



Pacific Pests and Pathogens - Mini Fact Sheet Edition

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Yellow-shelled semi-slug (403)



Photo 1. Side view of the yellow-shelled semi-slug, *Parmarion martensi*, showing the shell partly covered by the mantle. Contrast the grey colour with Photo 2.



Photo 2. A yellow-shelled semi-slug, *Parmarion martensi*, brown, and showing the shell partly covered by the mantle, the cream ridge (keel) along the tail, and black antennae.



Photo 3. A yellow-shelled semi-slug, *Parmarion martensi*, showing little of the shell, but the cream ridge (keel) along the tail is clear.

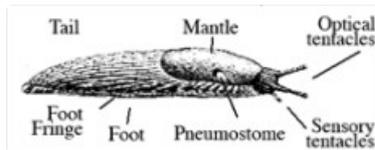


Diagram. Slug anatomy.



Photo 4. A yellow-shelled semi-slug, *Parmarion martensi*, with dark body colour, and shell well-covered by mantle (similar to Photo 5).



Photo 5. A yellow-shelled semi-slug, *Parmarion martensi*, with dark body colour, shell well-covered by mantle, and distinct cream-coloured line of the keel.

Summary

- Restricted. Asia, North America (Hawaii), Oceania. In Fiji.
- An invasive species, attacking vegetables and fallen fruit. Pale grey to dark brown, up to 45 mm long, plate-like shell, covered or partly covered by mantle, white line along edge of keel (rear end), and larger of the two pairs of tentacles dark-brown to black. Spread with produce, soil, machinery. Spreads rat lung worm to humans.
- Natural enemies: predatory snails and flatworms, but they should NOT be introduced without environmental impact studies. These generalists will annihilate local snails. Use Indian runner ducks (but note, slug climbs trees and buildings).

- Biosecurity: intercepted on vegetables.
- Cultural control: bare earth or sand around plots; collect and destroy; use beer traps to attract slugs.
- Chemical control: note, metaldehyde NOT recommended: toxic to livestock, pets and humans; use baits with iron phosphate, sodium ferric EDTA - effective and safer.

Common Name

Yellow-shelled semi-slug. A semi-slug does not have a shell that it can retract into.

Scientific Name

Parmarion martensi

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¹Information from Brodie G, Barker GM (2011) Introduced land snails in the Fiji Islands: are there risks involved? In: Veitch CR, Clout MN, Towns DR (eds.) 2011. pp32-36. Island Invasives: Eradication and Management. IUCN, (International Union for Conservation of Nature), Gland, Switzerland and Helicarionidae. Terrestrial Mollusc Tool. USDA, UF, Lucid. (<http://fdtools.org/id/mollusc/factsheet.php?name=Helicarionidae>); and Cowie RH, Hayes KA, Kim Jr, Bustamante KM, Yeung NW (2018) *Parmarion martensi* Simroth, 1893 (Gastropoda: Ariophantidae), an intermediate host of *Angiostrongylus cantonensis* (rat lungworm), on Maui. Records of the Hawaii Biological Survey for 2017. Edited Neal L. Evenhuis. Bishop Museum Occasional Papers 123: 7-10 (2018); and from Brodie G, Barker GM (2012) *Parmarion martensi* Simroth, 1893. Family Ariophantidae. USP Introduced Land Snails of the Fiji Islands Fact Sheet Series, No. 1. Photos 1&2 *Parmarion martensi* (DSC00332 & DSC07854. (www.NatureLoveYou.sg), Diagram Billion. Wikipedia. (<https://en.wikipedia.org/wiki/Slug>).

Produced with support from the Australian Centre for International Agricultural Research under project HORT/2016/185: *Responding to emerging pest and disease threats to horticulture in the Pacific islands*, implemented by the University of Queensland and the Secretariat of the Pacific Community.

This mini fact sheet is a part of the app *Pacific Pests and Pathogens*

The mobile application is available from the Google Play Store and Apple iTunes.

