A new hydrobiid genus and species from Peloponnese (Greece), with a note on *Achaiohydrobia* (Gastropoda: Hydrobiidae)

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A new genus and species of Hydrobiidae is described from north central Peloponnese peninsula, Greece: *Tridentalia lykaia*. Additionally a note on *Achaiohydrobia* Falniowski, 2021 is given: *Achaiohydrobia moreana* Hofman & Grego, 2021 is a junior synonym of *Bythinella corrosa* Glöer & Hirschfelder, 2020.

Key words: Mollusca, Gastropoda, Hydrobiidae, new genus, new species, anatomy, *Tridentalia*, *Achaiohydrobia,* Peloponnese, Greece.

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INTRODUCTION

Delicado & Hauffe (2022), in a revision of the genus *Radomaniola*, described several new species and erected a new genus, *Lerniana*. From the Peloponnese peninsula they mentioned *Radomaniola filiola* (Westerlund, 1881), *Lerniana tritonum* (Bourguignat, 1852), *L. seminula* (Frauenfeld, 1863) and *L. feheri* (Georgiev, 2013). In addition, they mentioned two *Radomaniola* populations with an open nomenclature (*Radomaniola* sp3 and sp4 – see Table S2 in Delicado & Hauffe). While trying to collect these species, the second author found a population composed of a species exhibiting a remarkable different and characteristic penis morphology, not known from any other hydrobiid species. The observed feature justifies the description of a new genus, since hydrobiid genera can be characterised by the shell shape in combination with the penis morphology (Radoman, 1983; Szarowska, 2006; Glöer, 2022).

Bythinella corrosa Glöer & Hirschfelder, 2020 was described as a new species from a spring south of Astros, eastern Arcadia, Peloponnese, Greece. As the alcohol material got lost during handling, the description was based on shell characters only. However, the shape of the shell of this species is so unique that a description seemed to be justified. One year later Hofman & Grego in Falniowski et al. (2021) described a species from the same locality as *Achaiohydrobia moreana*. We show that *B. corrosa* is the same species and has priority over *A. moreana*.

MATERIAL AND METHODS

The snails have been collected by the second author and fixed in 80% ethanol. The specimens were taken by hand from stones and fallen leaves. Only a few animals were collected to avoid disturbing the small population too much. The dissections and measurements of the genital organs and the shells were carried out using a stereo microscope (Leica M205C). The anatomical and shell photos were made with a microscope Leica M205C mounted with a digital camera (Leica DMC 5400). The type material is stored in the Zoological Museum Hamburg (ZMH), Germany, and in the collection of H.-J. Hirschfelder.

RESULTS

Family Hydrobiidae Stimpson, 1865
Genus *Tridentalia* gen. nov.

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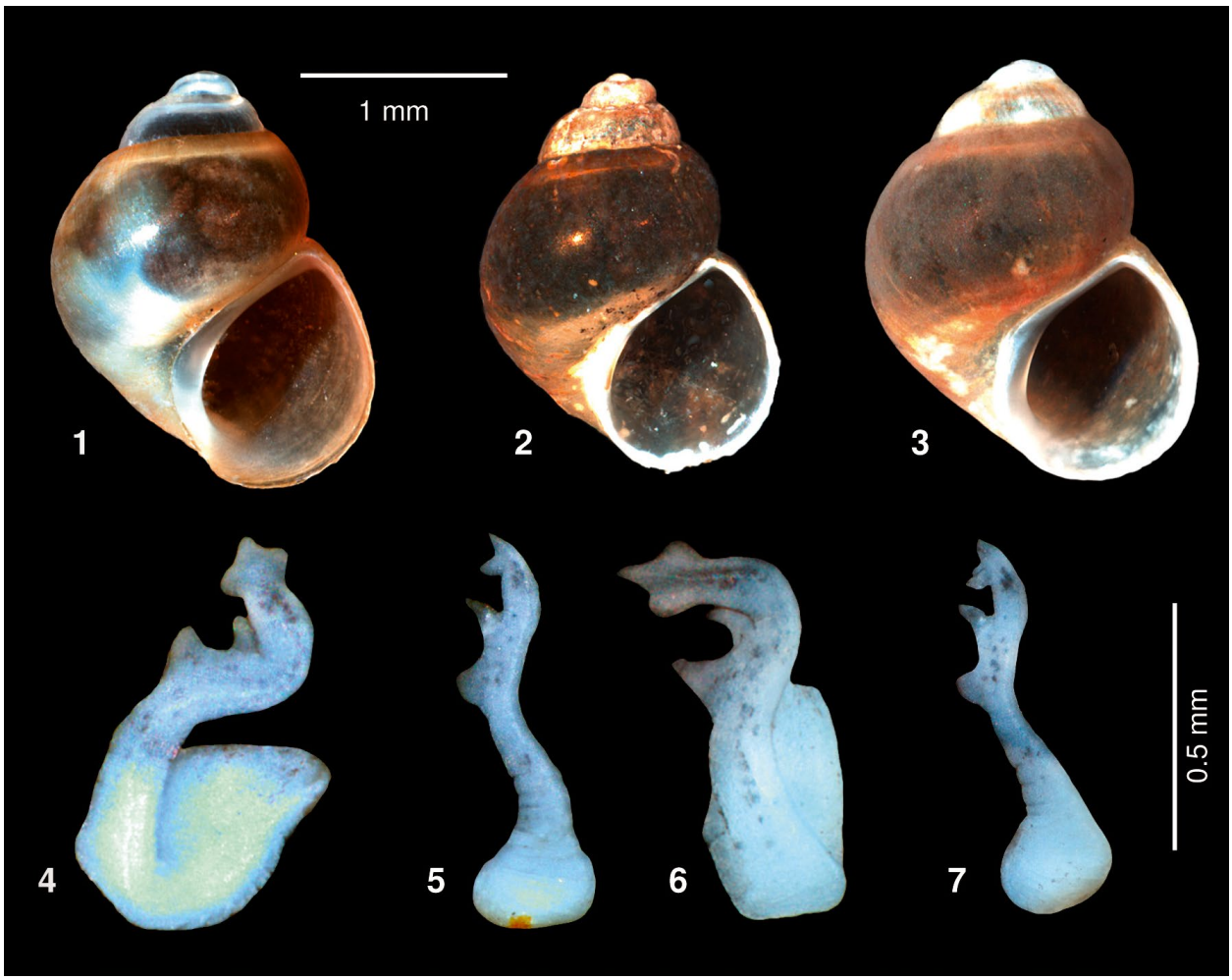
Type species. — *Tridentalia lykaia* gen. nov. spec. nov. (by monotypy).

