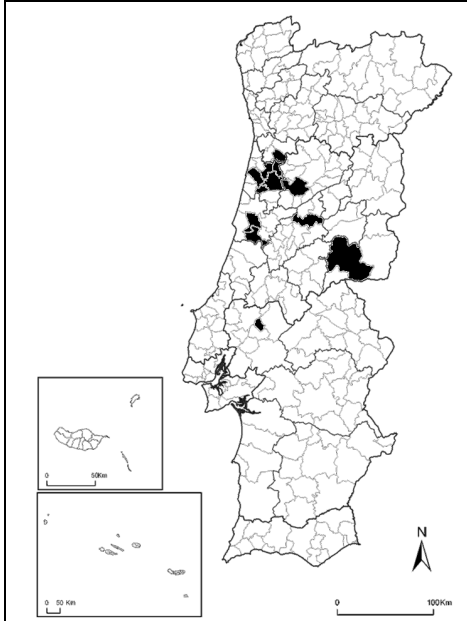


Fig. 239. Distribution map of *Cymbella aspera*

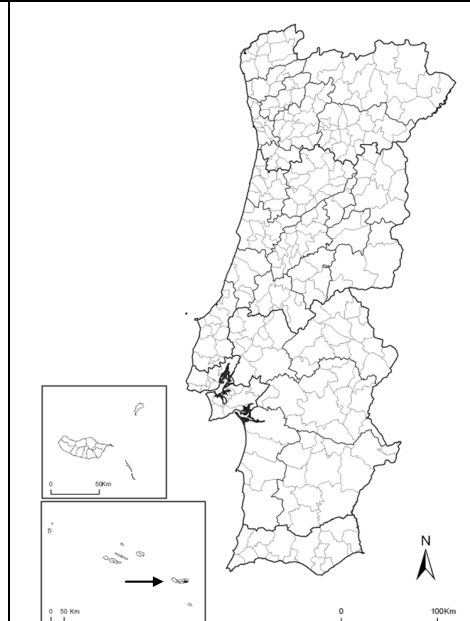


Fig. 240. Distribution map of *Cymbella cesatii* f. *minor*

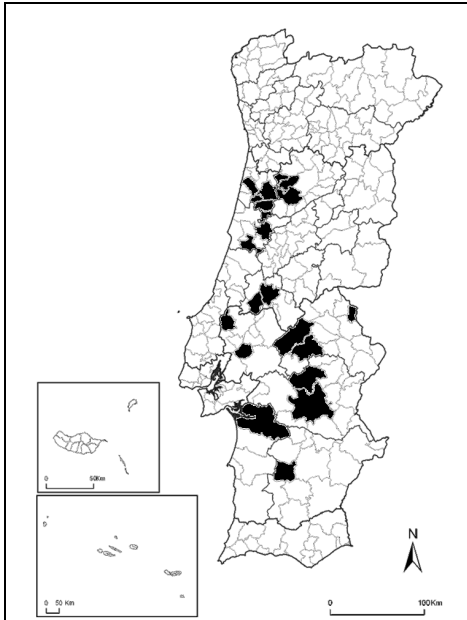


Fig. 241. Distribution map of *Cymbella cistula*

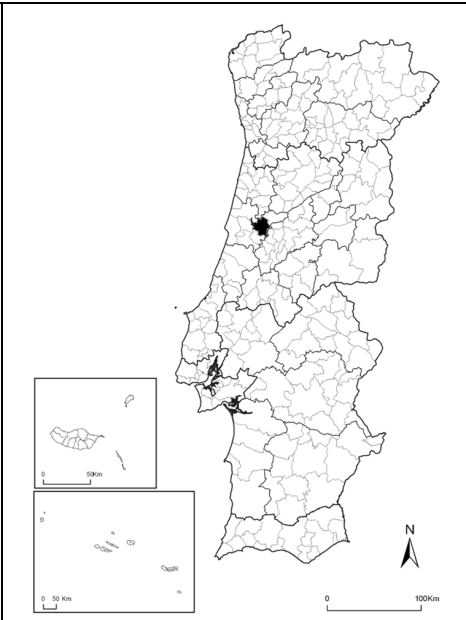


Fig. 242. Distribution map of *Cymbella cistula* var. *maculata*

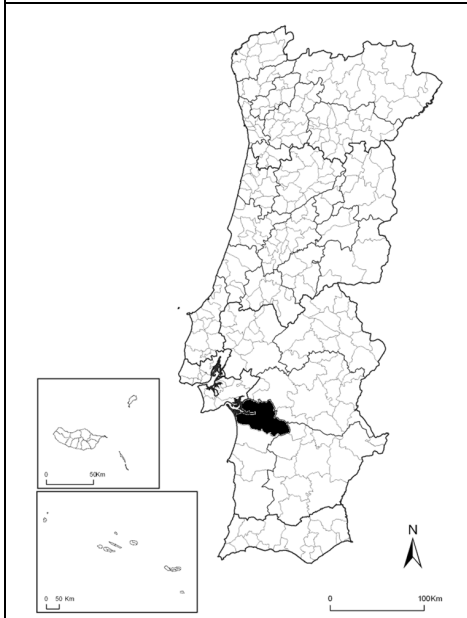


Fig. 243. Distribution map of *Cymbella crassa*

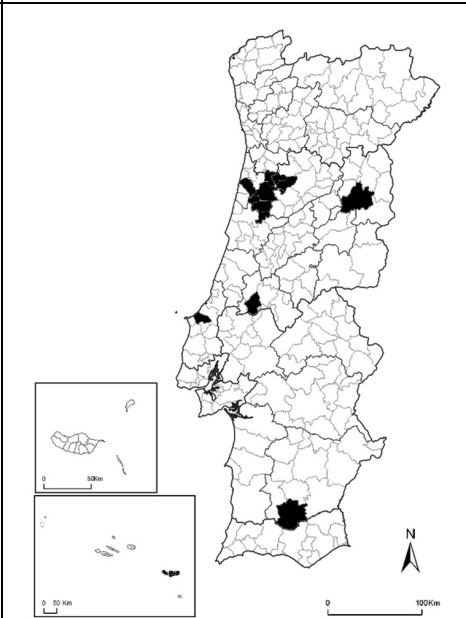


Fig. 244. Distribution map of *Cymbella cuspidata*

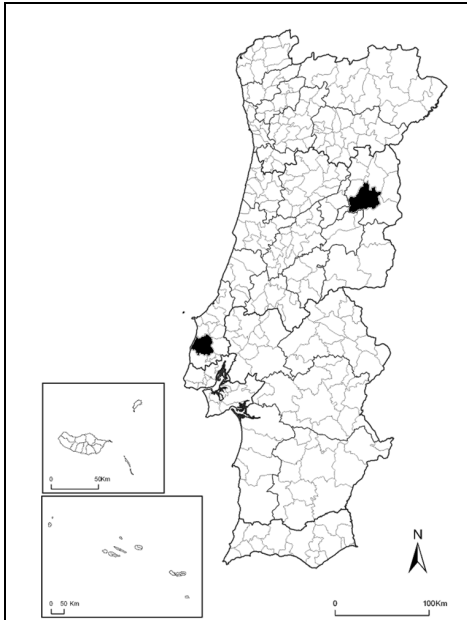


Fig. 245. Distribution map of *Cymbella cuspidata* var. *naviculiformis*

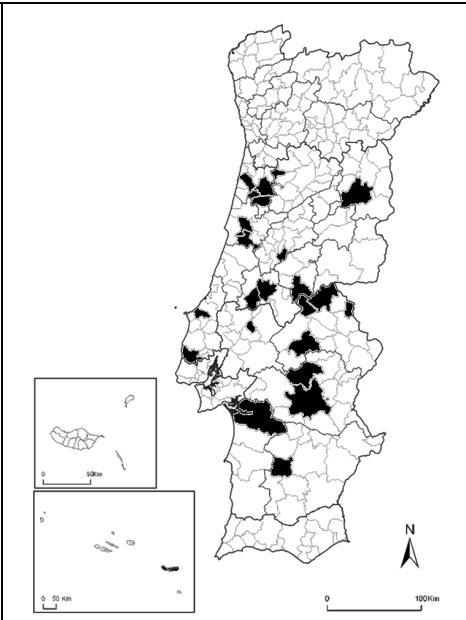


Fig. 246. Distribution map of *Cymbella cymbiformis*

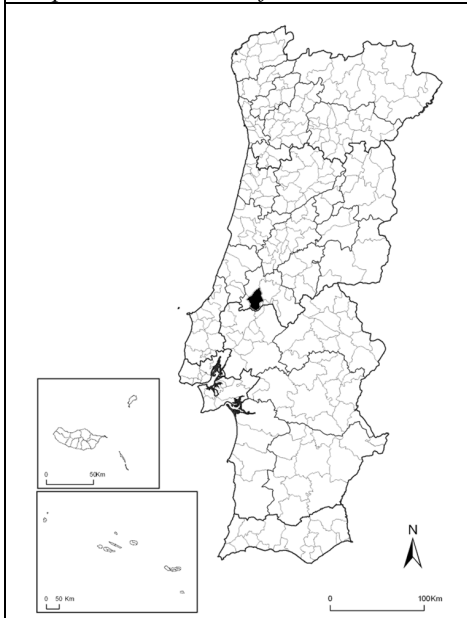


Fig. 247. Distribution map of *Cymbella cymbiformis* var. *jimboi*

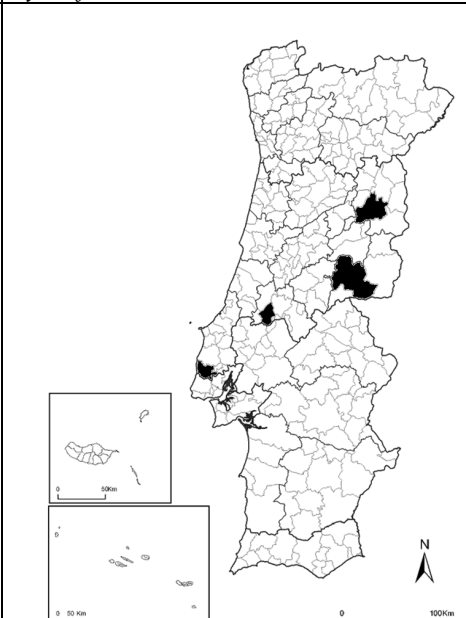


Fig. 248. Distribution map of *Cymbella cymbiformis* var. *parva*

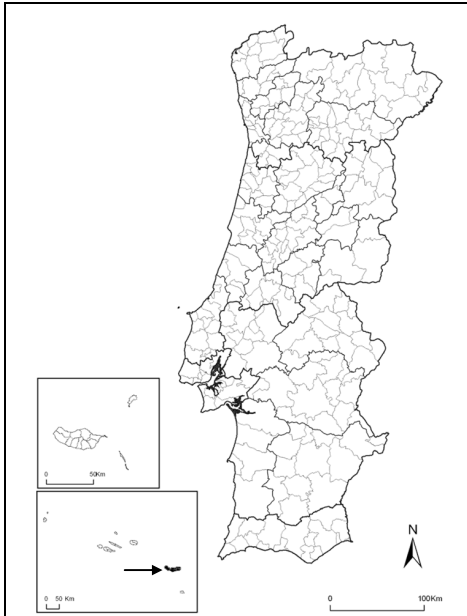


Fig. 249. Distribution map of *Cymbella dicephala*

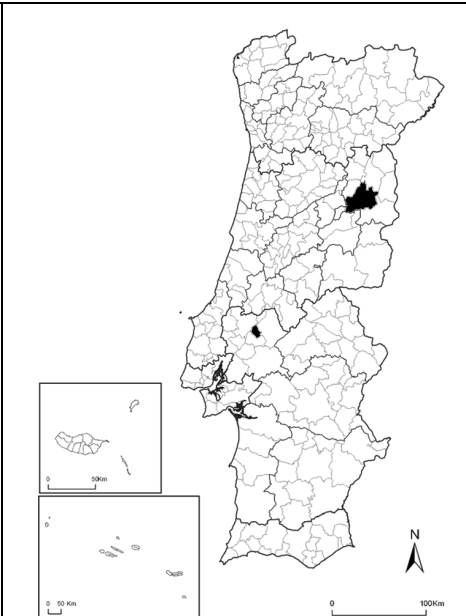


Fig. 250. Distribution map of *Cymbella ehrenbergii*

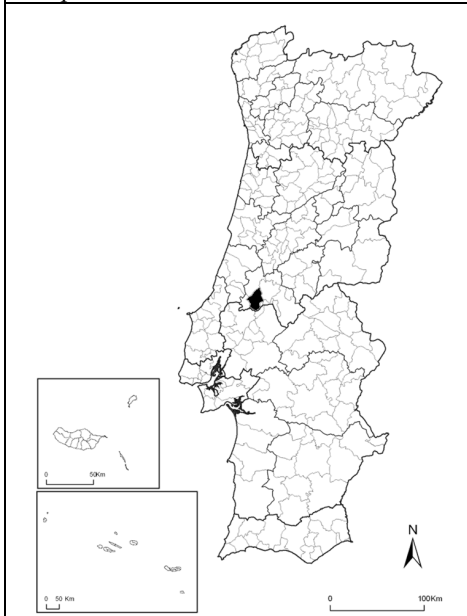


Fig. 251. Distribution map of *Cymbella gastroides*

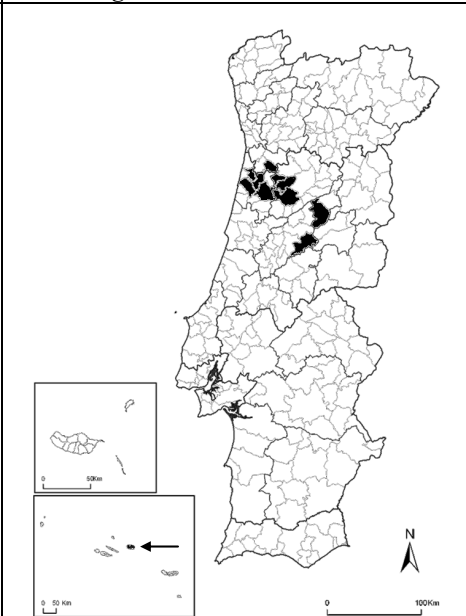


Fig. 252. Distribution map of *Cymbella gracilis*

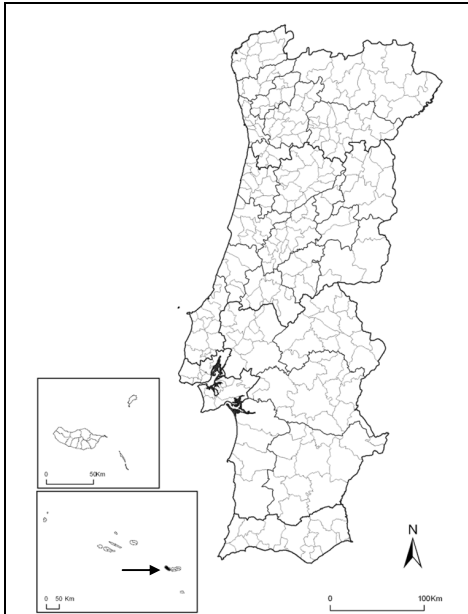


Fig. 253. Distribution map of *Cymbella gracilis* var. *capitata*

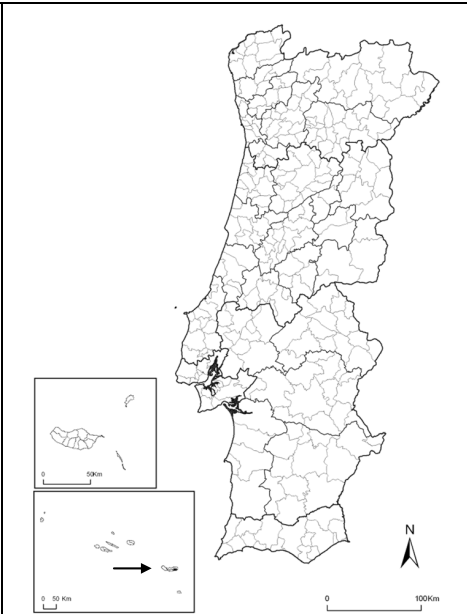


Fig. 254. Distribution map of *Cymbella gracilis* var. *laevis*

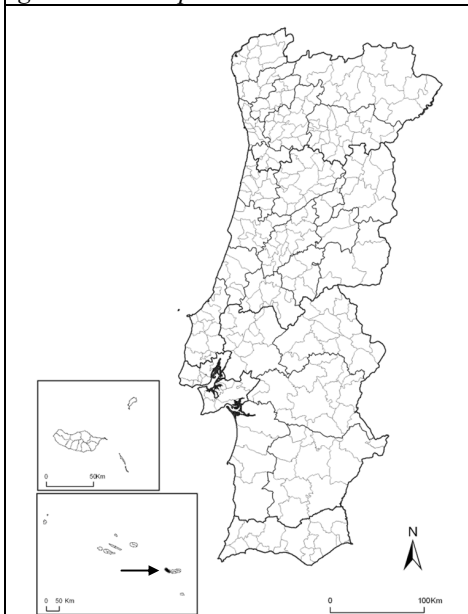


Fig. 255. Distribution map of *Cymbella gracilis* var. *rotundata*

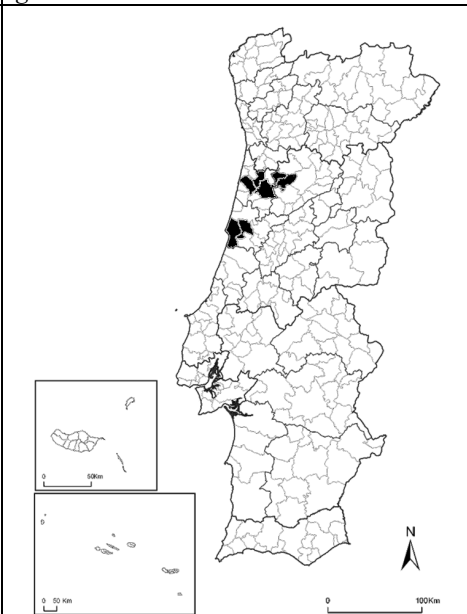


Fig. 256. Distribution map of *Cymbella helvetica*

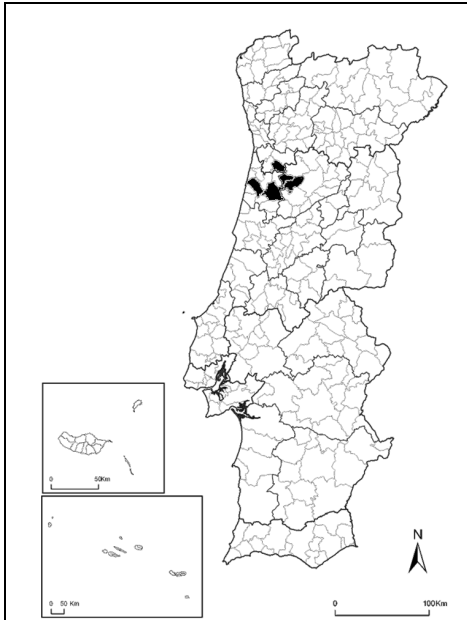


Fig. 257. Distribution map of *Cymbella heteropleura*

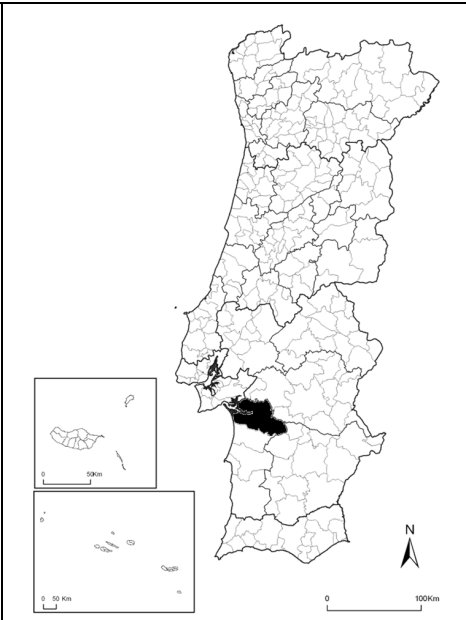


Fig. 258. Distribution map of *Cymbella hungarica*

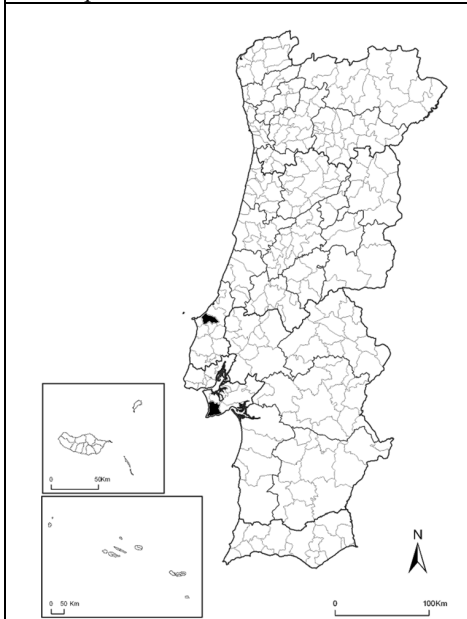


Fig. 259. Distribution map of *Cymbella laevis*

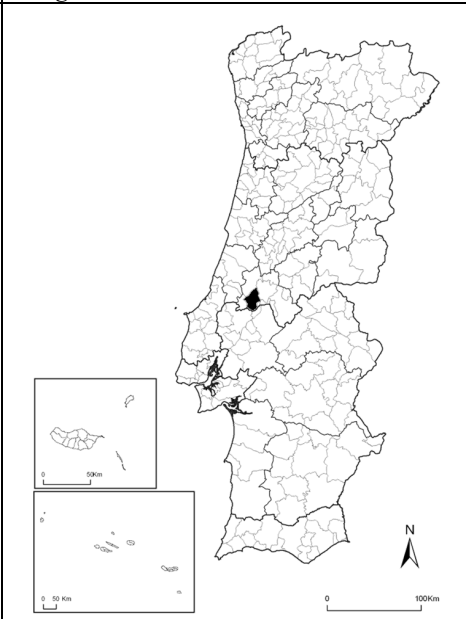


Fig. 260. Distribution map of *Cymbella lanceolata* var. *boeckii*

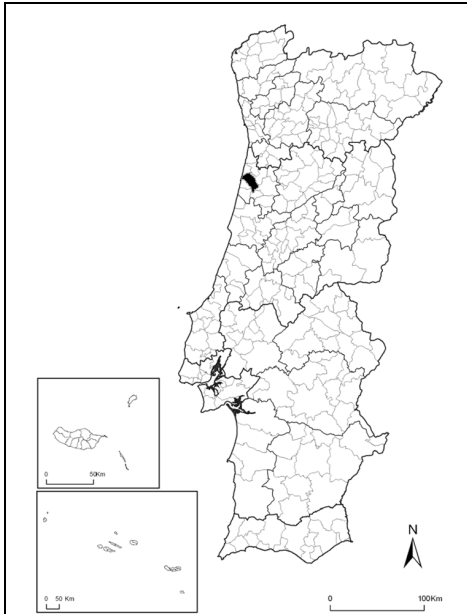


Fig. 261. Distribution map of *Cymbella leptoceras*

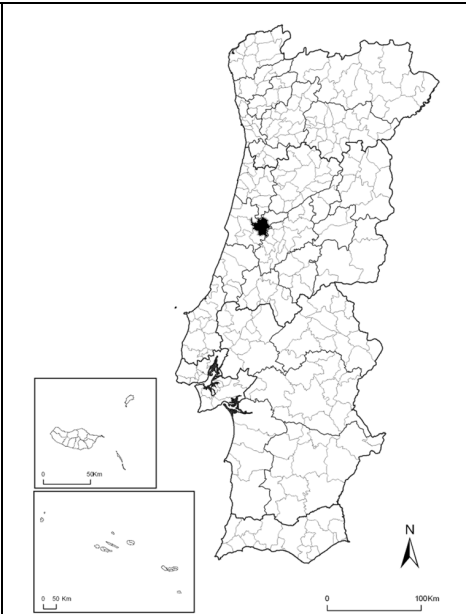


Fig. 262. Distribution map of *Cymbella maculata*

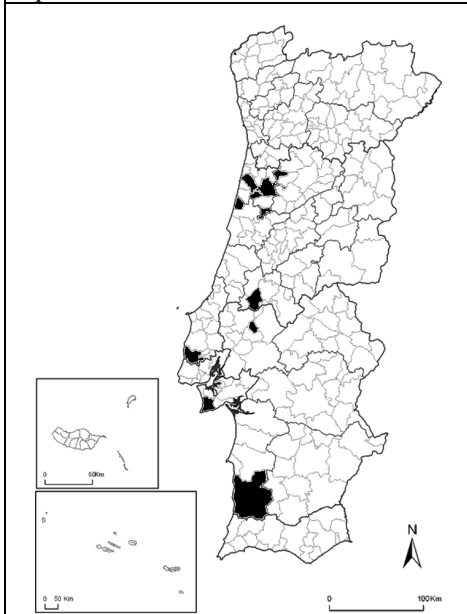


Fig. 263. Distribution map of *Cymbella neolanceolata*

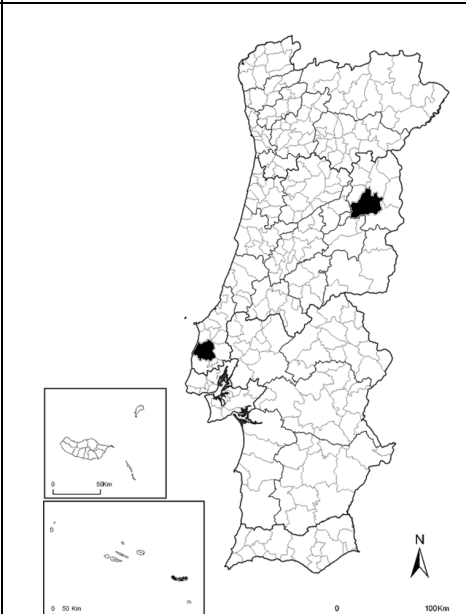


Fig. 264. Distribution map of *Cymbella obtusa*

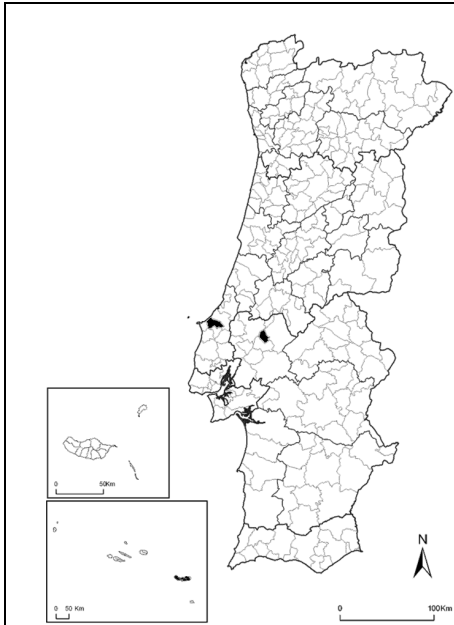


Fig. 265. Distribution map of *Cymbella parva*

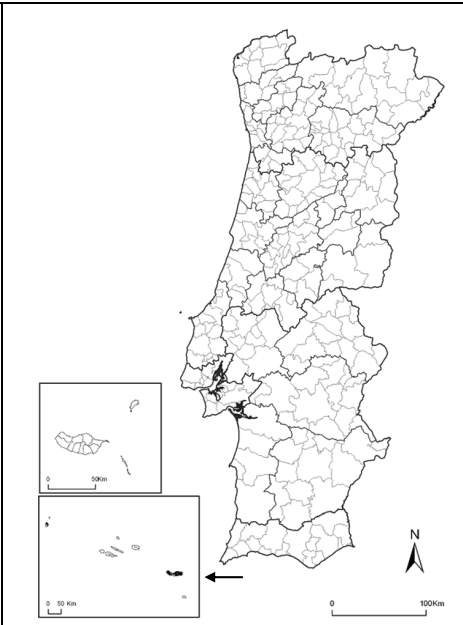


Fig. 266. Distribution map of *Cymbella perpusilla* var. *azorica*

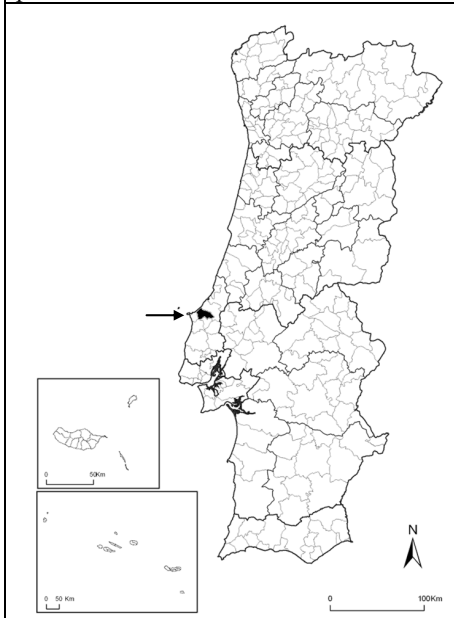


Fig. 267. Distribution map of *Cymbella reinhardtii*

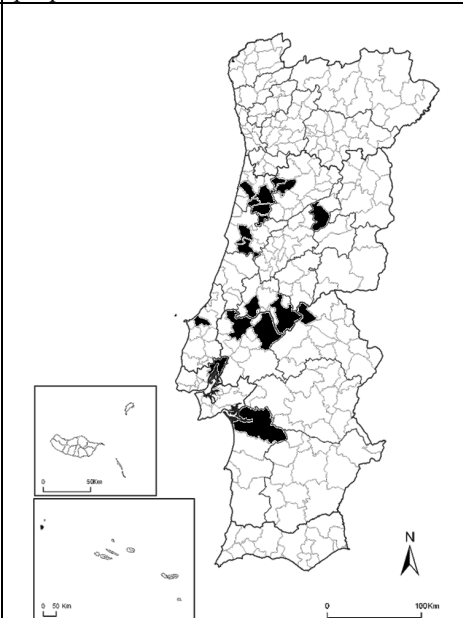


Fig. 268. Distribution map of *Cymbella tumida*

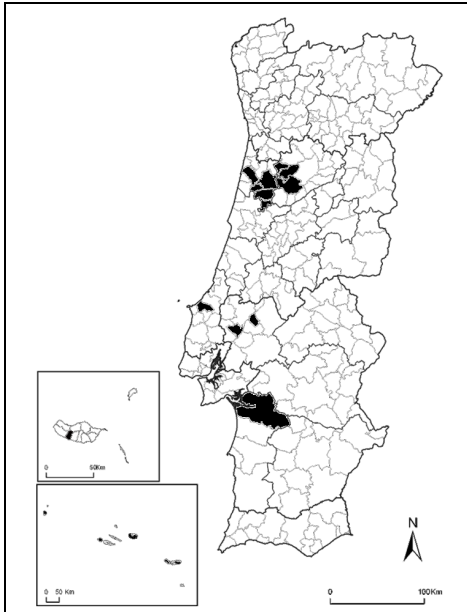


Fig. 269. Distribution map of *Cymbella turgida*

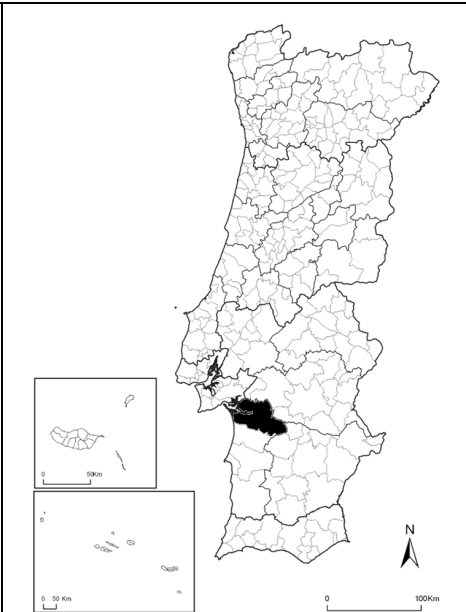


Fig. 270. Distribution map of *Cymbella turgidula*

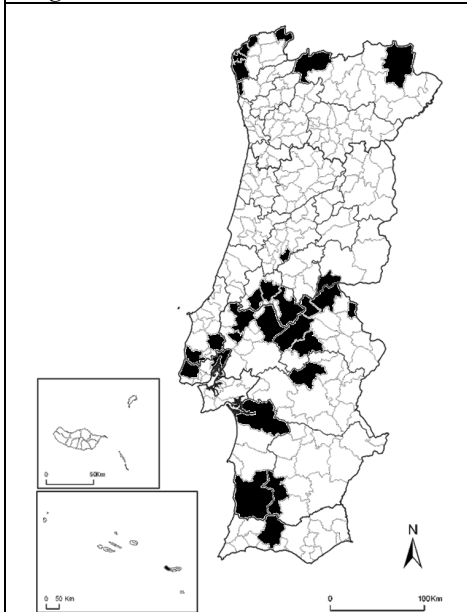


Fig. 271. Distribution map of *Cymbella* sp.

