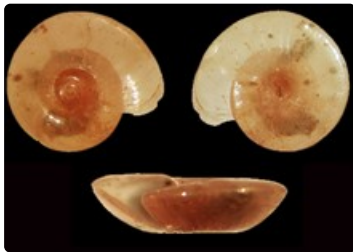




## *Helicorbis australiensis* (E. A. Smith, 1882)



*Helicorbis australiensis* (adult size up to 5.5 mm)



*Helicorbis australiensis*. A syntype of *Segnitia redita* Iredale.



Distribution of *Helicorbis australiensis*.

### Diagnostic features

This species differs from members of the genus *Gyraulus* by its strongly overlapping whorls and peripheral keel that is not centrally placed. The shell is smooth, shiny, and dark red-brown to pale amber when alive. It is small and flat, with a small to medium sunken spire and narrow to medium umbilicus. Some individuals have small internal lamellae.

### Classification

*Helicorbis australiensis* (E. A. Smith, 1882)

Class Gastropoda

Infraclass Heterobranchia

Megaorder Hygrophila

Order Lymnaeida

Superfamily Planorbioidea

Family Planorbidae

Subfamily: Planorbinae

Genus *Helicorbis* Benson, 1855 (Type species: *Planorbis umbilicalis* Benson, 1850, Chusan Island, China = Zhoushan Island) (= *Segnitila* Cotton and Godfrey, 1938; *Pingiella* F. C. Baker, 1945).

Original name: *Segmentina australiensis* E. A. Smith, 1882. In Smith, E.A. (1882). On the freshwater shells of Australia. *Journal of the Linnean Society of London, Zoology* 16: 255-316.

Type locality: Penrith, New South Wales.

Synonyms: *Planorbis meniscoides* Tate, 1882; *Segmentina victoriae* Smith, 1882; *Segnitila alphenae* Iredale, 1943; *Segnitila idonea* Iredale, 1944; *Segnitila redita* Iredale, 1944; *Segnitila brisbanensis* Iredale, 1944.

### State of taxonomy

We follow Brown (1981) while noting that the taxonomy of this group requires revision (see Notes).

### Biology and ecology

This species lives on aquatic vegetation in ponds, billabongs, swamps and sluggish streams and rivers. Feeds on detritus. Egg mass presumably a jelly strip containing small eggs. Development direct. Brown (1981) described the anatomy of this species.

### Distribution

Southern, eastern and northern Australia and a few records from Tasmania.

### Notes

This species differs from species of *Gyraulus* in having the whorls strongly overlapping and the peripheral keel is not centrally placed. The shell is smooth, shining and dark red-brown when alive.

This genus occurs in China, India, Philippines, islands of the western Pacific, as well as in eastern and northern Australia.

Related genera are *Hippeutis* Agassiz, 1837 and *Intha* Annandale, 1922 and the relationships of these genera and *Helicorbis* require re-examination. Some species in these genera are hosts of significant animal and human parasites. *Hippeutis* (or *Intha*) *umbilicalis* (Benson, 1836), an Asian species that is also known from New Guinea, has been intercepted by Australian Biosecurity.

A record of *Hippeutis complanatus* from New Plymouth, New Zealand (Hazelwood 1979) is based on an introduction of a species of *Helicorbis*, possibly *H. australiensis*.

### Further reading

Albrecht, C., Kuhn, K. & Streit, B. (2007). A molecular phylogeny of Planorboidea (Gastropoda, Pulmonata): insights from enhanced taxon sampling. *Zoologica Scripta* 36: 27-39.

Albrecht, C., Stelbrink, B. & Clewing, C. (2019). Planorbidae Rafinesque, 1815. Pp. 181-186 in C. Lydeard & Cummings, K. S. *Freshwater Mollusks of the World: a Distribution Atlas*. Baltimore, John Hopkins University Press.

Baker, F. C. (1945). *The molluscan family Planorbidae*. Urbana USA, University of Illinois Press.

Beesley, P. L., Ross, G. J. B. & Wells, A., Eds. (1998). *Mollusca: The Southern Synthesis. Parts A & B*. Melbourne, CSIRO Publishing.

Brown, D. S. (1981). Observations on the Planorbidae from Australia and New Guinea. *Journal of the Malacological Society of Australia* 5: 67-80.

- Brown, D. S. (1998). Freshwater snails of the genus *Gyraulus* (Gastropoda: Planorbidae) in Australia: the taxa of Tasmania. *Molluscan Research* 19: 105-154.
- Brown, D. S. (2001). Freshwater snails of the genus *Gyraulus* (Planorbidae) in Australia: taxa of the mainland. *Molluscan Research* 21: 17-107.
- Hazelwood, B. (1979). The first record of *Segmentina complanata* (L) from New Zealand. *Poirieria* 10: 60.
- Hubendick, B. (1955). Phylogeny of the Planorbidae. *Transactions of the Zoological Society of London* 28: 453-542.
- Ponder, W. F., Clark, S. A. & Dallwitz, M. J. (2000). *Freshwater and estuarine molluscs: an interactive, illustrated key for New South Wales*. Melbourne, CSIRO Publishing.
- Smith, B. J. (1992). Non-marine Mollusca. Pp. i-xii, 1-408 in W. W. K. Houston. *Zoological Catalogue of Australia*, 8. Canberra, Australian Government Publishing Service.
- Smith, B. J. and Kershaw, R. C. (1979). *Field guide to the non-marine molluscs of south eastern Australia*. Australian National University Press, Canberra, Australia.
- Smith, B. J. & Kershaw, R. C. (1981). *Tasmanian Land and Freshwater Molluscs*. Hobart, University of Tasmania.
- Smith, E. A. (1887). Notes on Australian species of *Bithinia*, *Segmentina*, and *Fusus* and description of a new *Melania*. *Journal of Conchology* 5: 235-238.
- Willan, E. C. & Kessner, V. (2021). A conspectus of the freshwater molluscs of the Daly River catchment, Northern Territory. *Northern Territory Naturalist* 30: 108-137.

---

To cite this resource: **Ponder, W. F., Hallan, A., Shea, M. E., Clark, S. A., Richards, K., Klunzinger, M. W., and Kessner, V. 2023. Australian Freshwater Molluscs. Revision 2.**

[https://keys.lucidcentral.org/keys/v3/freshwater\\_molluscs/](https://keys.lucidcentral.org/keys/v3/freshwater_molluscs/)

To contact the authors for comment or suggestions, please email: [fwmollusc@gmail.com](mailto:fwmollusc@gmail.com)

Copyright © 2023. All rights reserved. The Australian Museum.