Diagnosis. — The genus is characterized by a small conical shell with a prominent body whorl and closed umbilicus.



Figs 1-7. *Tridentalia lykaia* gen. nov. spec. nov. **Fig. 1.** Shell, holotype. **Figs 2-3.** Shell, paratypes. **Figs 4-7.** Penes. Photographs **1-7** by P. Glöer.

The penis is long with a bilobed outgrowth on the left side and a tridental penis tip.

***Tridentalia lykaia* gen. nov. spec. nov.**
(Figs 1-7)
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Type material. — Holotype: 2.10 mm high and 1.63 mm broad (ZMH 141458). Paratypes: 4 specimens (ZMH 141459), and 10 specimens coll. Hirschfelder.

Type locality. — Greece, Peloponnese, Arcadia, Ano Karies (33 km WSW Tripoli), spring 400 m SW of the village along the road to Sanctuary of Zeus at Mount Lykaion, 37.4334°N 21.9987°E, 1010 m a.s.l.; leg. H.-J. Hirschfelder, 16.10.2022.

Etymology. — The new genus is named after the tridental apex of the penis. The new species is named after Mount Lykaion. The type locality is situated on its flank.

Description. — The conical shell is glossy with a rounded apex and 3.5 fast growing whorls. The body whorl is prominent. The aperture is oval, angled at the top and takes about 0.53 of shell height. The outer lip is sharp, the inner lip is broad in the region of the closed umbilicus. The shell is 2.08-2.12 mm high and 1.60-1.63 mm broad. The penis is white with dark spots, long and slender with a bilobed outgrowth on the left side and a tridental apex (fig. 1).

Differentiating characters. — The shells are similar to *Radomaniola*/*Grossuana* but the penis is with the tridental apex different from all other hydrobiid species known so far.

Habitat. — The species was found on stones and fallen leaves at the outflow, together with a *Bythinella* sp. which was much rarer.

Distribution. — Only known from the type locality.

Genus *Achaiohydrobia* Falniowski, 2021

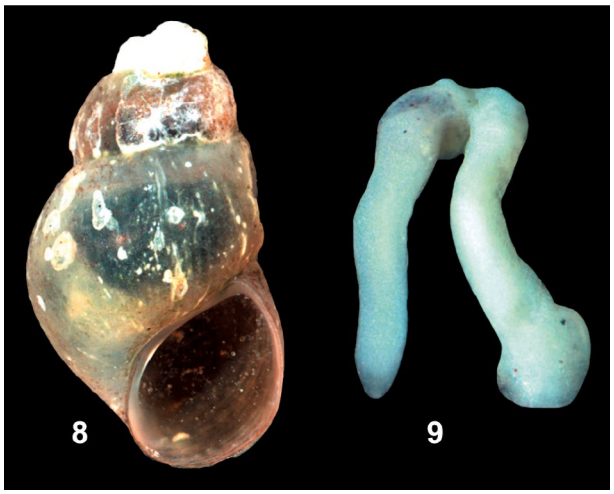
Type species (by monotypy): *Achaiohydrobia moreana* Hofman & Grego, 2021

***Achaiohydrobia corrosa* (Glöer & Hirschfelder, 2020)**
(Figs 8-9)

Bythinella corrosa Glöer & Hirschfelder, 2020, Ecologica Montenegrina, 30: 66.

Achaiohydrobia moreana Hofman & Grego, 2021, ZooKeys, 1037: 168.

In 2022 the second author collected new material of *Achaiohydrobia moreana* from the type locality (Moustos spring, 2 km N of Aghios Andreas, Arkadia, eastern Peloponnese, Greece). The anatomical study confirmed the results (Figs 8-9) of Falniowski et al. (2021). Unfortunately, Falniowski et al. (2021) overlooked that this species has been described a year earlier as *Bythinella corrosa* Glöer & Hirschfelder, 2020. Thus the species must be named as *Achaiohydrobia corrosa* (Glöer & Hirschfelder, 2020), with *Achaiohydrobia moreana* as a synonym.



Figs 8-9. *Achaiohydrobia corrosa* (Glöer & Hirschfelder, 2020). Greece, Moustos spring, 2 km N of Aghios Andreas. **Fig. 8.** Shell. **Fig. 9.** Penis. Photographs **8-9** by P. Glöer.

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