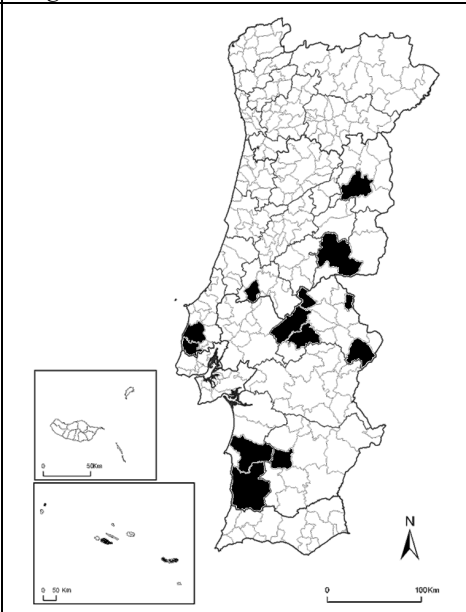


Fig. 272. Distribution map of *Cymbopleura amphicephala*

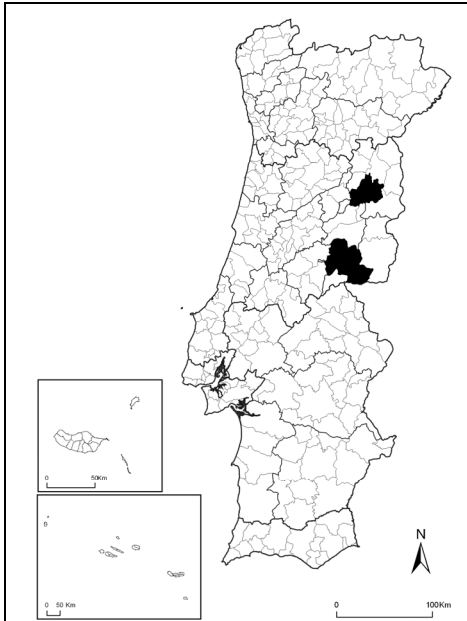


Fig. 273. Distribution map of *Cymbopleura anglica*

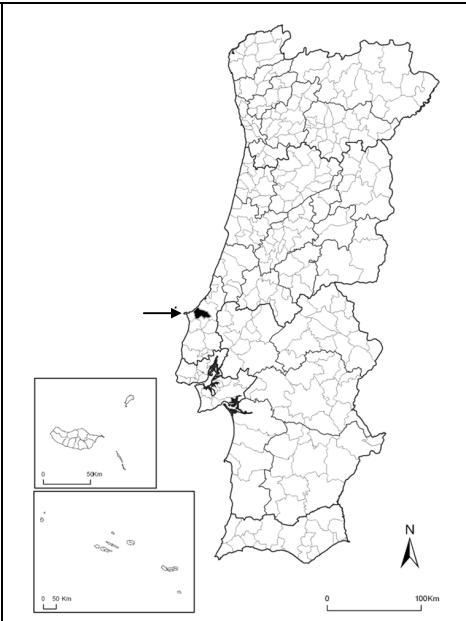


Fig. 274. Distribution map of *Cymbopleura hauckii*

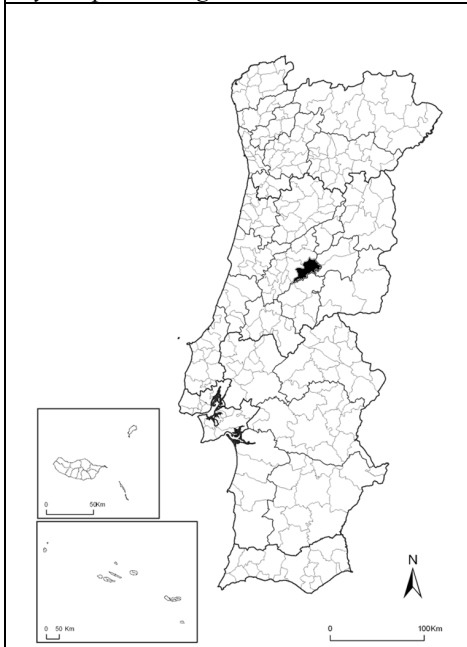


Fig. 275. Distribution map of *Cymbopleura lata*

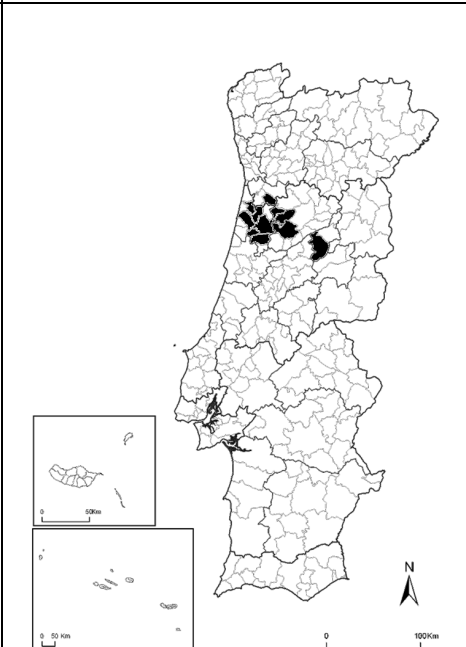


Fig. 276. Distribution map of *Cymbopleura naviculiformis*

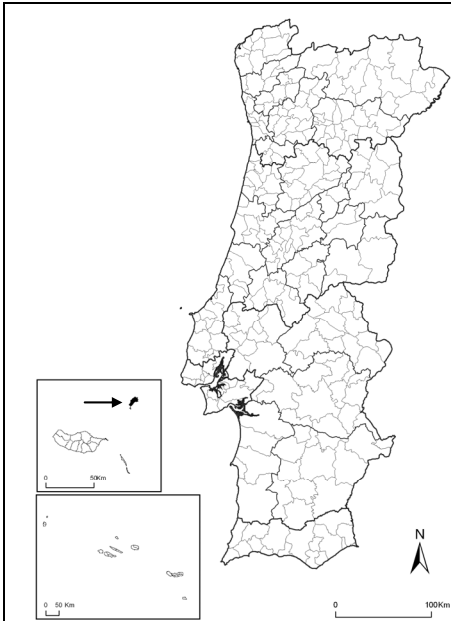


Fig. 277. Distribution map of *Cymboplectura subaequalis*

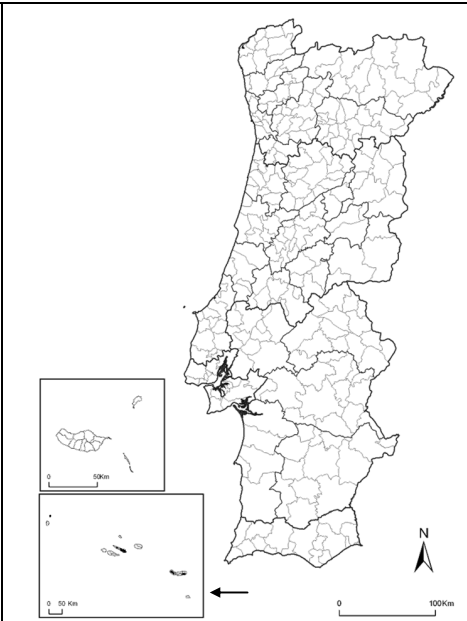


Fig. 278. Distribution map of *Delicata delicatula*

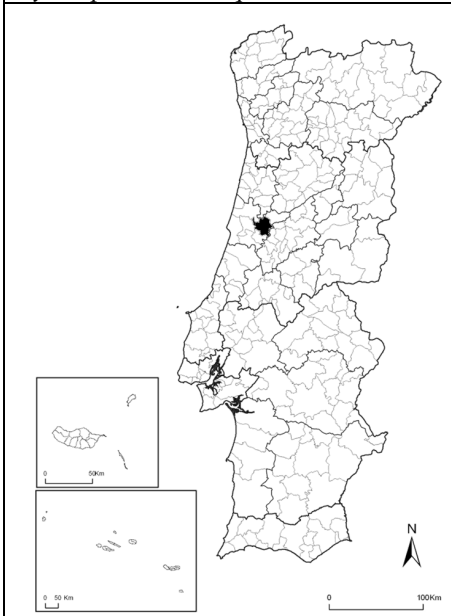


Fig. 279. Distribution map of *Denticula crassula*

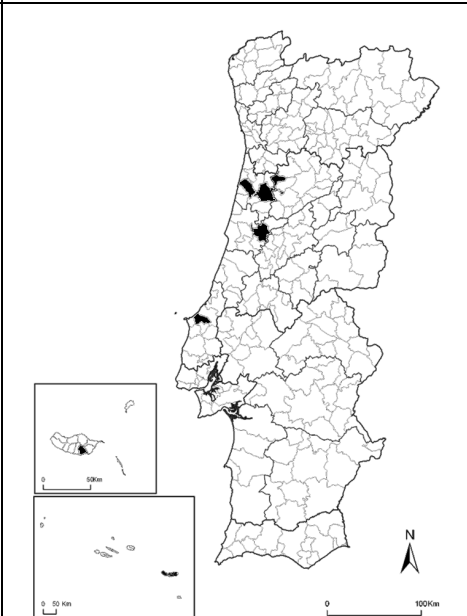


Fig. 280. Distribution map of *Denticula elegans*

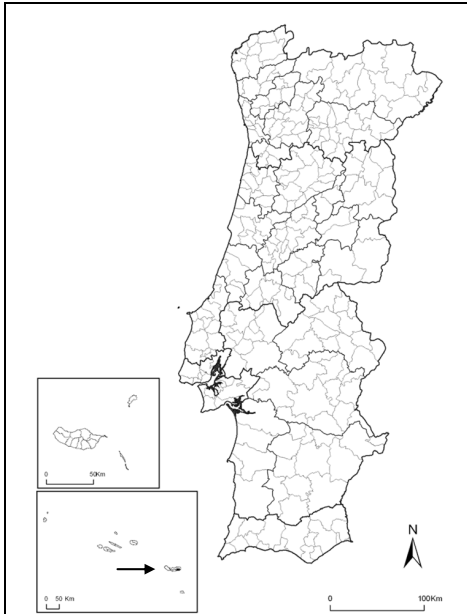


Fig. 281. Distribution map of *Denticula frigida*

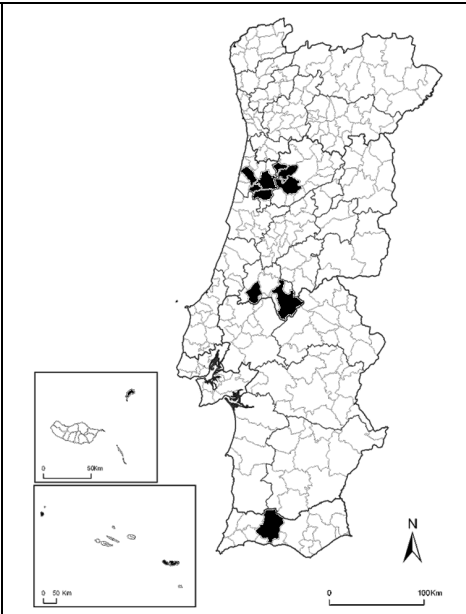


Fig. 282. Distribution map of *Denticula kuetzingii*

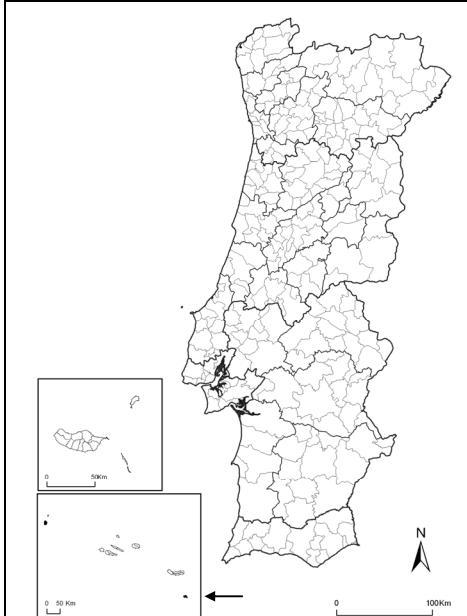


Fig. 283. Distribution map of *Denticula subtilis*

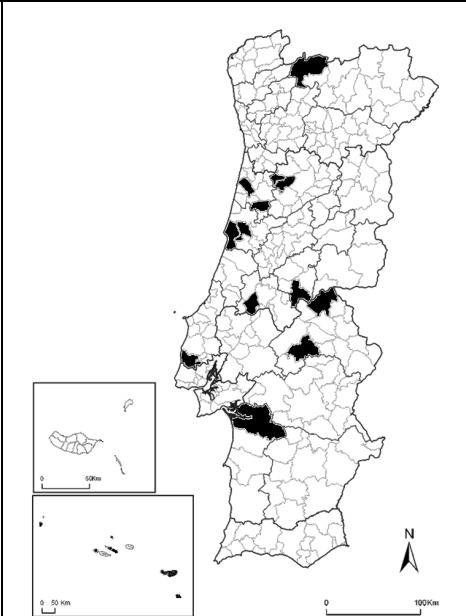


Fig. 284. Distribution map of *Denticula tenuis*

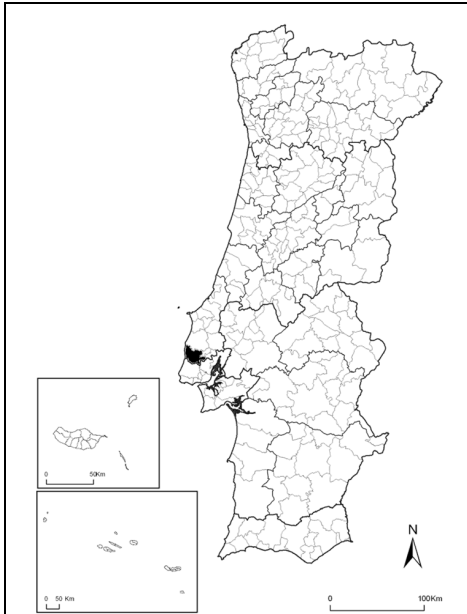


Fig. 285. Distribution map of *Denticula tenuis* var. *inflata*

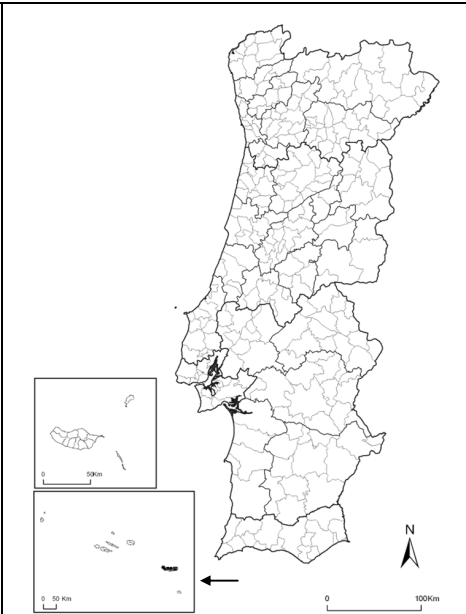


Fig. 286. Distribution map of *Denticula vanheurckii*

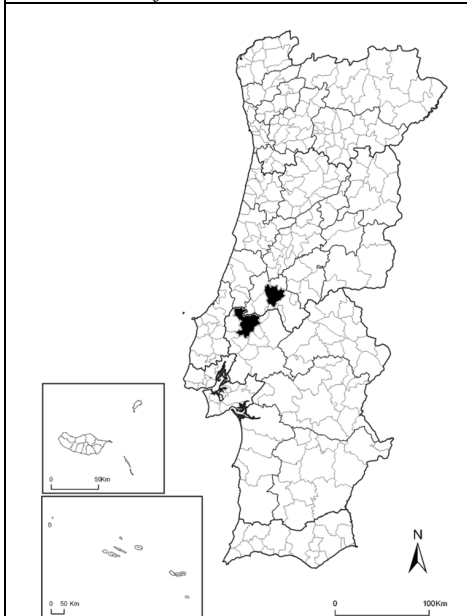


Fig. 287. Distribution map of *Denticula* sp.

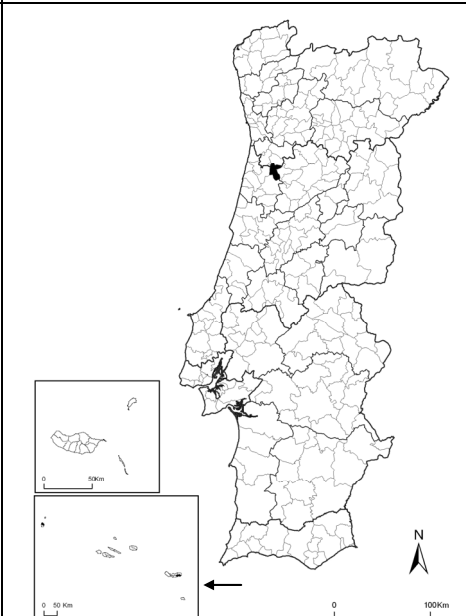


Fig. 288. Distribution map of *Diademsis biceps*

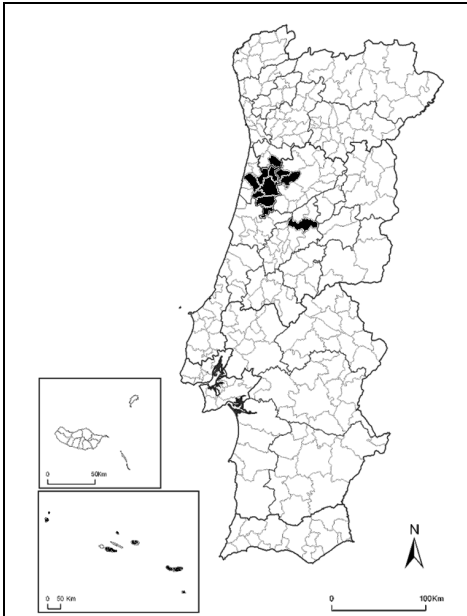


Fig. 289. Distribution map of *Diadесmis contenta*

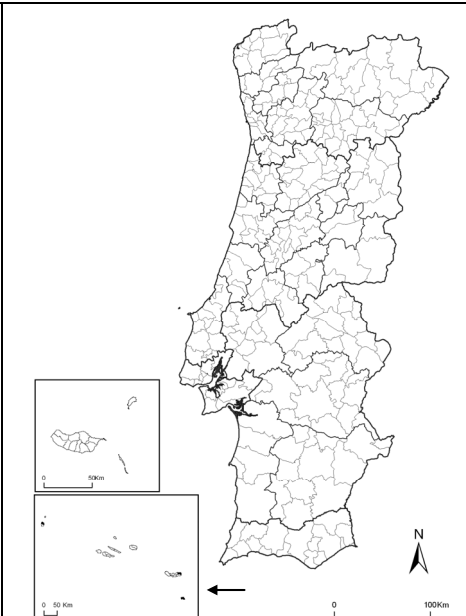


Fig. 290. Distribution map of *Diadесmis contenta* var. *parallela*

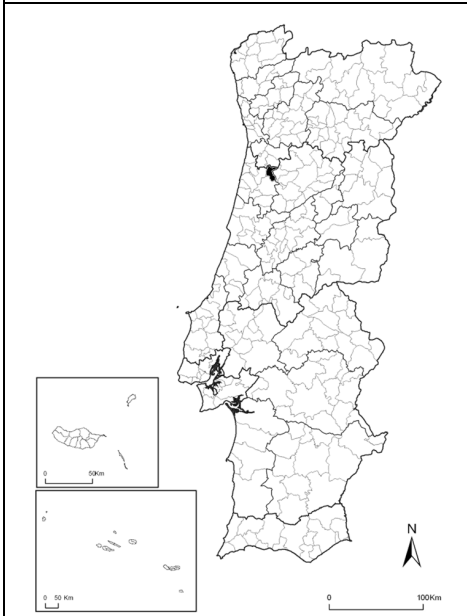


Fig. 291. Distribution map of *Diadесmis gallica*

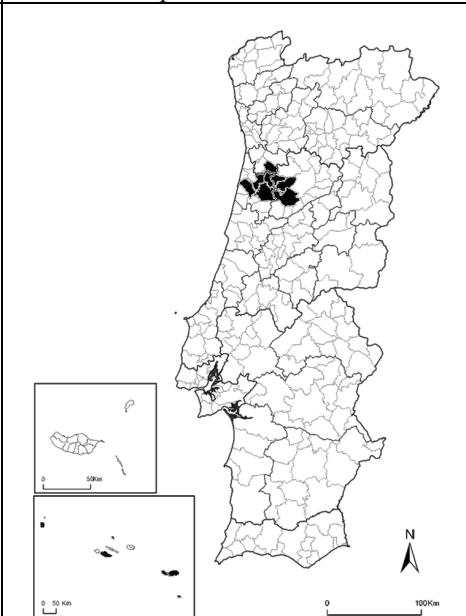


Fig. 292. Distribution map of *Diadесmis perpυsilla*

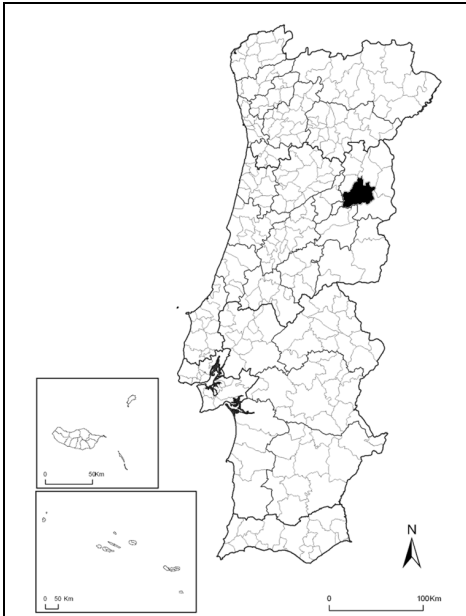


Fig. 293. Distribution map of *Diatoma anceps*

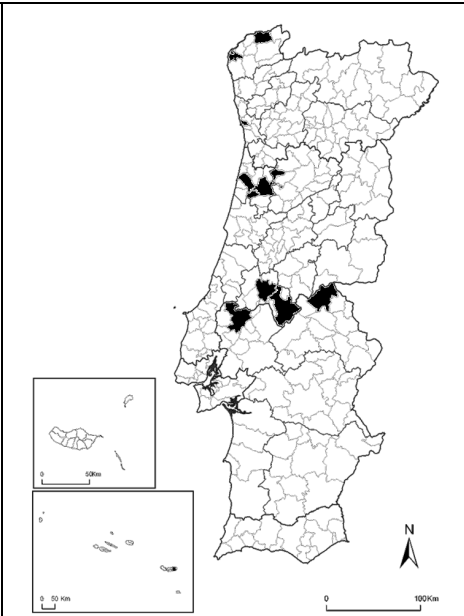


Fig. 294. Distribution map of *Diatoma elongata*

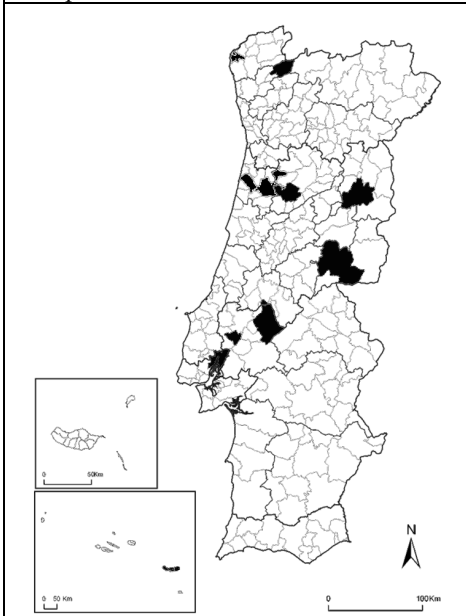


Fig. 295. Distribution map of *Diatoma hyemalis*

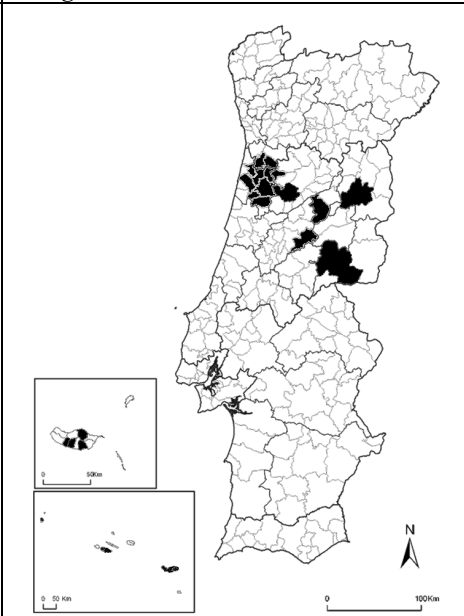


Fig. 296. Distribution map of *Diatoma mesodon*

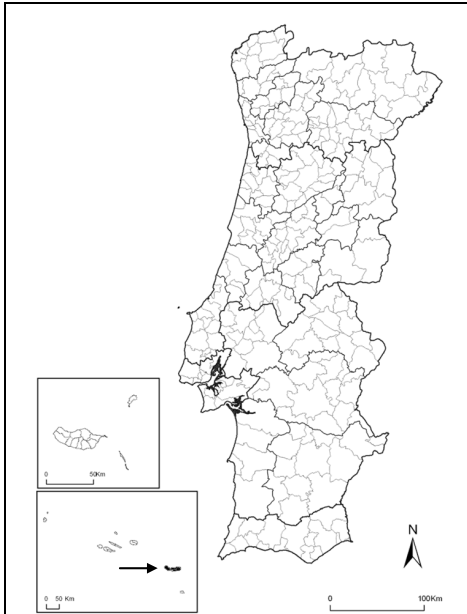


Fig. 297. Distribution map of *Diatoma mesolepta*

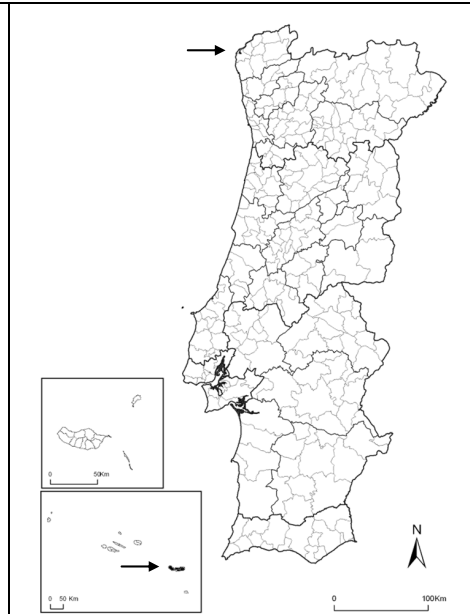


Fig. 298. Distribution map of *Diatoma obtusa*

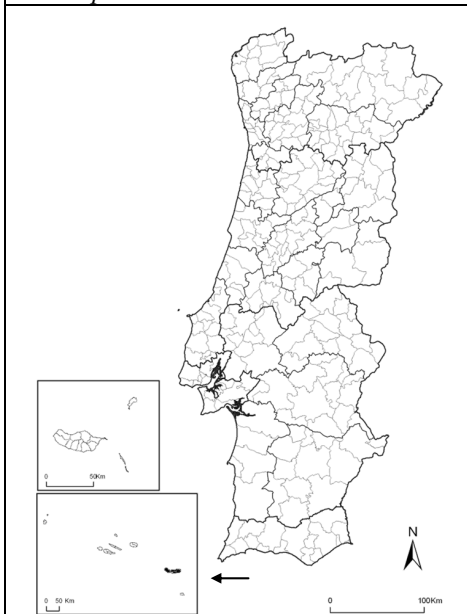


Fig. 299. Distribution map of *Diatoma pectinalis*

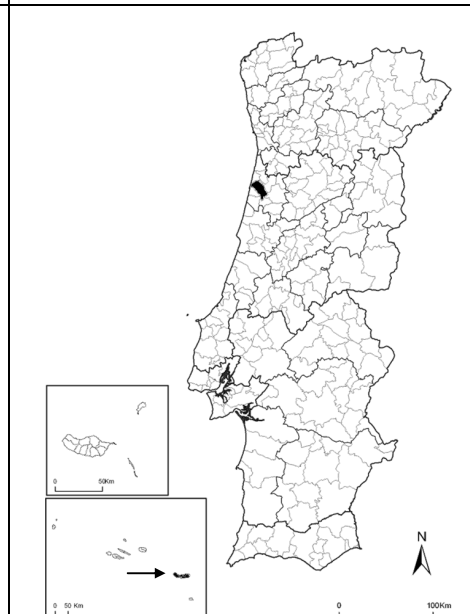


Fig. 300. Distribution map of *Diatoma tenuis*

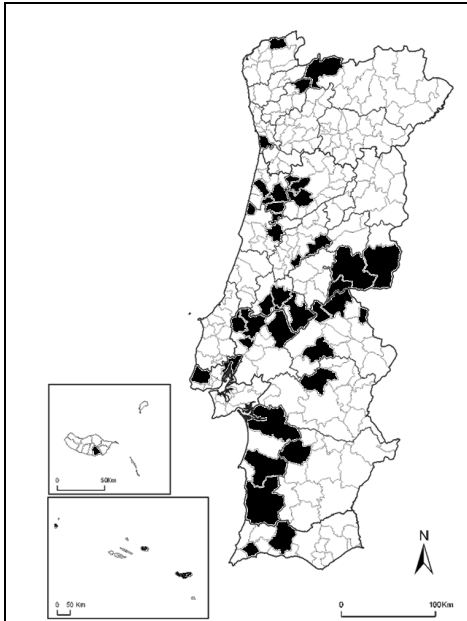


Fig. 301. Distribution map of *Diatoma vulgaris*

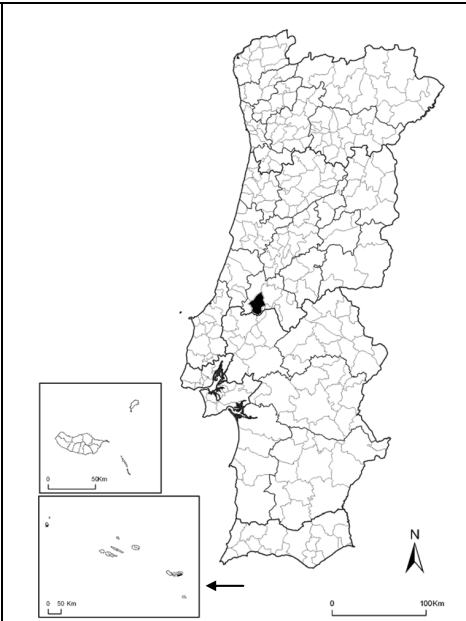


Fig. 302. Distribution map of *Diatoma vulgaris* var. *producta*

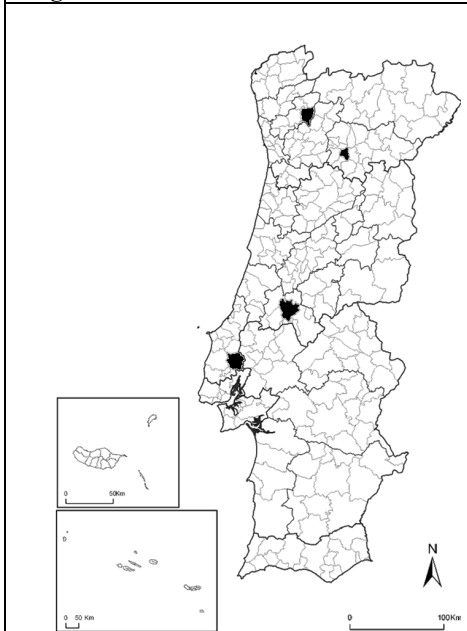


Fig. 303. Distribution map of *Diatoma* sp.

