

Vedalia (Rodolia) ladybird beetle (397)

Summary

- Worldwide distribution. In Oceania. Australia (native), American Samoa, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, New Caledonia, New Zealand, Palau, Tuvalu, Vanuatu. Preys on *Icerya* species.
- Eggs, red, laid on or under scales. Larvae (greyish with black spots) feed on scale eggs (in eggsac), crawlers, larvae; adults red-brown, black behind the head, covered in short white hairs.
- Important biocontrol beetle.
- Biosecurity: Need to assess risk before introduction: *Icerya* may be food for native species, and non-target insects may be attacked by *Rodolia*, although host range is narrow.
- Management: (i) avoid use of organophosphates, carbamates and synthetic pyrethroids; possible to use spinosad and abamectin if insecticides required to enhance control ; (ii) use sleeve cages to protect populations initially; control ants: (a) stomach poisons (fipronil, Amdro[®], borax), (b) growth regulators (methoprene, pyriproxyfen), (c) nerve poisons (bifenthrin, fipronil, imidacloprid). See (<http://piat.org.nz/getting-rid-of-ants>).

Common Name

Vedalia beetle, cardinal ladybird

Scientific Name

Rodolia cardinalis; previously known as *Vedalia cardinalis*



Photo 1. Adult *Rodolia cardinalis*. Note colour patterns and white short hairs over the body.



Photo 2. Adult citrus cushion scale, *Icerya purchasi*. Note that the fluted part is the eggsac.



Photo 4. The ladybird beetle, *Rodolia cardinalis*, feeding on a colony of the citrus cushion scale, *Icerya purchasi*.



Photo 3. Larva of *Rodolia cardinalis*.

AUTHOR Grahame Jackson

¹Swaine G (1971) *Agricultural Zoology in Fiji*. Her Majesty's Stationery Office, London; and *Rodolia cardinalis*. Wikipedia.

(https://en.wikipedia.org/wiki/Rodolia_cardinalis); and Martin NA (2016) Cardinal ladybird - *Rodolia cardinalis*.

(<https://nzfact sheets.landcareresearch.co.nz/factsheet/InterestingInsects/Cardinal-ladybird---Rodolia-cardinalis.html>); and Hoddle M (2013) Biocontrol of *Icerya*

with *Rodolia* in the Galapagos. UC Riverside. (https://biocontrol.ucr.edu/rodolia/rodolia_iceria_biocontrol_galapagos.html); and from Pacific Invasive Ant Toolkit.

(<http://piat.org.nz/index.php?page=getting-rid-of-ants>). Photo 1 Katja Schulz, *Rodolia cardinalis*. Els Poblets, Alicante, Spain.

([https://commons.wikimedia.org/wiki/File:Vedalia_Beetle_\(15959056801\).jpg](https://commons.wikimedia.org/wiki/File:Vedalia_Beetle_(15959056801).jpg)). Photo2 Vijay Cavale, *Icerya purchasi*, found on a lemon tree in our garden in Bangalore City, India.

(https://commons.wikimedia.org/wiki/File:Scale_insect.jpg#file). Photo3 Hectonichus, A larva of *Rodolia cardinalis*. Genova, Italy. (https://commons.wikimedia.org/wiki/File:Coccinellidae_-_Rodolia_cardinalis.JPG). Photo 4 Jeffrey W. Lotz,

Florida Department of Agriculture and Consumer Services, Bugwood.org.

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