Communication

Mieniplotia gen. nov. for Buccinum scabrum O.F. Müller, 1774, with comments on the nomenclature of Pseudoplotia Forcart, 1950, and Thiara Brot, 1870 (Gastropoda: Caenogastropoda: Cerithioidea: Thiaridae)

Martyn E. Y. Low¹,²,₄ and Siong Kiat Tan¹,³

¹Lee Kong Chian Natural History Museum (formerly the Raffles Museum of Biodiversity Research), Faculty of Science, National University of Singapore, Block S6, Science Drive 2, Singapore 117546, Republic of Singapore
²m.low@me.com
³nhmtsk@nus.edu.sg
⁴Corresponding author

Abstract

Mieniplotia gen. nov. is established for Buccinum scabrum O.F. Müller, 1774, which is currently assigned to the unavailable genus-group name Pseudoplotia Forcart, 1950. Nomenclatural notes on the other genus-group names that Buccinum scabrum has been historically assigned are provided. Mieniplotia gen. nov. currently contains only the type species, Mieniplotia scabra (O.F. Müller, 1774), comb. nov.

Introduction

The freshwater gastropod currently referred to as Plotia scabra or Pseudoplotia scabra (Figs. 1 and 2) is known to occur from the east coast of South Africa to Fiji (Glaubrecht et al., 2009: 230; Mienis, 2012: 14, 15), and is also a recognised invasive species in several areas outside of its native distribution (e.g., Thompson et al., 2009; Heller et al., 2014; Nasarat et al., 2014; Vaisman & Mienis, 2014). The species was first described as Buccinum scabrum by O.F. Müller (1774: 136). Buccinum scabrum O.F. Müller, 1774, is currently considered to be a valid species that should be placed in its own genus on the basis of morphological and molecular data (Glaubrecht et al., 2009: 212, 226–237; Mienis, 2012: 14).

There has, however, been some debate as to the correct generic assignment of Buccinum scabrum O.F. Müller, 1774. Four genus-group names have been applied: Plotia Röding, 1798 (e.g., Glaubrecht et al. 2009: 226, 227), Ploitiopsis Brot, 1874 (e.g., Abbott 1948: 291, 292), Pseudoplotia Forcart, 1950 (e.g., Mienis, 2012: 14), and Thiara Röding, 1798 (e.g., Morrison 1954: 378).

Until Mienis (2012), the name Pseudoplotia Forcart, 1950, has been almost universally been considered to be a synonym of Thiara Röding, 1798 (e.g., Morrison 1954: 378; Face 1973: 56; Burch 1984: 104). The only other author to consider Pseudoplotia Forcart, 1950, to be a valid name was Starmühlner (1957: 459), who used the name as valid when he recorded "Thiara (Pseudoplotia) scabra" from Iran. Following Mienis (2012), the combination Pseudoplotia scabra (O.F. Müller, 1774), has been accepted and used in the scientific literature (e.g., Dechruksa et al., 2013; Heller et al., 2014; Nasarat et al., 2014; Sternberg et al., 2014; Vaisman & Mienis, 2014).

However, the genus-group name Pseudoplotia Forcart, 1950, is not an available name as it does not fulfil...
Articles 13.1, 13.2 or 13.3 of the Code (ICZN, 1999: 17), namely it was not “accompanied by a description or definition that states in words characters that are purported to differentiate the taxon”, nor was it “accompanied by a bibliographic reference to such a published statement”, nor was it “proposed expressly as a new replacement name (nomen novum) for an available name”. No other available name could be located, and Mieniplotia gen. nov. is herein proposed for Buccinum scabrum O.F. Müller, 1774, which is designated as the type (and only) species.

Nomenclatural background. As discussed by Glaubrecht et al. (2009: 227), Buccinum scabrum O.F. Müller, 1774, cannot be assigned to the genus Plotiopsis Brot, 1874 (type species Melania balonensis Conrad, 1850), or Thiara Röding, 1798 (type species Helix amarula Linnaeus, 1758), as the type species of both genera are not congeneric with Buccinum scabrum O.F. Müller, 1774.

