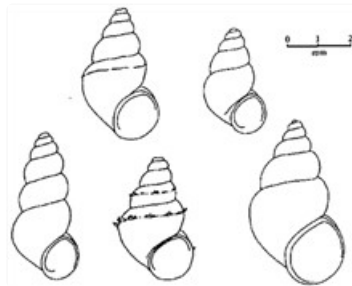




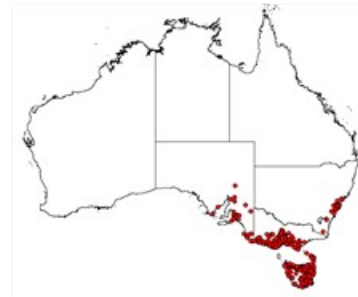
Potamopyrgus antipodarum (Gray, 1843)



Potamopyrgus antipodarum (adult size in Australia 3-5 mm; however, species grows much larger in New Zealand (up to 12 mm long) where it is native).



Potamopyrgus antipodarum - some of the variation seen in Australian specimens (from Ponder 1988).



Distribution of *Potamopyrgus antipodarum*.

Diagnostic features

Shells can be quite variable, and different forms include smooth with convex whorls, keeled, or with a peripheral periostracal spiral ridge or periostracal hairs. This species has a white smear on the inside of the operculum, does not develop a thickened aperture and females (all or nearly all of the population) have brooded embryos in the pallial oviduct in the mantle cavity.

Classification

Potamopyrgus antipodarum (J. E. Gray, 1843)

Common name: Mud snail (in Europe).

Class: Gastropoda

Infraclass: Caenogastropoda

Order: Littorinida

Suborder: Rissoidina

Superfamily Truncatelloidea

Family Tateidae

Genus *Potamopyrgus* Stimpson, 1865

Original name: Amnicola antipodarum J. E. Gray, 1843. In Gray, J. E. (1843). Catalogue of the species of Mollusca and their shells, which have hitherto been recorded as found at New Zealand, with the description of some lately found species. In Dieffenbach, E., *Travels in New Zealand 2*: 228-265.

Type locality: New Zealand.

Synonyms: Previously known in Australia as *Potamopyrgus niger** and in Europe as *Potamopyrgus jenkinsi*. There are many synonyms of this species, including several based on Australian material. A full list has been given by Ponder (1988).

* see *Austropyrgus niger*.

Biology and ecology

On wood, stones, sediment and water weed; often very abundant. Feeds on bacteria and microalgae. Parthenogenic, although some populations contain some males. Broods embryos in modified pallial oviduct.

P. antipodarum lives in polluted and unpolluted streams, lakes and drains in urban and rural areas. It lives on most kinds of substrate including on the inside of water pipes and water reticulation systems. Species feed on bacteria, microscopic algae, diatoms and, possibly, decaying vegetation. *P. antipodarum* is ovoviparous, and parthenogenic and has become a pest wherever it has been introduced, often reaching enormous population densities.

Distribution

Introduced from New Zealand; found throughout south-eastern Australia and Tasmania, although distribution in New South Wales is very patchy and not known to extend north of Newcastle. It is common in streams in most parts of Sydney.

It is also introduced to Europe and the UK, and to parts of North America.

Notes

This New Zealand species has become established in New South Wales, Victoria, South Australia and Tasmania. When present it can be extremely abundant.

The invasion of Europe, North America, Asia and SE Australia by the ovoviparous, parthenogenic *Potamopyrgus antipodarum* is well documented in the literature. In Europe the species had been named *Potamopyrgus jenkinsi* (Smith).

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To contact the authors for comment or suggestions, please email: fwmollusc@gmail.com

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