



Lortiella opertanea Ponder & Bayer, 2004



Lortiella opertanea (adult size up to 95 mm)



Distribution of *Lortiella opertanea*.



Katherine River, W entrance to Katherine Gorge. One of the locations in which *L. opertanea* is found. Photo V. Kessner.

Diagnostic features

Shell relatively elongate and narrowly hatchet shaped with the posterior end flaring, anterior end from umbo relatively short, margin rounded. Posterior end relatively long and almost truncate but rounded, ventral margin straight to concave. Dark olive brown, bluish to yellowish to dull golden brown internally. This species is not as narrowly elongate as *L. rugata* and is more elongate and compressed than *L. froggatti*. As in all species of the genus, in young specimens the beaks and shell surface lack distinct sculpture.

Classification

Lortiella opertanea Ponder & Bayer, 2004

Class Bivalvia

Infraclass Heteroconchia

Cohort Palaeoheterodonta

Order Unionida

Superfamily Unionoidea

Family Hyriidae

Subfamily Velesunioninae

Genus *Lortiella* Iredale, 1934

Original name: *Lortiella opertanea* Ponder & Bayer, 2004. In Ponder, W.F. & Bayer, M. (2004). A new species of *Lortiella* (Mollusca: Bivalvia: Unionoidea: Hyriidae) from northern Australia. *Molluscan Research* 24: 89-102.

Type locality: Katherine River, below Gorge (In pool alongside river, under logs and stones), Northern Territory, Australia.

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.

Biology and ecology

Found living beneath large flat rocks in pools in the riverbed, where it generally lives on its side with the posterior end towards the outer edge of the stone. Suspension feeder. Larvae (glochidia) are brooded in the marsupia of the gills of females and, when released, to become parasitic on fish gills or fins where they presumably undergo metamorphosis before dropping to the sediment as free-living juvenile mussels.

Distribution

Known only from the Katherine, Douglas and Daly Rivers, Northern Territory, and the Carson/King Edward River system (vicinity of Kalumburu), Western Australia.

Further reading

Klunzinger, M. W., Jones, H. A., Keleher, J., & Morgan, D. L. (2013). A new record of *Lortiella froggatti* Iredale, 1934 (Bivalvia: Unionoidea: Hyriidae) from the Pilbara region, Western Australia, with notes on anatomy and geographic range. *Records of the Western Australian Museum* 28: 1-6.

McMichael, D. F. & Hiscock, I. D. (1958). A monograph of the freshwater mussels (Mollusca: Pelecypoda) of the Australian region. *Australian Journal of Marine and Freshwater Research* 9: 372-508.

Ponder, W. F. & Bayer, M. (2004). A new species of *Lortiella* (Mollusca: Bivalvia: Unionoidea: Hyriidae) from northern Australia. *Molluscan Research* 24: 89-102.

Walker, K. F., Jones, H. A. & Klunzinger, M. W. (2014). Bivalves in a bottleneck: taxonomy, phylogeography and conservation of freshwater mussels (Bivalvia: Unionoidea) in Australasia. *Hydrobiologia* 735:61-79.

Willan, E. C. & Kessner, V. (2021). A conspectus of the freshwater molluscs of the Daly River catchment, Northern Territory. *Northern Territory Naturalist* 30: 108-137.

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https://keys.lucidcentral.org/keys/v3/freshwater_molluscs/

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