Mienis (2012: 14) discussed that the genus-group name Plotia Röding, 1798, can no longer be used as a genus for Buccinum scabrum O.F. Müller, 1774, or any other freshwater gastropod as the International Commission on Zoological Nomenclature has ruled Plotia Röding, 1798, to be an objective synonym of Pyramidella Lamarck, 1799, a genus of marine gastropods (ICZN, 1956:233). Buccinum scabrum O.F. Müller, 1774, cannot therefore be assigned to Plotia Röding, 1798.

Mienis (2012: 15) revalidated the genus-group name Pseudoplotia Forcart, 1950, for Buccinum scabrum O.F. Müller, 1774. In proposing the genus-group name Pseudoplotia, as a subgenus of Thiara Röding, 1798, Forcart (1950: 77) had come to the same conclusions as Mienis (2012) in realising the need for a genus for Buccinum scabrum O.F. Müller, 1774. Pseudoplotia Forcart, 1950, was established with Buccinum scabrum O.F. Müller, 1774, as its type species by original designation (Article 68.2 of the International Code of Zoological Nomenclature, hereafter the Code, ICZN, 1999:70).

Unfortunately, the genus-group name Pseudoplotia Forcart, 1950, is not an available name as it was proposed after 1930 and does not fulfill Article 13 of the Code (ICZN, 1999:17), as discussed above.

When proposing the name Pseudoplotia, Forcart (1950: 14) listed all genus-group names (with their respective type species) in which Buccinum scabrum O.F. Müller, 1774, had been referred to and stated that: “Aus obiger Aufstellung ist ersichtlich, daß keine der ursprünglichen Arten von Plotia der Gruppe von Thiara scabra (Müller) angehören. Für dieses Subgenus stelle ich den neuen Namen Pseudoplotia n. subgen, auf ...” [“From above table it can be seen that Thiara scabra (Müller) does not belong to any of the types of the Plotia the group. For this subgenus I propose the new name Pseudoplotia n. subgen. ...”]. As discussed above, no diagnosis or description accompanied the proposal of the genus-group name Pseudoplotia Forcart, 1950.

Another genus-group name that may be available for Buccinum scabrum O.F. Müller, 1774, is Tiaropsis Brot, 1870. Tiaropsis was established by Brot (1870: 298) with the inclusion of Melania winteri Philippi, 1842, and nine other species. Brot (1874: 7) designated Melania winteri Philippi, 1842, as the type species of Tiaropsis. Morphologically, Melania winteri Philippi, 1842, may be congeneric with Buccinum scabrum O.F. Müller, 1774. This would mean that Buccinum scabrum O.F. Müller, 1774, could potentially be referred to Tiaropsis Brot, 1870. However, Tiaropsis Brot, 1870, is a junior homonym of Tiaropsis L. Agassiz, 1850 (Cnidaria), and is not an available name (Article 53.2 of the Code, ICZN, 1999: 57).

Mieniplotia gen. nov.

Type species. Buccinum scabrum O.F. Müller, 1774, herein designated. Depository of type material of this species is not known.

Diagnosis. Shell rather small (10–20 mm), somewhat ovoid-conical, with elevated and prominently stepped spire (apex often eroded and decollated), shoulder profile straight and slightly sloping, edge rounded or with a pronounced keel; body whorl large, with low axial ribs that usually terminate posteriorly as short pointed spines or rounded nodules; shell sculptured with spiral striate, stronger spiral ridges usually present around the basal part of body whorl. Shell colour yellowish-brown to olive greenish-brown, usually with darker brown or red speckles or flame-like patterns.
**Etymology.** *Mieniplotia gen. nov.* is derived from combining the name Mienis (in honour of Henk K. Mienis who has contributed greatly to the taxonomy and nomenclature of molluscs, especially invasive taxa in the Mediterranean region), and the name *Plota* Röding, 1798, that forms the root of several thiariid genus-group names (e.g., *Plotiopsis* Brot., 1874, *Pseudoplotia* Forcart, 1950). The gender of the genus is feminine.

**Remarks.** *Mieniplotia gen. nov.* currently contains only the type species, *Mieniplotia scabra* (O.F. Müller, 1774), **comb. nov.** A second species, *Melania winteri* Philippi, 1842, may also be referable to *Mieniplotia gen. nov.*, but further research will be necessary to determine its generic placement.

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**References**


Mienis HK (2012) What is the correct generic name of the invasive tropical thiariid species occurring in Israel and elsewhere that was described originally as *Buccinum scabrum* Müller, 1774? Ellipsaria, 14(2): 14–16.


