

## Brown lacewing (406)

### Summary

- Worldwide. Recorded widely in Pacific islands. Adults and larvae prey on aphids, but also scales, mealybugs, thrips, psyllids, whiteflies, and other small insects, and mites.
- Adults light to dark brown, wings tent-like over body, long antennae and large eyes. Larvae up to 10 mm long, slender, flattened, with pincers. Adults hold and chew their prey; larvae hold, pierce and suck out contents of prey using pincer-like mouth parts after injecting venom (pincers are hollow). Both can eat up to 25 aphids a day.
- Eggs laid singly or in batches (not on stalks) on undersides of leaves, especially where odours of aphids (or other insects) detected. For instance, if aphids detected in centre of lettuce, females lay eggs on outer leaves so prey is available when eggs hatch.
- Management: in Australia and New Zealand, Tasmanian brown lacewing reared as a biocontrol of greenhouse pests. Note, lacewings very susceptible to broad-spectrum pesticides (e.g., chlorpyrifos, most neonicotinoids, pyrethroids).

### Common Name

Brown lacewing

### Scientific Name

Brown lacewings belong to the family Hemerobiidae. Green lacewings belong to the family Chrysopidae (see **Fact Sheet no. 270**). There are many genera and species; this fact sheet uses *Micromus tasmaniae* as an example (Photo 1).



Photo 1. Adult brown lacewing, *Micromus tasmaniae*.



Photo 2. Translucent egg of brown lacewing, *Micromus tasmaniae*.



Photo 4. Larva of a brown lacewing, *Micromus tasmaniae*. Note, the pincer-like mouth parts.



Photo 3. Eggs of brown lacewing, *Micromus tasmaniae*, fastened to a spider web.



Photo 5. A pupa of a brown lacewing, *Micromus tasmaniae*.

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Information from Hemerobiidae. Wikipedia. (<https://en.wikipedia.org/wiki/Hemerobiidae>); and Martin NA (2017) Tasmanian lacewing - *Micromus tasmaniae*.

(<https://nzfactsheets.landcareresearch.co.nz/factsheet/interestingInsects/Tasmanian-lacewing---Micromus-tasmaniae.html>); and The BugLady (2016) Brown lacewing (Family Hemerobiidae). College of Letters & Science. University of Milwaukee. (<https://uw.m.edu/field-station/brown-lacewing/>); and from Oswald JD (1993) Revision and cladistic analysis of the world genera of the family Hemerobiidae (Insecta: Neuroptera). Journal of the New York Entomological Society 101: 143-299. Photos 1-5 The New Zealand Institute for Plant & Food Research Limited.

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