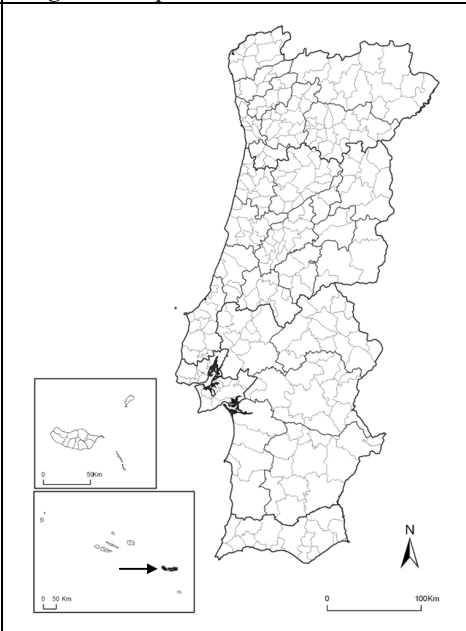


Fig. 304. Distribution map of *Diatomella balfouriana*

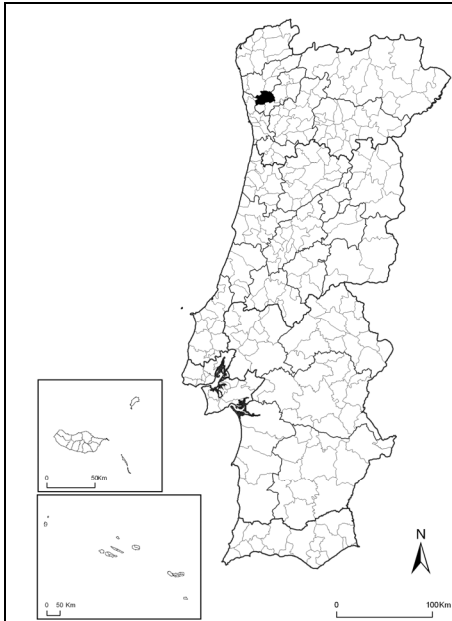


Fig. 305. Distribution map of *Didymosphenia geminata*

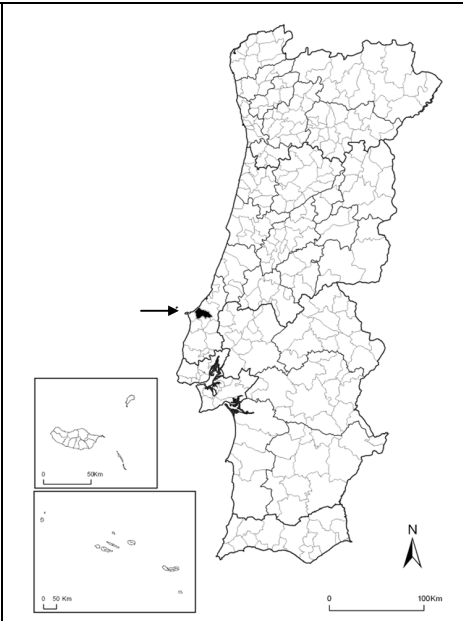


Fig. 306. Distribution map of *Diploneis didyma*

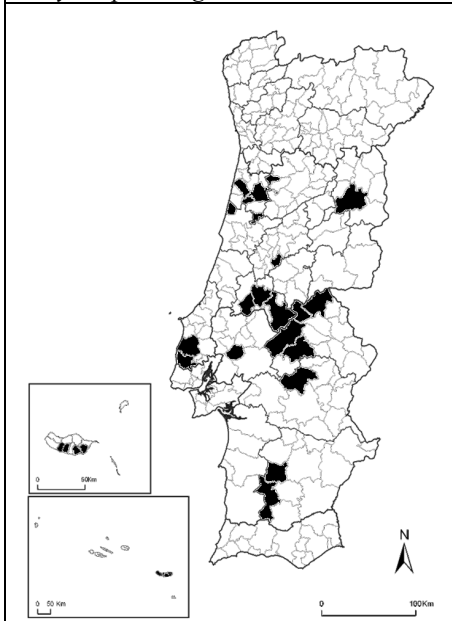


Fig. 307. Distribution map of *Diploneis elliptica*

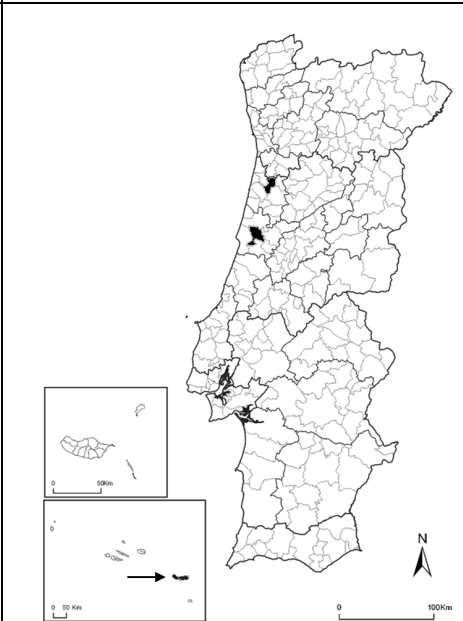


Fig. 308. Distribution map of *Diploneis interrupta*

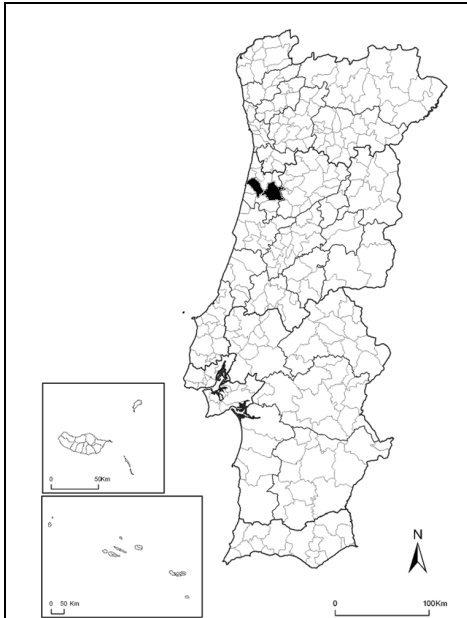


Fig. 309. Distribution map of *Diploneis marginestriata*

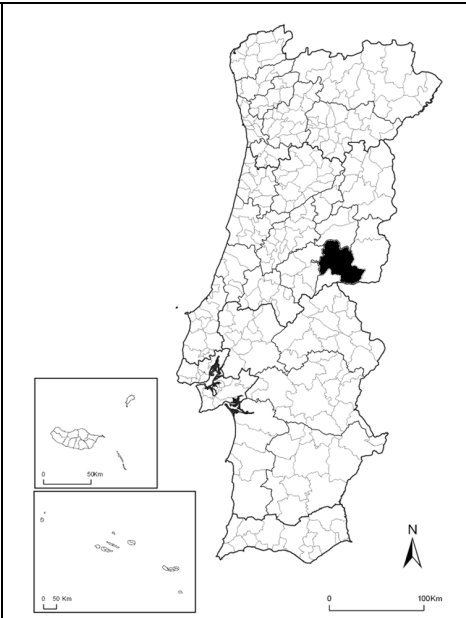


Fig. 310. Distribution map of *Diploneis nitescens*

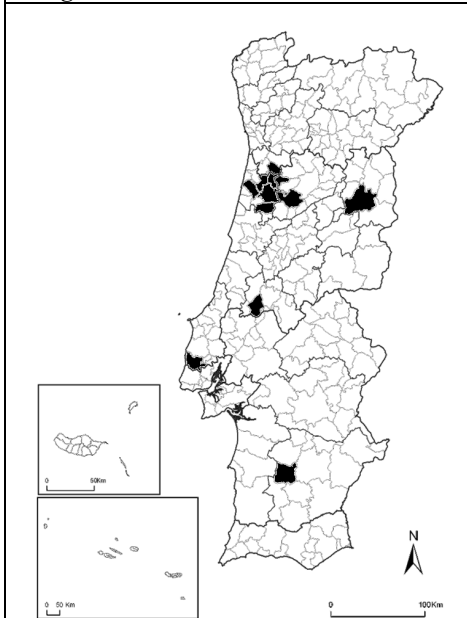


Fig. 311. Distribution map of *Diploneis oblongella*

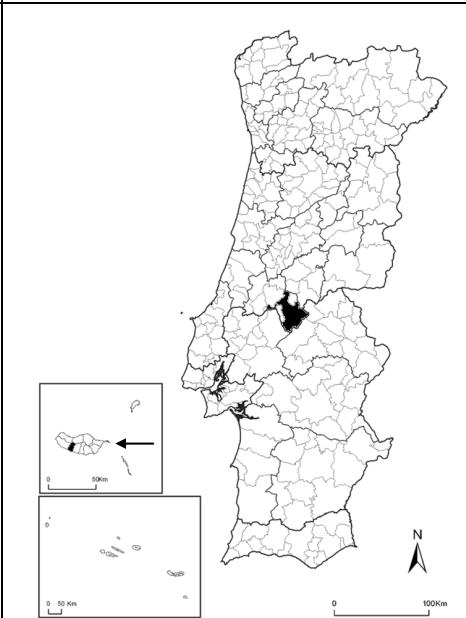


Fig. 312. Distribution map of *Diploneis oculata*

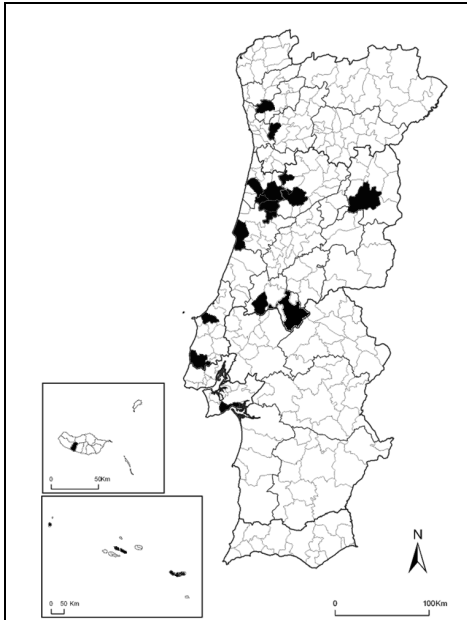


Fig. 313. Distribution map of *Diploneis ovalis*

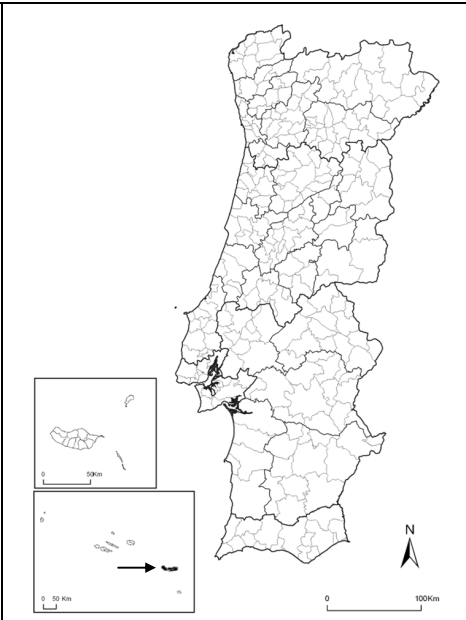


Fig. 314. Distribution map of *Diploneis pseudovalis*

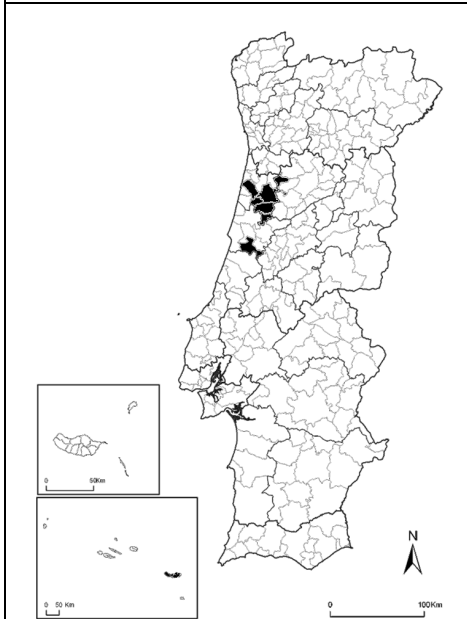


Fig. 315. Distribution map of *Diploneis puella*

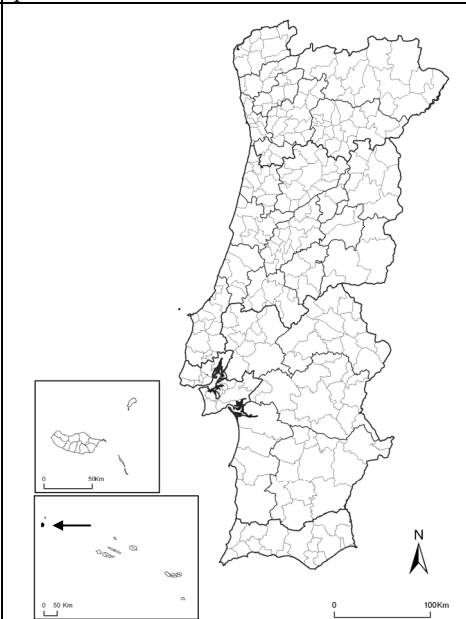


Fig. 316. Distribution map of *Diploneis smithii*

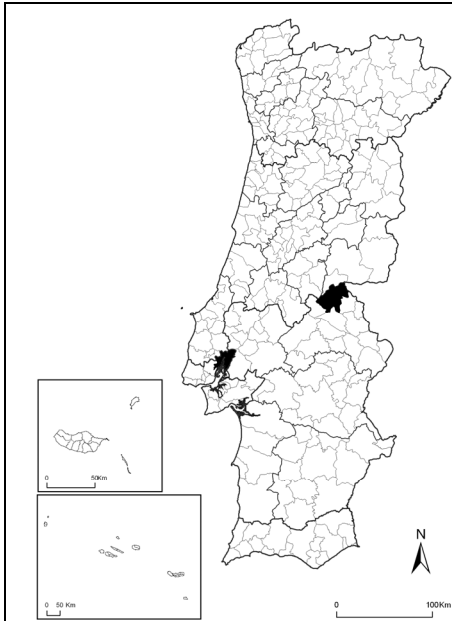


Fig. 317. Distribution map of *Diploneis* sp.

