

Case 3821– *Helix spirorbis* Deshayes, 1850 (currently *Scolodonta spirorbis*; Gastropoda, Eupulmonata): proposed conservation of the specific name

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Abstract. The purpose of this application, under Article 23.9.5 of the Code, is to conserve the specific name of *Helix spirorbis* Deshayes, 1859 (currently *Scolodonta spirorbis*), a junior primary homonym of *Helix spirorbis* Linnaeus, 1758 (currently *Anisus spirorbis*). These names are currently in use, respectively, for species in two different families of terrestrial (SCOLODONTIDAE) and freshwater (PLANORBIDAE) gastropods, that belong to different superorders. Both names have been treated as valid since they were proposed and both were transferred out of the genus *Helix* Linnaeus, 1758 before 1899. In fact, *H. spirorbis* Linnaeus had been reassigned even before Deshayes described his species. It is proposed that *Helix spirorbis* Deshayes, 1859 be conserved by ruling it is not invalid by reason of being a junior homonym of *Helix spirorbis* Linnaeus, 1758.

Keywords. Nomenclature; taxonomy; Gastropoda; Eupulmonata; SCOLODONTIDAE; *Scolodonta*; *Scolodonta spirorbis*; South America; Brazil.

1. Linnaeus (1758: 770) described *Helix spirorbis* from Europe. The type locality is considered to be restricted to Italy (MolluscaBase, 2020), even though Linnaeus had included the species in his *Fauna Svecica* (1746: 373; see also Linnaeus, 1761: 528), indicating that he was aware of its presence in Sweden. It is a freshwater gastropod (Panpulmonata, Hygrophila) that was transferred to the genus *Anisus* Studer, 1820 when the latter was established (Studer, 1820), later becoming the type species of *Anisus* by subsequent designation (Gray, 1847). This species is widely distributed in Europe, from Sweden in the north to Italy in the south, Ireland in the west to Siberia in the east (Glöer & Meier-Brook, 2008). The name *Anisus spirorbis* (Linnaeus, 1758) is commonly referred to in malacological works, such as European faunal catalogues of mollusks (e.g., Lisický,

1991; Cossignani & Cossignani, 1995; Turner et al., 1998; Welter-Schultes, 2012; Horsák et al., 2013; Vinarsky & Kantor, 2016) and compendia of freshwater molluscan taxa (e.g., Baker, 1945; Zilch, 1959–1960).

2. Deshayes (1850: 83, pl. 82A, figs. 1–3) described the terrestrial gastropod (Panpulmonata, Eupulmonata) species *Helix spirorbis* from Rio de Janeiro, Brazil (it is uncertain whether this refers to the city or to the state of the same name). A syntype (Deshayes did not indicate the number of specimens he examined) is housed in the malacological collection of the Muséum national d'Histoire naturelle (Paris, France) under the registration number MNHN-IM-2000-31791. The species was later transferred to the genus *Streptaxis* Gray, 1837 (family STREPTAXIDAE Gray, 1860) by Tryon (1885), and to the genus *Scolodonta* Doering, 1875 (family SCOLODONTIDAE H.B. Baker, 1925) by Gude (1902). This species name is not frequently mentioned in the literature, but has been used consistently in all checklists of terrestrial snails in Brazil (Morretes, 1949; Salgado & Coelho, 2003; Simone, 2006), a revision (Kobelt, 1906) and a few faunal surveys reporting occurrences of the species (e.g. Haas, 1953; Santos et al., 2010; Salvador et al., 2018a, 2018b).

3. *Helix spirorbis* Deshayes, 1850 is a junior primary homonym of *Helix spirorbis* Linnaeus, 1758 and is, therefore, permanently invalid (Article 57.2 of the Code). *Helix spirorbis* Deshayes, 1850 has no recognized junior synonyms (Gude, 1902; Kobelt, 1906; Simone, 2006).

4. *Anisus spirorbis* (Linnaeus, 1758) and *Scolodonta spirorbis* (Deshayes, 1850) are well-established names that have been used in their current combinations since 1820 and 1902, respectively. They are distinct taxonomic entities in different superorders: the former is a freshwater snail in the superorder Hygrophila, and the latter a terrestrial snail in the superorder Eupulmonata. As such, there is no realistic possibility of these species ever being classified in the same genus again. As shown above, the junior name, in the combination *Scolodonta spirorbis*, is well-established in the literature. Nomenclatural stability would be better achieved by conserving this junior primary homonym (Art. 23.9.5) than by proposing a replacement name for it (Art. 60.1).

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

- (1) to use its Plenary Power to rule that the specific name *spirorbis* Deshayes, 1850, as published in the binomen *Helix spirorbis*, is not invalid by reason of being a junior primary homonym of *Helix spirorbis* Linnaeus, 1758; and
- (2) to place on the Official List of Specific Names in Zoology the name *spirorbis* Deshayes, 1850, as published in the binomen *Helix spirorbis*, with the endorsement that it is not invalid by reason of being a junior primary homonym of *spirorbis* Linnaeus, 1758, as published in the binomen *Helix spirorbis*, as ruled in (1) above.

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