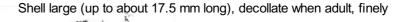


Coxiella pyrrhostoma (Cox, 1868)

Diagnostic features





Distribution of Coxiella pyrrhostoma.

Coxiella pyrrhostoma (adult size up to 17.5 mm)

axially and spirally striated; whorls very lightly convex, suture shallow. Aperture red inside. Operculum paucispiral.

Classification

Coxiella pyrrhostoma (Cox, 1868)

Class Gastropoda

Infraclass Caenogastropoda

Order Littorinida

Suborder Rissoidina

Superfamily Truncatelloidea

Family Tomichiidae

Genus Coxiella E. A. Smith, 1894

Original name: Blandfordia pyrrhostoma Cox, 1868. In Cox, J. C. (1868). A Monograph of Australian Land

Shells . Sydney: Maddock. 111pp.

Type locality: Shark 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

Inhabits 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 coast and Indian Ocean divisions, Western 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.

Iredale, T. (1943). A basic list of the fresh water Mollusca of Australia. Australian Zoologist 10: 188-230.

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.

Smith, B. J. & Kershaw, R. C. (1979). Field guide to the non-marine Molluscs of South-eastern Australia. Canberra, A.N.U. Press.

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

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