

A note on Bandel's 2007 review of the classification and phylogeny of the Strombidae (Caenogastropoda)

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By considering *Lambis* Röding, 1798, a subgenus of *Strombus* Linnaeus, 1758, two cases of secondary homonymy are introduced by Bandel (2007), viz. *Strombus rugosus* and *S. robustus*. These cases and some additional nomenclatorial subjects are discussed.

Key words: Caenogastropoda, Strombidae, homonymy, unavailable names.

INTRODUCTION

Bandel (2007) introduced a number of new taxa, both at family and genus level within the superfamily Stromboidea. Undoubtedly, these new taxa will be evaluated in the future.

Within the family Strombidae Bandel considers all genus level taxa to be subgenera of *Strombus* Linnaeus, 1758, including the long-standing genus *Lambis* Röding, 1798. This action created two cases of secondary homonymy, unnoticed by Bandel, that will be briefly addressed. Bandel also re-installed some names that were discussed by Abbott (1960) or subsequent authors (Bieler & Petit, 1996; Kronenberg & Dharma, 2005), that are either junior synonyms or unavailable names. These will be mentioned here briefly.

SECONDARY HOMONYMS

If Bandel's (2007) classification of the genus *Strombus* would be accepted, the following two cases of homonymy would be a consequence.

1, *Pteroceras rugosum* Sowerby, 1842 [regarded as the male form of *Lambis* (*Harpago*) *chiragra* Linnaeus, 1758 (Abbott, 1961), currently assigned to *Harpago* as a genus] would become a junior secondary homonym of *Strombus rugosus* Sowerby, 1825 [formerly regarded as a subspecies of *Strombus erythrinus* Dillwyn, 1817 (Abbott, 1960) but subsequently accepted as a species by Abbott (1967); currently known as *Canarium rugosum*]. Although the synonymy of *P. rugosum* with *H. chiragra* is widely accepted, this synonymy may in fact not be correct. Specimens that roughly have the characters of the so-called male form of *H. chiragra* have been encountered in French Polynesia, but appear to be male and female (Jean Letourneux pers. comm.). Such specimens need to be carefully compared with the type specimen(s) of *P. rugosum* (type locality: "South Seas"), the whereabouts of which are unknown. They were not found in the type collection of The Natural History Museum (London) during a visit in December 2008. It is known however, that some type specimens are still in the general collection of the Natural History Museum (Kathie Way, pers. comm.). For *P. rugosum* there is no other name available (fide Abbott, 1961), so if Bandel's scheme was to be adopted, a new name would be required for *Pteroceras rugosum* Sowerby, 1842.

2, *Strombus robustus* Sowerby, 1875 [provisionally accepting Bandel's (2007) new taxon

(as a subgenus) *Margistrombus*, currently known as *Margistrombus robustus* (Sowerby, 1874)] would become a junior secondary homonym of *Pterocera robusta* Swainson, 1821, currently known as *Lambis robusta* (Swainson, 1821). For *S. robustus* probably the name *Strombus (Dolomena) sowerbyorum* Visser & Man in 't Veld, 2005, might be available (for a preliminary discussion, see Kronenberg, 2008). Currently samples are being studied by Monsecour & Wiersma, and their results will be published elsewhere (pers. comm.).

SYNONYMS AND UNAVAILABLE NAMES

Strombella Schlüter, 1838. Bandel, 2007: 143. The type species of *Strombella* is *Strombus pugilis* Linnaeus, 1758 (by monotypy). Therefore, *Strombella* is to be considered a junior synonym of *Strombus* Linnaeus, 1758, with the same type species, by subsequent designation (Montfort, 1810) (ICZN Art. 43.1).

Monodactylus Klein, 1753. Bandel, 2007: 145. The generic name *Monodactylus* is not available from Klein, as it is a pre-Linnaean work (ICZN Art. 3 & 8.7.1). *Monodactylus* Lacépède, 1800, is a genus in Pisces. For further discussion see Abbott (1960: 125).

Dolomena Iredale, 1931. Bandel, 2007: 152. The generic name *Dolomena* is not available from Iredale, 1931, as it is a nomen nudum. It should be attributed to Wenz, 1940. For further discussion see Kronenberg & Dharma (2005).

Gallinula Klein, 1753. Bandel, 2007: 153. The generic name *Gallinula* is not available from Klein, as it is a pre-Linnaean work (ICZN Art. 3 & 8.7.1). *Gallinula* Brisson, 1760, is a genus in Aves. For further discussion see Abbott (1960: 107).

Laevistrombus Kira, 1955. Bandel, 2007: 153. The generic name *Laevistrombus* is not available from Kira, 1955, as it is a nomen nudum. It should be attributed to Abbott, 1960. For further discussion see Bieler & Petit (1996).

Doxander Iredale, 1931. Bandel, 2007: 152. The generic name *Doxander* is not available from Iredale, 1931, as it is a nomen nudum. It should be attributed to Wenz, 1940. For further discussion see Kronenberg & Dharma (2005).

DISCUSSION

Bandel's (2007) classification of the Strombidae, viz. the recognition of a single genus *Strombus*, that is subdivided into subgenera including *Lambis*, is in sharp contrast with most recent literature on this family, that recognises (most of) the taxa given the rank of subgenus by Abbott (1960, 1961, 1967), as genera. This recognition as genera is primarily based on morphological and biogeographical data; see e.g. Kronenberg & Vermeij (2002) and some preliminary molecular analysis (Yokogawa, 1999) and anatomical data (Simone, 2005). Based on molecular research, Latiolais et al. (2006) confirmed some of the conclusions drawn by Kronenberg & Vermeij (e.g. the monophyly of a clade consisting of the Recent Caribbean + Panamic + West African Strombidae). It should be noted however, that many Indo-Pacific species and some genera, such as *Doxander* Wenz, 1940, and *Mirabilistrombus* Kronenberg, 1998, were not included in the analysis by Latiolais et al. (2006).

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