



Pacific Pests, Pathogens & Weeds - Mini Fact Sheet Edition

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Big-eyed bug (370)

Relates to: **Biocontrol**



Photo 1. Adult big-eyed bug, *Geocoris* species (Fiji).



Photo 2. Adult big-eyed bug, *Geocoris punctipes*, preying on whitefly adults and larvae.

Summary

- Worldwide distribution. Reported from Australia and Fiji. Prey includes aphids, hoppers, mirids, mealybugs, thrips, whiteflies, small caterpillars, and spider mites. Prey is stabbed, enzymes injected, contents sucked out.
- Eggs laid singly, or in clusters on leaves or stems near prey.
- Biocontrol: nymphs and adults predators, surviving on nectar and pollen (and seeds) when prey scarce.
- Adults, 5-6 mm long, broad heads, bulging eyes, piercing-sucking mouth parts, forewings create triangular pattern when closed.
- Management: i) studies in USA used crimson clover or vetch cover crops interplanted with cash crops - bugs migrate to cash crop as cover crop dies; plant sunflower to support bugs with seed when populations low; most importantly, do not use broad-spectrum insecticides, instead use i) microbial pesticides: spinosad or Bt; ii) botanical pesticides: neem; iii) sex pheromones (if available).

Common Name

Big-eyed bug

Scientific Name

Geocoris species. There are at least 140 species.

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¹Information from Swaine G (1971) *Agricultural Zoology in Fiji*. Her Majesty's Stationery Office. London; and Mead FW (2017) Featured Creatures: Big-eyed bugs (of Florida). UF/IFAS, University of Florida. (http://entnemdept.ufl.edu/creatures/beneficial/bigeyed_bugs.htm); and *Geocoris* spp. Biological control. Cornell University, College of Agriculture and Life Sciences. (<https://biocontrol.entomology.cornell.edu/predators/Geocoris.php>); and from Hooks CR *et al.* Big-eyed bug: A MVP of generalist natural enemies. Department of Entomology, University of Maryland. (https://extension.umd.edu/sites/extension.umd.edu/files/_docs/programs/mdvegetables/Geocoris.pdf). Photo 2 Jack Dykinga. ARS image gallery, USDA. (<http://www.sel.barc.usda.gov/selhome/gbu/geocoris.html>).

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This mini fact sheet is a part of the app *Pacific Pests, Pathogens & Weeds*

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

