



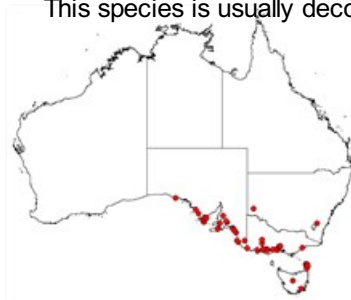
Coxiella striata (Reeve, 1842)

Diagnostic features

This species is usually decollate when adult, fusiform, with impressed



Coxiella striata (adult size up to 9 mm)



Distribution of *Coxiella striata*.



Shells of *Coxiella striata* and *Notoispisula trigonella* (Mactridae) on the shore of Pink Lake, a coastal salt lake, South Australia. Photo W. Ponder.



Pink Lake, South Australia. Photo W. Ponder.

sutures and convex whorls, smooth except for growth lines and fine concentric striae, dull, aperture reddish brown within.

Classification

Coxiella striata (Reeve, 1842)

Class Gastropoda

Infraclass Caenogastropoda

Order Littorinida

Suborder Rissoidina

Superfamily Truncatelloidea

Family Tomichiidae

Genus *Coxiella* E. A. Smith, 1894

Original name: *Truncatella striata* Reeve, 1842. In Reeve, L.A. 1842, *Conchologia Systematica* or Complete System of Conchology: in which the Lepades and Conchiferous Mollusca are described and classified according to their natural organisation and habits. London: Longman, Brown, Green and Longmans Vol.2, 337pp.

Type locality: Mitre Lake, Victoria.

Synonyms: *Truncatella filosa* Mitchell, 1838 (nom. nud.); *Pomatiopsis badgerensis* Johnston, 1879; *Coxiella confusa* Smith, 1898.

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 and coastal salt marshes. Empty shells often form pink tidelines around lake shores.

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

From southeast South Australia to southern Victoria, and including northern and eastern Tasmania. The species has also been recognised from fossil deposits in New South Wales, and it may also occur in south-western New South Wales.

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.

Smith, B. J. & Kershaw, R. C. (1981). *Tasmanian Land and Freshwater Molluscs*. Hobart, University of Tasmania.

Williams, W. D. & Mellor, M. W. (1991). Ecology of *Coxiella* (Mollusca, Gastropoda, Prosobranchia), a snail endemic to Australian salt lakes. *Palaeogeography, Palaeoclimatology, Palaeoecology* 84: 339-355.

To cite this resource: **Ponder, W. F., Hallan, A., Shea, M. E., Clark, S. A., Richards, K., Klunzinger, M. W., and Kessner, V. 2023. Australian Freshwater Molluscs. Revision 2.**

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