



## ***Pseudopotamis* Brot, 1894**

### **Diagnostic features**

Elongately turreted, usually decollated, with 4–7 remaining whorls; darkish brown to black. Sculpture of mostly faint spiral grooves, only few pronounced immediately below suture and at base of whorls; axial sculpture only weak. Whorls with deep suture, periphery either angulated through prominent median keel or convex. Aperture oval, outer lip angulated or round; anterior basis slightly sinuous. Embryonic shells with wrinkled sculpture on initial whorl; spiral striae and few more pronounced spiral grooves on subsequent whorls. Operculum is round and multispiral, with central nucleus.

Anatomy: Headfoot black, sometimes dotted with small white blotches. Right mantle edge with broad flap on inside. Radula taenioglossate, with typical pachychilid pattern and about 90–100 rows. Central tooth almost squarish, nearly as high as wide; its cutting edge with a strongly pronounced main denticle, flanked by three smaller ones on each side. Laterals of triangular shape, with a broad v-shaped and short base, and relatively thin lateral protrusions that extend from the upper cutting edge. Marginal teeth slender, with typically kneed stalks and hooked, fork-like heads with three (inner marginal) and 3–4 (outer marginal) strong cusps, respectively. Salivary glands as flat, expanded lobes dorsally of posterior part of buccal mass. The species of the genus are uterine brooders, with the open pallial oviduct containing only very few (1–3), but large juveniles with shells of multiple whorls.

### **Classification**

***Pseudopotamis*** Brot, 1894

*Class* Gastropoda

*Infraclass* Caenogastropoda

*Megaorder* Cerithiimorpha

*Order* Cerithiida

*Superfamily* Cerithioidea

*Family* Pachychilidae

Genus *Pseudopotamis* Brot, 1894

Type species: *Pseudopotamis finschi* Brot, 1894

Original reference: Martens, E. (1894). von Mollusken. In R. W. Semon (Ed.) *Zoologische Forschungsreisen in Australien und dem Malayischen Archipel, Vol. V: Systematik und Tiergeographie* (pp. 82–88). Jena: Fischer.

Type locality: Prince of Wales Island, Torres Strait Islands.

## State of taxonomy

We follow Glaubrecht et al. (2003) and Bouchet (2015) in this resource.

## Biology and ecology

Freshwater creeks and ponds. *Pseudopotamis* species are viviparous.

## Distribution

Prince of Wales Island and Hammond Island, north of Thursday Island, Torres Strait, Queensland.

## Notes

*Pseudopotamis* has a very restricted distribution, and the genus is only found on two islands in the Torres Strait. They differ from the similar thiarids with regards to their circular spiral operculum.

The two *Pseudopotamis* species are considered to be relicts. The closest related pachychilid genus is thought to be *Tylomelania*, endemic to Sulawesi (Glaubrecht *et al.* 2003).

## Further reading

Glaubrecht, M. & Rintelen, T., von (2003). Systematics, molecular genetics and historical zoogeography of the viviparous freshwater gastropod *Pseudopotamis* (Certhioidea, Pachychilidae): a relic on the Torres Strait Islands, Australia. *Zoologica Scripta* 32: 415-435.

Iredale, T. (1943). A basic list of the fresh water Mollusca of Australia. *Australian Zoologist* 10: 188-230.

Neiber, M. T. & Glaubrecht, M. (2019). Pachychilidae Fischer and Crosse, 1892. Pp. 62-67 in C. Lydeard & Cummings, K. S. *Freshwater Mollusks of the World: a Distribution Atlas*. Baltimore, John Hopkins University Press.

Smith, B. J. (1992). Non-marine Mollusca. Pp. i-xii, 1-408 in W. W. K. Houston. *Zoological Catalogue of Australia*, 8. Canberra, Australian Government Publishing Service.

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To cite this resource: **Ponder, W. F., Hallan, A., Shea, M. E., Clark, S. A., Richards, K., Klunzinger, M. W., and Kessner, V. 2023. Australian Freshwater Molluscs. Revision 2.**

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