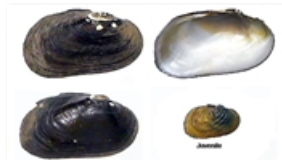
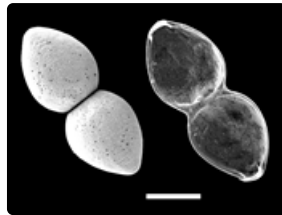


Hyridella australis (Lamarck, 1819)



Hyridella australis (adult size 70-90 mm)



Glochidia of *Hyridella australis*. Scale bar 50 μ m SEM photo: M. Klunzinger.



Distribution of *Hyridella australis*.

Diagnostic features

This species can be identified by its oblong-ovate rather inflated shell which is strongly ridged posteriorly and has heavy v-shaped sculpture restricted to the umbos which are raised above the dorsal margin. Its periostracum is distinctive in being glossy purple-black in colour with very fine, faint impressed sculpture. It reaches about 90 mm in length, and the height/length ratio is about 60%. Glochidia small (length 70-75 μ m) with widely-spread, forked bicuspid teeth.

Classification

Hyridella australis (Lamarck, 1819)

Common name: Southern freshwater mussel, Nepean mussel, Austral mussel

Class Bivalvia

Infraclass Heteroconchia

Cohort Palaeoheterodonta

Order Unionida

Superfamily Unionoidea

Family Hyriidae

Subfamily Hyriinae

Genus *Hyridella* Swainson, 1840

Original name: *Unio australis* Lamarck, 1819. In Lamarck, J.B.P.A. (1819). *Histoire Naturelle des Animaux sans Vertèbres*. Paris : J.B.P. Lamarck Vol. 6 (1) 2nd Edn, 343 pp.

Type locality: Nepean River, New South Wales

Synonyms: *Unio dorsuosus* Gould, 1850; *Unio nepeanensis* Conrad, 1850; *Unio lessoni* Küster, 1856. *Propehyridella nepeanensis opportuna* Iredale, 1934; *Propehyridella nepeanensis novata* 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 reassessment of Australian hyriids is needed and one is now in progress.

Biology and ecology

Shallow burrower in fine, compact sand/mud in streams and rivers, preferring quieter conditions (such as slack waters along stream edges) compared with other species of *Hyridella* (Jones 2013). Suspension feeder. Larvae (glochidia) are brooded in the marsupia of the gills of females and, when released attached to fish gills where they undergo metamorphosis before dropping to the sediment as free-living juvenile mussels.

Distribution

Coastal rivers and streams of southeast Queensland, New South Wales, and eastern Victoria.

Notes

Ian Hiscock published papers on the biology of supposedly this species, but they were actually based on *Velesunio ambiguus* (see under that species for details).

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