



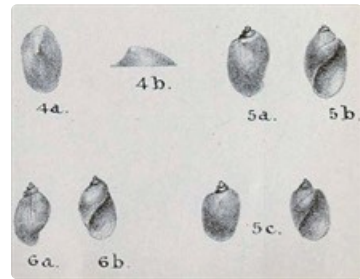
***Austropeplea*
(*Austropeplea*) *subaquatilis* (Tate,
1880)**



Austropeplea (Austropeplea) subaquatilis. (adult size to about 12 mm)



Shell variation in *Austropeplea (Austropeplea) subaquatilis*.



The original figures (6a, 6b) of *L. subaquatilis* and *L. papyracea* (figs 5a-c).



Distribution of *Austropeplea (Austropeplea) subaquatilis*.

Disclaimer

This genus is in need of revision, and the species concepts we have used have not been rigorously tested. There are few morphological characters that allow separation between species and they are difficult to separate based on shell characters alone. This situation needs to be resolved by additional molecular and morphological

studies, involving comprehensive sampling.

Diagnostic features

This species have a large aperture and reflected mantle like that of *A. huonensis*. It tends to be paler in colour than *A. brazieri*.

Classification

Austropeplea (Austropeplea) subaquatilis (Tate, 1880)

Common name: South Australian fluke pond snail.

Class Gastropoda

Infraclass Heterobranchia

Megaorder Hygrophila

Order Lymnaeida

Superfamily Lymnoidea

Family Lymnaeidae

Genus *Austropeplea* Cotton, 1942

Subgenus *Austropeplea* Cotton, 1942

Original name: *Lymnaea subaquatilis* Tate, 1880. In Tate, R. (1880). Descriptions of some new species of South Australian Pulmonifera. *Transactions and Proceedings of the Philosophical Society of South Australia* 3 (1878-9): 102-104.

Type locality: River Torrens, Adelaide, South Australia, in herbage along marshy margins.

Synonyms: *Limnaea papyracea* Tate, 1880, non *Limnaeus papyraceus* Spix, 1827; *Lymnaea viridula* Tate, 1882 (nom. nud.); *Lymnaea aruntalis* Cotton & Godfrey, 1938.

State of taxonomy

Until recently, a large number of available names for these Australian lymnaeids (e.g., Iredale 1943, 1944) were lumped as *Austropeplea tomentosa* (e.g., Boray & McMichael, 1961), a name based on a New Zealand species. Recent studies have shown that *A. tomentosa* is very different from the Australian taxa (Puslednik et al. 2009). However, unlike Puslednik *et al.* (2009), we tentatively recognise three species in SE Australia, based on differences in anatomy and molecules.

This genus is in need of revision and the species concepts we have used have not been rigorously tested. There are no-clear cut shell characters that allow separation. The current situation is clearly far from satisfactory and can only be resolved by additional molecular and morphological studies involving dense sampling.

Biology and ecology

This common species is found amongst water vegetation in dams, ponds, billabongs, rivers, streams, water-logged pasture, springs, swamps, and similar habitats. It is semi-amphibious - commonly found out of the water along the banks on damp mud. It feeds on algae and detritus. Its egg mass is a crescent-shaped jelly strip containing many small eggs. Development is direct.

Distribution

South-eastern South Australia and western Victoria.

Notes

This species is a vector of sheep liver fluke parasite. *Austropeplea subaquatilis* is generally larger in size and has a very broad parietal area compared to other *Austropeplea* species.

Further reading

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Puslednik, L., Ponder, W. F., Downton, M. & Davis, A. R. (2009). Examining the phylogeny of the Australasian Lymnaeidae (Heterobranchia: Pulmonata: Gastropoda) using mitochondrial, nuclear and morphological markers. *Molecular Phylogenetics and Evolution* 52: 643-659.

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

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