

## ARTIGO / ARTÍCULO / ARTICLE

The genus *Rugilus* Leach, 1819 in the Portuguese fauna  
(Coleoptera: Staphylinidae: Paederinae)

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**Abstract:** New data that expand the geographic distribution of the five Portuguese species within the genus *Rugilus* Leach, 1819 (Coleoptera: Staphylinidae: Paederinae) are presented. The aedeagus of these species is illustrated.

**Key words:** Coleoptera, Staphylinidae, Paederinae, *Rugilus*, ecology, Portugal, faunistics.

**Resumo:** O género *Rugilus* Leach, 1819 na fauna portuguesa (Coleoptera: Staphylinidae: Paederinae). Damos a conhecer novos dados que alargam a área de distribuição das cinco espécies portuguesas do género *Rugilus* Leach, 1819 (Coleoptera: Staphylinidae: Paederinae). O edeago das espécies é ilustrado.

**Palavras chave:** Coleoptera, Staphylinidae, Paederinae, *Rugilus*, ecologia, Portugal, faunística.

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## Introduction

The Paederine genus *Rugilus* Leach, 1819 (Coleoptera: Staphylinidae), with 255 species worldwide and 85 in the Palaearctic Region (Assing, 2020) is divided into two subgenera, *Eurystilicus* Fagel, 1953 and the nominal subgenus, which is the only one reported from the Iberian Peninsula with ten species (Gamarra & Outerelo, 2020 Schülke & Smetana, 2015). Regarding Portugal, only four species or even two species are considered as present in the country, according to Gamarra & Outerelo (2020) and Schülke & Smetana (2015), respectively.

In this article, records compiled from available literature as well as new data obtained during some collecting trips to the country, confirm five species for the Portuguese fauna.

## Material and methods

This study is based on a literature survey and data of specimens collected by the author during several trips to Portugal over the years, using hand collecting and pitfall traps.

The material was studied using a Wild M5 stereomicroscope. The last segments of the abdomen were removed to obtain the aedeagus or spermatheca to help identify the specimens. All specimens must have the mandibles open to verify the teeth in their inner part. In our area the left mandible has three teeth and the right mandible four.

Nomenclature of all species follows Schülke & Smetana (2015). All specimens were identified by the author using the keys by Coiffait (1970, 1984) and are deposited in the author's collection (RNFC), unless otherwise stated. New data includes: province, district, town, village or place.

## Results

### Family STAPHYLINIDAE Latreille, 1802

#### Subfamily PAEDERINAE Fleming, 1821

#### Tribe PAEDERINI Fleming, 1821

#### Subtribe STILICINA Casey, 1905

Genus *Rugilus* Leach, 1819

Subgenus *Rugilus* Leach, 1819

*Rugilus (Rugilus) angustatus* (Geoffroy, 1785)

**Material examined:** *Minho, Braga, Vieira do Minho, Serra do Gerês, 12-X-1971, 2 ex.*

**Distribution:** See Schülke & Smetana (2015). Distribution in Portugal: Braga.

**Remarks:** Length: 5.5-6.5 mm. Head, elytra and abdomen brown-blackish with posterior margins of elytra grayish. Pronotum red or reddish-yellow. Legs, antennae and mouthparts brown-blackish or brown-reddish. Head slightly longer than wide, pronotum oblong narrower than head and elytra slightly longer than wide but wider than the head. For a more complete description see Coiffait (1984). Aedeagus as in Fig. 1. This species has during the year two peaks, one from March to June and other from October to December. The larvae were described by Rey (1880) and Xambeu (1911). Adults found under loose bark in wood piles, among composted wood chips and decaying plant materials, flood debris on river margins and in general in moist, muddy places near water and wet fields and meadows. One specimen with no locality is represented in Padre Ramiro Neves collection with the № 57 (Ferreira, 2021). Not mentioned for Portugal in the Palaearctic Catalogue (Schülke & Smetana, 2015).

*Rugilus (Rugilus) erichsonii* (Fauvel, 1867)

**Material examined:** *Beira Alta, Guarda, Pinhel, Souro Pires, 4-IX-2004, 1 ex.*

**Distribution:** See Schülke & Smetana (2015). Distribution in Portugal: Guarda, Minho.

**Remarks:** Length 3.5-4.5 mm. Species black with posterior area of elytra yellowish to straw color. Legs, antennae and mouthparts entirely yellow-reddish. Head without mouthparts wider than long, and as width as elytra. For a more complete description see Coiffait (1984). Aedeagus as in Fig. 2. The species is found all year round with two peaks, one from March to April and the other from June to August. Immatures are frequently found in August and the adults hibernate. Adults found in a wet and muddy spot between brushes and decaying plant materials. This species is not referred for Portugal in the Palaearctic Catalogue (Schülke & Smetana, 2015). Gamarra & Outerelo (2020) mention the species from Minho and Rougemont (1988) reports this species from Guarda.