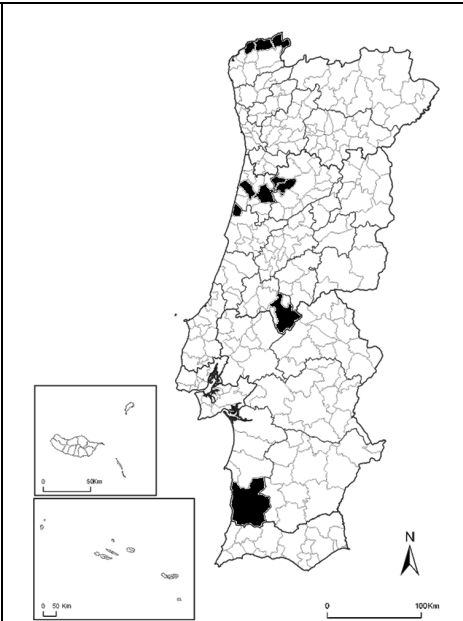


Fig. 318. Distribution map of *Discostella glomerata*

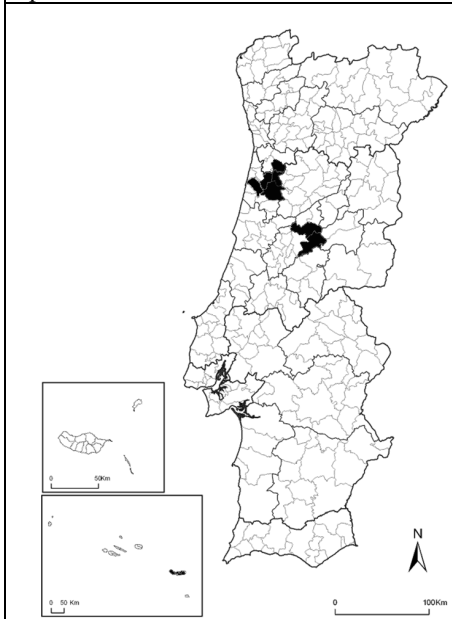


Fig. 319. Distribution map of *Discostella pseudostelligera*

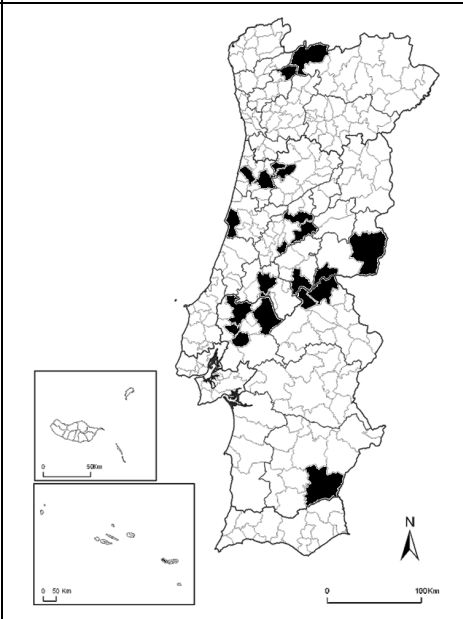


Fig. 320. Distribution map of *Discostella stelligera*

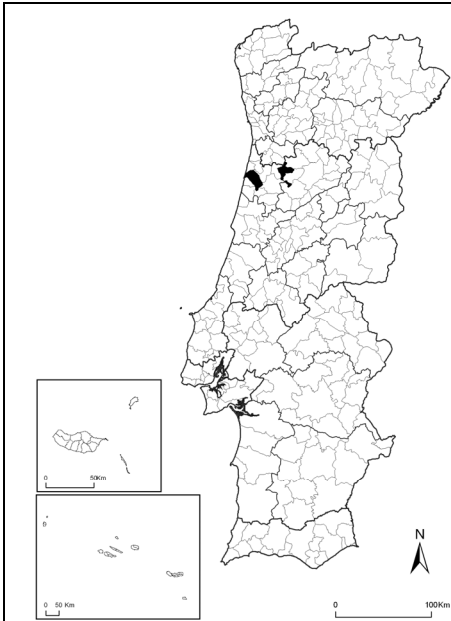


Fig. 321. Distribution map of *Ellerbeckia arenaria*

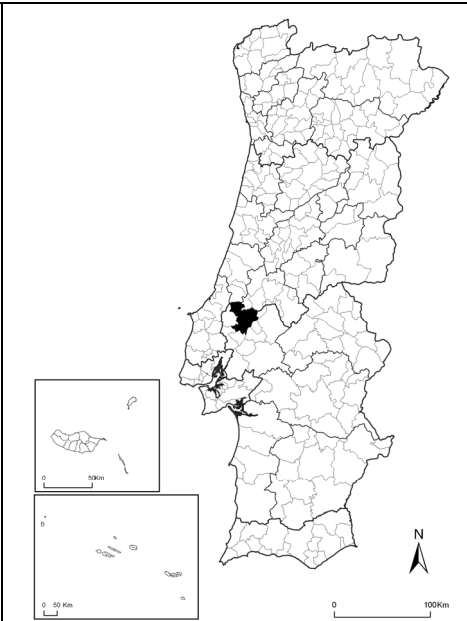


Fig. 322. Distribution map of *Ellerbeckia sol*

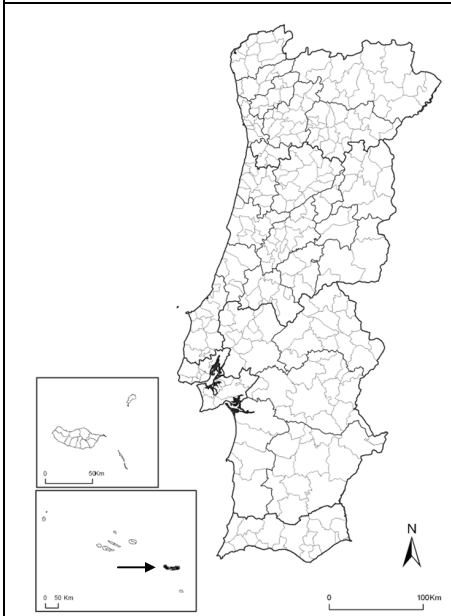


Fig. 323. Distribution map of *Encyonema alpinum*

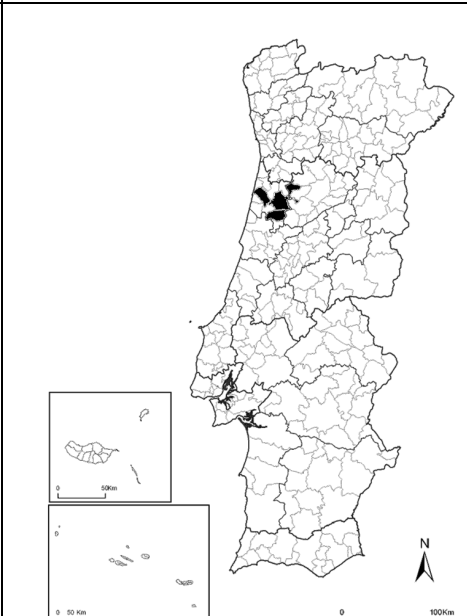


Fig. 324. Distribution map of *Encyonema brehmii*

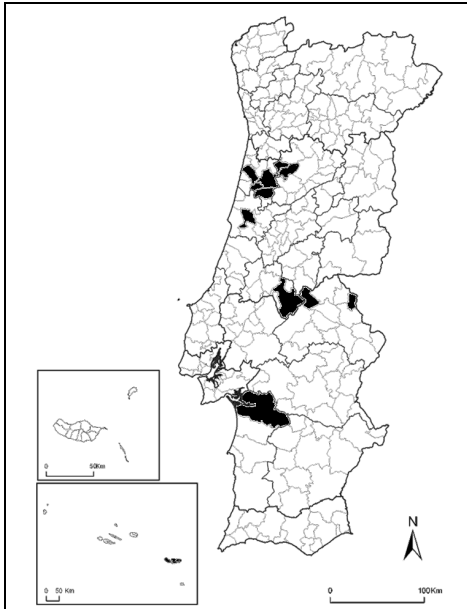


Fig. 325. Distribution map of *Encyonema caespitosum*

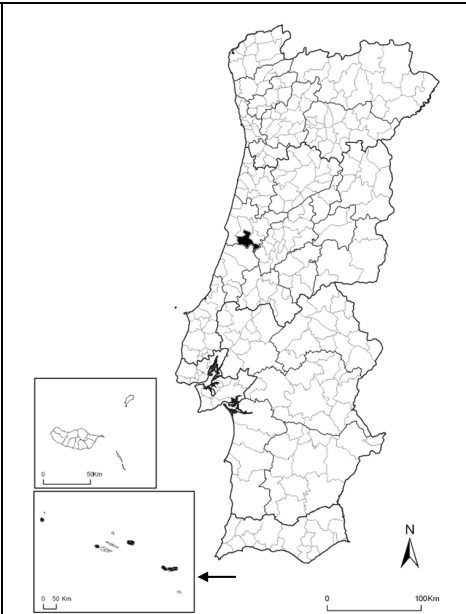


Fig. 326. Distribution map of *Encyonema elginense*

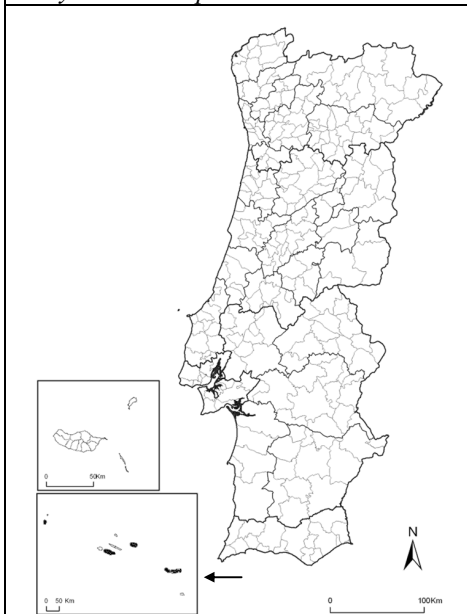


Fig. 327. Distribution map of *Encyonema gaumannii*

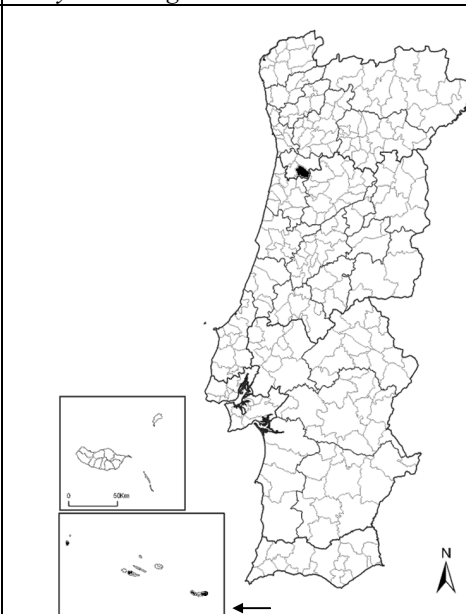


Fig. 328. Distribution map of *Encyonema gracile*

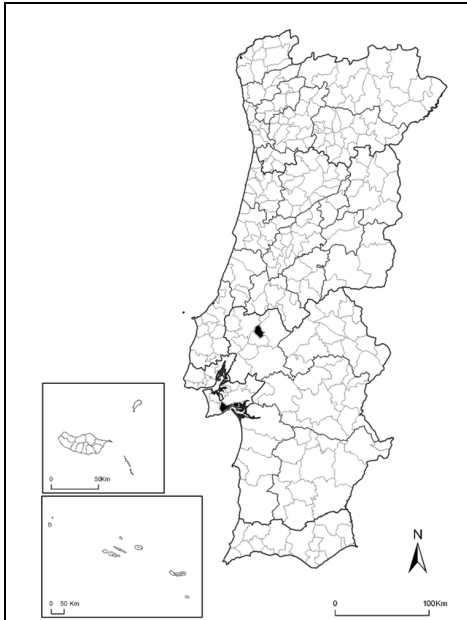


Fig. 329. Distribution map of *Encyonema hebridicum*

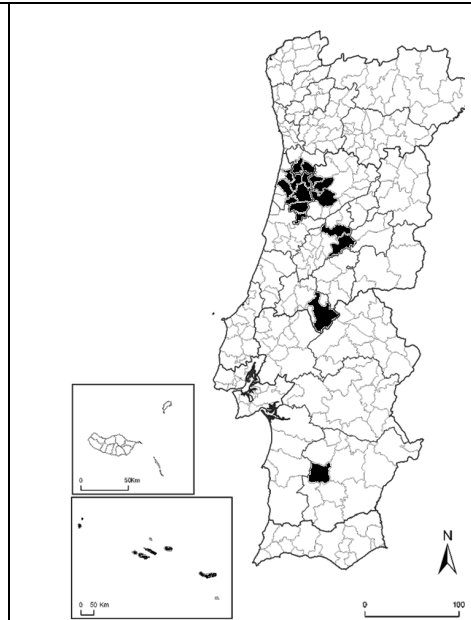


Fig. 330. Distribution map of *Encyonema minutum*

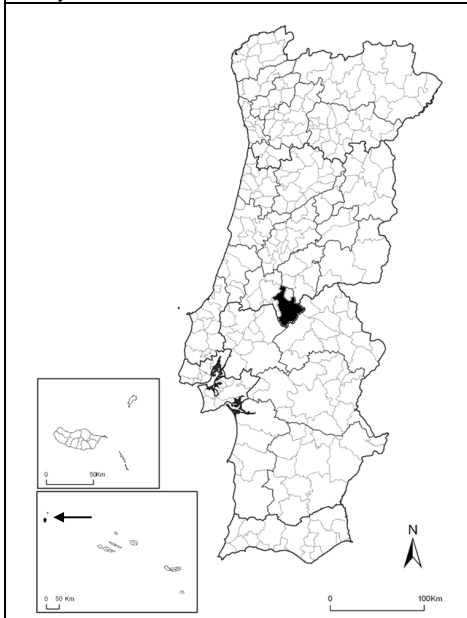


Fig. 331. Distribution map of *Encyonema muelleri*

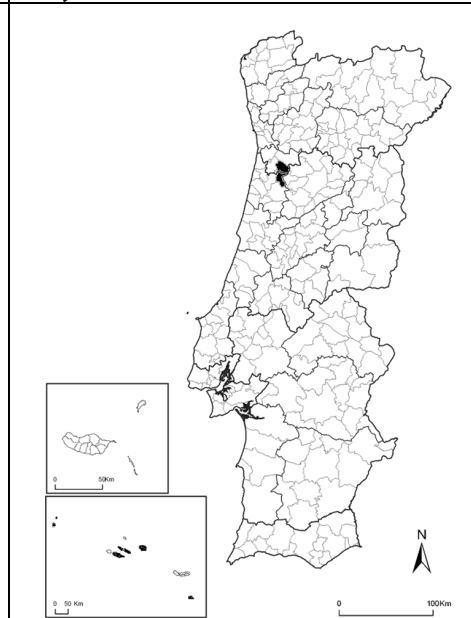


Fig. 332. Distribution map of *Encyonema neogracile*

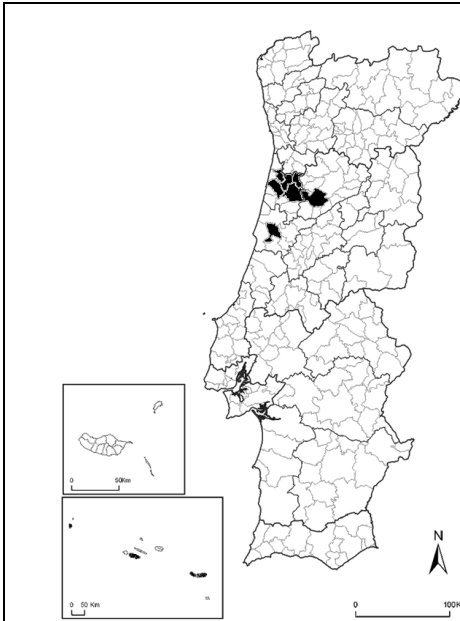


Fig. 333. Distribution map of *Encyonema neomesianum*

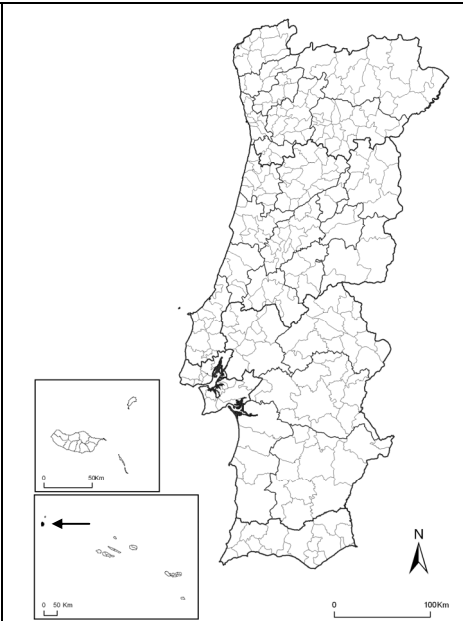


Fig. 334. Distribution map of *Encyonema paucistriatum*

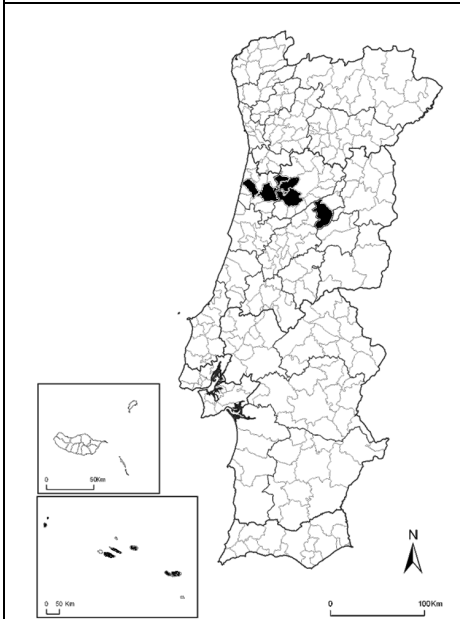


Fig. 335. Distribution map of *Encyonema perpusillum*

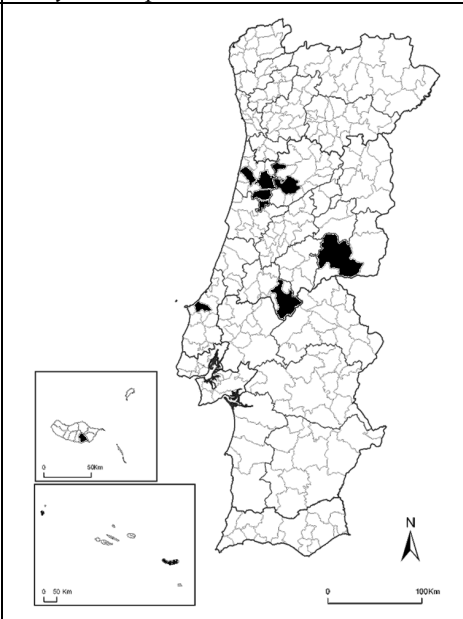


Fig. 336. Distribution map of *Encyonema prostratum*

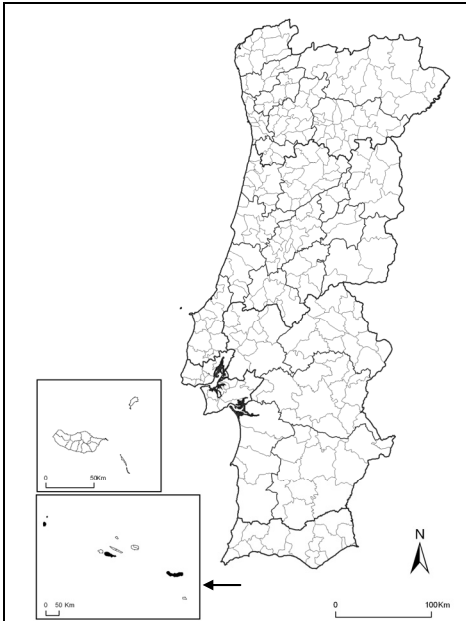


Fig. 337. Distribution map of *Encyonema rostratum*

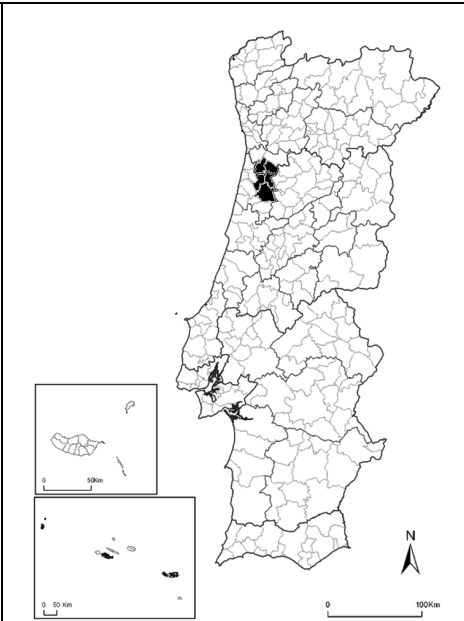


Fig. 338. Distribution map of *Encyonema silesiacum*

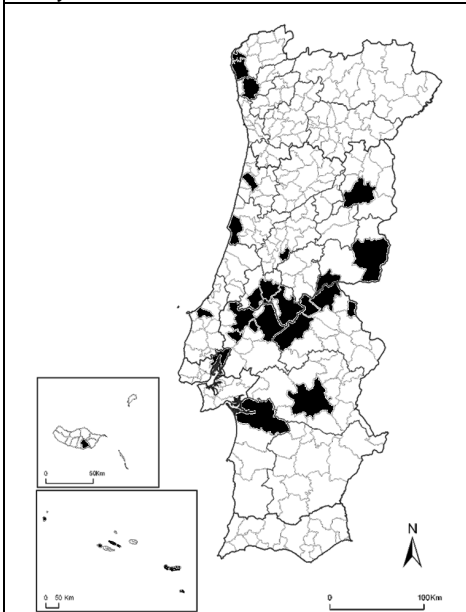


Fig. 339. Distribution map of *Encyonema ventricosum*

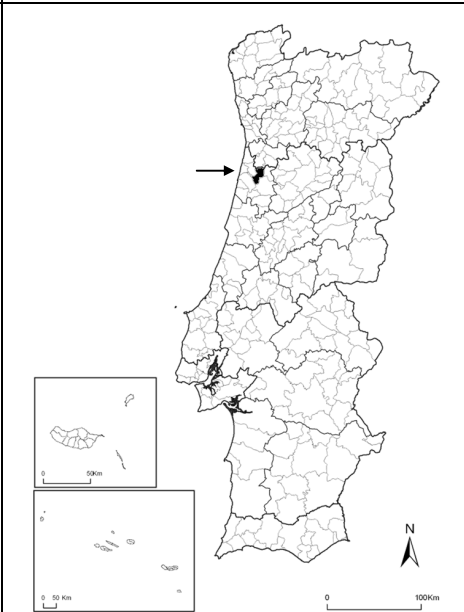


Fig. 340. Distribution map of *Encyonema vulgare*

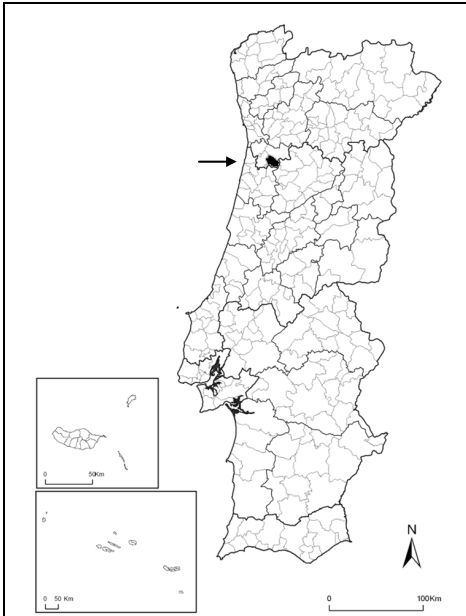


Fig. 341. Distribution map of *Encyonema vulgare* var. *intermedia*

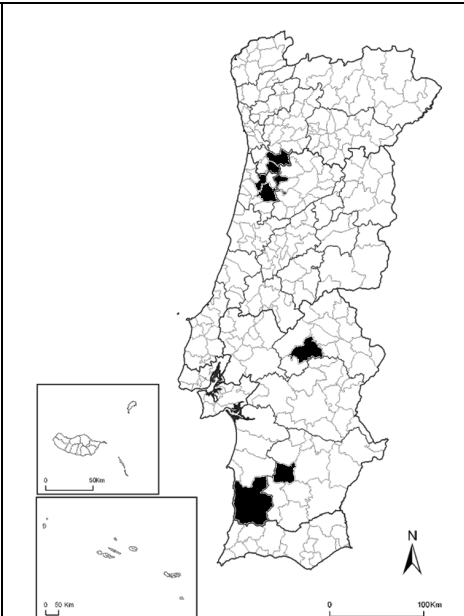


Fig. 342. Distribution map of *Encyonopsis aequalis*

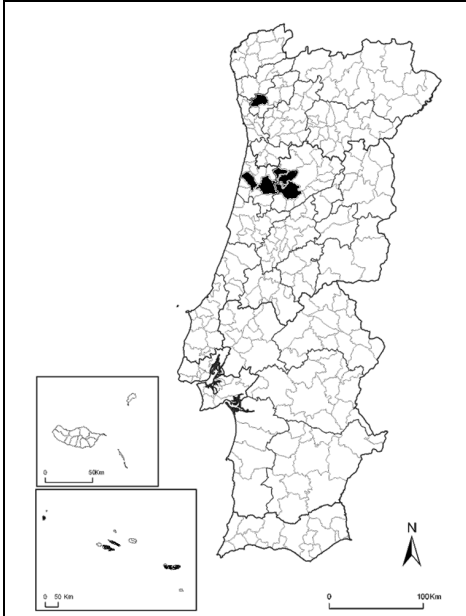


Fig. 343. Distribution map of *Encyonopsis cesatii*

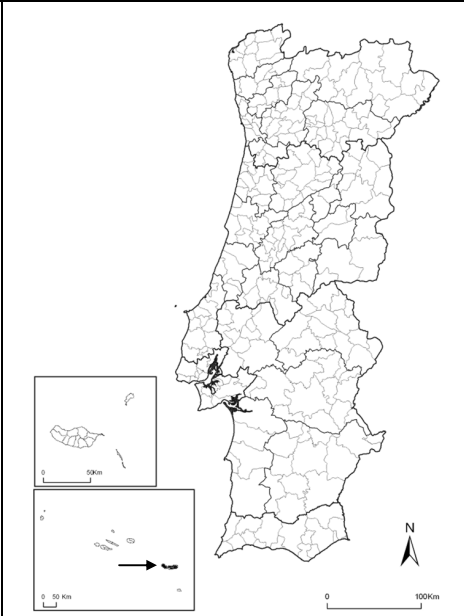


Fig. 344. Distribution map of *Encyonopsis falaisensis*

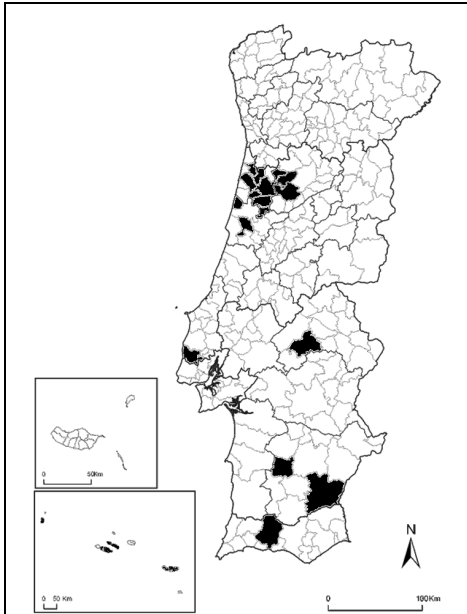


Fig. 345. Distribution map of *Encyonopsis microcephala*

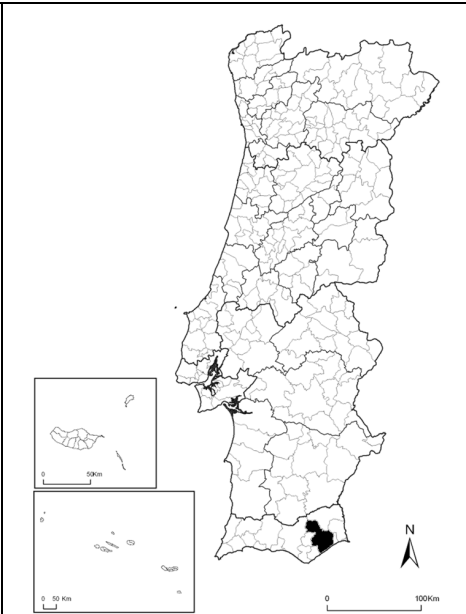


Fig. 346. Distribution map of *Encyonopsis tavirana*

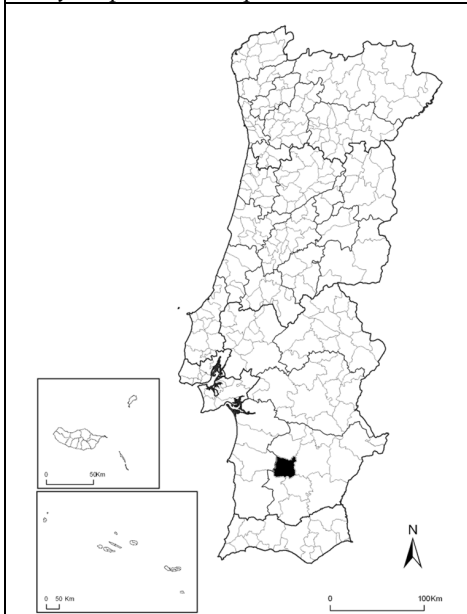


Fig. 347. Distribution map of *Entomoneis alata*

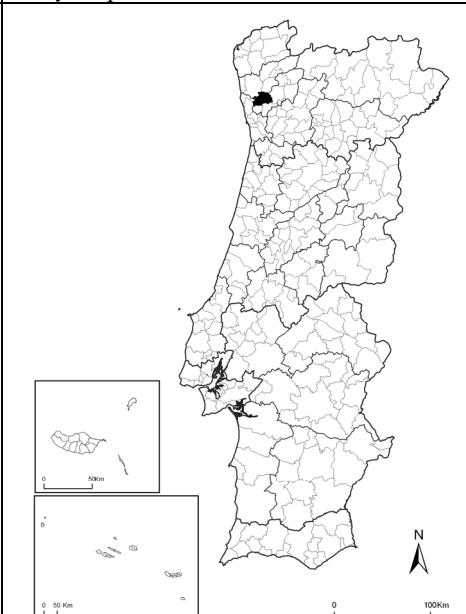


Fig. 348. Distribution map of *Entomoneis paludosa*

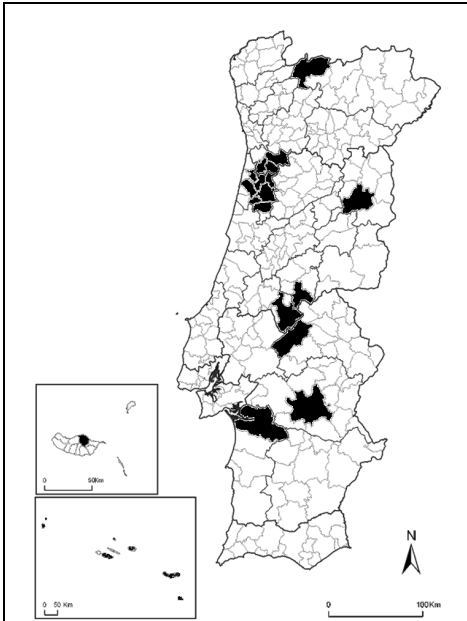


Fig. 349. Distribution map of *Eolimna minima*

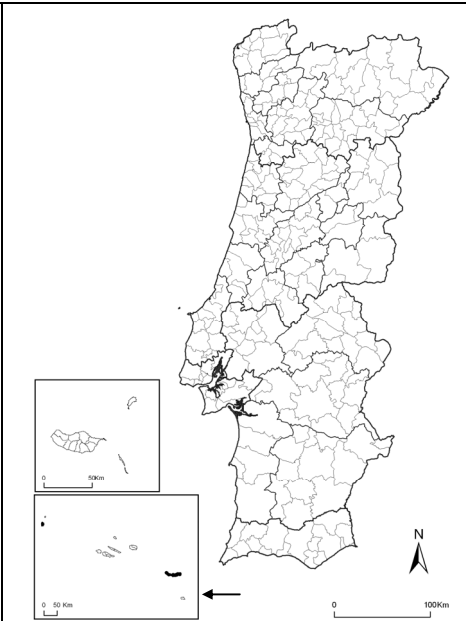


Fig. 350. Distribution map of *Eolimna rutneri*

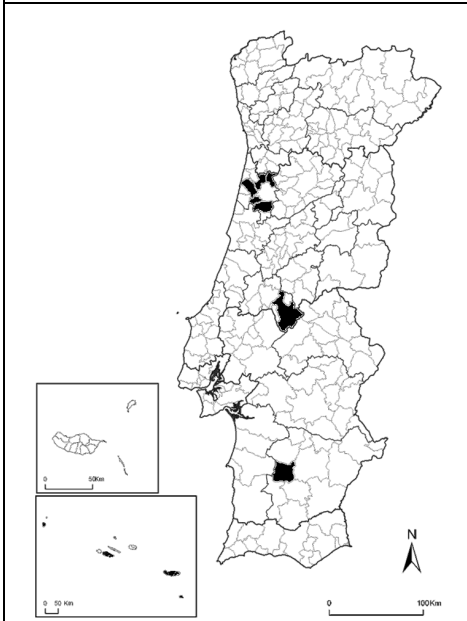


Fig. 351. Distribution map of *Eolimna subminuscula*

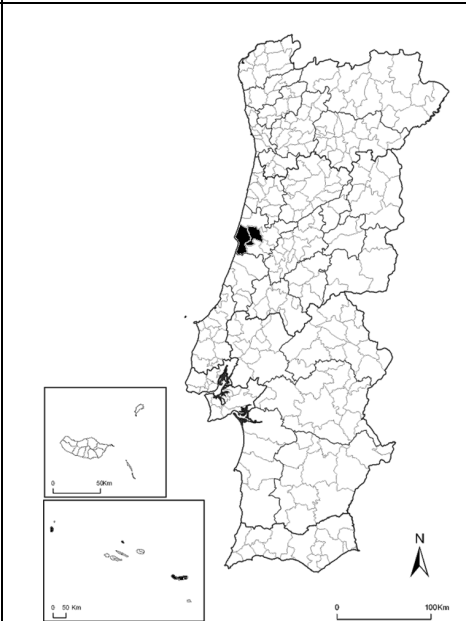


Fig. 352. Distribution map of *Epithemia adnata*

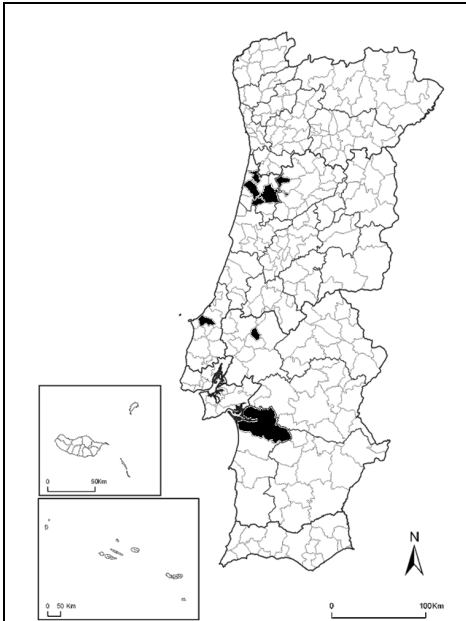


Fig. 353. Distribution map of *Epithemia adnata* var. *porcellus*

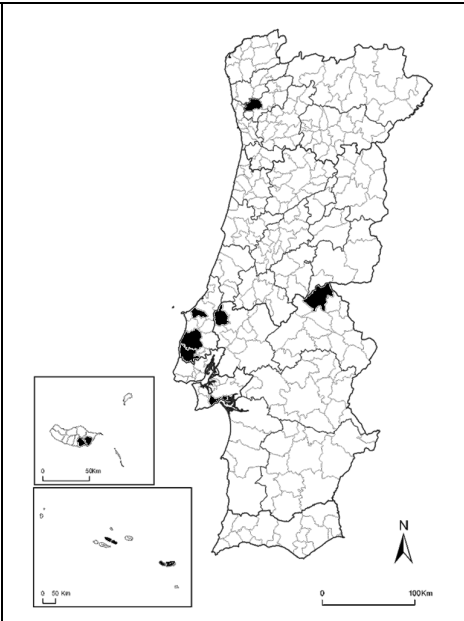


Fig. 354. Distribution map of *Epithemia argus*

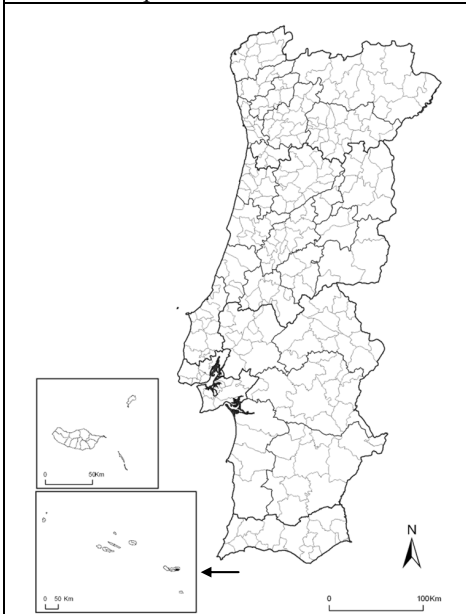


Fig. 355. Distribution map of *Epithemia argus* var. *alpestris*

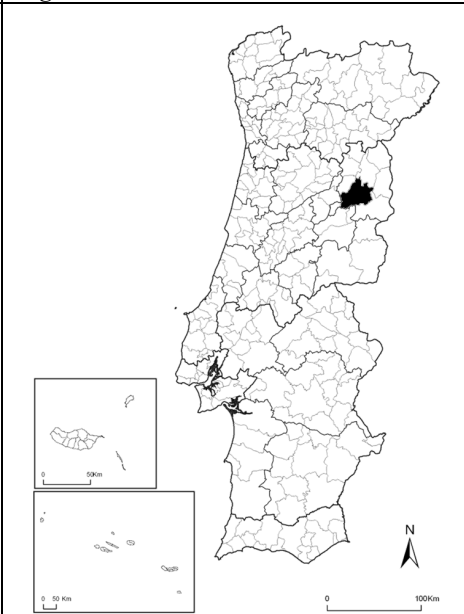


Fig. 356. Distribution map of *Epithemia argus* var. *capitata*

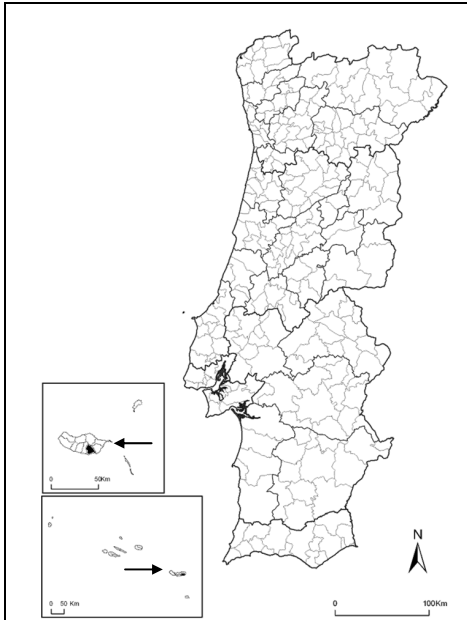


Fig. 357. Distribution map of *Epithemia ocellata*

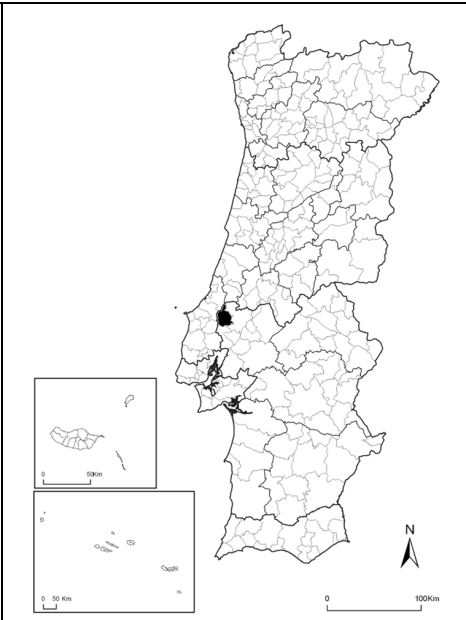


Fig. 358. Distribution map of *Epithemia reichelti*

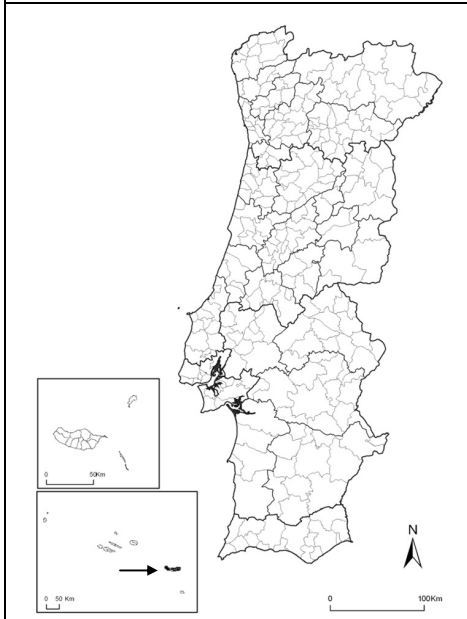


Fig. 359. Distribution map of *Epithemia smithii*

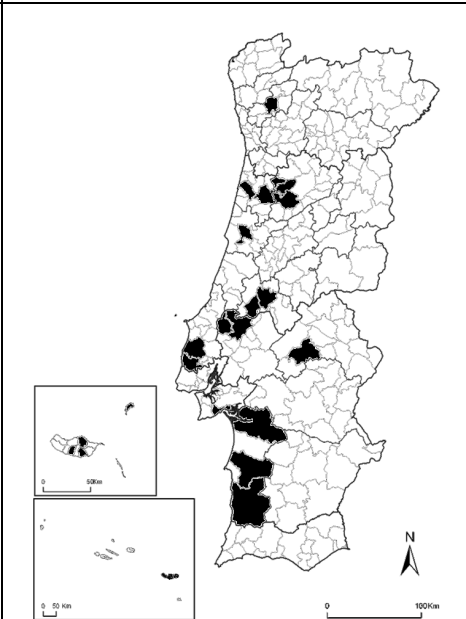


Fig. 360. Distribution map of *Epithemia sorex*

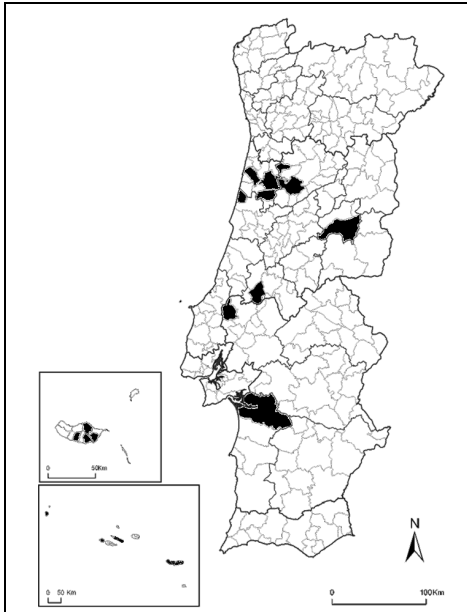


Fig. 361. Distribution map of *Epithemia turgida*

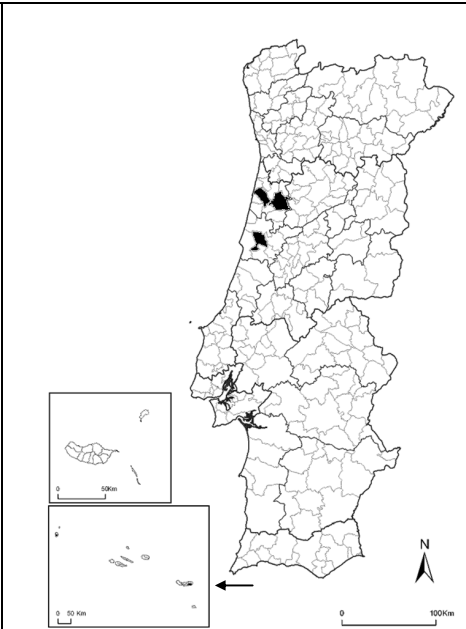


Fig. 362. Distribution map of *Epithemia turgida* var. *granulata*

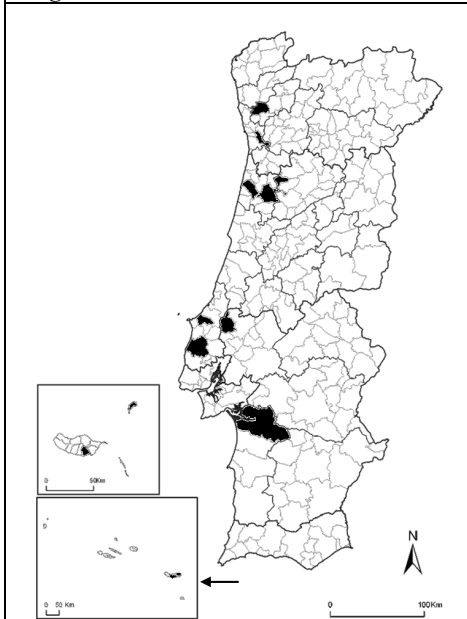


Fig. 363. Distribution map of *Epithemia zebra*

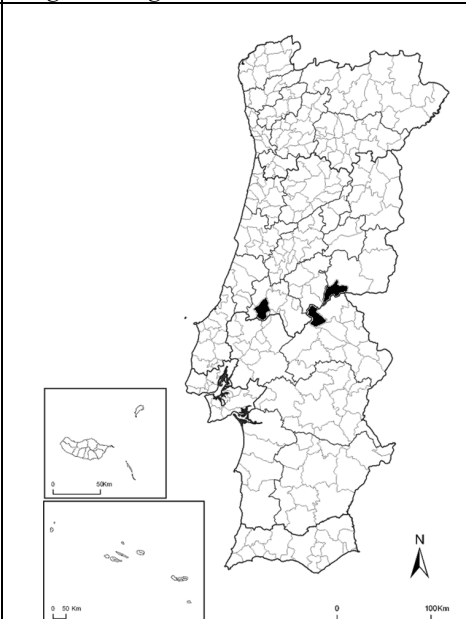


Fig. 364. Distribution map of *Epithemia* sp.

