

Coxiella glauerti (Macpherson, 1957)

Diagnostic features





Somewhat similar to C. pyrrhostoma but differs from it in its more

Distribution of Coxiella glauerti.

Coxiella glauerti (adult size up to 13.7 mm)

rugose sculpture and the possession of a concentric operculum. The shell is chalky white, umbilicate and the last whorl is usually keeled.

Classification

Coxiella glauerti (Macpherson, 1957)

Class Gastropoda

Infraclass Caenogastropoda

Order Littorinida

Suborder Rissoidina

Superfamily Truncatelloidea

Family Tomichiidae

Genus E. A. Coxiella Smith, 1894

Original name: Coxiella glauerti Macpherson, 1957. In Macpherson, J. H. (1957). A review of the genus

Coxiella, Smith, 1894 sensu lato. Western Australian Naturalist 5: 191 - 204.

Type locality: Salt lake just inland of Israelite Bay, Western Australia.

State of taxonomy

Lawrie et al. (2023) have undertaken an assessment of this group and recognised four clades within what was previously treated as a single genus, Coxiella. They did not formally name the clades or provide names for some new species in that paper but will do so in a forthcoming publication. Hence, in the meantime, we follow Macpherson (1957) who provided the previous taxonomic treatment of this group.

Biology and ecology

Lives in salt lakes.

The snout is long and the eyes have a cluster of glands above them. Coxiella are dioecious and development is direct; females are oviparous, depositing eggs singly in capsules coated in sand or mud. Coxiella probably feed on organic detritus and they are amphibious.

Distribution

Southwest coastal division, Western Australia and coastal South Australia.

Notes

For species description see Macpherson (1957).

Previously included in Pomatiopsidae, recent molecular studies have shown that this genus, together with two other genera, one from South America and the other from Africa, should be separated as a distinct family.

Further reading

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

Davis, G. M. (1979). The origin and evolution of the gastropod family Pomatiopsidae, with emphasis on the Mekong River Triculinae. Academy of Natural Sciences of Philadelphia Monographs 20: 1-120.

Lawrie, A. D. A., Chaplin, J., Kirkendale, L., Whisson, C., Pinder, A., & Mlambo, M. C. (2023). Phylogenetic assessment of the halophilic Australian gastropod Coxiella and South African Tomichia resolves taxonomic uncertainties, uncovers new species and supports a Gondwanan link. Molecular Phylogenetics and Evolution, 184: 107810.

Macpherson, J. H. (1957). A review of the genus Coxiella Smith, 1894, sensu lato. Western Australian Naturalist 5: 191-204.

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https://keys.lucidcentral.org/keys/v3/freshwater molluscs/

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