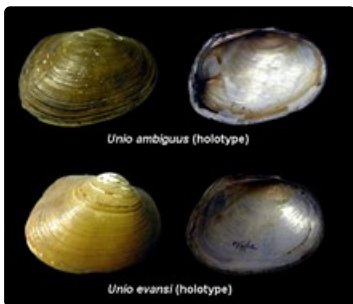




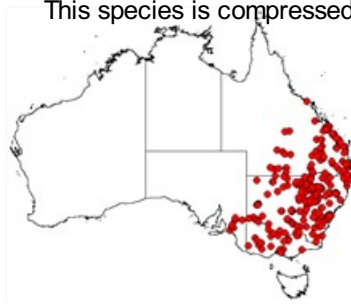
Velesunio ambiguus (Philippi, 1847)

Diagnostic features

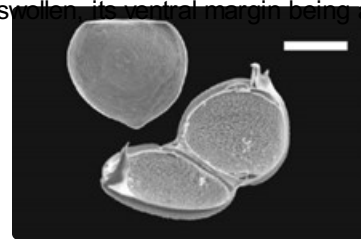
This species is compressed to swollen, its ventral margin being at least



Velesunio ambiguus, photographs of holotype and the type of one of the synonyms (adult size 75-105 mm)



Distribution of *Velesunio ambiguus*



Velesunio ambiguus glochidia. Scale 125 µm SEM photo K. Walker.



Barwon River, NSW, in flood, a habitat of *Velesunio ambiguus* and *Alathyria jacksoni* Photo M. Klunzinger.

slightly rounded, and the shell length reaches about 120 mm with the width/length ratio 58-69%. In the hinge, the pseudocardinal teeth are usually smooth, sometimes grooved. The anterior adductor scar is weak, except in old individuals.

Classification

Velesunio ambiguus (Philippi, 1847)

Common name: Balonne freshwater mussel, southern mussel, billabong mussel

Class Bivalvia

Infraclass Heteroconchia

Cohort Palaeoheterodonta

Order Unionida

Superfamily Unionoidea

Family Hyriidae

Subfamily Velesunioninae

Genus *Velesunio* Iredale, 1934

Original name: *Unio ambiguus* Philippi, 1847. In Philippi, R. A. (1847). *Abbildungen und Beschreibungen neuer oder wenig gekannter Conchylien*. Vol. 2. Verlag von Theodor Fischer, Cassel.

Type locality: Australia (as Nova Hollandia).

Synonyms: *Unio balonnensis* Conrad, 1850; *Unio vittatus* Lea, 1859; *Unio philippianus* Küster, 1861; *Unio (Alasmodon) evansi* A. Adams & Angas 1864; *Unio danelli* Villa, 1871; *Unio jeffreysianus* Lea, 1871; *Unio protovittatus* Hale & Tindale, 1930; *Velesunio balonnensis adjunctus* Iredale, 1934; *Velesunio balonnensis intricatus* Iredale, 1934; *Velesunio mckeowni* Iredale, 1943; *Velesunio testatus* Iredale, 1943; *Velesunio transitus* Iredale, 1943.

State of taxonomy

The last major taxonomic revision of Australian freshwater mussels was by McMichael & Hiscock (1958). Based on the available molecular results, Walker et al. (2014) pointed out that a re-assessment of Australian hyriids is needed.

Biology and ecology

Shallow burrower in silty sand/mud in streams, billabongs, and slow-flowing rivers. Suspension feeder. Larvae (glochidia) are brooded in the gills of females and, when released, become parasitic on the fins or gills of fish* where they undergo metamorphosis before dropping to the sediment as free-living juvenile mussels. Able to tolerate low oxygen concentrations and long periods out of water.

*Reports of tadpoles being infected by glochidia are erroneous (K. Walker, pers. com. to M. Klunzinger).

Distribution

Lakes, streams, and rivers of eastern Australia including the Murray-Darling basin, coastal rivers from the Burdekin River in Queensland to the Gawler River in South Australia and the Cooper, Diamantina, and Bulloo rivers of inland Queensland.

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