

## Notas Nomenclaturales / *Nomenclatural Notes*

### *Arganiella wolfi*, new combination for *Boetersiella wolfi* (Boeters & Gloer, 2007)

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The paper by Boeters (1988) compiling knowledge of the Iberian “Hydrobiidae and Moitessieridae” was decisive in the history of the taxonomy of this difficult group of freshwater snails in Spain. This review evidenced that the taxonomy of this group of small to minute species was a shambles and needed an urgent revision. Many new species were described only based on conchological characters and anatomical information, when available, was too poor and/or incomplete for the accurate adscription of new non-studied populations to species. Since then Spanish malacologists started an in depth study of Iberian populations of Hydrobiids. More than 1,000 localities have been sampled to date leading to the description of several new genera and species, as well as to the description of all anatomical characters following the standardized criteria established by Hershler & Ponder (1998).

Recently (May 2007), the journal *Heldia*, published the paper “*A contribution to the genus Boetersiella Arconada & Ramos, 2001 in Spain with the description of Boetersiella wolfi n.sp.*” by Boeters & Gloer describing a new species, which was included in the genus *Boetersiella* Arconada & Ramos, 2001. Unfortunately, this paper has an intricate history behind it.

The same manuscript was first submitted by Boeters and Gloer to the Spanish journal *Iberus*

with the title “*A contribution to the genus Boetersiella Arconada & Ramos, 2001 in Spain*”. The manuscript was sent for evaluation to two expert reviewers, one of them being B. Arconada, as a recognized authority on the taxonomy of Spanish valvatoïd hydrobiids.

The paper described the presence of a new hydrobiid species in a locality from Southern Spain that was assigned to the genus *Boetersiella* Arconada & Ramos, 2001. The species was named *Boetersiella wolfi* in honor of Wolfgang Graack who collected it in 2001. In order to justify the inclusion of the new species into this genus Boeters & Gloer (2007) modified the diagnostic characters defined for *Boetersiella* (Arconada & Ramos, 2001) by broadening them. It is necessary to point out that in addition to these modifications, the new species also differs in other fundamental diagnostic characters that are not explained or justified by Boeters and Gloer (2007). Among them we can highlight the presence in *B. wolfi* of a distal seminal receptacle (RS1) instead of the proximal (RS2), that is characteristic of *Boetersiella*, and the existence of a bulbous bulge at the basis of the penis not described before. Hydrobiids taxonomy has been traditionally based on penis structure and the number and position of the sac-like structures associated with the renal oviduct (bursa copulatrix and seminal receptacles) (Bodon *et al.*, 2001). It is well known that the genital characters and combinations between them are generally constant in groups of species of western Palaearctic hydrobiids and are therefore the most relevant diagnostic features at the rank of genus (Davis & Carney, 1973; Bodon *et al.*, 2001; Arconada & Ramos, 2001, 2006; Ramos *et al.*, 2000).

During the revision of the manuscript it was detected not only that the generic adscription of the new species had been incorrect but also that the species was studied before and included in the PhD

thesis of one of the authors (B.A.) that was publicly defended in 2000 (Arconada, 2000). This doctoral dissertation included a detailed description of the species and a complete justification of its ascription to the Italian genus *Arganiella* Giusti & Pezzoli, 1980 based on an exhaustive comparison and discussion of its diagnostic characters. We have to admit that the inclusion of a new taxon in a PhD thesis does not constitute a valid description of it according to the International Code for Zoological Nomenclature (ICZN) rules. Nevertheless the existence of this PhD thesis has been cited in several papers of Arconada and Ramos and is publicly accessible in the Library of the Universidad Autónoma of Madrid, in addition to the libraries of the members of the PhD evaluation committee. The PhD thesis received an Extraordinary Doctorate Award by the University based on its quality and contribution to science. Dr. Boeters knew of the existence of this still unpublished species (*Arganiella tartessica*) and also that its formal description was in press, as will be explained below, because of his collaboration with B.A.