*Rugilus (Rugilus) festivus* (Mulsant & Rey, 1853)

**Material examined:** *Beira Litoral, Coimbra, Coimbra, Choupal, 13-VII-1967, 1 ex.*

**Distribution:** See Schülke & Smetana (2015). Distribution in Portugal: Coimbra.

**Remarks:** Length 5.5-6.5 mm. Head and pronotum red. Elytra and abdomen black or black-brownish. Legs, mouthparts brown-blackish. Head longer than wider, gena two times longer than eyes. Pronotum

narrower than head. Head longer than head. For a more complete description see Coiffait (1984). Aedeagus as in Fig. 3. Adults found in wet sand with flood debris and loose bark. Oliveira (1893) said about the species: "Je l'ai trouvé dans les détritius des inondations du Mondego, à Coimbra". Oliveira (1899), Fuente (1922) and Seabra (1943) likely refer the species from Coimbra as of Oliveira (1893). Ferreira (1962) mentions the species for Portugal without any locality. Gamarra & Outerelo (2020) mention the species from Beira Litoral whilst it is not referred for Portugal in the Palaearctic Catalogue (Schülke & Smetana, 2015).

***Rugilus (Rugilus) geniculatus* (Erichson, 1839)**

**Material examined:** Douro Litoral, Porto, Porto, Paços de Ferreira, Penamaior, 3 ex. (PRNC) (Ferreira, 2021).

**Distribution:** See Schülke & Smetana (2015). Distribution in Portugal: Beja, Castelo Branco, Lisboa, Porto, Vila Real.

**Remarks:** Length 5-5,5 mm. Species black with posterior margins of elytra brown-yellowish. Legs, antennae and mouth parts yellow-reddish. Head, pronotum and elytra slightly longer than wide, but elytra wider than head. For a more complete description see Coiffait (1984). Aedeagus as in Fig. 4. The species displays two peaks, one in May and the other in September. Larvae unknown. Adults found along brooks and river margins, in wet substrates and decaying plant materials. Barros (1913) reported this species from S. Martinho d'Anta. Fuente (1922) and Seabra (1943) refer to Barros (1913) as the one that mentions the species for Portugal. Ferreira (1962) recorded the species for Portugal without any locality. Rougemont (1988) refers the species from Beja. Gamarra & Outerelo (2020) mention the species from Baixo Alentejo e Castelo Branco. Also referred for Portugal in the Palaearctic Catalogue (Schülke & Smetana, 2015). There is one specimen from Lisboa, Alvalade, collected in 31-May-2000 and identified by Pedro Mendonça (Lopes *et al.*, 2019), but it was not possible to confirm the identification.

***Rugilus (Rugilus) orbiculatus* (Paykull, 1789)**

**Material examined:** Alto Alentejo, Évora, Évora, Jardim Público, 7-XI-1963, 1 ex. Beira Litoral, Aveiro, Aveiro, Eirol, 11-VIII-1967, 1 ex.; Coimbra, Coimbra, Pinhal de Marrocos, 20-IV-1967, 1 ex. Minho, Braga, Braga, Vieira do Minho, Serra do Gerês, 2-VII-1969, 2 ex.; Viana do Castelo, Caminha, Foz do Rio Minho, Pinhal do Camarido, 24-VI-1966, 1 ex.; Valença, S. Pedro da Torre, 30-VI-1966, 1 ex.

**Distribution:** See Schülke & Smetana (2015). Distribution in Portugal: Aveiro, Braga, Coimbra, Évora, Faro, Porto, Viana do Castelo.

**Remarks:** Length 3.5-4.5 mm. Species black, with posterior margin of elytra yellowish and with legs, antennae and mouthparts brown-reddish. Head as long as wide. Pronotum longer than wide. For a more complete description see Coiffait (1984). Aedeagus as in Fig. 5. This species occurs all year around. The larvae was described by Rey (1880) and Paulian (1941). Adults found along river margins in hardwood and mixed forests among compost and decaying plant material. This species was reported from Coimbra as *Stilicus affinis* Erichson, 1839 by Heyden (1870), from Portugal without any locality by Fauvel (1877) and from Coimbra, Leça and Estarreja by Oliveira (1885, 1893). Ferreira (1962) mentions the species without a locality but later mentions the species from Eirol (Ferreira, 1971). Gamarra & Outerelo (2020) mention Douro Litoral, Beira Litoral and Algarve. Referred for Portugal in the Palaearctic Catalogue (Schülke & Smetana, 2015). Referred as part of the collection of Padre Ramiro Neves from Monte Córdova by 10 specimens and with the № 56 by one specimen (Ferreira, 2021).

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**Figs. 1-5.** - Aedeagus of the five species of the genus *Rugilus* Leach, 1819 already reported from Portugal. 1. - *Rugilus* (s.str.) *angustatus* (Geoffroy, 1785). 2. - *Rugilus* (s.str.) *erichsonii* (Fauvel, 1867). 3. - *Rugilus* (s.str.) *festivus* (Mulsant & Rey, 1853). 4. - *Rugilus* (s.str.) *geniculatus* (Erichson, 1839). 5. - *Rugilus* (s.str.) *orbiculatus* (Paykull, 1789).

