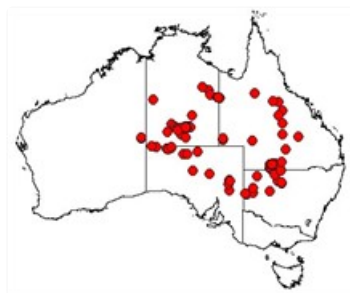




Isidorella newcombi (A. Adams & Angas, 1864)



Isidorella newcombi (adult size 7.5-21 mm)



Distribution of *Isidorella newcombi*.



Isidorella newcombi aestivating in dried up pool. Wombula Springs, SW Queensland. The small snails are *Gabbia campicola*. Photo W. Ponder.



Running Waters, Finke River, Northern Territory. Location for *I. newcombi*. Photo L. V. Kessner.

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 Unpublished molecular data indicate that the species units we are here using appear to be justified, however they are not accompanied by clear-cut morphological characters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

Globose shell with about 4 convex whorls, narrowly umbilicate, with fine spiral striae and periostracal hairs. Reaches about 20 mm in length.

Classification

Isidorella newcombi (A. Adams & Angas, 1864)

Common name: Newcomb's pouch snail

Class Gastropoda

Infraclass Heterobranchia

Megaorder Hygrophila

Order Lymnaeida

Superfamily Planorboidea

Family Planorbidae

Subfamily: Miratestinae

Genus *Isidorella* Tate, 1896

Original name: *Physa newcombi* A. Adams & Angas, 1864. In Adams, A. & Angas, G. F. (1864). Descriptions of new species of freshwater shells collected by Mr F.G. Waterhouse during J. McDonald Stuart's overland journey from Adelaide to the north-west coast of Australia. *Proceedings of the Zoological Society of London* 1863: 414-418.

Type locality: Ponds, Mt. Margaret, South Australia.

Synonym: *Lymnaea physopsis* Cooke, 1887

Biology and ecology

This species lives on aquatic vegetation in ponds, billabongs, swamps and sluggish streams and rivers. Locally common. Capable of aestivation (see photo), biology generally unstudied. Development direct.

Distribution

Isidorella newcombi occurs throughout much of far inland, arid to semi-arid parts of Australia, but does not range far into Western Australia. It is absent from Victoria.

Notes

Some forms of *Glyptophysa* - particularly those in Tasmania - are very similar to *Isidorella* species, but the penial apparatus has a penial stylet and an accessory flagellum. *Isidorella* lacks a stylet and an accessory structure but the penis has two lobes. A possible subspecies with more pronounced spiral cords, relatively high spire and narrower shell occurs at Hugh River and Jay Creek in the Lake Eyre Division of the Northern Territory. The taxonomy of *Isidorella* is very poorly understood. A number of species-group names are available and it is quite possible that more species of *Isidorella* occur in Australia. Another species name - *Isidorella hainesii* (Tryon, 1866) - has been used to describe a relatively smooth - shelled form from NSW and eastern

Queensland which lacks an umbilicus and which lives in more or less permanent water bodies however this form appears to intergrade with *I. newcombi* and the two forms are often difficult to separate. *I. newcombi* generally has a larger shell with an open umbilicus.

This genus is in need of revision, as the species concepts we have used have not been rigorously tested and can only be resolved by additional molecular and morphological studies involving dense sampling.

Further reading

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https://keys.lucidcentral.org/keys/v3/freshwater_molluscs/

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