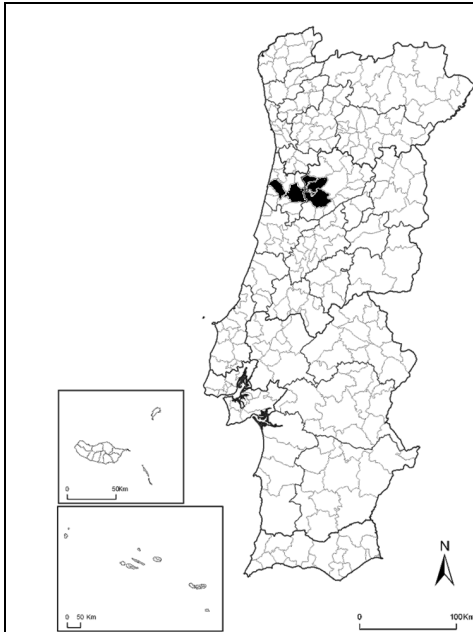


Fig. 365. Distribution map of *Eucoconeis austriaca*

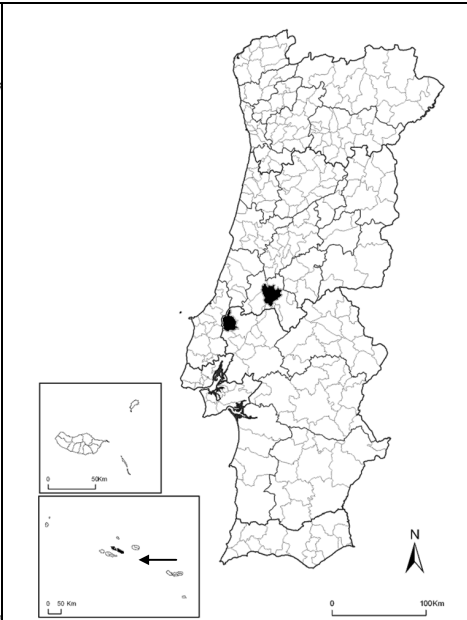


Fig. 366. Distribution map of *Eucoconeis flexella*

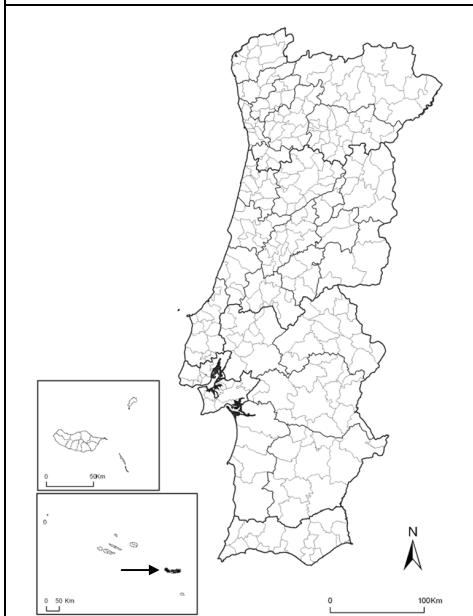


Fig. 367. Distribution map of *Eucoconeis laevis*

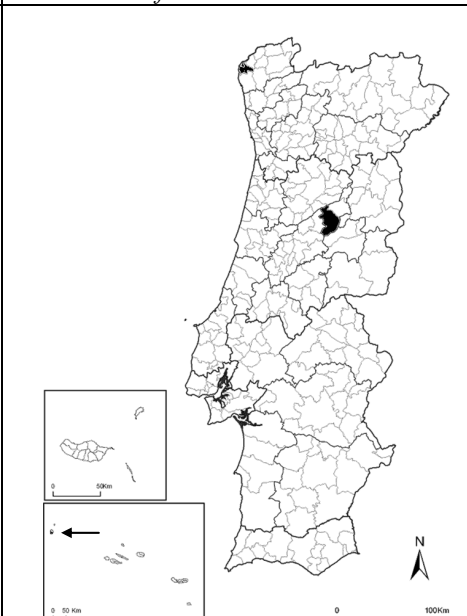


Fig. 368. Distribution map of *Eumotia alpina*

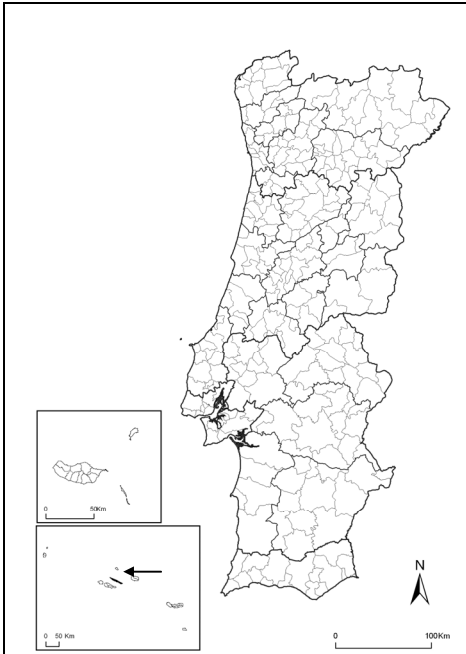


Fig. 369. Distribution map of *Eunotia arcofallax*

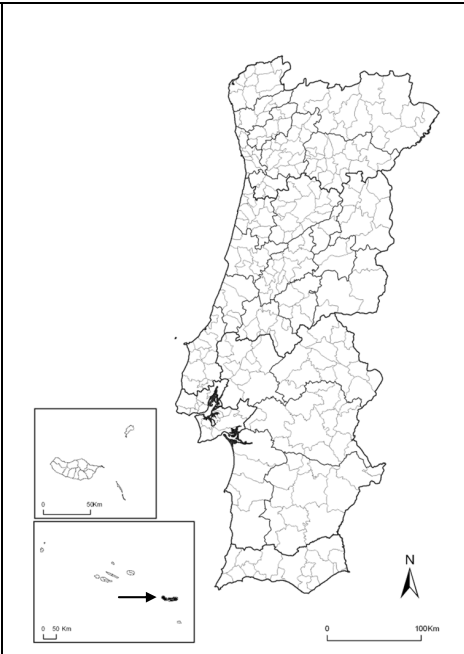


Fig. 370. Distribution map of *Eunotia arcubus*

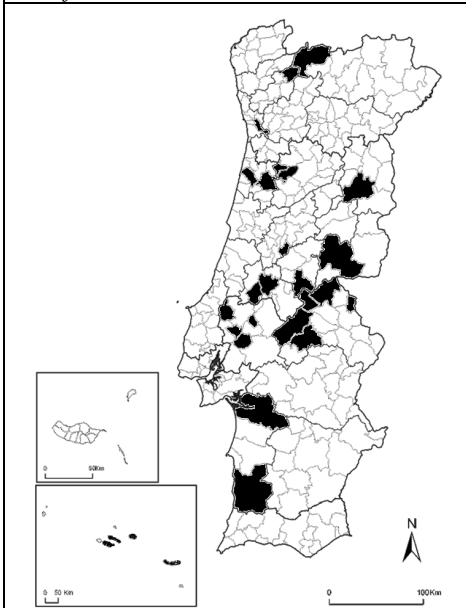


Fig. 371. Distribution map of *Eunotia arcus*

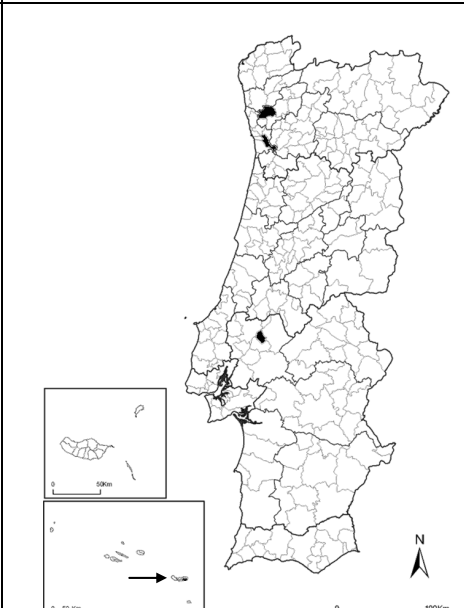


Fig. 372. Distribution map of *Eunotia arcus* var. *bidens*

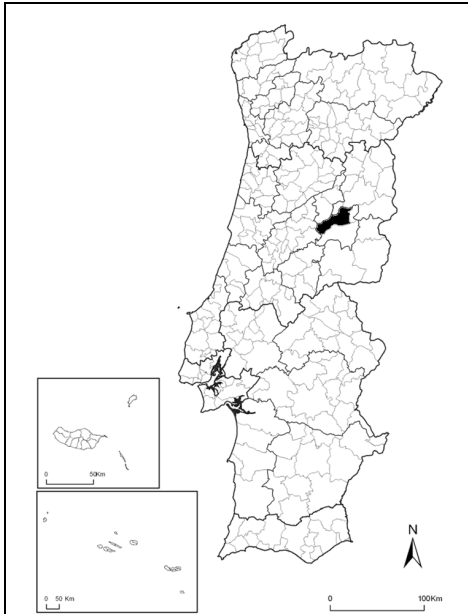


Fig. 373. Distribution map of *Eunotia arcus* var. *curtum*

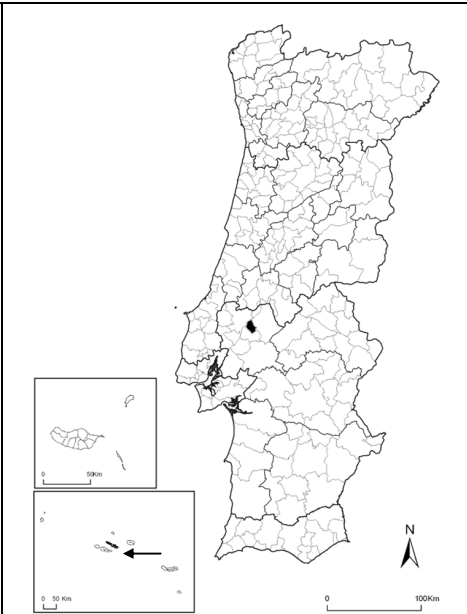


Fig. 374. Distribution map of *Eunotia arcus* var. *fallax*

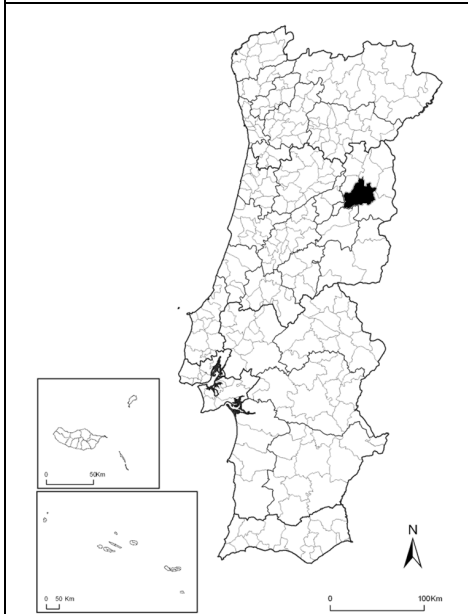


Fig. 375. Distribution map of *Eunotia arcus* var. *minor*

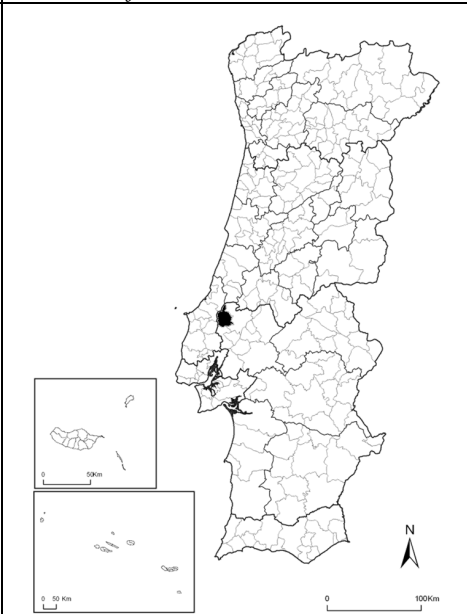


Fig. 376. Distribution map of *Eunotia arcus* var. *bicipitata*

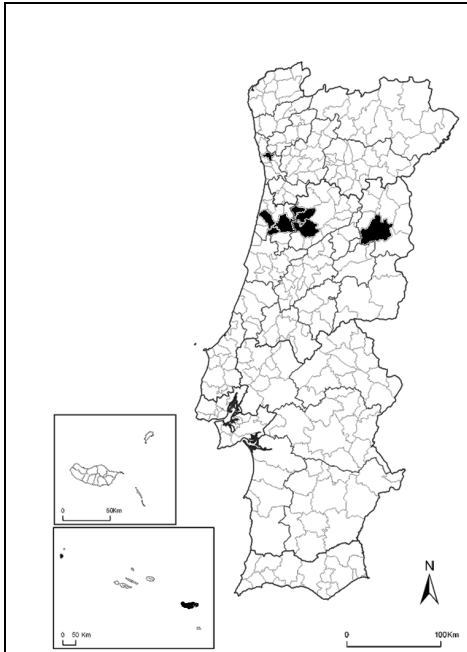


Fig. 377. Distribution map of *Eunotia bidens*

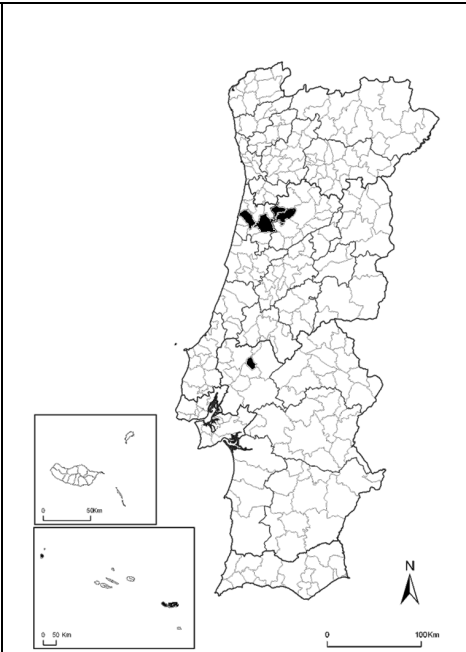


Fig. 378. Distribution map of *Eunotia bidentula*

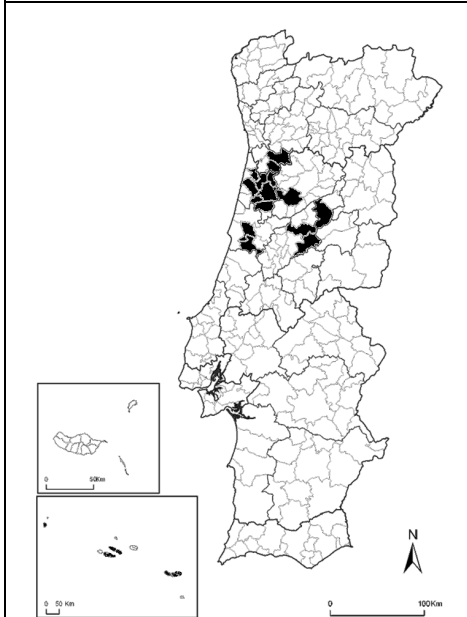


Fig. 379. Distribution map of *Eunotia bilunaris*

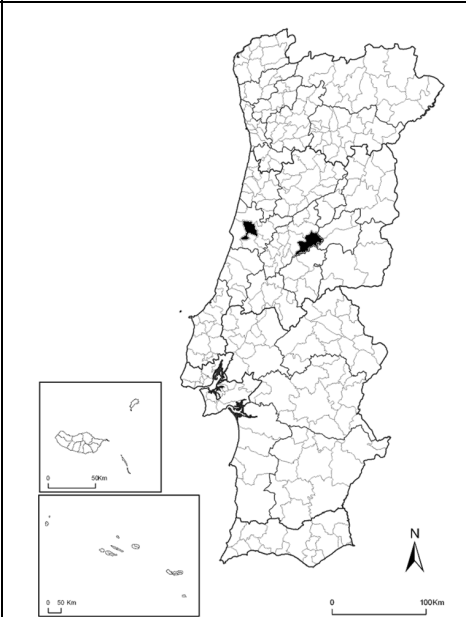


Fig. 380. Distribution map of *Eunotia bilunaris* var. *linearis*

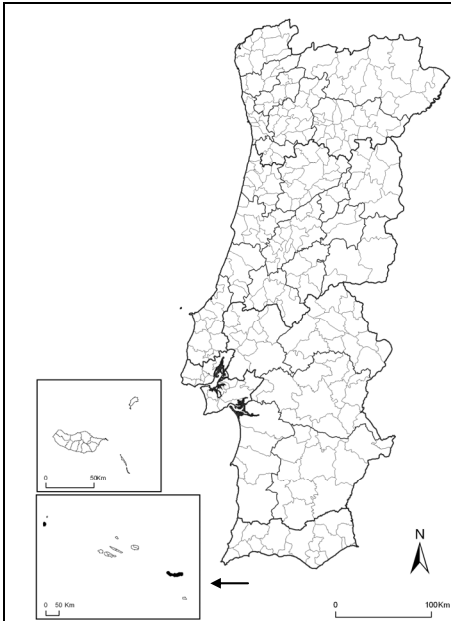


Fig. 381. Distribution map of *Eunotia curtagrünowii*

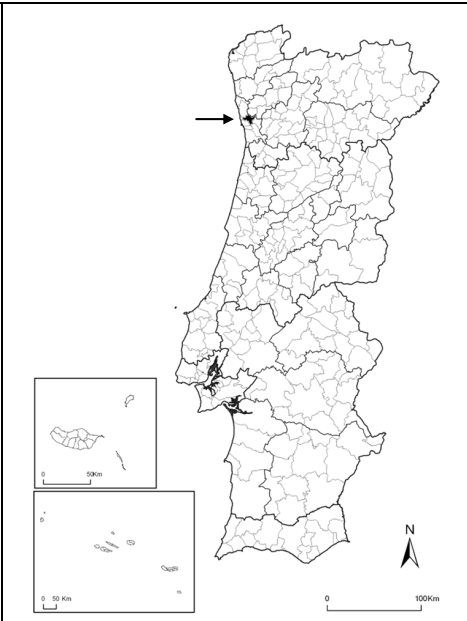


Fig. 382. Distribution map of *Eunotia diadema*

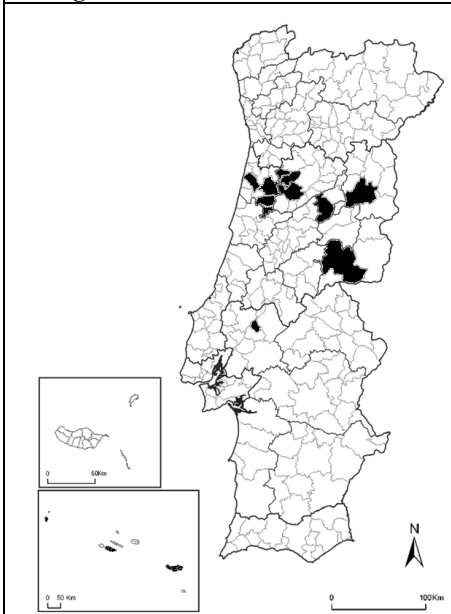


Fig. 383. Distribution map of *Eunotia diodon*

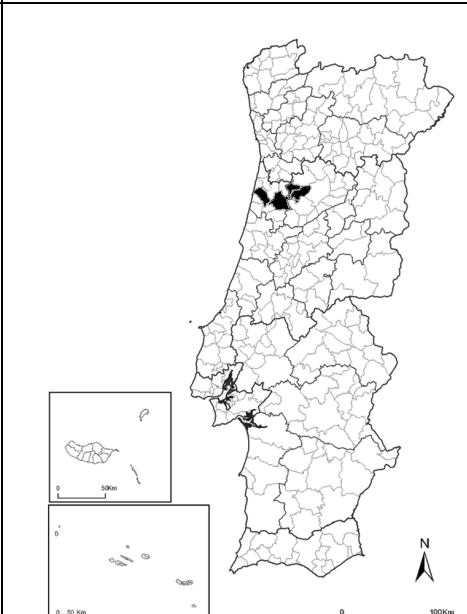


Fig. 384. Distribution map of *Eunotia exgracilis*

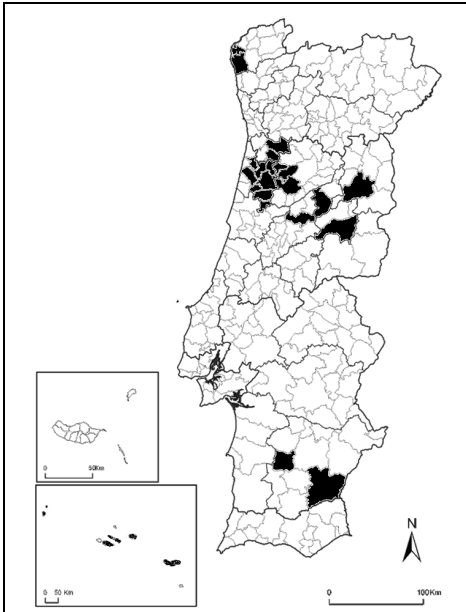


Fig. 385. Distribution map of *Eunotia exigua*

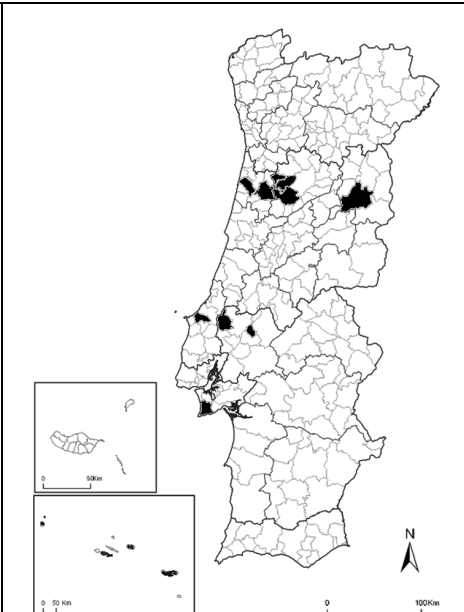


Fig. 386. Distribution map of *Eunotia faba*

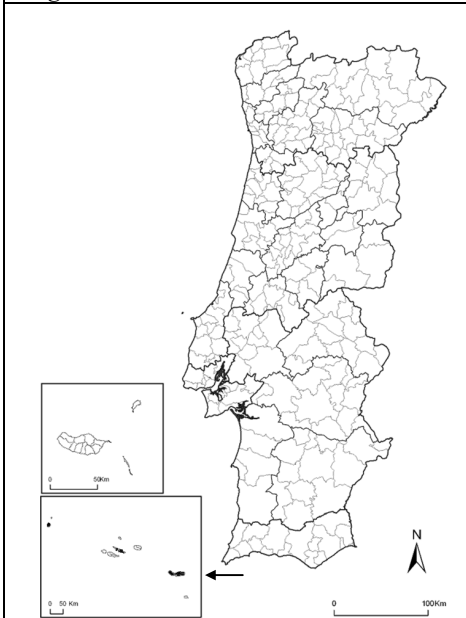


Fig. 387. Distribution map of *Eunotia fallax*

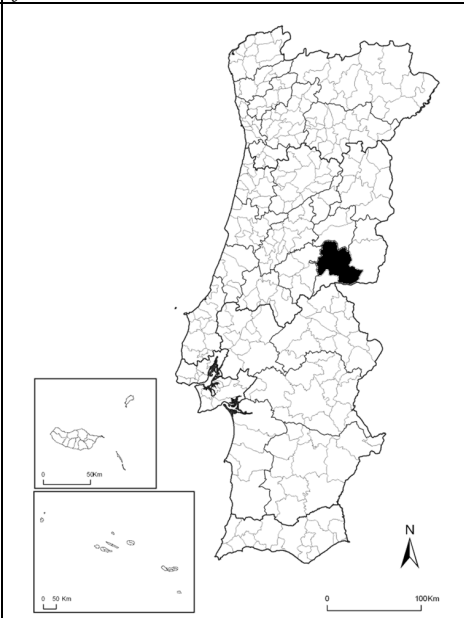


Fig. 388. Distribution map of *Eunotia fidelensis*

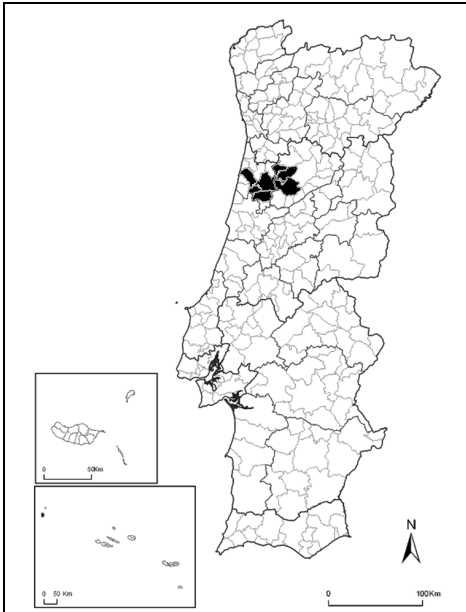


Fig. 389. Distribution map of *Eunotia flexuosa*

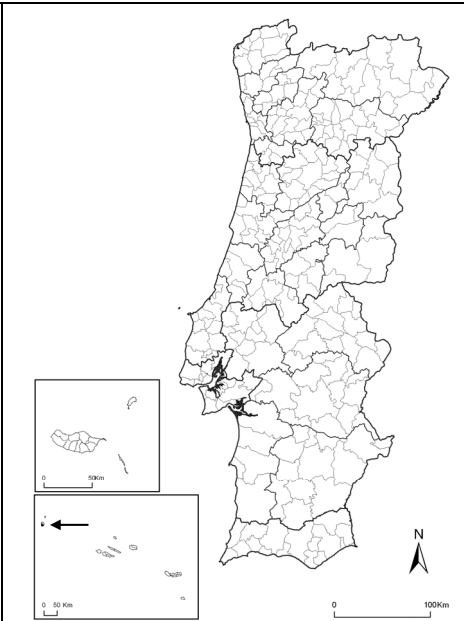


Fig. 390. Distribution map of *Eunotia flexuosa* var. *vasconiensis*

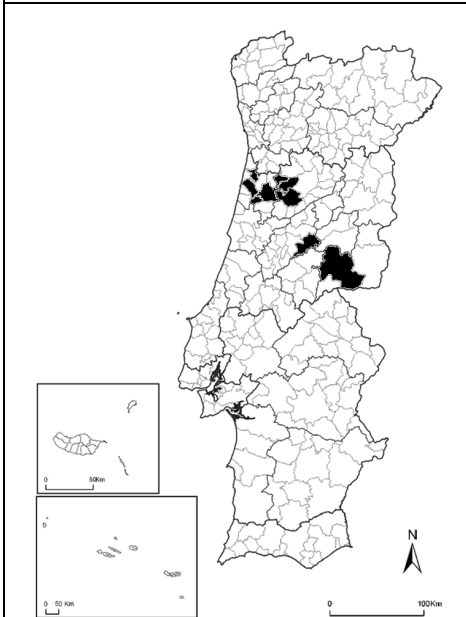


Fig. 391. Distribution map of *Eunotia formica*

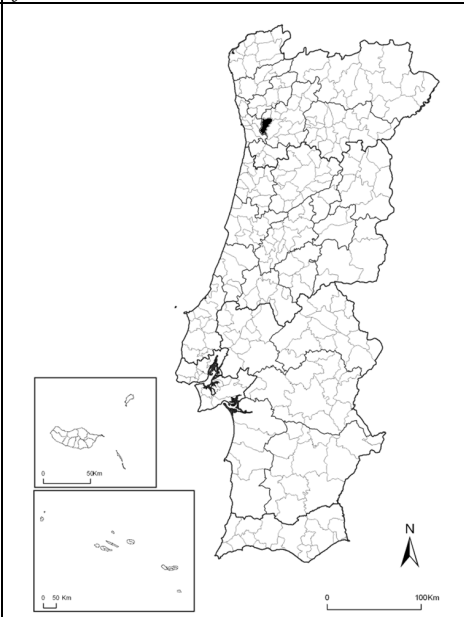


Fig. 392. Distribution map of *Eunotia formica* var. *intermedia*

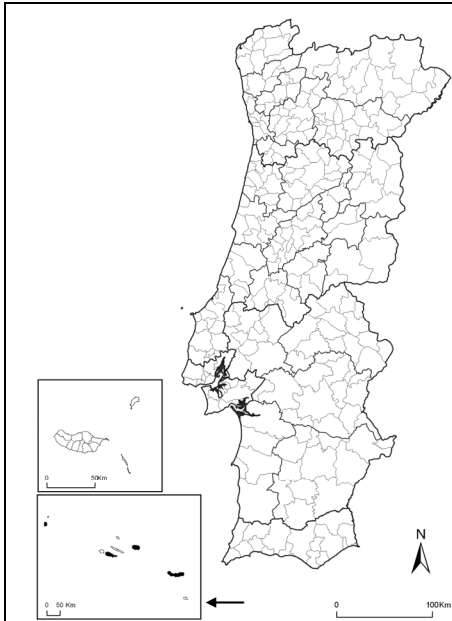


Fig. 393. Distribution map of *Eunotia glacialis*

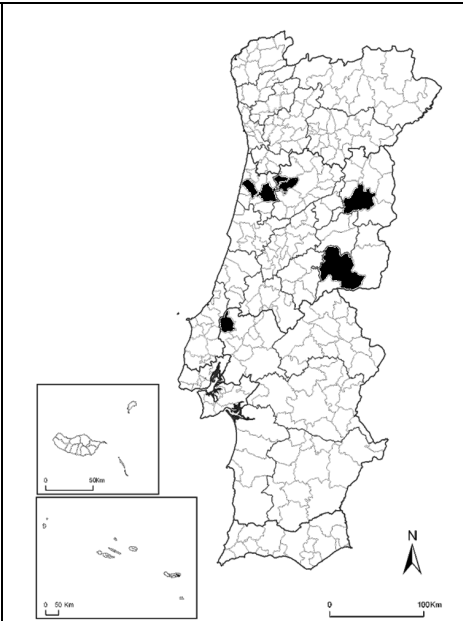


Fig. 394. Distribution map of *Eunotia gracilis* (Ehrenberg) Rabenhorst

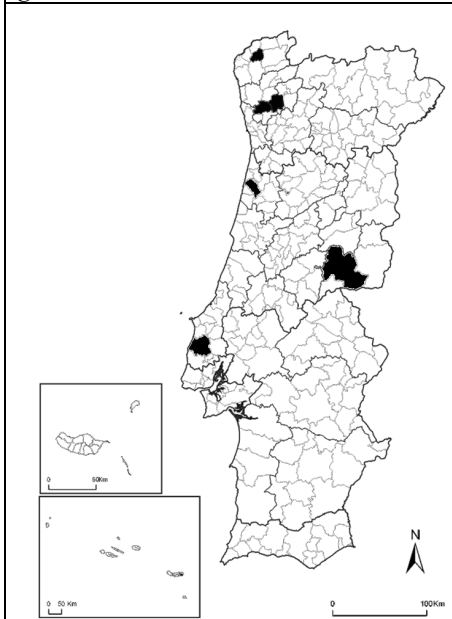


Fig. 395. Distribution map of *Eunotia gracilis* W. Smith

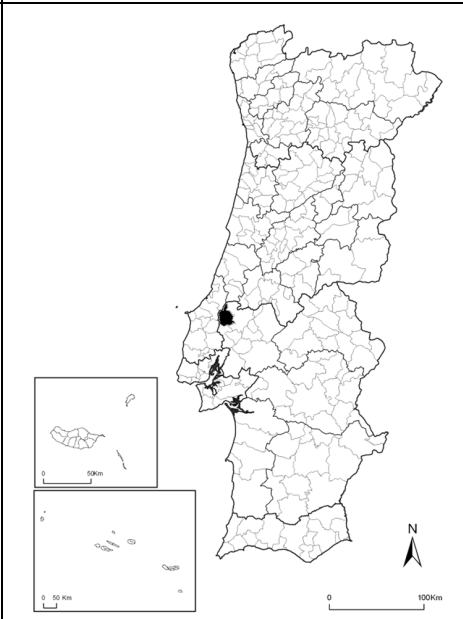


Fig. 396. Distribution map of *Eunotia gracilis* var. *ventralis*

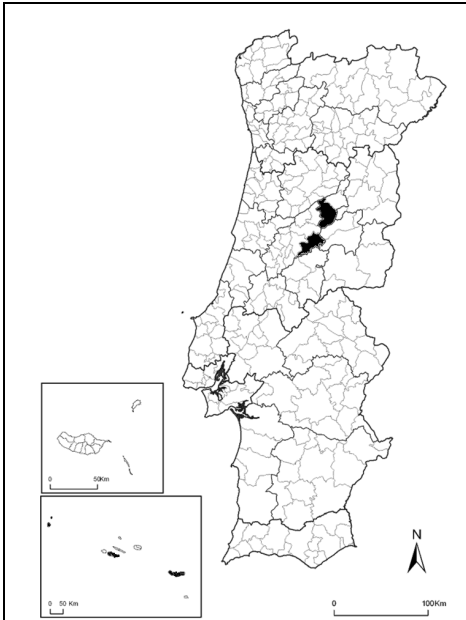


Fig. 397. Distribution map of *Eunotia implicata*

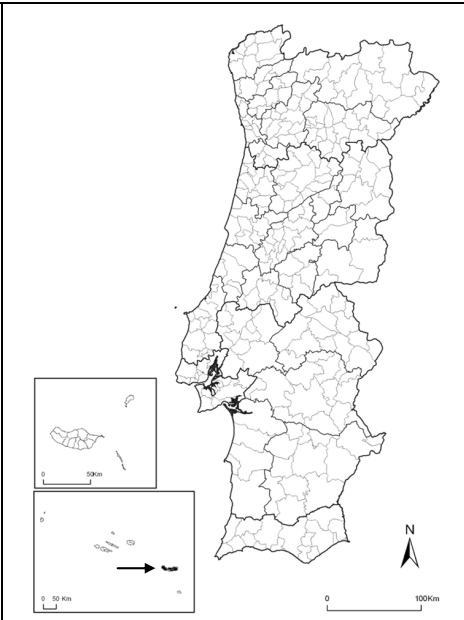


Fig. 398. Distribution map of *Eunotia impressa*

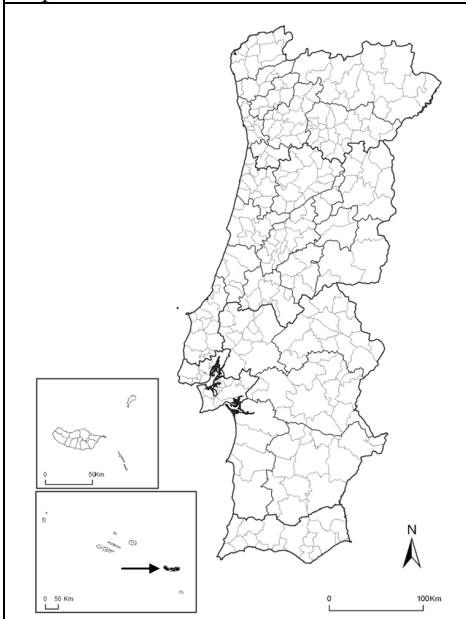


Fig. 399. Distribution map of *Eunotia impressa* var. *angusta*

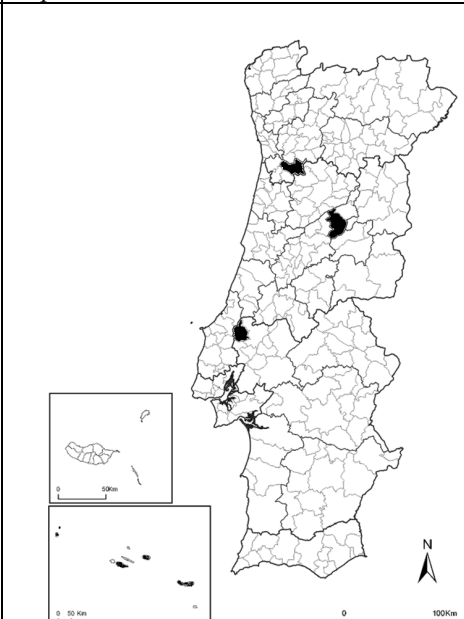


Fig. 400. Distribution map of *Eunotia incisa*

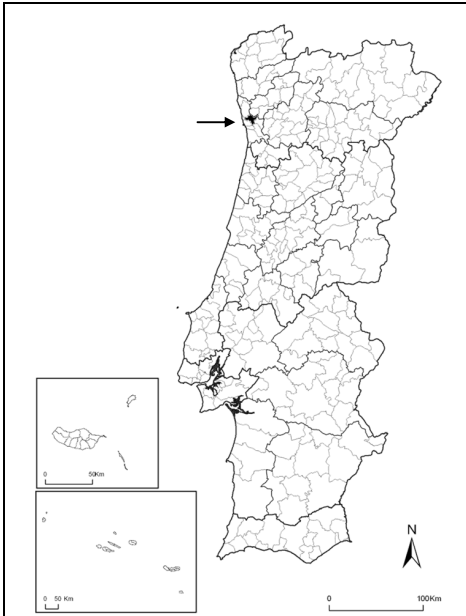


Fig. 401. Distribution map of *Eunotia inflata*

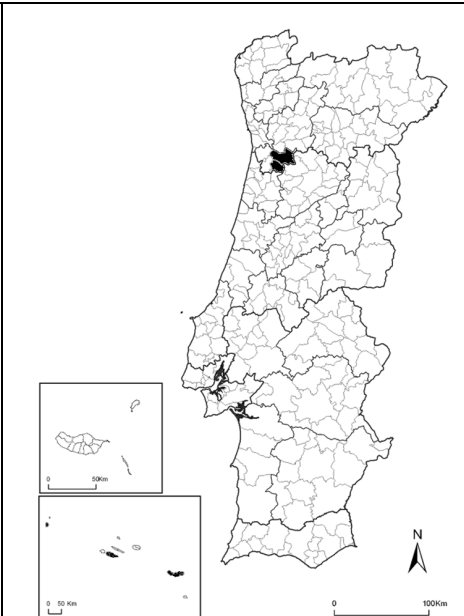


Fig. 402. Distribution map of *Eunotia intermedia*

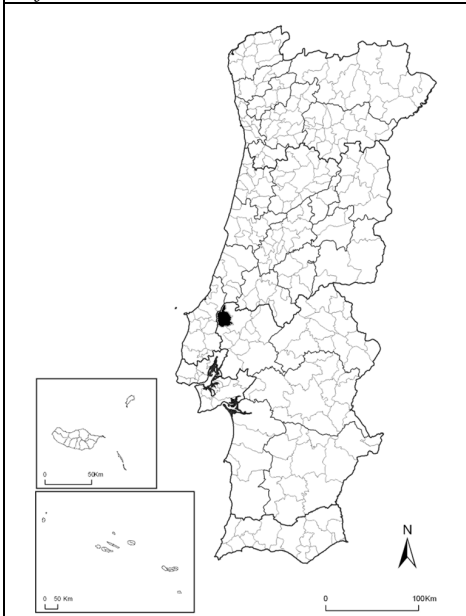


Fig. 403. Distribution map of *Eunotia lapponica*

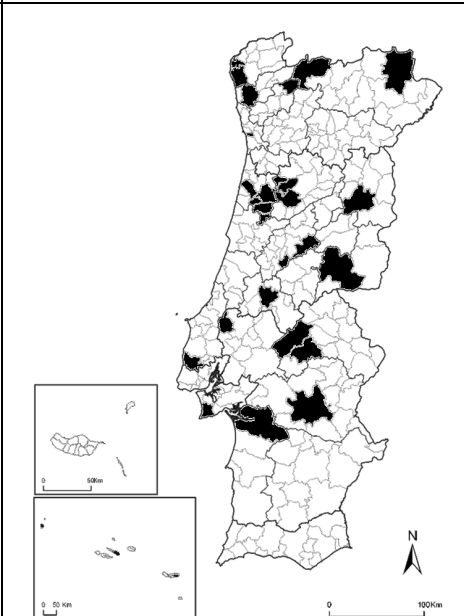


Fig. 404. Distribution map of *Eunotia lunaris*

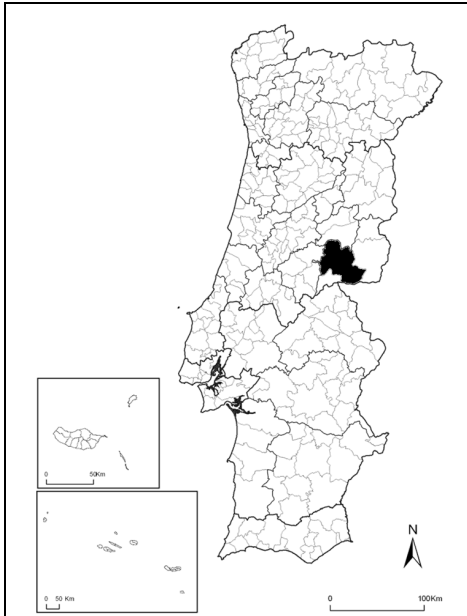


Fig. 405. Distribution map of *Eunotia lunaris* var. *bilunaris*

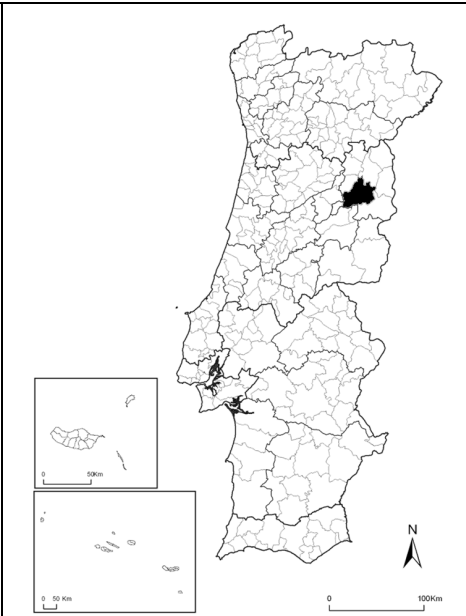


Fig. 406. Distribution map of *Eunotia lunaris* var. *excisa*

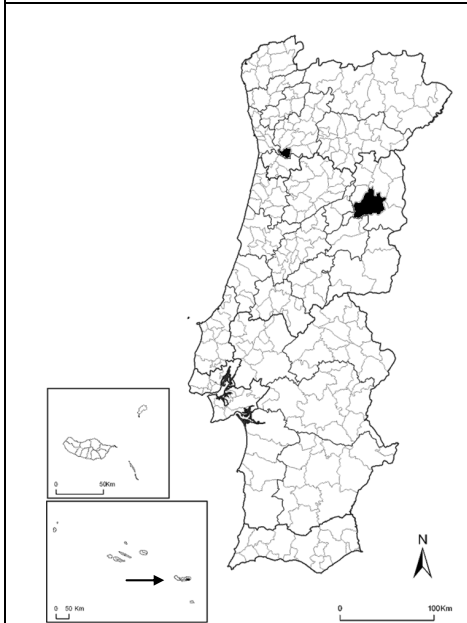


