

Green Scale (*Coccus viridis* De Lotto)

Donald Nafus, Ph.D., Associate Professor of Entomology, University of Guam

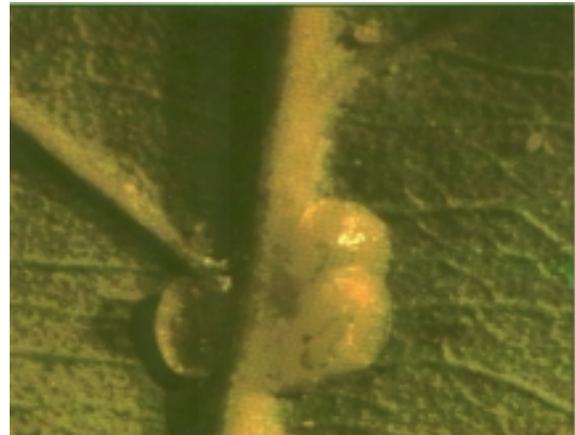
The adult scale (*Coccus viridis* De Lotto [Homoptera: Coccidae]) is green with black, twisted lines visible inside the scale. These lines are the malpighian tubules. The scale is somewhat oval in shape and quite flat. The front end is more rounded and the rear has a distinct cleft extending about one-fourth of the way into the body.

Adults are about 2-3 mm long. They are not covered with a wax plate. The life cycle takes just over one month in Micronesia but can take two months in cooler areas. The female lays her eggs underneath her body. These hatch into crawlers which wander around the plant or disperse to other hosts. Once settled, the nymphs tend to remain in the same spot but can move if necessary. The adult female does not move. Males are unknown in this species. There are three nymphal instars.

These scales are often found along the veins of the leaves. They secrete abundant honeydew on which sooty mold grows. This turns the leaves black and blocks photosynthesis. These scales can be very damaging to young trees. Some of the hosts are guava, coffee, chico, citrus, soursop, sweetsop, mango, and banana. The green scale is widely distributed throughout the tropics except Australia. It is found in Hawaii, throughout Micronesia, and many islands of the South Pacific.

Control

Generally the green scale is more of a problem on newly planted trees. On older trees various biological control agents, primarily various ladybeetles including *Orcus chalybeus*, *Chilocorus circumdatus*, and *Cryptolaemus montrouzieri*, help reduce levels of the scales. Volck Supreme Oil could be used as an alternative to insecticides. Controlling ants on the trees will help reduce levels of this pest. The ants protect the green scales from the ladybeetles and other predators. If the use of chemicals is required



Green scale on a guava leaf

or if additional information is desired, consult an Extension Agent at your local land grant institution. On Guam, you may also consult the Guam Fruit and Vegetable Pesticide Guide for recommendations and permissible uses.

Replaces Agricultural Pests of the Pacific Series, ADAP 90-6.

For Further Information:



ADAP
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

Funded by the United States Department of Agriculture Cooperative State Research, Education and Extension Service Grant 99-38826-7854
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
The Pacific Land Grants and the U.S.D.A. are Equal Opportunity/
Affirmative Action Institutions

Publishing and conversion into digital format made possible by funding from
USDA Western SARE PEOPLE Project, Utah State Subcontract #C019211,
Project #EW98011.