



Coxiella molesta Iredale, 1943

Diagnostic features

This species is distinctive in its elongate shell and shagreen texture.



Coxiella molesta (adult size up to 8 mm)



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Distribution of *Coxiella molesta*.

Sculpture of fine growth lines. Imperforate.

Classification

Coxiella molesta Iredale, 1943

Class Gastropoda

Infraclass Caenogastropoda

Order Littorinida

Suborder Rissoidina

Superfamily Truncatelloidea

Family Tomichiidae

Genus *Coxiella* E. A. Smith, 1894

Original name: Coxiella molesta Iredale, 1943. In Iredale, T. (1943). A basic list of the freshwater Mollusca of Australia. *Australian Zoologist* 10: 188 - 230.

Type locality: Hobsons Bay, Port Phillip, Victoria.

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

Coxiella molesta formerly inhabited saltmarsh areas in the Port Phillip area of Victoria.

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

Port Phillip, Victoria.

Notes

This species has not been collected since original specimens were obtained and is possibly extinct. 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

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

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