



***Isidorella* Tate, 1896**

Disclaimer

This genus is in need of revision, as the species concepts we have used have not been rigorously tested. Unpublished molecular data indicate that the species units we are here using appear to be justified, however they are not accompanied by clear-cut morphological characters that allow separation based on shell characters alone. As the species units appear to be overall concordant with state boundaries, we have used these boundaries to delimit species. This situation is not ideal and can only be resolved by additional molecular and morphological studies involving dense sampling.

Diagnostic features

Snails with a medium sized subglobose to globose, sinistrally coiled shell. Low to moderately raised spire with unshouldered to weakly shouldered whorls; with or without narrow umbilicus, whorls rounded with indented sutures. Aperture large, ovate. Outer lip and columella are entire without columella twist or plait. Smooth or with spiral threads and periostracal setae. *Isidorella* lacks a stylet and an accessory structure but the penis has two lobes.

Classification

Isidorella Tate, 1896

Class Gastropoda

Infraclass Heterobranchia

Megaorder Hygrophila

Order Lymnaeida

Superfamily Planorboidea

Family Planorbidae

Subfamily: Miratestinae

Genus *Isidorella* Tate, 1896

Type species: *Physa newcombi* A. Adams & Angas, 1864 (= *Isidorella newcombi* (A. Adams & Angas, 1864))

Original reference: Tate, R. (1896) Mollusca in Baldwin, S. (ed.) Report on the Work of the Horn Scientific Expedition to Central Australia Part II – Zoology. Dulau & Co., London and Melville, Muller & Slade, Melbourne; pp.181-226.

Type locality: Ponds, Mt. Margaret, South Australia

State of taxonomy

See Disclaimer.

Biology and ecology

On aquatic vegetation in ponds, billabongs, swamps, and sluggish streams and rivers. Locally common. Capable of aestivation, biology generally unstudied. Development direct.

Distribution

Mainland Australia.

Notes

Some forms of *Glyptophysa* - particularly the species *G.(G.) vandiemenensis* from Tasmania - are very similar to *Isidorella* species. However, *Isidorella* lacks a stylet and an accessory structure, and the penis has two lobes. The taxonomy of species of *Isidorella* is poorly understood.

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.

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.

Walker, J. C. (1988). Classification of Australian buliniform planorbids (Mollusca: Pulmonata). *Records of the Australian Museum* 40: 61-89.

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/

To contact the authors for comment or suggestions, please email: fwmollusc@gmail.com

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