Fig. 407. Distribution map of *Eunotia lunaris* var. *subarcuata*

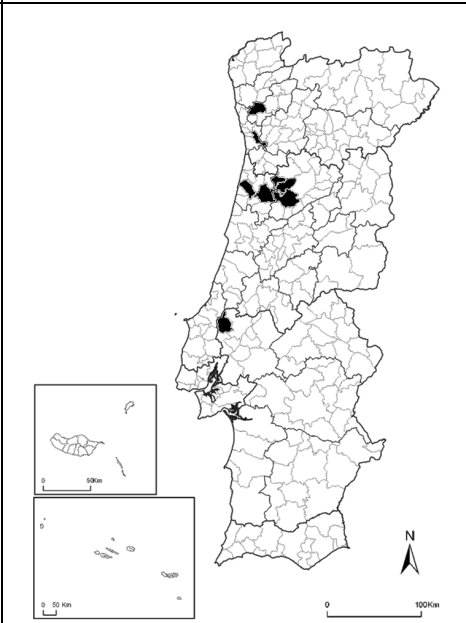


Fig. 408. Distribution map of *Eunotia lunaris* var. *maior*

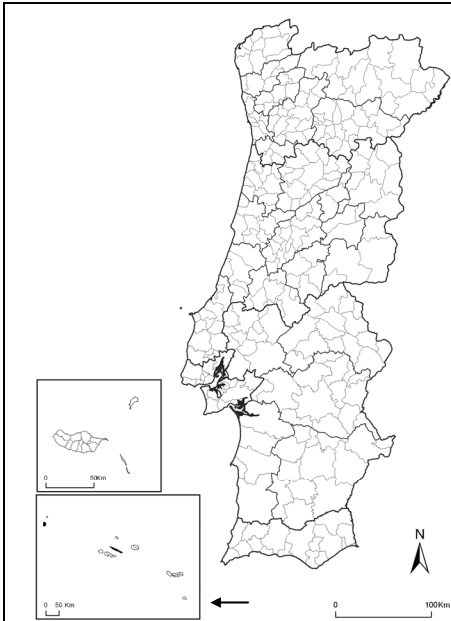


Fig. 409. Distribution map of *Eunotia microcephala*

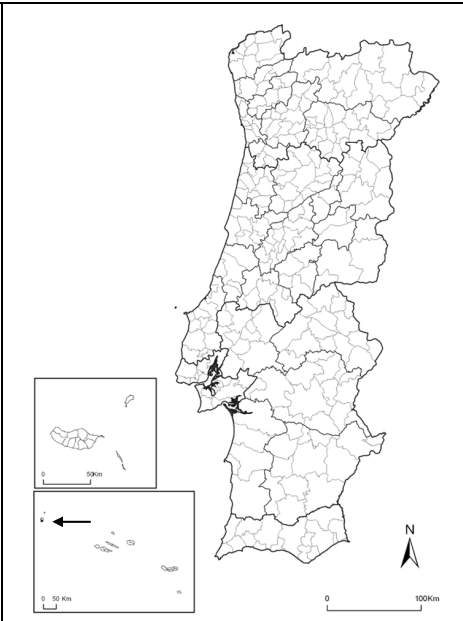


Fig. 410. Distribution map of *Eunotia microcephala* var. *tridentata*

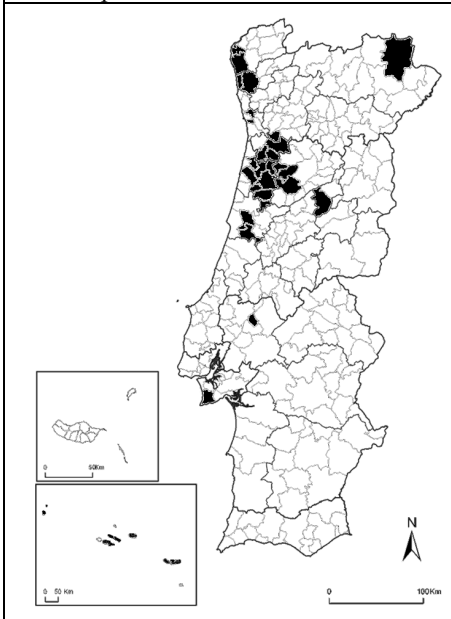


Fig. 411. Distribution map of *Eunotia minor*

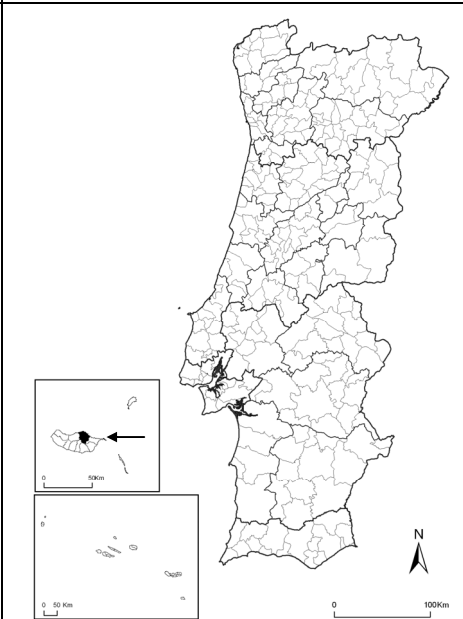


Fig. 412. Distribution map of *Eunotia minutula*

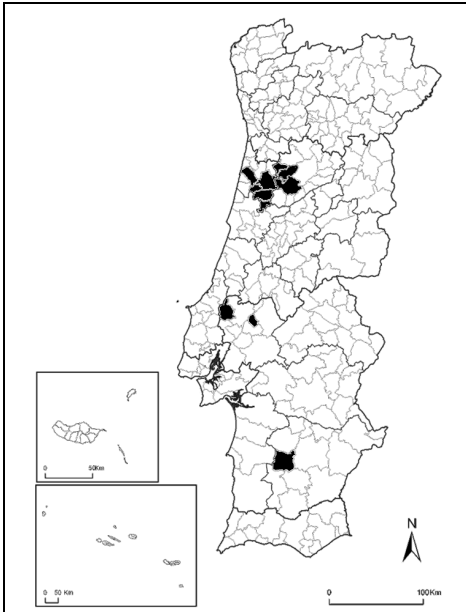


Fig. 413. Distribution map of *Eunotia monodon*

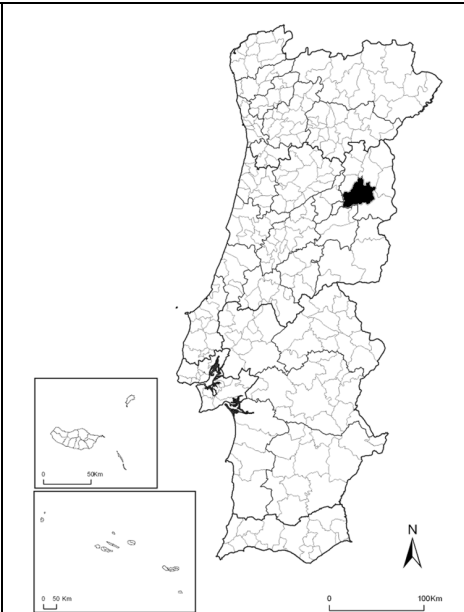


Fig. 414. Distribution map of *Eunotia monodon* f. *curta*

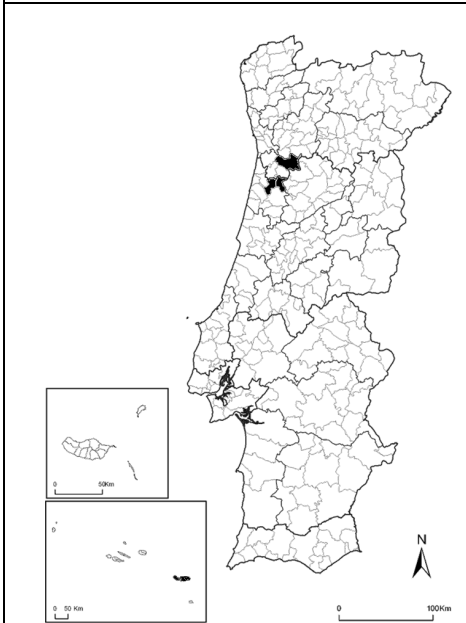


Fig. 415. Distribution map of *Eunotia mucophila*

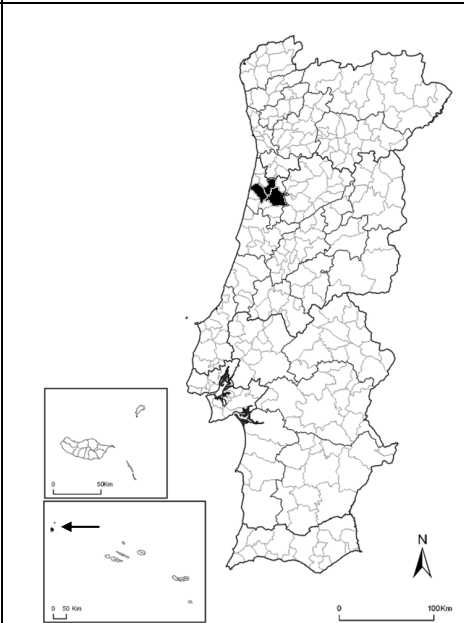


Fig. 416. Distribution map of *Eunotia naegelii*

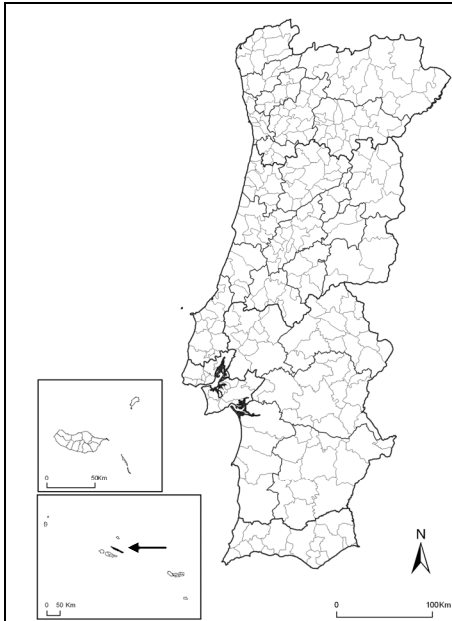


Fig. 417. Distribution map of *Eunotia neocompacta*

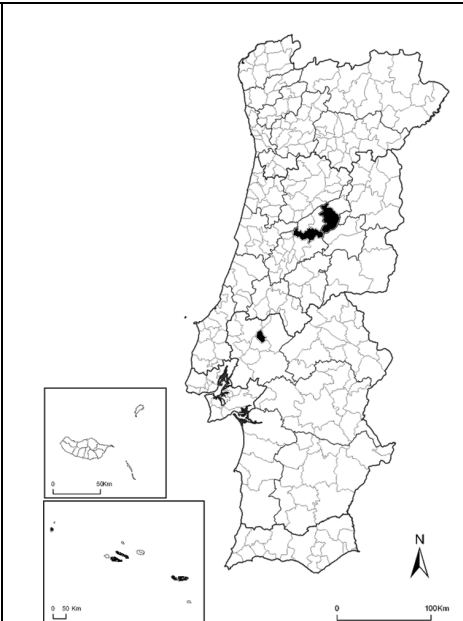


Fig. 418. Distribution map of *Eunotia paludosa*

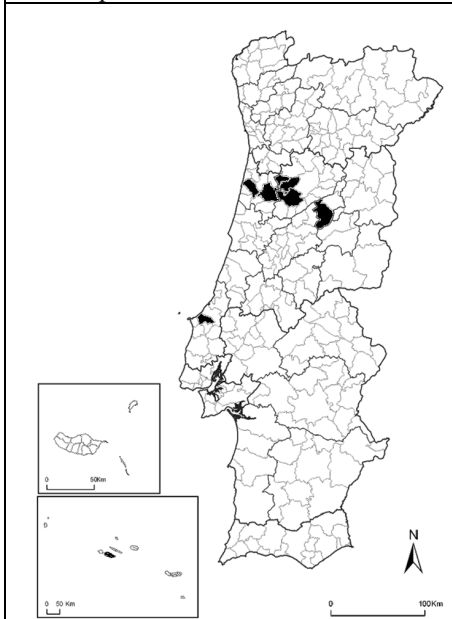


Fig. 419. Distribution map of *Eunotia parallela*

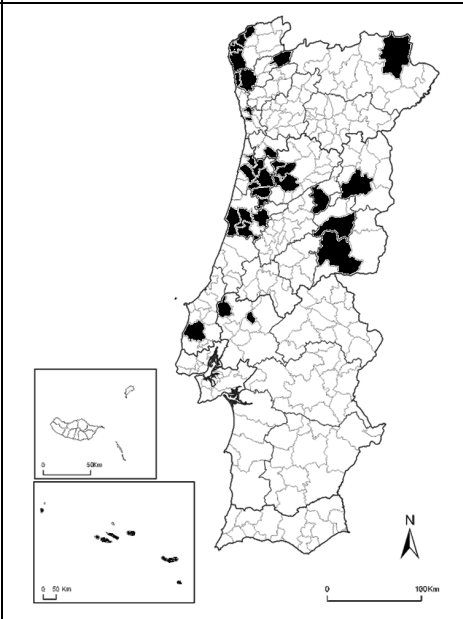


Fig. 420. Distribution map of *Eunotia pectinalis*

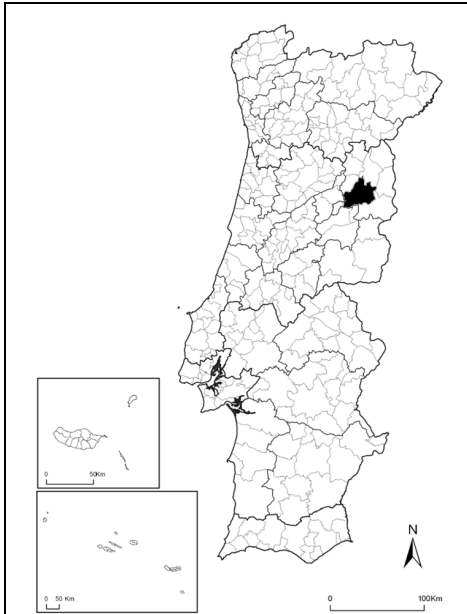


Fig. 421. Distribution map of *Eunotia pectinalis* f. *curta*

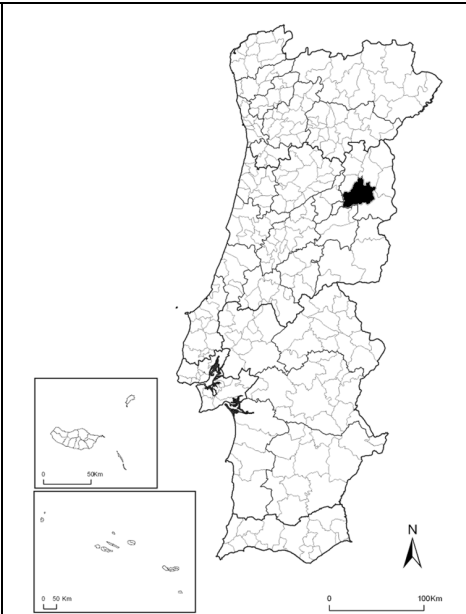


Fig. 422. Distribution map of *Eunotia pectinalis* f. *elongata*

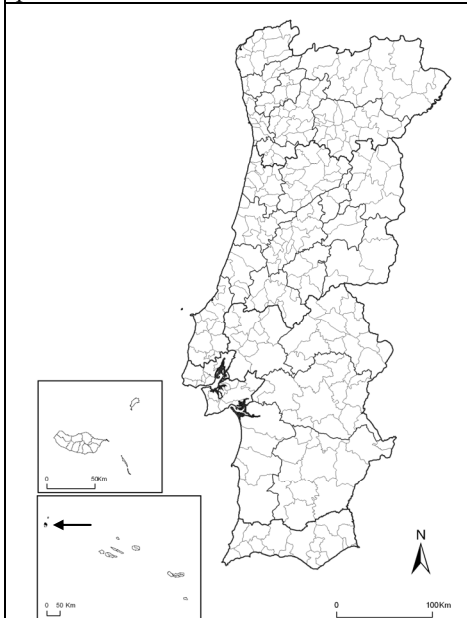


Fig. 423. Distribution map of *Eunotia pectinalis* var. *minor* f. *affines*

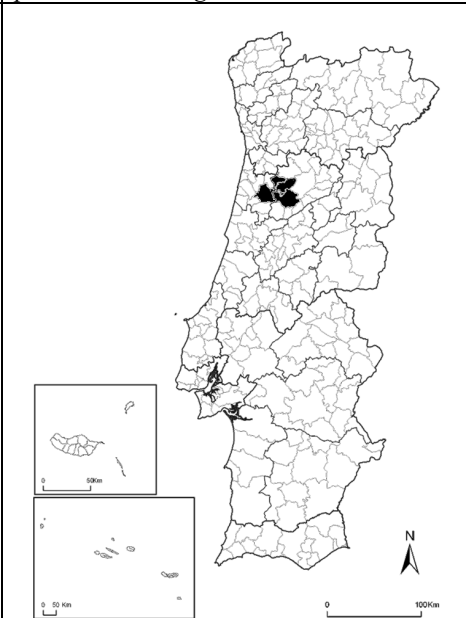


Fig. 424. Distribution map of *Eunotia pectinalis* var. *rostrata*

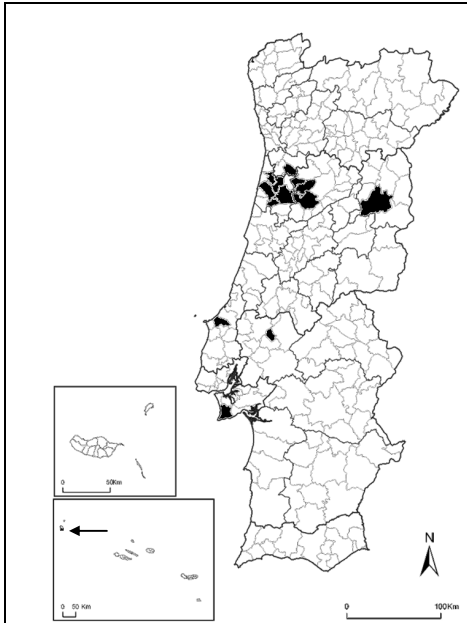


Fig. 425. Distribution map of *Eunotia pectinalis* var. *undulata*

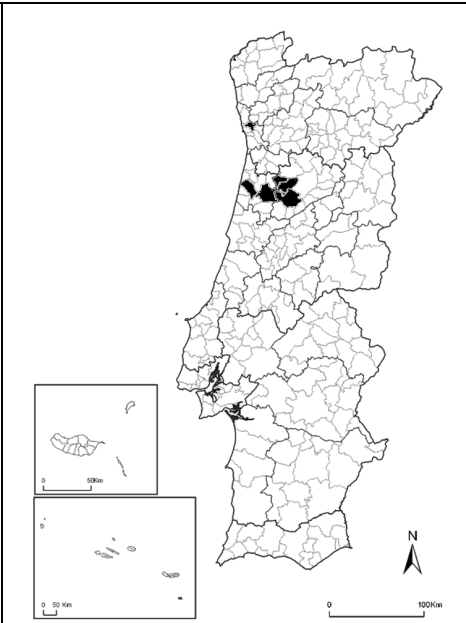


Fig. 426. Distribution map of *Eunotia pectinalis* var. *ventralis*

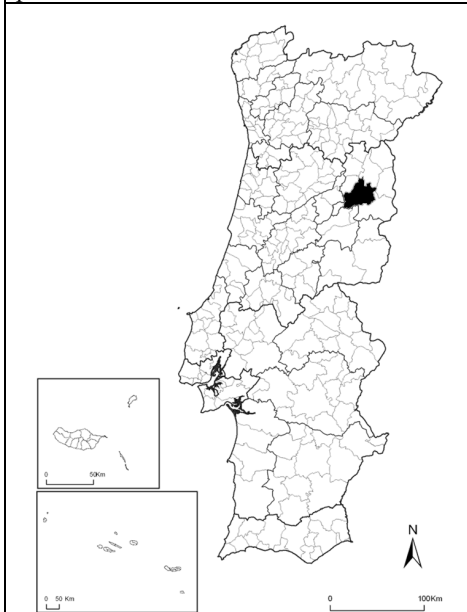


Fig. 427. Distribution map of *Eunotia pectinalis* var. *ventricosa*

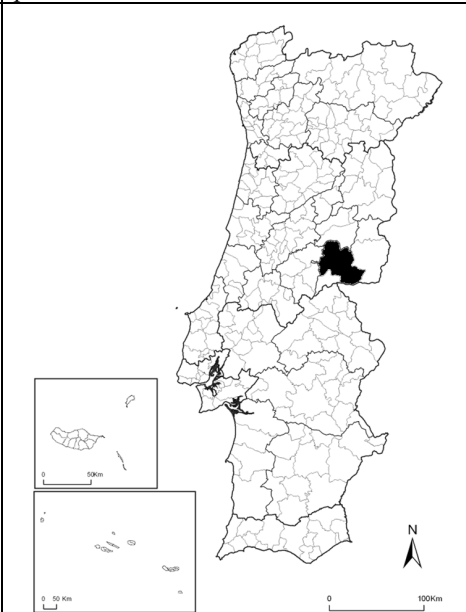


Fig. 428. Distribution map of *Eunotia pectinoides*

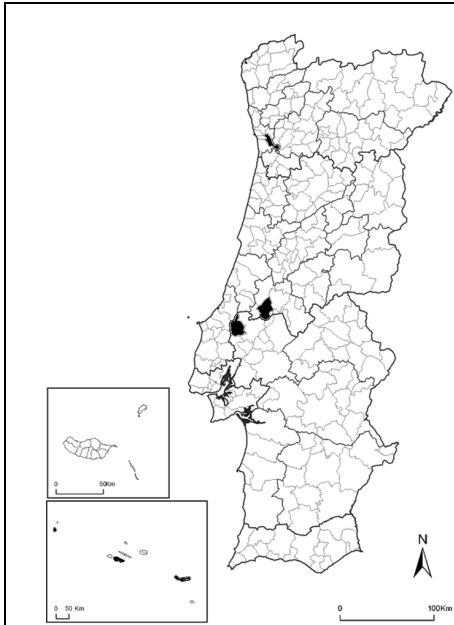


Fig. 429. Distribution map of *Eunotia praerupta*

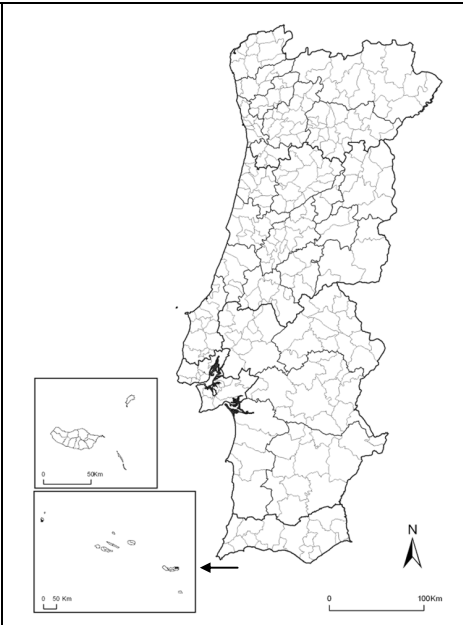


Fig. 430. Distribution map of *Eunotia praerupta* var. *muscicola*

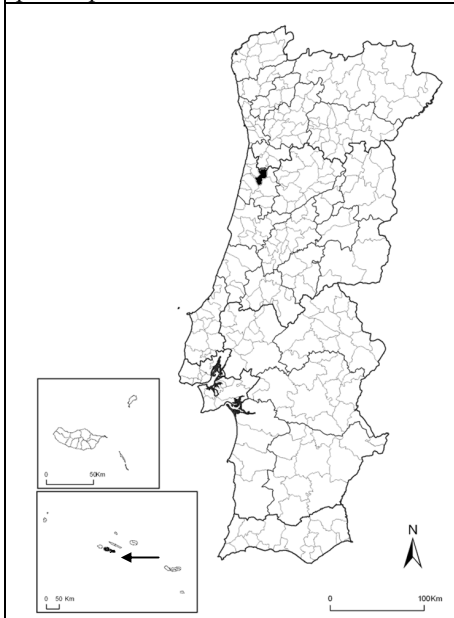


Fig. 431. Distribution map of *Eunotia rhomboidea*

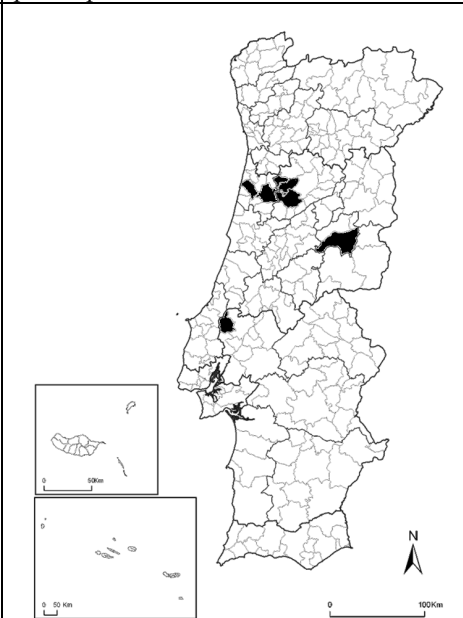


Fig. 432. Distribution map of *Eunotia robusta*

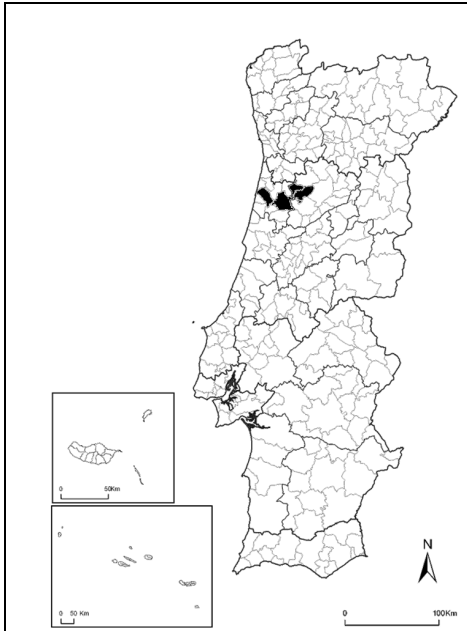


Fig. 433. Distribution map of *Eunotia septentrionalis*

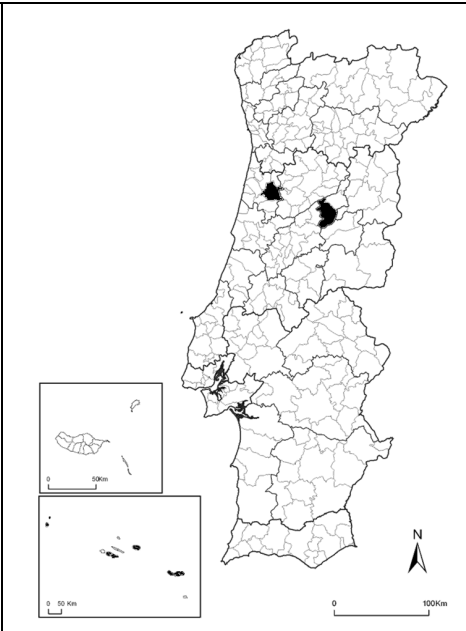


Fig. 434. Distribution map of *Eunotia serra*

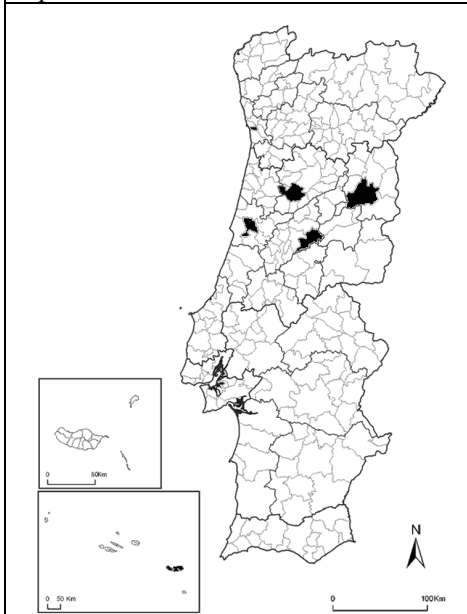


Fig. 435. Distribution map of *Eunotia soleirolii*

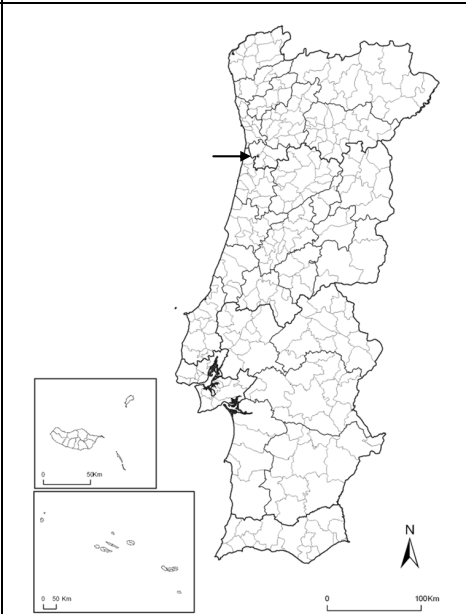


Fig. 436. Distribution map of *Eunotia subarcuatoides*

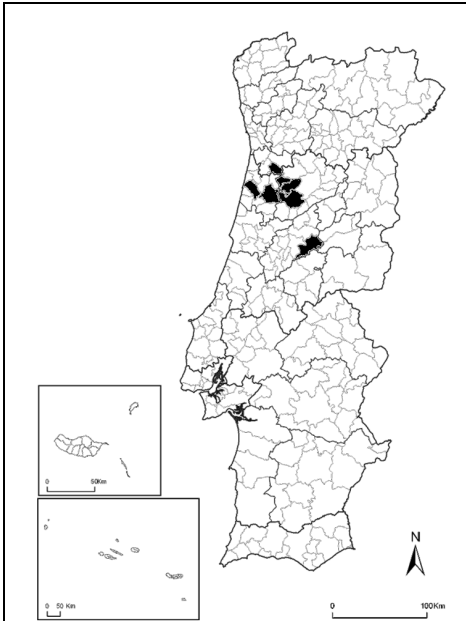


Fig. 437. Distribution map of *Eunotia submonodon*

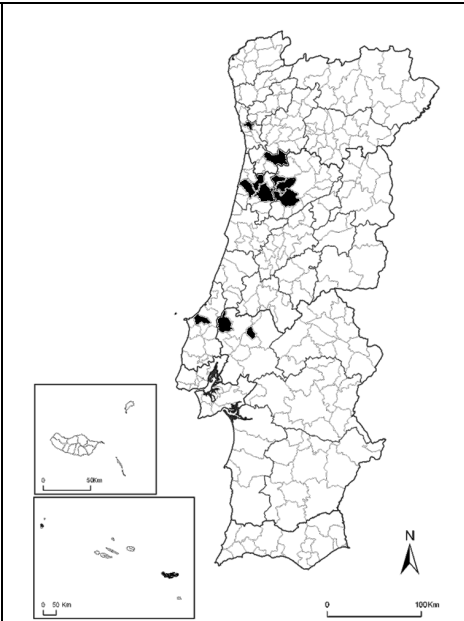


Fig. 438. Distribution map of *Eunotia sudetica*

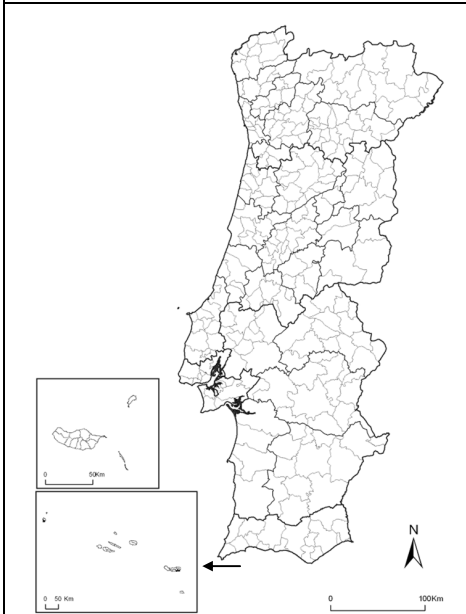


Fig. 439. Distribution map of *Eunotia sudetica* var. *bidens*

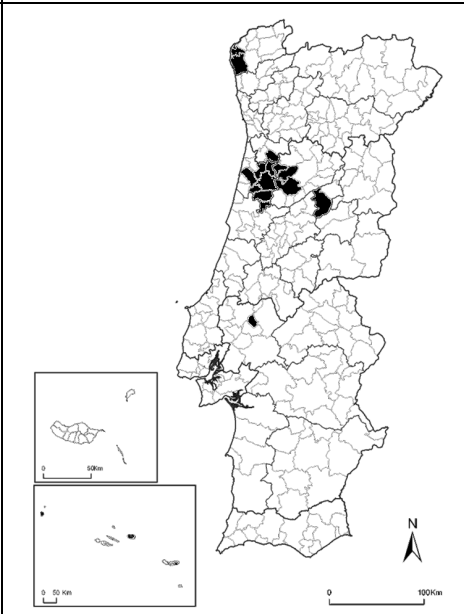


Fig. 440. Distribution map of *Eunotia tenella*

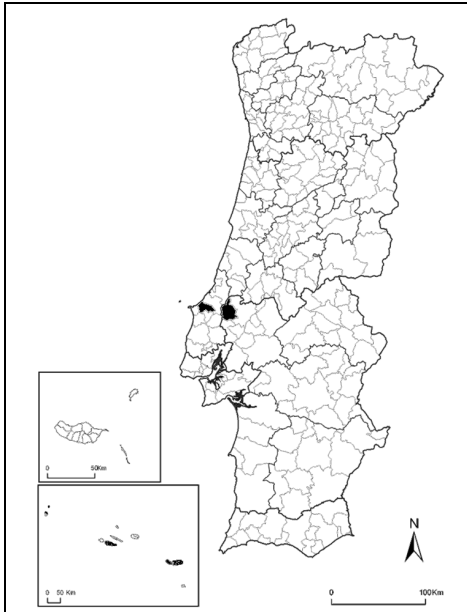


Fig. 441. Distribution map of *Eunotia tetradon*

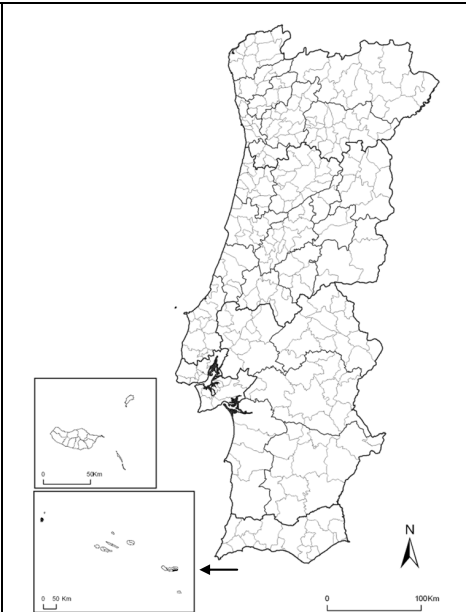


Fig. 442. Distribution map of *Eunotia trinacria*

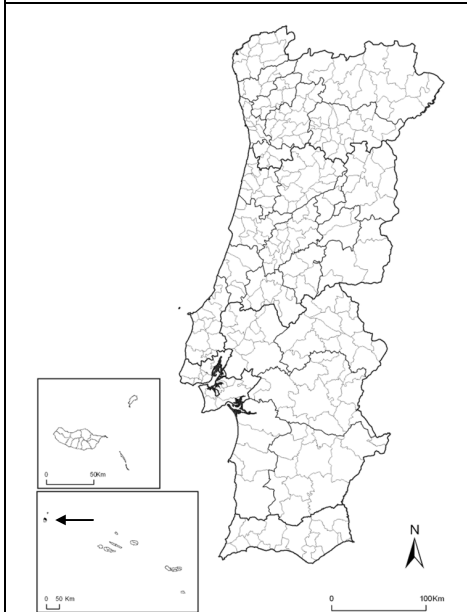


Fig. 443. Distribution map of *Eunotia trinacria* var. *undulata*

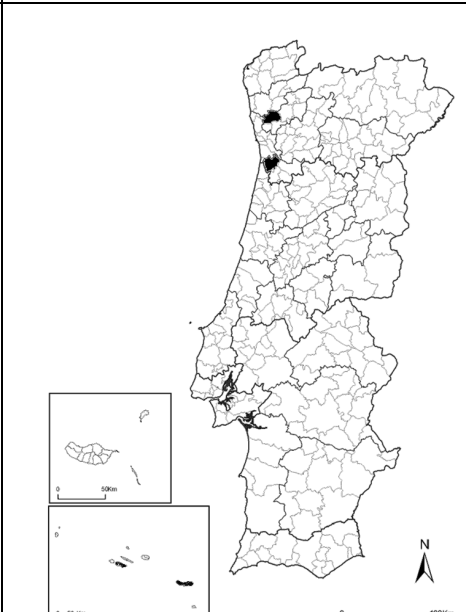


Fig. 444. Distribution map of *Eunotia triodon*

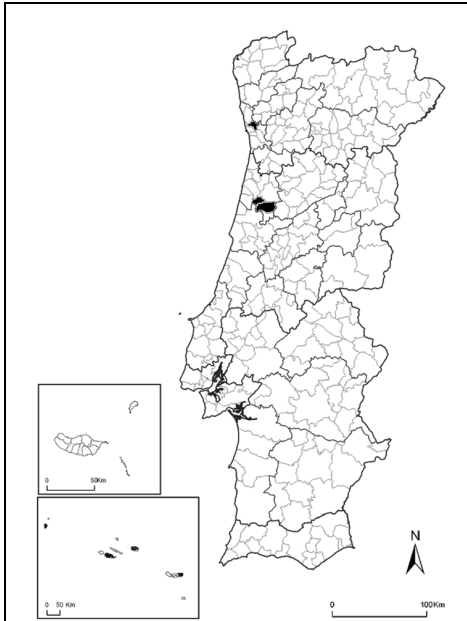


Fig. 445. Distribution map of *Eunotia valida*

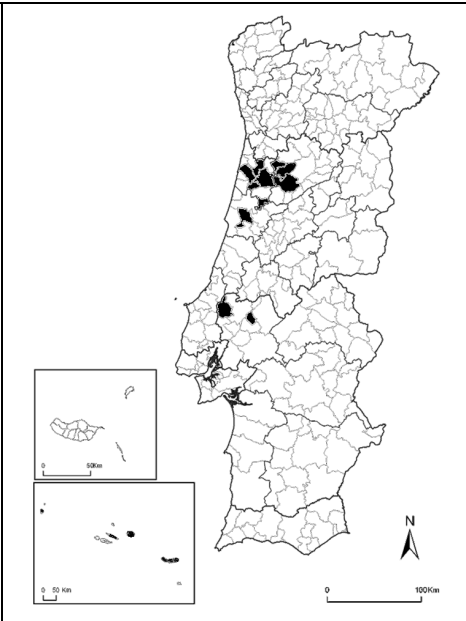


Fig. 446. Distribution map of *Eunotia veneris*

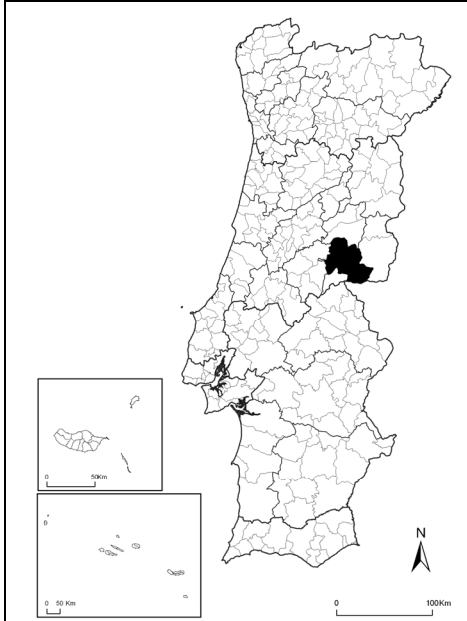


Fig. 447. Distribution map of *Eunotia ventricosa*

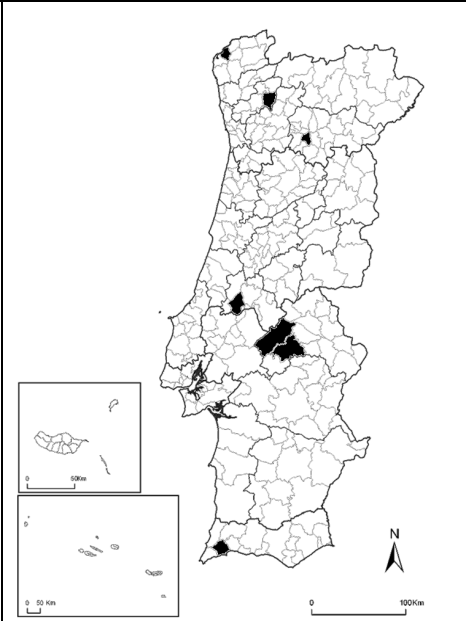


Fig. 448. Distribution map of *Eunotia* sp.

