



## *Coxiella exposita* (Iredale, 1943)

### Diagnostic features

This small species reaches about 6 mm in length. The adult shell



*Coxiella exposita* (adult size up to 6 mm)



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Distribution of *Coxiella exposita*.

generally has about three convex whorls and is dark reddish brown with concentric striations. The operculum is partially spiral.

### Classification

*Coxiella exposita* (Iredale, 1943)

Class Gastropoda

*Infraclass* Caenogastropoda

*Order* Littorinida

*Suborder* Rissoidina

*Superfamily* Truncatelloidea

*Family* Tomichiidae

*Genus* *Coxiella* E. A. Smith, 1894

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

*Type locality:* Cranbrook, inland from Albany, 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.

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