

Case 3683***Cylindrus* Fitzinger, 1833 (Mollusca, Gastropoda, HELICIDAE):
proposed conservation**

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Abstract. The purpose of this application, under Article 23.9.3, is to conserve the generic name *Cylindrus* Fitzinger, 1833 for a well-known, monotypic genus with a model species for Alpine endemism in gastropods. This name is threatened by the earlier *Cochlopupa* Jan, 1830, a virtually unused, objective synonym, and by two senior homonyms: the unused *Cylindrus* Batsch, 1789, and *Cylindrus* Deshayes, 1824 which is an unjustified emendation of *Cylinder* Montfort, 1810 and has occasionally been used, though incorrectly applied. Currently *Cylinder* Montfort, 1810 is in use for this taxon, despite being an objective junior synonym of *Cylindrus* Batsch, 1789. It is proposed that the names *Cylindrus* and *Cylinder* be conserved in their accustomed sense by the suppression of all usages of the name *Cylindrus* before that of Fitzinger, 1833, and of *Cylinder* before that of Montfort, 1810.

Keywords. Nomenclature; taxonomy; Mollusca; Gastropoda; HELICIDAE; CONIDAE; *Cylindrus obtusus*; Recent.

1. Batsch (1789, p. 692) validly established the generic name *Cylindrus* for a group of species of cone shells, without including nominal species; his publication was neglected by later authors except Dubois & Bour (2010). This fact resulted in instability with regard to the nomenclature of an iconic, high-alpine land snail, currently known as *Cylindrus* Fitzinger, 1833, and of a taxon of well-known cone snails, for which *Cylinder* Montfort, 1810 is in use.

2. Dubois & Bour (2010, p. 171), the first authors to deal with Batsch's (1789) publication, designated *Conus textile* Linnaeus, 1758, as the type species of *Cylindrus* Batsch, 1789. As no other species were mentioned, *C. textile* is deemed to be the only originally included species (Article 67.2.2).

3. Montfort (1810, p. 390) introduced the generic name *Cylinder* and designated *Conus textile* Linnaeus, 1758 as its type species.

4. The epithets *Cylinder* and *Cylindrus* refer to a shape which is not uncommon among shells of molluscs and would have been well known to 18th century shell collectors. It is therefore possible that other overlooked usages of these names may exist in addition to Batsch (1789).

5. Deshayes (1824, p. 236) used the spelling *Cylindrus* as an unjustified emendation for *Cylinder* Montfort, 1810, so that *Cylindrus* Deshayes, 1824 is an objective junior synonym of *Cylinder* Montfort, 1810, and cannot be used for a genus-group taxon.

6. *Cochlopupa* Jan, 1830 (p. 5), established for *Helix* (*Cochlostyla*) *obtusa* Ferrusac, 1821 [= *Pupa obtusa* Draparnaud, 1805], was cited by Schileyko (2006, p. 1785) as a 'nom. oblit.' in the synonymy of *Cylindrus* Fitzinger, 1833. Earlier Kennard (1942, p. 114) had remarked that *Cylindrus* Fitzinger, 1833 had to be replaced by *Cochlopupa* Jan, 1830 because of the senior homonym *Cylindrus* Deshayes, 1824. However, only one publication after 1899 was found (Schileyko, 2012) in which the name *Cochlopupa* Jan, 1830 was used as valid.

7. Following Dubois & Bour (2010), *Cylindrus* Batsch, 1789, was used as valid by Poppe et al. (2012) but, soon after that, malacologists used *Cylinder* Montfort, 1810 instead, to promote stability regarding *Cylindrus* Fitzinger, 1833. *Cylinder* is currently used with *Conus textile* Linnaeus, 1758 as its type species at generic rank (Bozzetti, 2012; Tucker & Tenorio, 2013; Limpalaër & Monnier, 2013) or as a subgenus (Puillandre et al., 2015; Tucker & Tenorio, 2009; WoRMS, 2015).

8. Schileyko (2006, p. 1785) introduced the tribe CYLINDRUINI based on *Cylindrus* Fitzinger, 1833, next to CYLINDRINAE Thiele, 1929, based on *Cylindra* Schumacher, 1817, and stated (p. 1786) that the Commission had been petitioned to maintain the usual usage of *Cylindrus* Fitzinger, 1833, but this has not yet been done.

9. Bank & Gittenberger (2013, p. 1) and Puillandre et al. (2015, p. 7) independently declared that the Commission should be, or would be, petitioned to maintain the usual usage of *Cylindrus* Fitzinger, 1833, and *Cylinder* Montfort, 1810.

10. The World Register of Marine Species (WoRMS) states (04.08.2015): '*Cylindrus* Batsch, 1789 accepted as *Cylinder* Montfort, 1810 accepted as *Conus* (*Cylinder*) Montfort, 1810'.

11. *Cylindrus* Fitzinger, 1833 (p. 107), in the combination *Cylindrus obtusus* (Draparnaud, 1805), has been used in the preceding 50 years (cited chronologically) at least by Backhuys (1969), Klemm (1974), Schütt (1977), Kerney, Cameron & Jungbluth (1983), Pflieger & Chatfield (1988), Kreissl (1989), Fechter & Falkner (1990), Mildner & Kofler (1990), Gittenberger (1991), Freitag (1991), Frank (1992), Sattmann, Kleewein & Baminger (1995), Schileyko (1996), Freitag & Desch (1996), Schileyko, Baminger & Sattmann (1997), Edlinger (1999), Bisenberger et al. (1999), Kleewein, Baumgartner & Sattmann (2000), Schileyko (2006), Frank (2006), Duda et al. (2010), Kruckenhauser et al. (2010a, b), Arthofer, Cadahía & Kruckenhauser (2010), Groenenberg et al. (2012), Neubert (2013), and Cadahía et al. (2014). Earlier in the 20th century, *Cylindrus* Fitzinger, 1833 was also frequently used, as for example by Sturany & Wagner (1914), Geyer (1927), Thiele (1931), Hesse (1931), Adensamer (1937, with many additional references for *Cylindrus obtusus*), Kühnelt (1937), Boettger (1949), Frömming (1954), Ehrmann (1956), Paget (1959), Zilch (1960), Adensamer (1962), and Jaekel (1962). It is suggested that the prevailing usage of the names *Cylinder* Montfort, 1810 and *Cylindrus* Fitzinger, 1833 be maintained by a Commission's ruling.

12. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary power to:

(a) suppress all usages of the genus-group name *Cylindrus* before that of

- Fitzinger, 1833 for the purposes of both the Principle of Priority and the Principle of Homonymy;
- (b) suppress all usages of the genus-group name *Cylinder* before that by Montfort, 1810 for the purposes of both the Principle of Priority and the Principle of Homonymy;
 - (c) suppress the genus-group name *Cochlopupa* Jan, 1830 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
- (a) *Cylindrus* Batsch, 1789, as suppressed in (1)(a) above;
 - (b) *Cylindrus* Deshayes, 1824, as suppressed in (1)(b) above;
 - (c) *Cochlopupa* Jan, 1830, as suppressed in (1)(c) above.

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