The results of this PhD thesis and other works are the basis of the papers that Arconada and Ramos have been publishing since 2000 in high standard scientific journals confirming that the Iberian Peninsula is one of the areas of highest hydrobiids diversity in Europe (see Arconada & Ramos, 2003 for a review). As a matter of fact when B. Arconada received from the editor of *Iberus* a copy of the Boeters & Glöer manuscript for evaluation, the manuscript with the formal description of *A. tartessica* was already submitted to the journal *Graellsia* and soon after it was accepted for publication (Arconada & Ramos, 2007). All these events were communicated by letter to the editor of *Iberus* including the letter accepting the description of *A. tartessica* for publication in *Graellsia*.

On May, 2<sup>nd</sup> 2007, the editor of *Iberus* (Dr. S. Gofás, pers. com.) sent a letter to Dr. Boeters notifying him that according to the criteria of both referees his manuscript was not acceptable for publication in its current format because of its deficient presentation and also because the description of the same new species was already in the press in *Graellsia*. The letter of the *Iberus* editor included a personal letter of B.A. to Boeters explaining the state of affairs.

Instead of withdrawing the article, according to the Ethics Code of the ICZN Appendix A, Boeters expedited its publication without changes and published it also in May in the journal *Heldia* with the title “*A contribution to the genus Boetersiella Arconada &*

*Ramos, 2001 in Spain with the description of Boetersiella wolffi n.sp.*” by Boeters & Glöer. The editors of *Heldia* should have avoided the publication of this paper following the same Ethics Code because they knew of the existence of the Arconada and Ramos (2007) paper in press and its moral priority.

On June 27<sup>th</sup> 2007 the issue of *Graellsia* was published including the paper “*Description of a new species of the genus Arganiella Giusti & Pezzoli, 1980 (Mollusca, Gastropoda, Hydrobiidae) from the Iberian Peninsula*” (Arconada & Ramos, 2007) in which *A. tartessica* was formally described providing exhaustive morphological and morphometrical data as well as a detailed morphological comparison of this species with the type species of different European genera that justified the adscription of the new species to *Arganiella*. In addition, this paper reported the species from a higher number of localities extending its distribution area.

We have no doubt about the incorrect adscription of the new species to *Boetersiella* and therefore we consider that the original diagnosis of this genus is still valid as defined by its authors (see Arconada & Ramos, 2001).

As a consequence, currently there are two nominal combinations for the same species differing in their generic adscription: *Boetersiella wolffi* and *Arganiella tartessica*. Therefore, following the ICZN Priority Principle, the valid name for the species should be *Arganiella wolffi* (Boeters & Glöer, 2007), **comb. nov.**, of which *Arganiella tartessica*, **syn. nov.** is a synonym. The species type locality corresponds with the one designated by Boeters & Glöer, the holotype and paratypes being those corresponding to the population of La Peña de Arias Montano, Huelva, that have been deposited in the Zoological Museum of Hamburg (ZMH) with catalogue numbers 51018 and 51019. Nowhere in the description of *B. wolffi* is the existence of official permissions mentioned for the capture of the specimens that allowed the description of the species. This mandatory according to Spanish legislation (Law 4/1989).

Finally, some reflections might be added:

1. Diagnostic characters defined for a geographically restricted genus are the result of a wide knowledge of the biodiversity of a territory. The modification of one diagnosis should be based therefore on solid arguments and fully justified, otherwise it only leads to misunderstandings and taxonomic chaos. To avoid these additional complications to the already complicated syste-

matics of this group of minute hydrobiid snails it is necessary that all descriptions of new taxa are rigorously made and based on as many characters as possible and on large series of specimens to also consider intraspecific variability.

2. More exchanges of information between the handful of scientists who are interested in the Iberian groundwater fauna, would be desirable, thus avoiding duplication and waste of efforts. In any case a careful respect of the rules of ethics and scientific moral rules should prevail for the real progress of taxonomic knowledge. Otherwise, taxonomists will never gain the respect of our colleagues in other areas of science and of society at large, especially at a time when taxonomy is claimed to be at the core of knowledge about biodiversity.

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