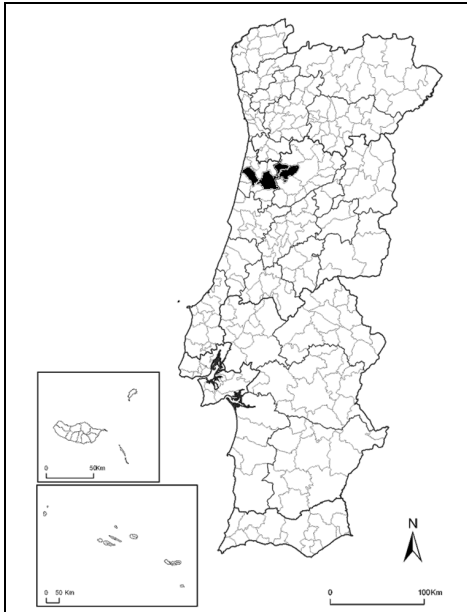


Fig. 449. Distribution map of *Fallacia enigmatica*

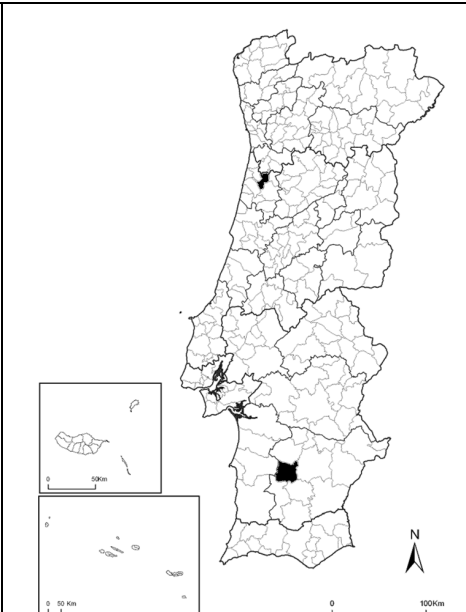


Fig. 450. Distribution map of *Fallacia insociabilis*

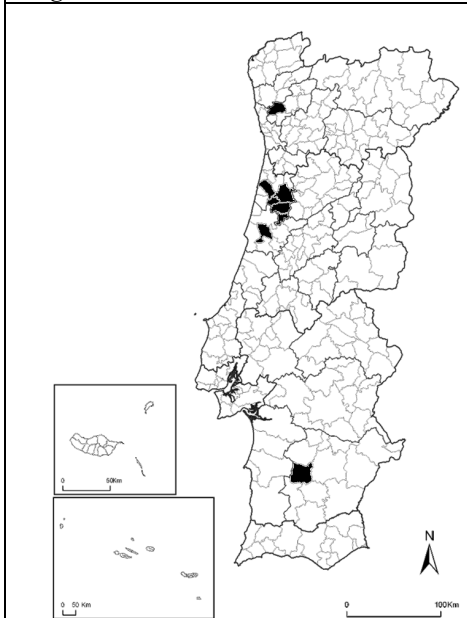


Fig. 451. Distribution map of *Fallacia pygmaea*

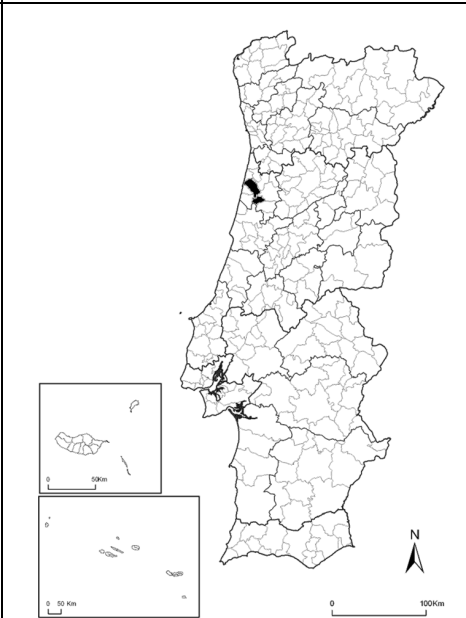


Fig. 452. Distribution map of *Fallacia subhamulata*

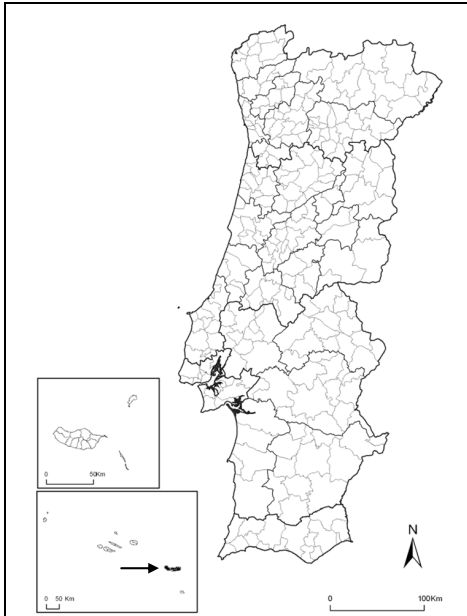


Fig. 453. Distribution map of *Fallacia tenera*

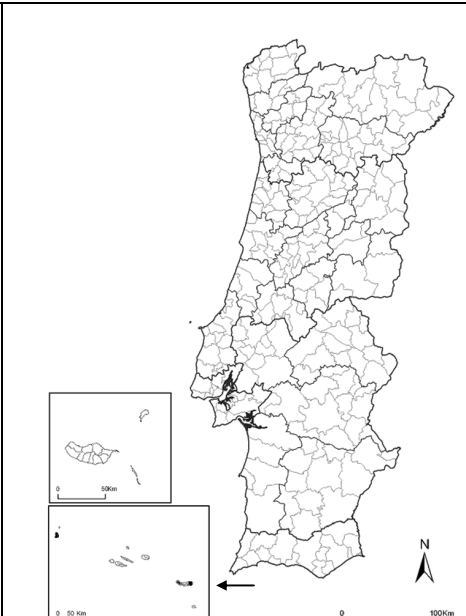


Fig. 454. Distribution map of *Fallacia vitrea*

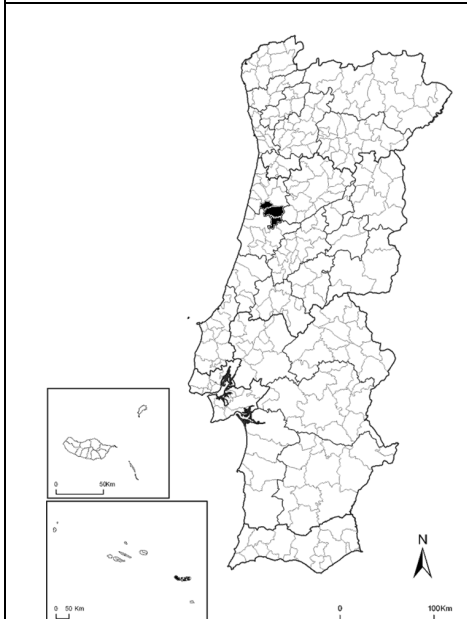


Fig. 455. Distribution map of *Fistulifera pelliculosa*

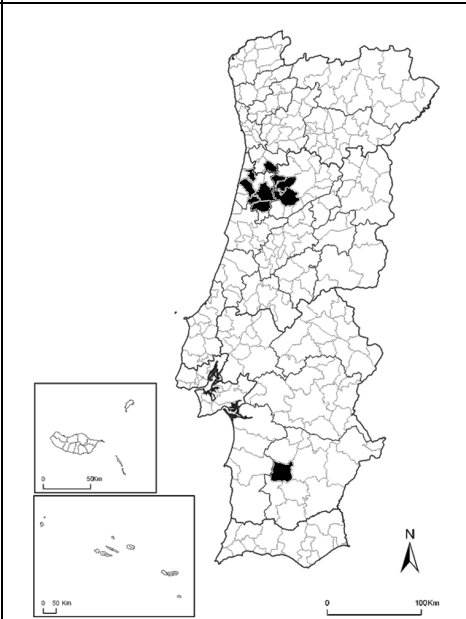


Fig. 456. Distribution map of *Fistulifera saprophila*

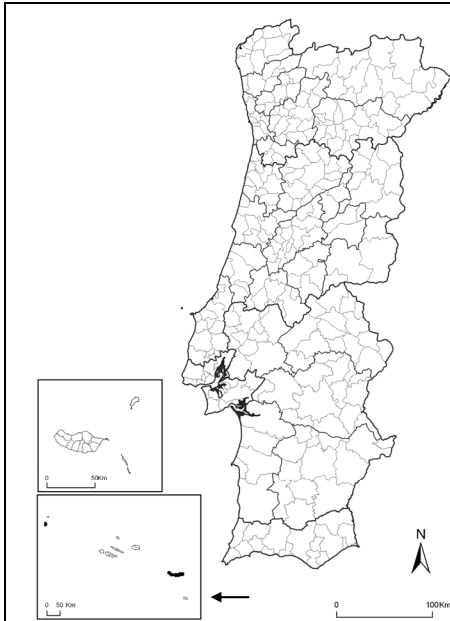


Fig. 457. Distribution map of *Fragilaria bidens*

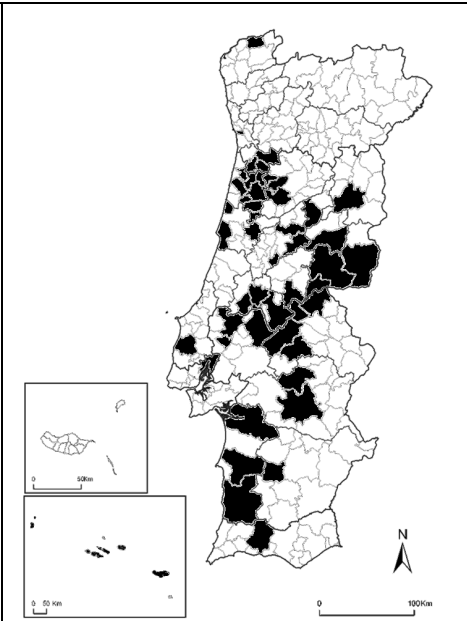


Fig. 458. Distribution map of *Fragilaria capucina*

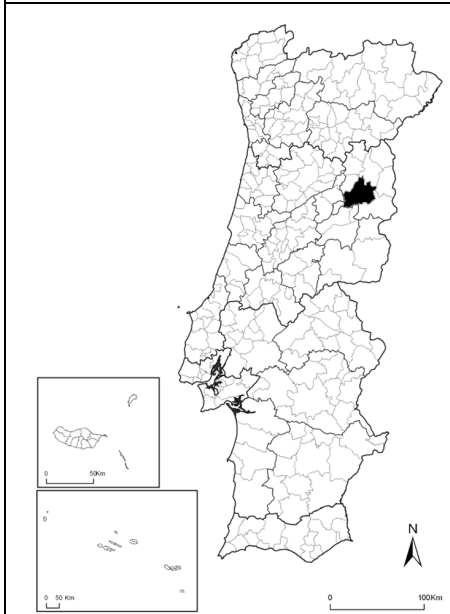


Fig. 459. Distribution map of *Fragilaria capucina* var. *acuta*

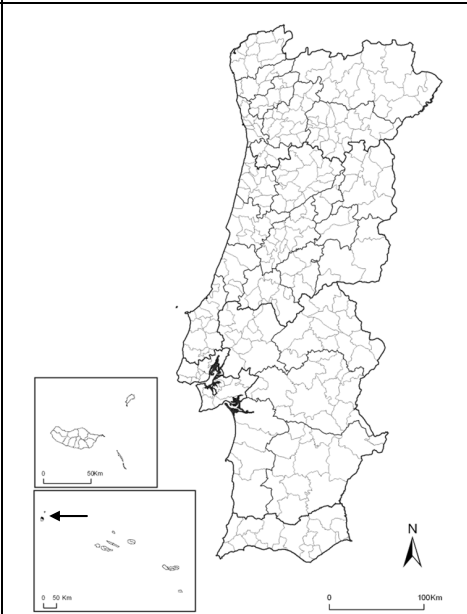


Fig. 460. Distribution map of *Fragilaria capucina* subsp. *amphicephala*

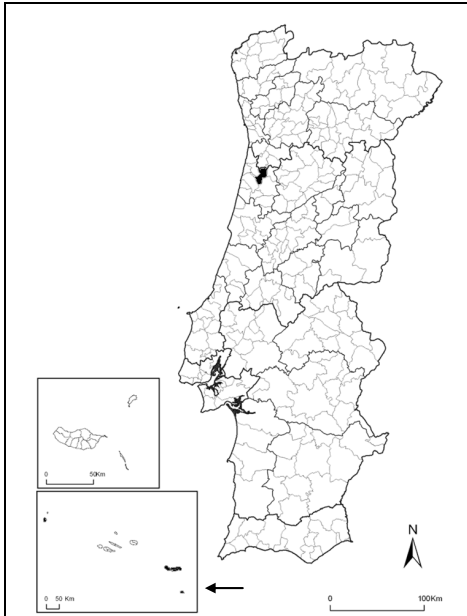


Fig. 461. Distribution map of *Fragilaria capucina* var. *capitellata*

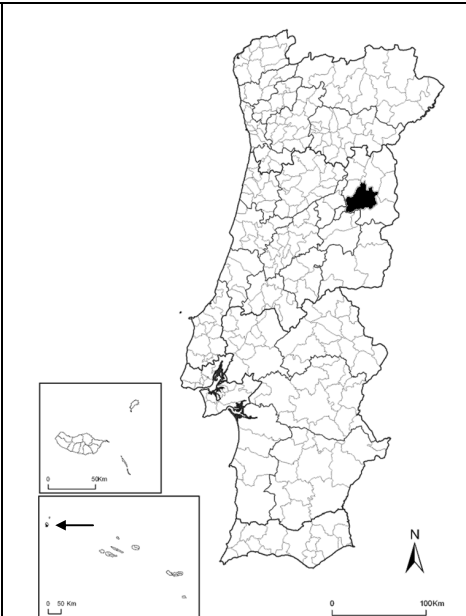


Fig. 462. Distribution map of *Fragilaria capucina* var. *lanceolata*

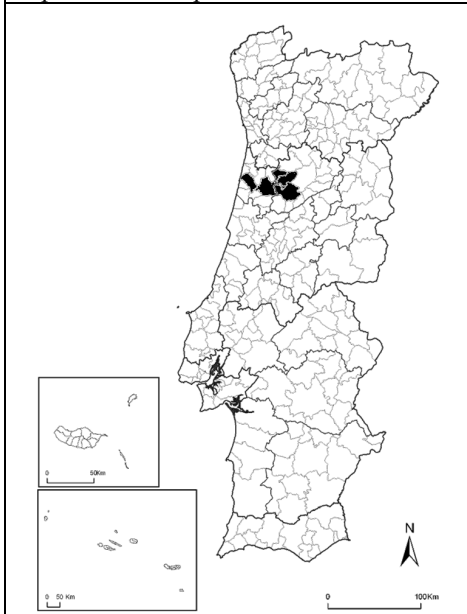


Fig. 463. Distribution map of *Fragilaria capucina* fo. *minuscula*

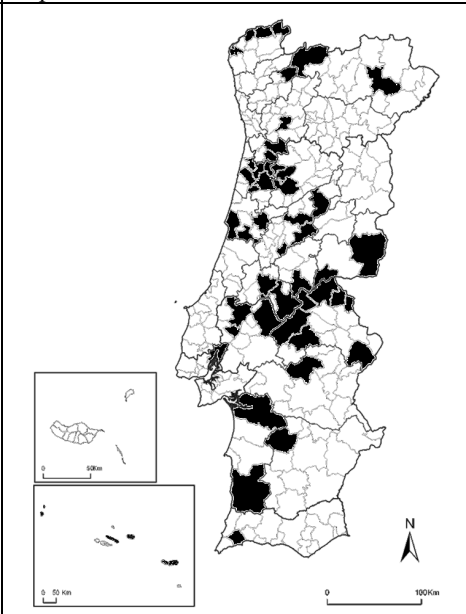


Fig. 464. Distribution map of *Fragilaria crotonensis*

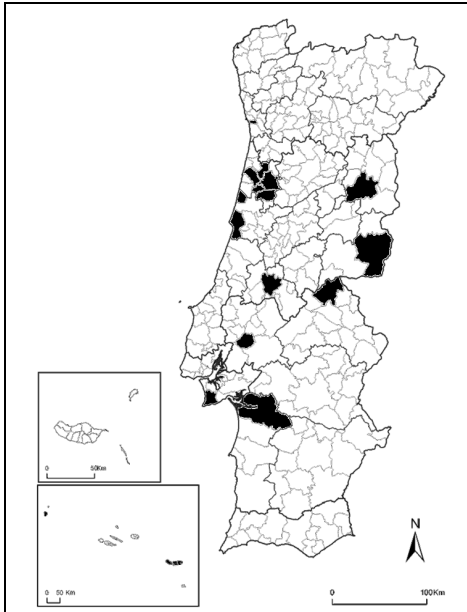


Fig. 465. Distribution map of *Fragilaria danica*

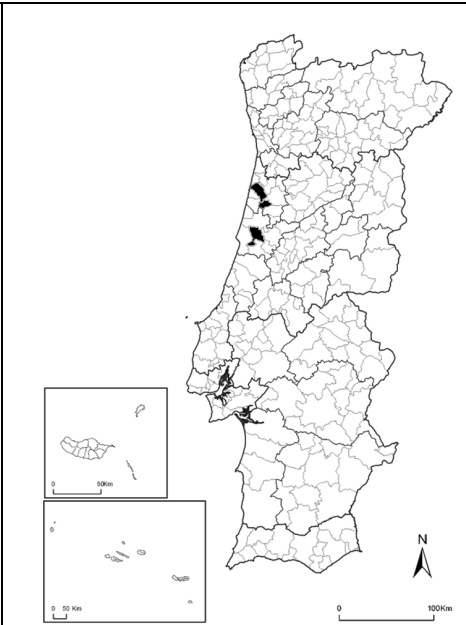


Fig. 466. Distribution map of *Fragilaria dilatata*

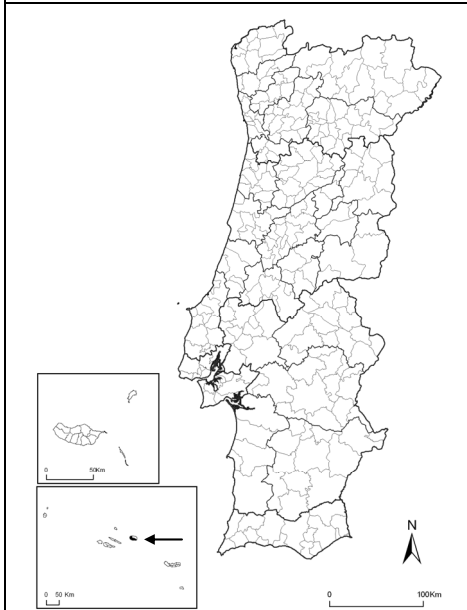


Fig. 467. Distribution map of *Fragilaria exigua*

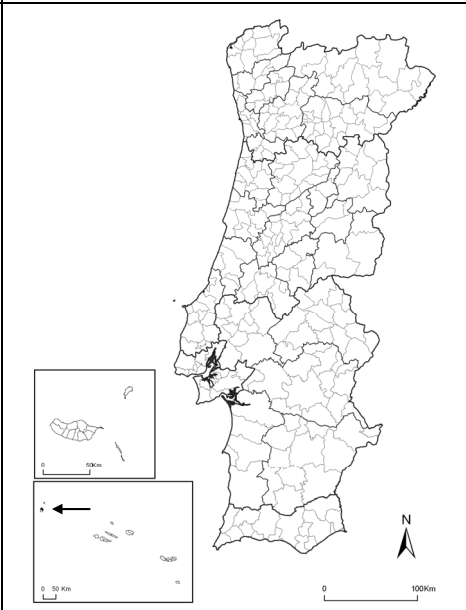


Fig. 468. Distribution map of *Fragilaria fragilarioides*

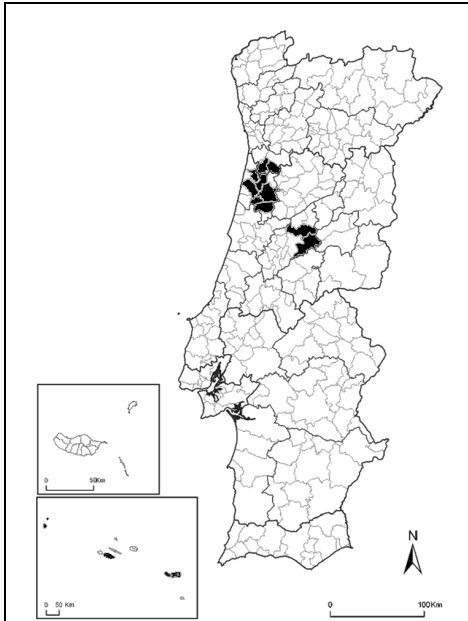


Fig. 469. Distribution map of *Fragilaria gracilis*

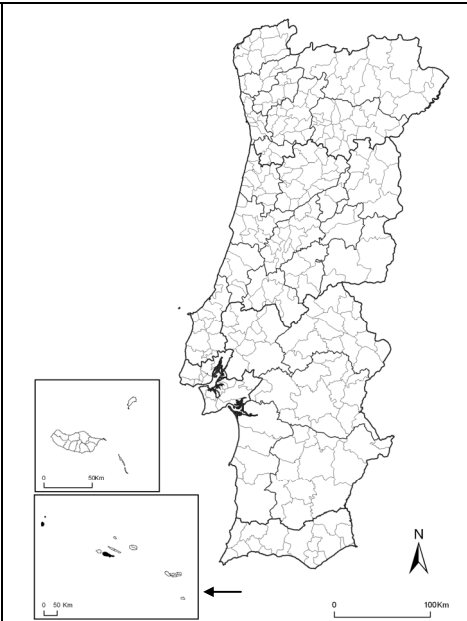


Fig. 470. Distribution map of *Fragilaria henryi*

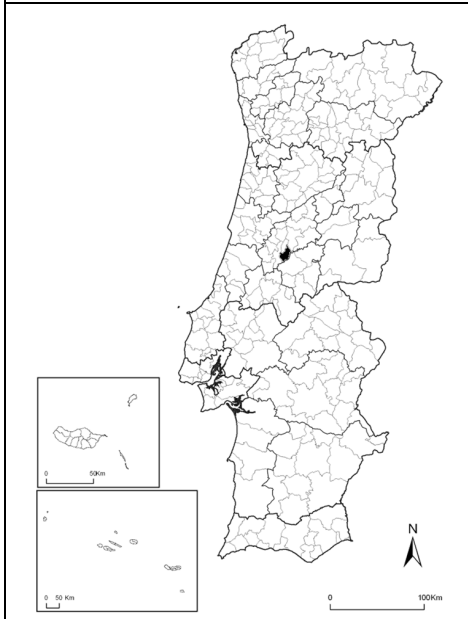


Fig. 471. Distribution map of *Fragilaria inflata*

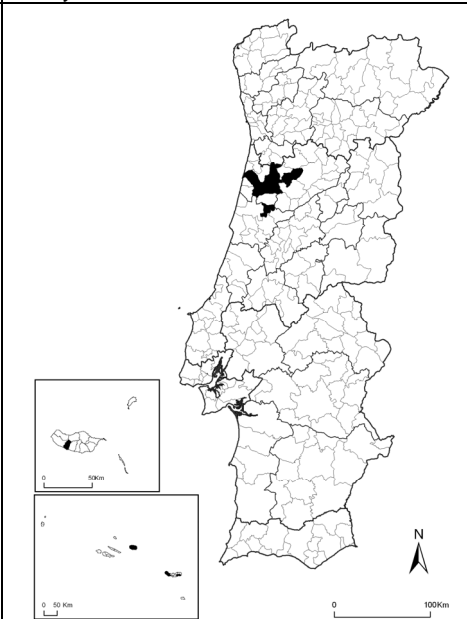


Fig. 472. Distribution map of *Fragilaria intermedia*

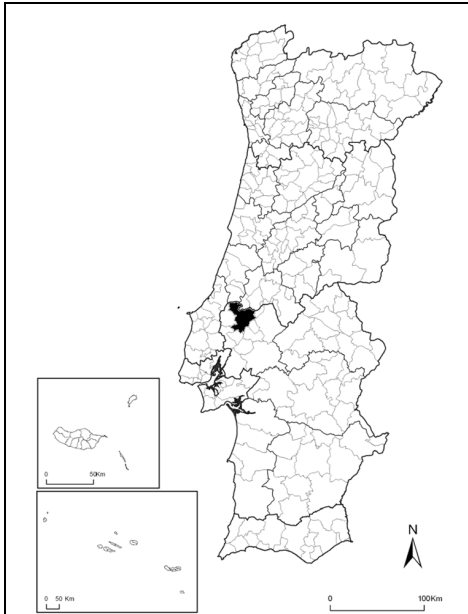


Fig. 473. Distribution map of *Fragilaria islandica*

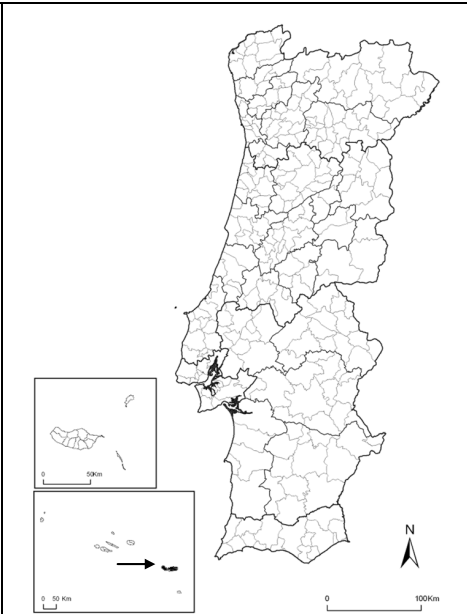


Fig. 474. Distribution map of *Fragilaria lapponica*

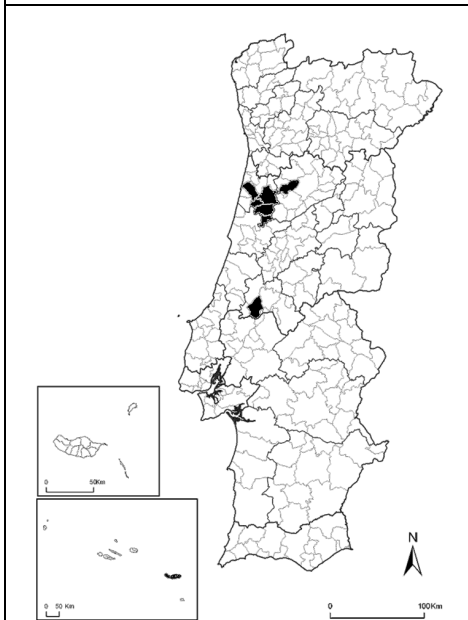


Fig. 475. Distribution map of *Fragilaria mesolepta*

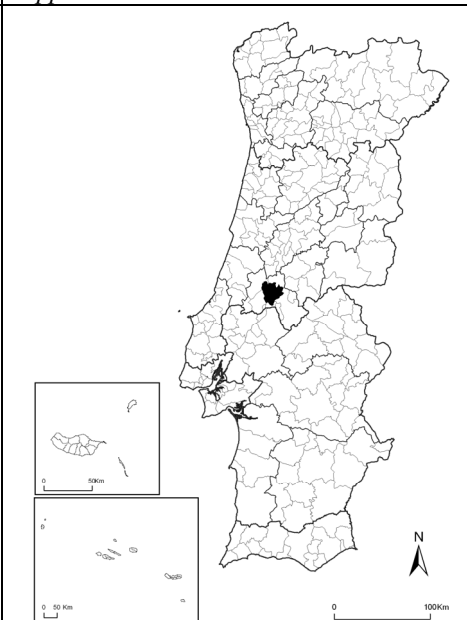


Fig. 476. Distribution map of *Fragilaria minuscula*

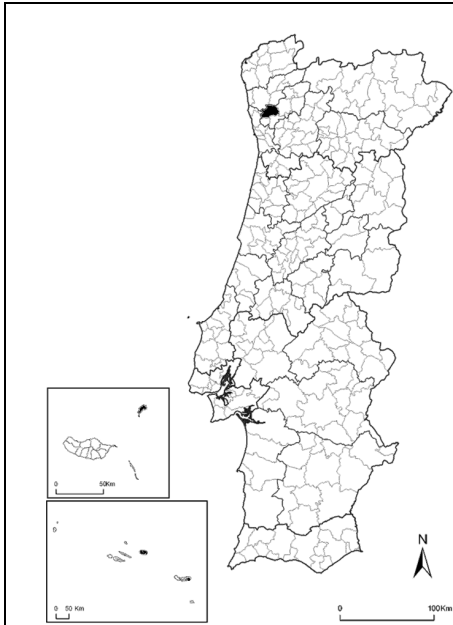


Fig. 477. Distribution map of *Fragilaria mutabilis*

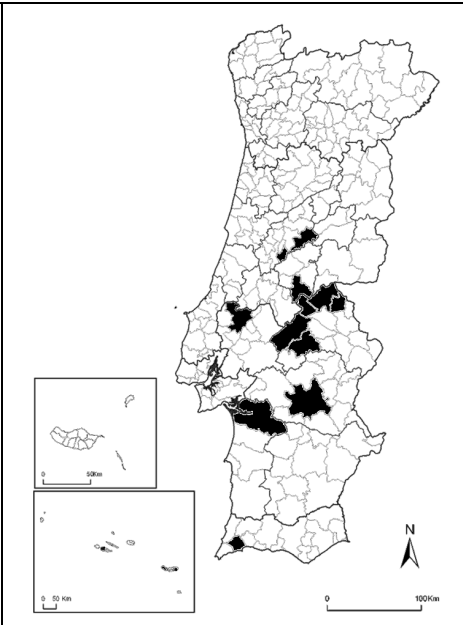


Fig. 478. Distribution map of *Fragilaria nana*

