Ann. Naturhist. Mus. Wien, Serie A	117	95–100	Wien, 15 Feb. 2015

Taxonomic note on problematic Neogene European freshwater Gastropoda

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Manuscript submitted on November 6th 2014,
the revised manuscript on November 17th 2014.

Abstract

In the course of the setup of the online version of the database for Freshwater Gastropoda of the European Neogene (FreshGEN) three junior homonyms were detected. This regards the primary homonyms of a genus and a species, as well as the secondary homonym of a species. *Brasovia* nov. nom. (Littorinimorpha: Hydrobiidae), *Gyraulus sauerzopfi* nov. nom. (Hygrophila: Planorbidae), and *Pseudamnicola*? *babindolensis* nov. nom. (Littorinimorpha: Hydrobiidae) are introduced as replacement names.

Key-words: Nomenclature, replacement names, homonyms, Miocene, Pliocene

Introduction

A recent effort to compile taxonomic and biogeographic data on Neogene freshwater Gastropoda in the comprehensive FreshGEN database (Freshwater Gastropods of the European Neogene; Neubauer *et al.* 2014c, d) successively revealed a great number of primary and secondary homonyms, most of which have been resolved in recently published papers already (Neubauer *et al.* 2014a, b). These publications resume the endeavour of earlier authors to correct nomenclatorial issues (*e.g.*, Cossmann 1909; Pallary 1916, 1920, 1925; Wenz 1919a–b, 1922, 1923a, 1924, 1925, 1928, 1929, 1930). Since the latest nomenclatural amendments, three more cases have been detected. This short note is devoted to the introduction of replacement names to settle these issues.

Systematic palaeontology

For classification above family level see Bouchet & Rocroi (2005) and Criscione & Ponder (2013).

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ZooBank LSID: urn:lsid:zoobank.org:pub:7646FE0F-A81A-452A-897F-0C87EDDA9F38

Family Hydrobiidae Stimpson, 1865

Genus *Brasovia* nov. nom.

1932 [*Pseudamnicola*] Subgenus *Aluta* n. s. g. – Jekelius: 77 [non *Aluta* Matthew, 1896].

Derivatio nominis: Named after the Braşov Basin in Romania, from where the type species was described.

Type species: *Pseudamnicola* (*Aluta*) *trochiformis* Jekelius, 1932. Pliocene, Romania. Type by subsequent designation by Jekelius (1933).

ZooBank LSID: urn:lsid:zoobank.org:act:CB2FA2C6-0F86-4677-964A-AAF85C6D960A

Other included species: *Pseudamnicola* (*Aluta*) *trochisimilis* Jekelius, 1932, *P.* (*A.*) *carinata* Jekelius, 1932, *Pseudamnicola* (*Aluta*) *producta* Jekelius, 1944, *Pseudamnicola* (*Aluta*) *producta unicarinata* Jekelius, 1944, *Pyrgula* (*Aluta*) *pseudocarinata* Roshka, 1973, *Pyrgula* (*Aluta*) *tenuistriata* Roshka, 1973.

Original diagnosis: "Keeled forms with weakly convex to straight-sided whorls and open to partly covered umbilicus." [translated from Jekelius 1932: p. 77]

Discussion: The genus-group name *Aluta* Jekelius, 1932 is a primary homonym of the fossil ostracod genus *Aluta* Matthew, 1896 (p. 198; see also Brandão 2014). In addition, the taxonomic status of the gastropod genus is doubtful. Jekelius (1932) introduced *Aluta* as subgenus of *Pseudamnicola*, but mentioned its problematic classification. Based on the illustrations, an affiliation with *Pseudamnicola* can be excluded and *Brasovia* is thus treated at genus level here. Instead, a closer relationship to pyrgulinids can be assumed (Roshka 1973), but this issue is beyond the scope of this paper.

Occurrence: Known from the Middle Miocene of Soceni (Romania), the Late Miocene (Maeotian) of SW Ukraine, and the Pliocene (Dacian?) of the Braşov Basin (Romania). Papp (1953) also mentioned a species from the early Pannonian of Leobersdorf (Austria).

Genus *Pseudamnicola* Paulucci, 1878

***Pseudamnicola*? *babindolensis* nov. nom.**

1903 *Pseudamnicola*? *Brusiniana* nov. spec. – Pavlović: 159, pl. 3, figs 15–16 [non *Zagrabica brusiniana* Clessin & Dybowski in Dybowski, 1888].

1926 *Amnicola* (*Amnicola*) *brusiniana* (Pavlović) – Wenz: 2057 [non Clessin & Dybowski in Dybowski, 1888].

1962 *Pseudoamnicola* [sic] *brusiniana* Pavl. – Milošević: 19, pl. 14, fig. 4 [non Clessin & Dybowski in Dybowski, 1888].

Derivatio nominis: Named after the type locality.

Syntypes: Natural History Museum, Belgrade, coll. no. 1456 (MILOŠEVIĆ 1962).

