

Communication

Nomenclature of the genus *Opisthoporus* Benson in L. Pfeiffer, 1851: the type species of the genus and *Opisthoporus singaporeanus* nom. nov. for *Cyclostoma rostellatum* L. Pfeiffer, 1851, a junior primary homonym of *Cyclostoma rostellatum* Partiot, 1848 (Gastropoda: Cyclophoroidea: Cyclophoridae)

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Abstract

The genus-group name *Opisthoporus* was first established in a work by Pfeiffer (1851). The contents of the work make it clear that Benson was responsible for the name and authorship is to be attributed to Benson in Pfeiffer (1851). We discuss that the type species of *Opisthoporus* is *Cyclostoma taylorianum* L. Pfeiffer, 1851 by subsequent designation by Kobelt (1912). A replacement name is also proposed for *Cyclostoma rostellatum* L. Pfeiffer, 1851 (currently assigned to *Opisthoporus*) which is a permanently invalid junior primary homonym of *Cyclostoma rostellatum* Partiot, 1848.

http://zoobank.org/urn:lsid:zoobank.org:pub:3C7EDBC8-1A92-4F32-9937-43D497FA796B

The genus *Opisthoporus*: original description, authorship and type species

Original description. The genus-group name *Opisthoporus* was first used in a publication by L. Pfeiffer (1851: 7, 8) as follows: “Einen ähnlichen, aber entschiedener röhrenförmigen, nach hinten gekrümmten, abstehenden, deutlich offenen Auswuchs beobachte ich auch an zwei anderen Arten der Cumingschen Sammlung, welche ich C[yclostoma] Taylorianum und C[yclostoma] rostellatum *) genannt habe. Herr Benson, der auch diese gesehen hat, schlägt brieflich vor, für diese Arten eine Sektion *Opisthoporus* zu gründen” [= “A similar, but distinct, tubular protrusion has been observed by me in two species from the Cuming collection which I have named C[yclostoma] Taylorianum and C[yclostoma] rostellatum. In a letter, Mr Benson has proposed the section *Opisthoporus* for these species”]. The species-group names *Cyclostoma taylorianum* and *Cyclostoma rostellatum* were diagnosed in footnotes in the same publication (pp. 7, 8) and both species-group names are available.

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Authorship. It is clear that Benson was intending to describe this genus-group name and in a later work a discussion under the heading “Genus *Opisthoporus*, nobis” appeared (Benson, 1855: 14). Following the stipulations of Article 50.1 of the *International Code of Zoological Nomenclature* (hereafter the Code, ICZN, 1999: 52), Benson should be cited as the author of the name while L. Pfeiffer cited as the author of the work. Authorship of *Opisthoporus* should therefore be attributed to Benson in L. Pfeiffer, 1851.

From the text cited above, it is also clear that authorship of the two species-group names (i.e., *Cyclostoma rostellatum* and *Cyclostoma taylorianum*) should be attributed only to L. Pfeiffer (1851).

Type species. *Cyclostoma taylorianum* L. Pfeiffer, 1851 and *Cyclostoma rostellatum* L. Pfeiffer, 1851 are both originally included species in *Opisthoporus* Benson in L. Pfeiffer, 1851 and are eligible for designation as type species (Article 67.2 of the Code, ICZN, 1999: 66, 67).

Egorov (2009: 19) stated that the type species of *Opisthoporus* Benson in L. Pfeiffer, 1851 was *Cyclostoma taylorianum* L. Pfeiffer, 1851 by subsequent designation by Kobelt (1902: 213). Although Kobelt (1902: 213–218) did treat *Opisthoporus* Benson in L. Pfeiffer, 1851 and its included species, no such type species designation was found therein.

In a later work, Kobelt (1912: 834) stated that the type species of *Opisthoporus* Benson in L. Pfeiffer, 1851 was *Opisthoporus biciliatus* Mousson, 1849. Although

Opisthoporus biciliatus Mousson, 1849 was not an originally included species in *Opisthoporus* Benson in L. Pfeiffer, 1851, Kobelt (1912: 835) listed *Cyclostoma taylorianum* L. Pfeiffer, 1851 as a synonym of *Opisthoporus biciliatus* Mousson, 1849. Furthermore, *Cyclostoma rostellatum* L. Pfeiffer, 1851 was not treated as either a valid name or synonym in Kobelt (1912).

