



## ***Fluvolanatus subtortus* (Dunker, 1857)**



*Fluvolanatus subtortus* (adult size up to 15 mm)

### **Diagnostic features**

Shell medium-sized, thin, brown with brown colour rays internally,



Distribution of *Fluvolanatus subtortus*.

fragile elongate/oblong, inequivalve overlapping valves, slight posterior gape, umbones at anterior end, ligament internal, hinge teeth absent, adductor and pedal retractor muscle scars unequal.

### **Anatomy**

Eulamellibranch gills, foot small with byssal gland, small siphons formed by mantle folds, extensive ventral mantle fusion, unusually large non-plicate gills, labial palps quite small, the mid gut is not extensively joined to the style sac. Heart traversed by rectum.

### **Classification**

***Fluvolanatus subtortus*** (Dunker, 1857)

Class Bivalvia

Infraclass Heteroconchia

Cohort Heterodonta

Megaorder Neoheterodonte

Order Venerida

Superfamily Glossoidea

Family Trapezidae (Not to be confused with the family Trapeziidae (with two i's) in Crustacea).

Genus *Fluviolanatus* Iredale, 1924 (Type species: *Modiolarca subtorta* Dunker, 1857).

*Original reference*: Iredale T. (1924). Results from Roy Bell's molluscan collections. *Proceedings of the Linnean Society of New South Wales* 49: 179-278, pl. 31-36.

*Original name*: *Modiolarca (Volsella) subtorta* Dunker, 1857. In Dunker, W. 1857. Mytilacea nova collectionis Cumingianae. *Proceedings of the Zoological Society, London* 1856: 358-366.

*Type locality*: North Australia.

*Synonym*: *Fluviolanatus amarus* Laseron, 1956

## Biology and ecology

Lives intertidally and subtidally attached to logs and reeds with a fine byssus in lower reaches of brackish estuaries and coastal lagoons at or near the junction with freshwater. Also lives in brackish environments in coastal lakes, upper reaches of estuaries, harbours and inlets. *Fluviolanatus* possibly possesses zooxanthellae in the mantle folds, but this awaits confirmation. It ranges into the freshwater parts of estuaries.

## Distribution

Australian endemic. Disjunct - eastern and northern Australia from Victoria to Northern Territory and SW Western Australia. Absent from southern Tasmania.

## Notes

This mainly brackish-water species has an unusual disjunct geographical range. The isolated southwest Western Australian population contains some populations ranging into pure freshwater, and it is commonly found alongside freshwater planorbids and lymnaeids.

This taxon was included in Mytilidae for many years.

## Further reading

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Lamprell, K. & Healy, J. (1998). *Bivalves of Australia, volume 2*. Leiden, Backhuys Publishers.

Huber, M. (2010). *Compendium of bivalves. A full-color guide to 3,300 of the World's Marine Bivalves. A status on Bivalvia after 250 years of research*. Hackenheim, Germany, ConchBooks.

Morton, B. (1982). The biology, functional morphology and taxonomic status of *Fluviolanatus subtorta* (Bivalvia: Trapeziidae), a heteromyarian bivalve possessing "zooxanthellae". *Journal of the Malacological Society of Australia* 5: 113-140.

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