

Philippine Ladybeetle (*Epilachna viginsexpunctata* [Boisduval]) and Cucumber Ladybeetle (*E. cucurbitae* Richards)

Agnes Vargo, American Samoa Community College, and Ilse Schreiner, Ph.D., University of Guam

The Philippine ladybeetle attacks plants in the Solanaceae, including tomatoes, eggplants, potatoes and husk tomatoes, but rarely peppers. The Cucumber ladybeetle attacks various species of cucurbits such as cucumbers, pumpkins and melons. The biology of the two beetles is otherwise very similar. Bright yellow eggs are laid in clusters on the underside of leaves of the host plant. These hatch after 4-5 days into larvae which feed on the undersides of the leaves. The larvae feed for 17-18 days, then pupate where they have been feeding. There are 4 instars. The pupal stage takes 6 days. The larvae and pupae are bright yellow and spiky all over. The beetle larvae are easily distinguished from beneficial aphid-eating species of ladybeetles since the aphid-feeding ones have dark larvae which move quickly. The adult aphid-eating ladybeetles in the region are bright red and black or pink and black, with few spots, instead of being dull-orange with many spots which is the color of both the *Epilachna* species. Both adults and larvae feed on the leaves of their host plant leaving distinctive parallel brown scrape marks on the leaves. Breeding is continuous, so all stages of the beetle may be found on the plant at any given time. The Philippine ladybeetle is present in all of the southern Mariana Islands and the Cucumber ladybeetle is present in American Samoa as well as in other islands in the South Pacific region.

Control

A parasitic wasp, *Pediobius foveolatus*, has been introduced to Guam and the Northern Marianas which attacks the pupal stages of the beetle and keeps the numbers down, so that it is rarely a pest in these areas. How-



Philippine ladybeetle adult.



Philippine ladybeetle larva with feeding marks on eggplant leaf.

ever, as it does not always keep the beetles under control, it is necessary to monitor beetle numbers and spray if they become too numerous. If the use of chemicals is required, consult an Extension Agent at your local land grant institution. In Guam you may also consult the Fruit and Vegetable Pesticide Guide for current recommendations and permissible uses.

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For Further Information:

American Samoa Community College (684) 699-1575 - fax (684) 699-5011
College of Micronesia (691) 320-2462 - fax (691) 320-2726
College of Micronesia (FSM) (691) 320-2480 - fax (691) 320-2479
College of the Marshall Islands (692) 625-3236 - fax (692) 625-4699
Palau Community College (680) 488-2746 - fax (680) 488-3307
Northern Marianas College (670) 234-9023 - fax (670) 234-0054
University of Guam (671) 735-2002 - fax (671) 734-5600
University of Hawaii (808) 956-8140 - fax (808) 956-6967

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ADAP Home Office - College of Tropical Agriculture and Human Resources
3050 Maile Way, Gilmore Hall 213, University of Hawaii at Manoa
Honolulu, HI 96822 USA www.adap.hawaii.edu/adap - adap@hawaii.edu
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