Locus typicus: Babin Dol, a small stream on the southern slope of Vodno hill near Skopje, Republic of Macedonia.

Stratum typicum: Middle or Late Miocene (after DUMURDŽANOV & KRSTIĆ 1999).

ZooBank LSID: urn:lsid:zoobank.org:act:26E27C0B-140D-4F29-B9E9-FE184A7AB0AE

Original diagnosis: "The extremely minute shell of globose, conical shape consists of 4–5 whorls, which are separated by a suture. The last whorl is strongly protruded and large. The aperture is oval. The columellar margin is narrow, so that the umbilicus is visible; the outer margin is simple and sharp." [translated from PAVLOVIĆ 1903: p. 159]

Discussion: CLESSIN & DYBOWKSI in DYBOWKSI (1888: p. 52) introduced the new gastropod species *Zagrabica brusiniana* based on material from the Caspian Sea. Later, the species was recombined with the genus *Pseudamnicola* (see KANTOR & SYSOEV 2006; KANTOR *et al.* 2010). This makes *Pseudamnicola*? *brusiniana* PAVLOVIĆ, 1903 from the Miocene of Skopje a junior secondary homonym (ICZN 1999, Art. 59 and 60).

Confirmation of the generic attribution of PAVLOVIĆ's species necessitates a renewed study of the type material. The attribution to *Amnicola* proposed by WENZ (1926) seems highly unlikely based on the otherwise exclusively North American distribution of the genus.

Occurrence: Known only from the type locality.

Family Planorbidae RAFINESQUE, 1815

Genus *Gyraulus* CHARPENTIER, 1837

***Gyraulus sauerzopfi* nov. nom.**

1862 *Planorbis vermicularis* STOL. – STOLICZKA: 532; pl. 17, fig. 1 [non *Planorbis vermicularis* GOULD, 1847].
1923b *Gyraulus* (*Gyraulus*) *vermicularius* [sic] (STOLICZKA) – WENZ: 1623 [non GOULD, 1847].
2002 *Gyraulus vermicularis* (STOLICZKA, 1862) – HARZHAUSER & KOWALKE: 75; pl. 10, fig. 14 [non GOULD, 1847].
2008 *Gyraulus vermicularis* (STOLICZKA, 1862) – HARZHAUSER *et al.*: 48; figs 4.3–3a [non GOULD, 1847].

Derivatio nominis: In honour of Franz Sauerzopf (formerly State Museum Burgenland, Eisenstadt), who worked on the planorbids of the Pannonian Basin.

Syntypes: Stored at the Geological Survey of Austria, Vienna, coll. no. 1862/001/0001.

Locus typicus: Sveti Jurij (= Vízlendva), Rogašovci, Murska Sobota, Slovenia.

Stratum typicum: Middle Miocene, late Serravallian (Sarmatian).

ZooBank LSID: urn:lsid:zoobank.org:act:2D45E9E1-047F-4116-B41B-D4A7C1CAB025

Original diagnosis: "The shell is flat, discoid and consists of 2–3 whorls, which show only little overlap. The diameter of the tube-like last whorl increases slightly but consistently toward the aperture. The aperture is almost circular, the outer lip is sharp, the inner lip very thin. The surface exposes faint growth lines [...]. The depression on the lower side is barely deeper than on the upper side." [translated from Stoliczka 1862: p. 532]

Discussion: *Planorbis vermicularis* Stoliczka, 1862 is a primary homonym of the extant species *Planorbis vermicularis* Gould, 1847 (p. 212) from Oregon, United States. Both species have been recombined with the genus *Gyraulus* and both are in common use (for Stoliczka's species see, *e.g.*, Wenz 1923b; Harzhauser & Kowalke 2002; Harzhauser *et al.* 2008; for Gould's species see, *e.g.*, Johnson *et al.* 2013). The combination with *Gyraulus* is followed herein.

Full description, illustrations, and further discussions are provided by Stoliczka (1862), Harzhauser & Kowalke (2002), and Harzhauser *et al.* (2008).

Occurrence: Recorded from the following Sarmatian localities around the Central Paratethys: Sveti Jurij/Rogašovci (Slovenia), Gratkorn/St. Stefan (Austria), St. Margarethen/Zollhaus (Austria), Boleráz (Slovakia), Láz/Săsciori (Romania) (Wenz 1923b; Harzhauser & Kowalke 2002; Harzhauser *et al.* 2008).

Acknowledgements

We thank Philippe Bouchet (Muséum national d'Histoire naturelle, Paris) and the management team of the World Register of Marine Species (Vlaams Instituut voor de Zee, Oostende) for intensive collaboration and feedback, which helped to actually detect the homonyms. The critical review by Simon Schneider (CASP, Cambridge) is gratefully acknowledged. This contribution was realized within the project "Freshwater systems in the Neogene and Quaternary of Europe: Gastropod biodiversity, provinciality, and faunal gradients" financed by the Austrian Science Fund (FWF project no. P25365-B25).

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