

## *Arcuatula senhousia* Asian Date Mussel

**Phylum:** Mollusca

**Class:** Bivalvia (**Subclass:** Pteriomorpha)

**Order:** Mytiloida

**(Superfamily:** Mytiloidea) **Family:** Mytilidae

### Synonymised Taxa

*Musculista senhousia* Benson in Cantor, 1842

*Modiola aquarius* Grabau & King, 1928

*Modiola bellardiana* Tapparone-Canefri, 1874

*Modiola senhousia* Benson on Cantor, 1842

*Branchidontes (Arcuatula) senhousia* Kira, 1959

*Branchidontes (Musculista) senhousia* Kira, 1962

*Branchidontes aquarius* Grabau and King, 1928

*Modiola (Arcuatula) arcuatula* Hanley, 1844

*Modiola senhausii* Reeve, 1857

*Modiolus senhousei* Hanna, 1966

*Musculista senhausia* Morton, 1974

*Musculus (Musculista) senhousia* Tammamoto & Habe, 1958

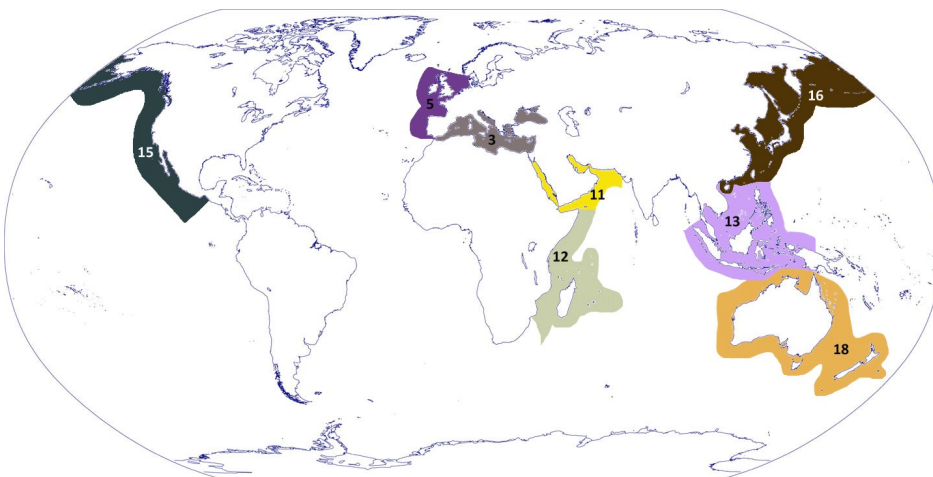
*VolSELLa senhausi* Smith, 1944

### Larval Period

Remains in planktonic form for 45-55 days before settlement, usually in eelgrass.

### Distribution (Bioregions)

**Native:** 13, 16    **Introduced:** 3, 5, 11, 12, 15, 18



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### Habitat

Found intertidally to depths of 20 m. This is an opportunistic species which will colonise soft sediment or hard surfaces, including artificial structures. However, it prefers soft sediment habitats and will form a protective cocoon using its byssal threads. When settlement occurs on mass, these byssal threads will fuse and form a dense mat on the seafloor, thereby changing the nature of that substrate. The animal will burrow head down into the sediment and leave its posterior end visible, giving the siphon access to the water column to feed.

### Temperature Tolerance

0.8 to 31.1°C

### Salinity Range

18 to 35 ppt

### Size

Up to 35 mm

### List

- CCIMPE
- WA species of concern
- Woodside
- BHP Billiton — Outer Harbour Development

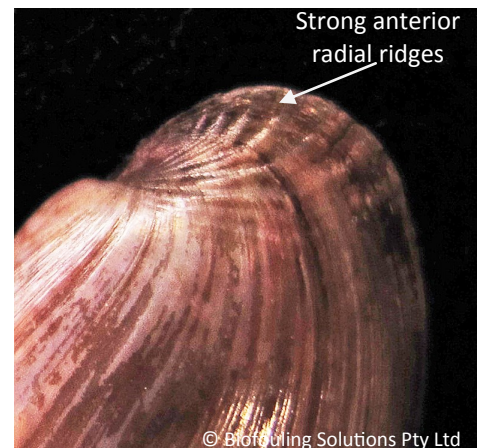
## *Arcuatula senhousia* Asian Date Mussel

### Key Features

- Olive green to brown in colour;
- Dark purple to brown zig-zag rings;
- Smooth, shiny, thin, fragile shell;
- Spiral, striate ribs which surround the centre of growth;
- Dark (purple-ish) axial lines projecting from the anterior centre of growth to the posterior margin;
- **Strong radial ridges anteriorly (always present);**
- The umbones are subterminal and prosogyrate;
- Valves are equivalve but inequilateral;
- Ligament is opisthodetic and parivincular;
- No septum;
- Hinge teeth are dysodont;
- Byssal gland present and secretes byssal threads;
- Musculature is heteromyarian. Anterior adductor muscle absent;
- Purple stripes and zig-zags often show through to the interior side of the valves. The inside is lustrous purple to grey in colour;
- Filibranch gill anatomy;
- Mantle lobes with 3 marginal folds.



Axial lines projecting from the anterior centre of growth to the posterior margin.



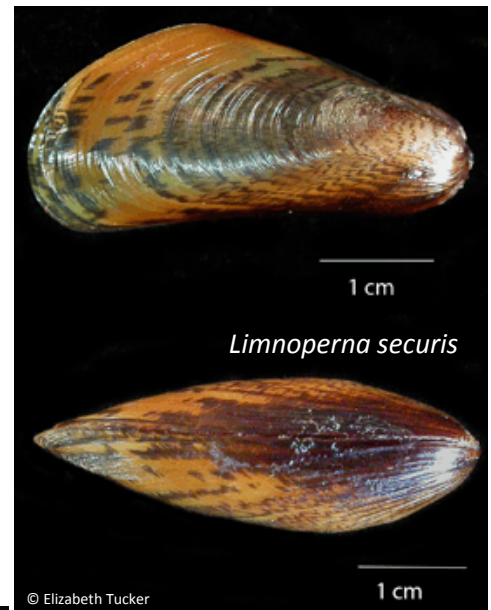


## *Arcuatula senhousia* Asian Date Mussel

### Similar species

- *Arcuatula glaberrima* (formerly *Amygdala glaberrima*);
- *Musculus nanus*;
- *Limnoperna securis* (formerly *Xenostrobus securis*).

- *A. glaberrima* is more elongated than *A. senhousia*;
- The umbo of *A. glaberrima* is smaller compared to *A. senhousia*;
- *A. glaberrima* does not have anterior radial ribs;
- Shape and sculpture are consistently different.



- Lacks dysodont teeth;
- It's very small compared with *A. senhousia* (it is an adult at 5mm);
- Radial ribs are more prominent and numerous.