This designation by Kobelt (1912: 834, 835) of *Opisthoporus biciliatus* Mousson, 1849 as the type species, in combination with the listing of *Cyclostoma taylorianum* L. Pfeiffer, 1851 as a synonym of the former fulfils the requirements of Article 69.2.2 of the Code (ICZN, 1999: 72). *Cyclostoma taylorianus* L. Pfeiffer, 1851 is therefore the type species of *Opisthoporus* Benson in L. Pfeiffer, 1851 by subsequent designation by Kobelt (1912: 834).

***Opisthoporus singaporeanus* nom. nov. for *Cyclostoma rostellatum* L. Pfeiffer, 1851, a junior primary homonym of *Cyclostoma rostellatum* Partiot, 1848**

Homonymy. The name *Cyclostoma rostellatum* was established by L. Pfeiffer (1851: 8, footnote) for species of cyclophorid snail from “Singapore”. The name is in current use (see references cited below) for a species currently assigned to the genus *Opisthoporus* Benson in Pfeiffer, 1851 (Egorov, 2009: 17–19).

The name *Cyclostoma rostellatum* was also proposed by Partiot (1848: 19) for material from an unknown locality. From the description, the identity of *Cyclostoma rostellatum* Partiot, 1848 is indeterminate but it is clearly not conspecific with *Cyclostoma rostellatum* L. Pfeiffer, 1851. *Cyclostoma rostellatum* Partiot, 1848 may possibly be a member of one of the genera in the New World family Annulariidae Henderson & Bartsch, 1920 that has a shell with the last part of the body whorl detached, a thickened but not reflected peristome, with a beak-like projection at the dorsal side, and a tall spire with a truncated apex (e.g., see Watters, 2006; 2012). It should be noted that the identities of the taxon names described in Partiot (1848) have not been discussed in recent works on the family Annulariidae (e.g., Watters, 2006; 2012; 2014), or other gastropod families, with the exceptions of Raven (1990: 30) and Neubert (2009: 86).

Cyclostoma rostellatum L. Pfeiffer, 1851 is therefore a junior primary homonym of *Cyclostoma rostellatum* Partiot, 1848 (Article 57.2 of the Code, ICZN, 1999: 59).

Reversal of precedence not possible. Article 23.9.1 of the Code (ICZN, 1999: 28) allows for the precedence between an unused senior homonym and a junior homonym in current use to be reversed when certain criteria are met. Although *Cyclostoma rostellatum* Partiot, 1848 has not been used as a valid name and Article 23.9.1.1 of the Code (ICZN, 1999: 28) is fulfilled, *Cyclostoma rostellatum* L. Pfeiffer, 1851 has only been used as a valid name in nine publications by twelve

different authors (viz., Chan, 1998: 1; Davison, 1995: 235; Dharma, 2005: 84; Egorov, 2009: 17, 19; Ho, 1995: 94; Maassen, 2001: 20; Marwoto, 2016: 18; Tan & Woo, 2010: 27; Foon et al., 2017: 21, 22) in the past 50 years and Article 23.9.1.2 of the Code (ICZN, 1999: 28) cannot be fulfilled. *Cyclostoma rostellatum* L. Pfeiffer, 1851 is therefore a permanently invalid name as it is a junior primary homonym of *Cyclostoma rostellatum* Partiot, 1848 (Article 57.2 of the Code, ICZN, 1999: 59).

Replacement name. Following Article 60 of the Code (ICZN, 1999: 62, 63) of the Code, the replacement name *Opisthoporus singaporeanus* **nom. nov.** is proposed for *Cyclostoma rostellatum* L. Pfeiffer, 1851 as preoccupied by *Cyclostoma rostellatum* Partiot, 1848. The valid name for the taxon previously known as *Opisthoporus rostellatus* (L. Pfeiffer, 1851) is *Opisthoporus singaporeanus* **nom. nov.**

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