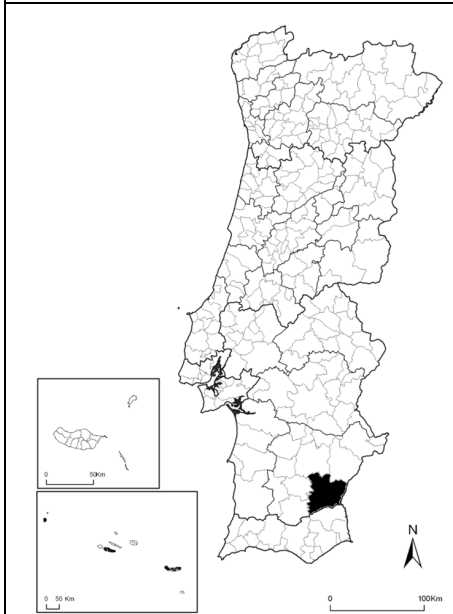


Fig. 479. Distribution map of *Fragilaria nanana*

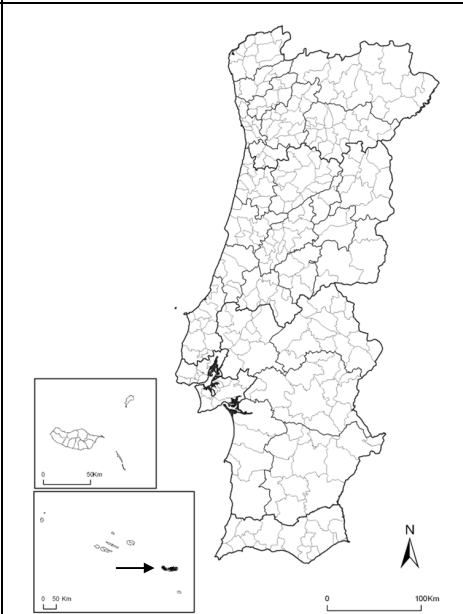


Fig. 480. Distribution map of *Fragilaria neoproducta*

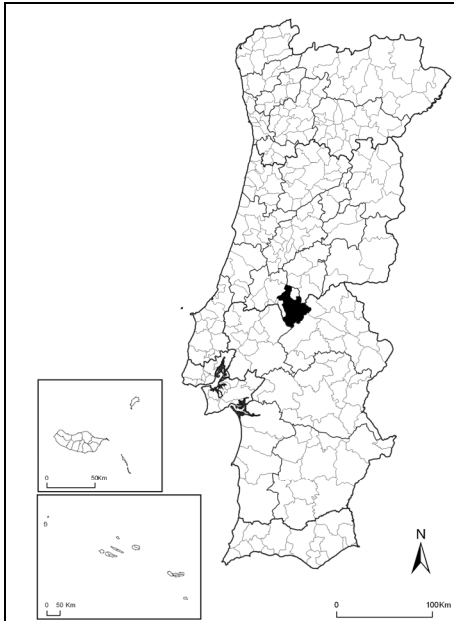


Fig. 481. Distribution map of *Fragilaria pinnata* var. *robusta*

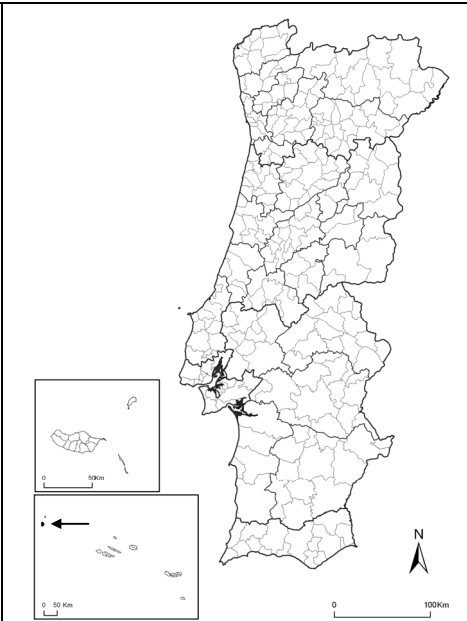


Fig. 482. Distribution map of *Fragilaria punctatostrciata*

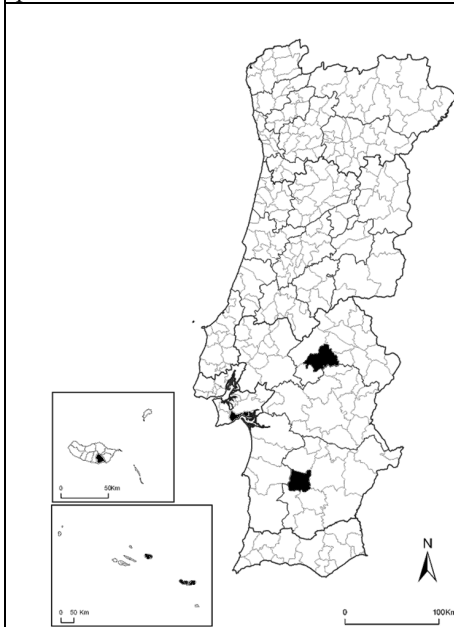


Fig. 483. Distribution map of *Fragilaria radians*

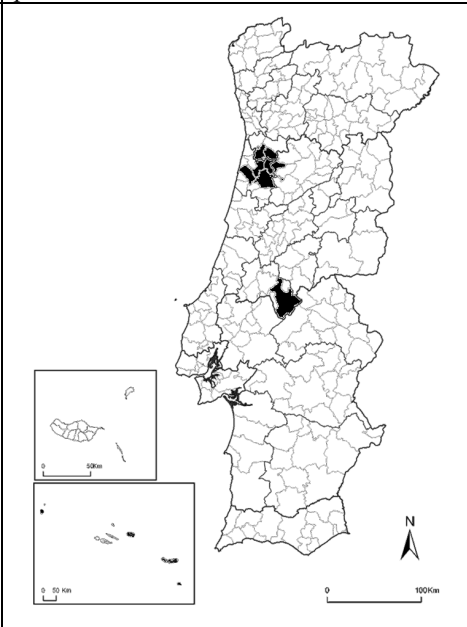


Fig. 484. Distribution map of *Fragilaria rumpens*

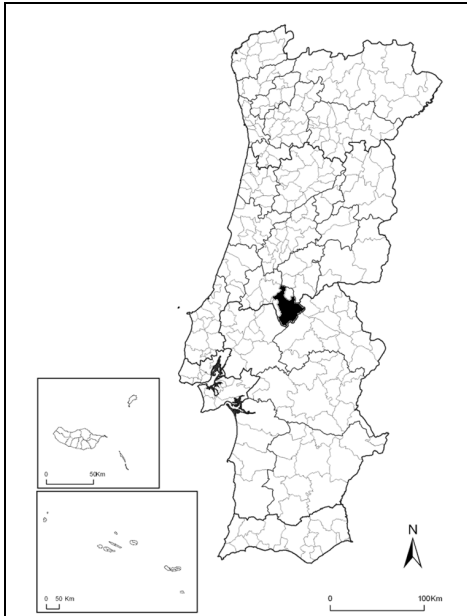


Fig. 485. Distribution map of *Fragilaria socia*

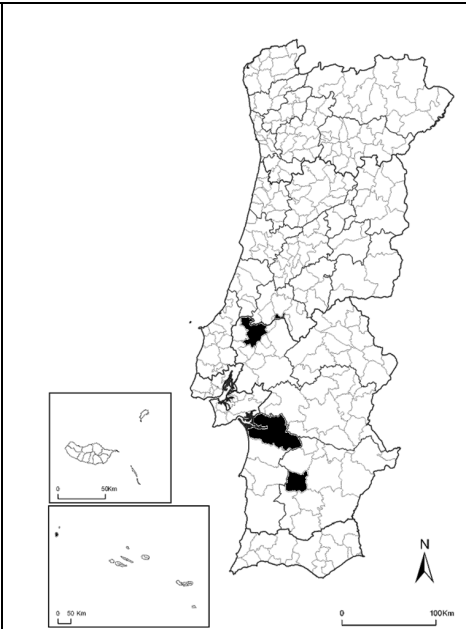


Fig. 486. Distribution map of *Fragilaria tenera*

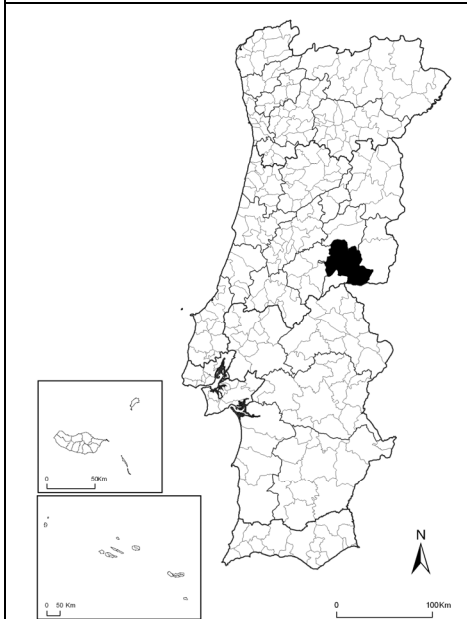


Fig. 487. Distribution map of *Fragilaria tenuicollis*

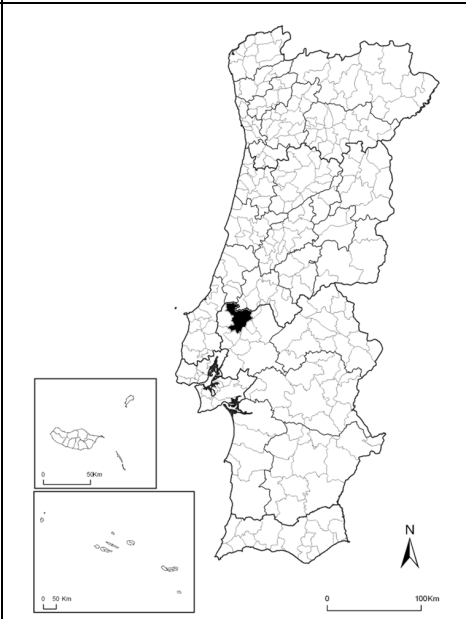


Fig. 488. Distribution map of *Fragilaria utermoehlii*

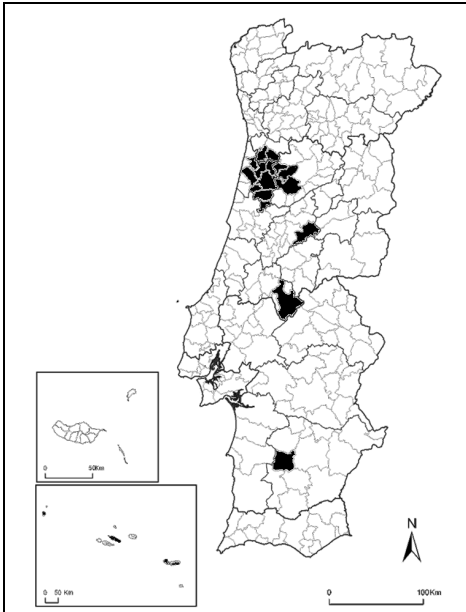


Fig. 489. Distribution map of *Fragilaria vaucheriae*

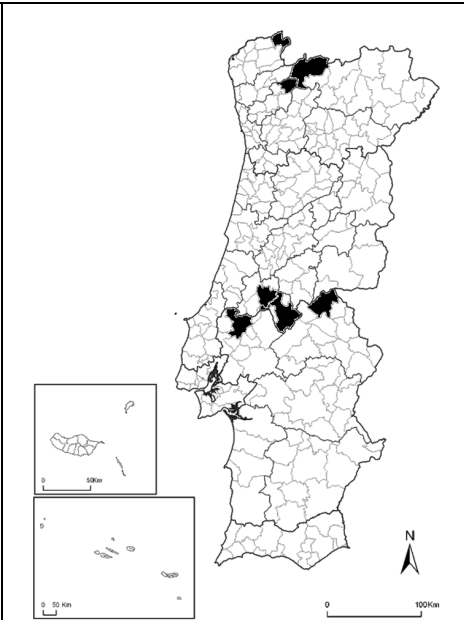


Fig. 490. Distribution map of *Fragilaria* sp.

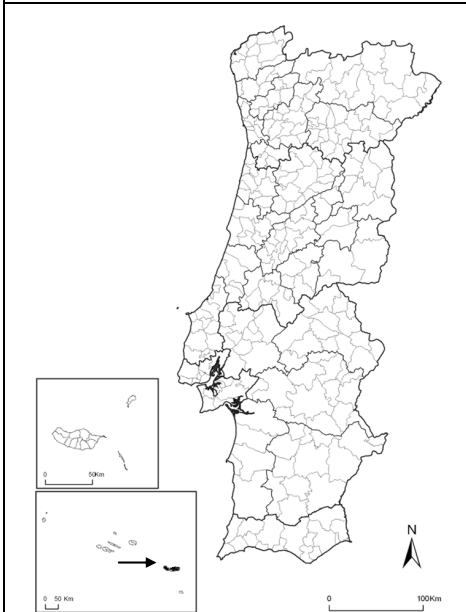


Fig. 491. Distribution map of *Fragilariforma constricta*

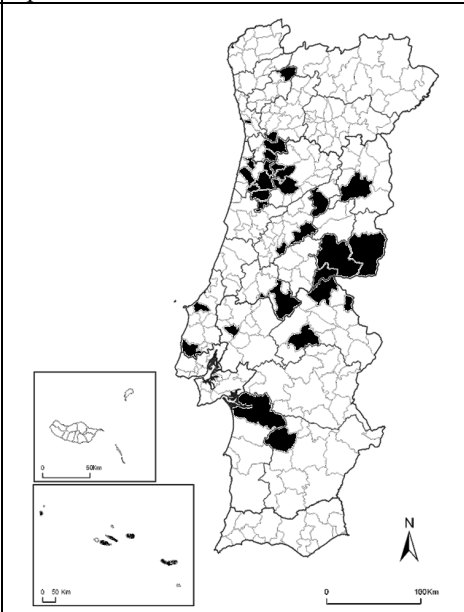


Fig. 492. Distribution map of *Fragilariforma virescens*

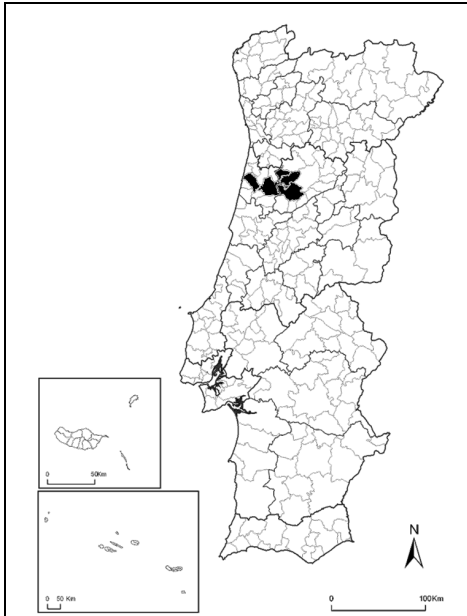


Fig. 493. Distribution map of *Fragariforma virescens* var. *elliptica*

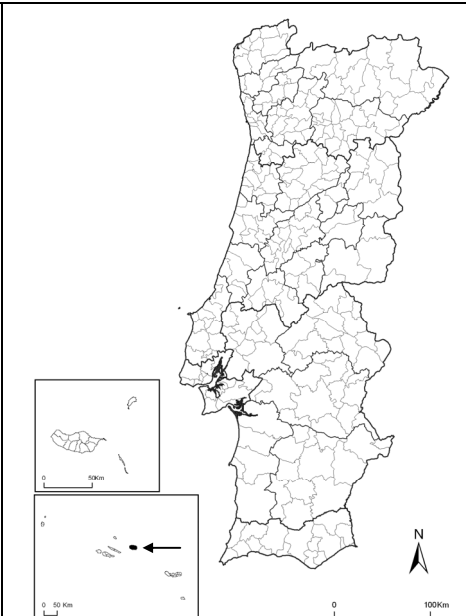


Fig. 494. Distribution map of *Frustulia amosseana*

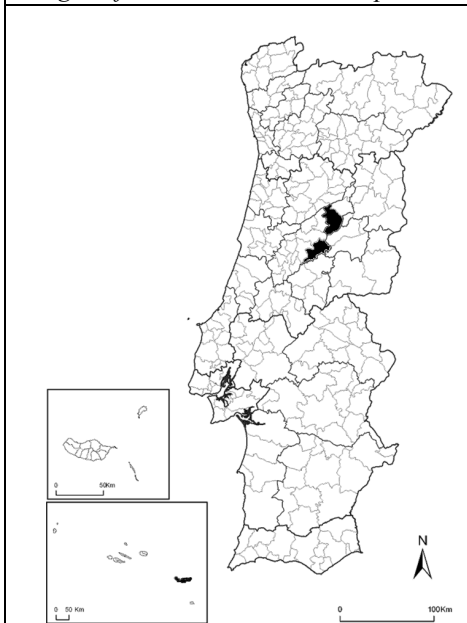


Fig. 495. Distribution map of *Frustulia crassinervia*

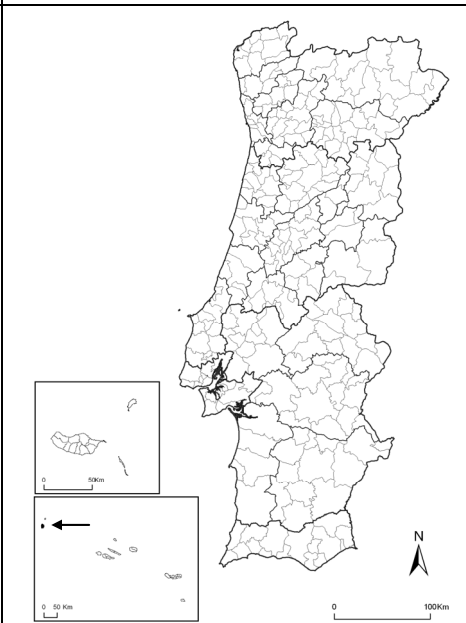


Fig. 496. Distribution map of *Frustulia elongata*

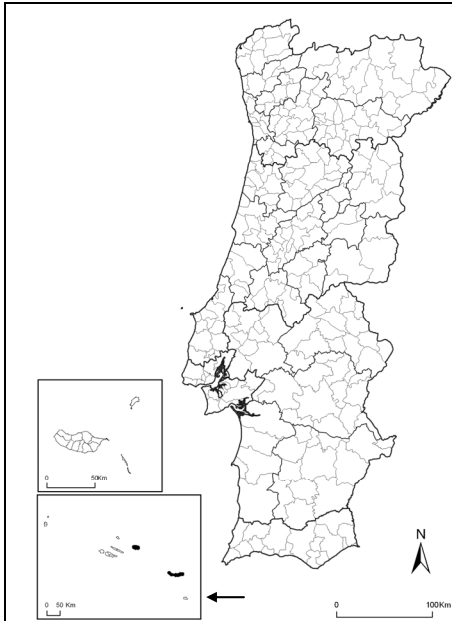


Fig. 497. Distribution map of *Frustulia erifuga*

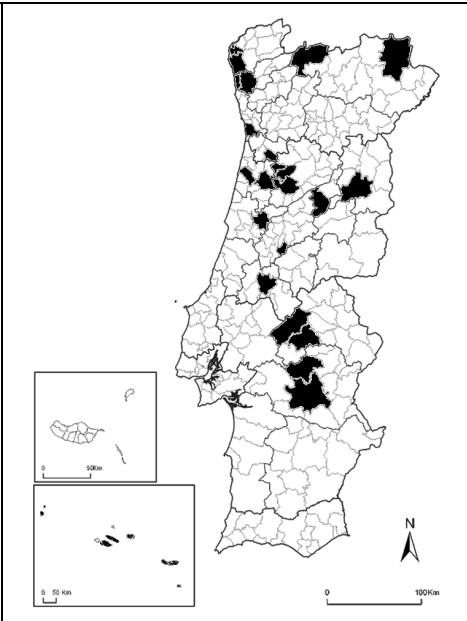


Fig. 498. Distribution map of *Frustulia krammeri*

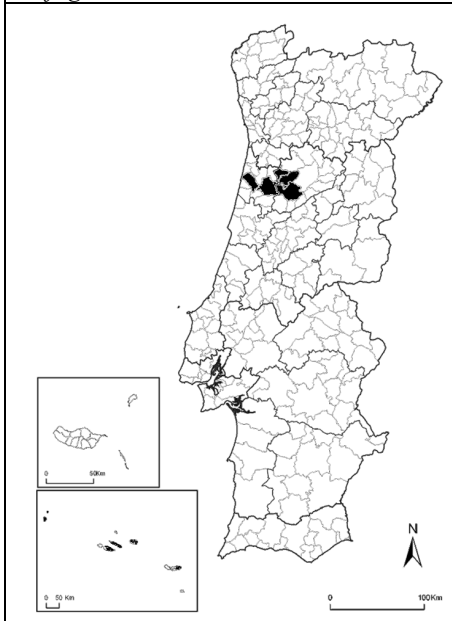


Fig. 499. Distribution map of *Frustulia rhomboides* var. *saxonica* f. *capitata*

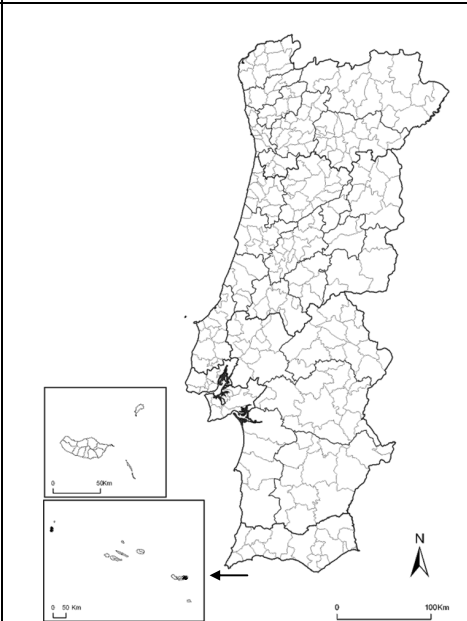


Fig. 500. Distribution map of *Frustulia rhomboides* var. *saxonica* f. *undulata*

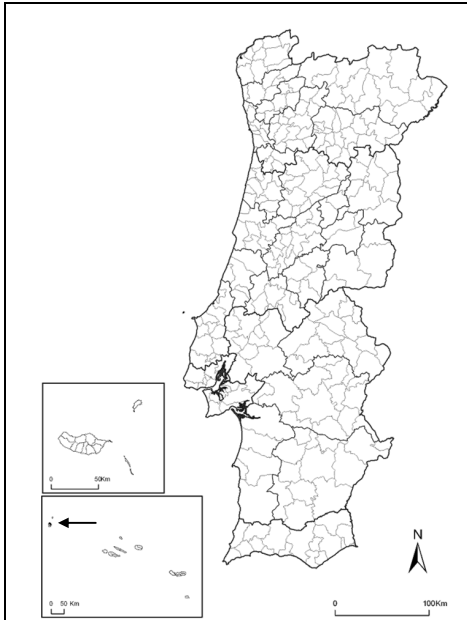


Fig. 501. Distribution map of *Frustulia rostratiformis*

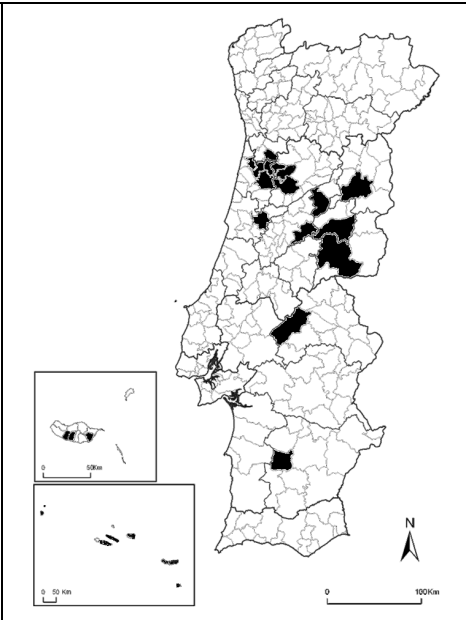


Fig. 502. Distribution map of *Frustulia saxonica*

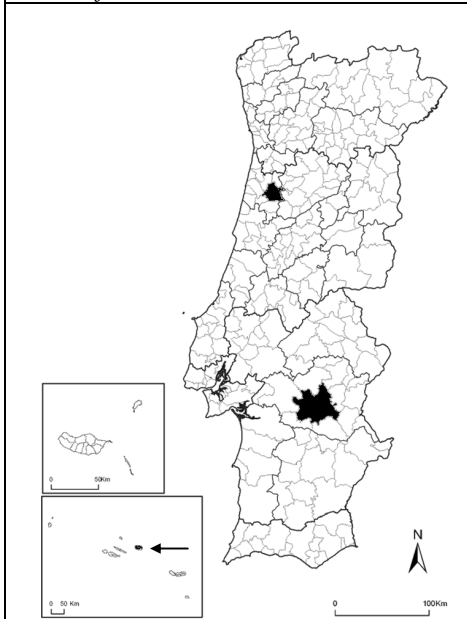


Fig. 503. Distribution map of *Frustulia viridula*

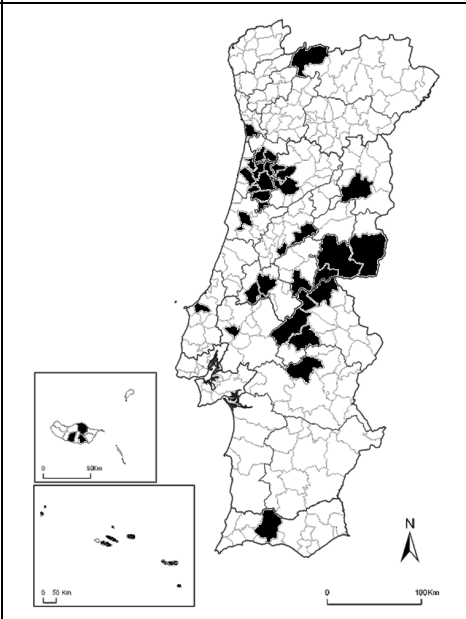


Fig. 504. Distribution map of *Frustulia vulgaris*

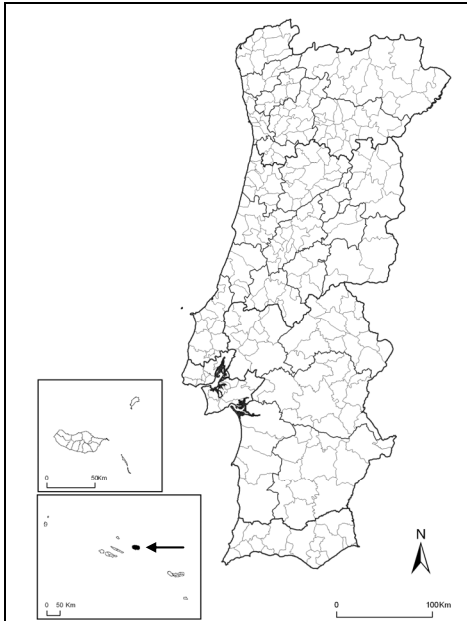


Fig. 505. Distribution map of *Frustulia vulgaris* var. *capitata*

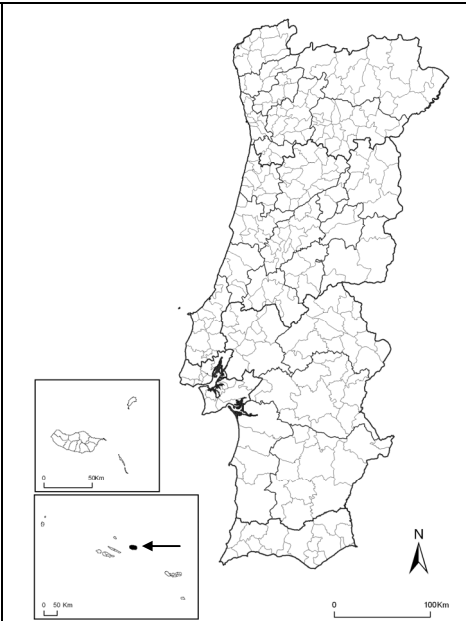


Fig. 506. Distribution map of *Frustulia vulgaris* var. *typical f. parva*

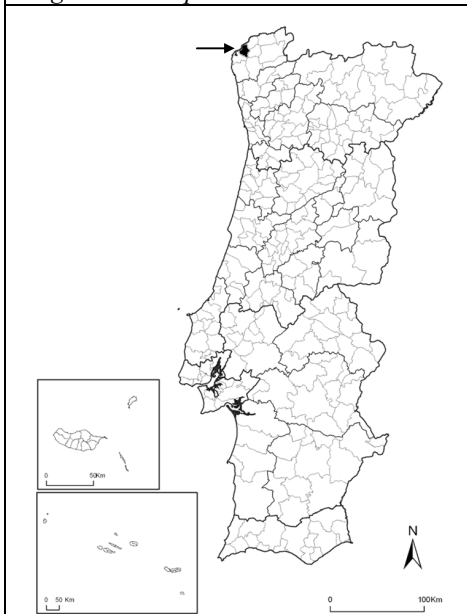


Fig. 507. Distribution map of *Frustulia* sp.

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