



Pacific Pests, Pathogens & Weeds - Mini Fact Sheet Edition

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Calligrapha beetle (352)

Relates to: **Biocontrol**



Photo 1. Adult Calligrapha beetle, *Calligrapha pantherina*.



Photo 2. Adult Calligrapha beetle, *Calligrapha pantherina* feeding on a *Sida* leaf.



Photo 3. Larva of Calligrapha beetle, *Calligrapha pantherina*.



Photo 4. Adult *Calligrapha pantherina* on *Sida* stem.



Photo 4. Damage to leaves of *Sida* caused by Calligrapha beetle, *Calligrapha pantherina*.



Photo 5. Damage to leaves of *Sida* caused by Calligrapha beetle, *Calligrapha pantherina*.

Summary

- Probably widespread through introduction. A beetle used in biocontrol of *Sida*, e.g., *Sida acuta* and *Sida rhombifolia* (common wireweed & Paddy's lucerne) causing severe defoliation.
- Native of Mexico. Introduced into Australia, Fiji, Papua New Guinea, Vanuatu. Present in New Caledonia.
- Eggs laid on *Sida*, larvae remain together until last moult, adults brown then bright green with black markings. Adults spread on the

wing.

- Biosecurity: need to test potential harm to native *Sida* (and other) species before release.
- Survival affected by condition of *Sida*; poor in dry seasons, needing reintroductions.
- Collect in wet season (at least 50); release together; check after 2-3 weeks for eggs/larvae, and later adults. Distribute further when beetles established over several square metres.

Common Name

Calligrapha beetle

Scientific Name

Calligrapha pantherina

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¹Waterhouse DF, Norris KR (1987) *Biological Control Pacific Prospects*. Inkata Press. Information Julien MH, McFadyen RE, Cullen J (2012). *Biological Control of Weeds in Australia*. CSIRO Publishing. pp. 525–526. ISBN 978-0-643-09993-7; and CABI *Sida acuta* (sida) (2017) Crop Protection Compendium. (www.cabi.org/cpc); and from Biological control of sida. Department of Land Resource Management. Northern Territory Government. (https://denr.nt.gov.au/_data/assets/pdf_file/0003/258087/biological-control-sida.pdf). Photo 1 Mani Mua, SPC, Sigatoka Research Station, Fiji; Photos 2,4&5 Celia Symmons, University of NSW, Sydney, Australia.

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

