

False Oleander Scale, *Pseudaulacaspis cockerelli* (Cooley) (Insecta: Hemiptera: Coccoidea: Diaspididae) ¹

Avas B. Hamon and Thomas R. Fasulo²

Introduction

False oleander scale, an armored scale, was first described in California from palms taken in quarantine from China. It was first found in Florida at Meade Gardens, Winter Park, Orange County, by J. R. Springer on sweetbay (*Magnolia virginiana* L.) in 1942. In 1953, G. B. Merrill reported the distribution in Florida as Orange and Leon counties. It is now widespread in Florida, Georgia and Alabama, and probably occurs in all of the Gulf States.

This scale formerly was referred to as magnolia white scale (*Phenacaspis natalensis* Ckll.) and oleander scale (*Phenacaspis cockerelli* (Cooley)).

Description

The female armor is pear-shaped, shiny white, and 2 to 3 mm long. The exuviae are terminal and yellowish brown. The size of the female scale may vary with the host. For example, it is slightly smaller on palmetto than on aucuba. The male armor is elongate, snow-white, feebly tricarinate, and about 1 mm long. The male exuviae are terminal with a faint

yellowish tinge. Males usually occur in clusters on the leaf.

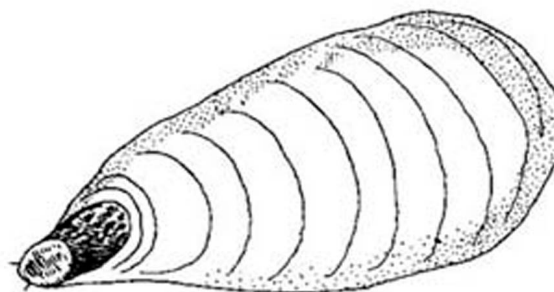


Figure 1. False oleander scale. Credits:

Economic Importance

False oleander scale has become an economic pest of many of the major ornamental plants found in Florida commercial nurseries. The rapid distribution throughout Florida can be attributed to the movement of infested nursery stock.

The scale tends to confine itself to feeding on foliage and rarely attacks tender shoots or fruit. Its

-
1. This document is EENY-149 (IN306), one of a series of Featured Creatures from the Department of Entomology, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Date printed: August 2000. Revised: November 2007 and June 2009. This document is also available as a Featured Creature at <http://creatures.ifas.ufl.edu/>. Please visit the EDIS Web site at <http://edis.ifas.ufl.edu>.
 2. Avas B. Hamon, Florida Department of Agriculture and Consumer Services, Division of Plant Industry, and Thomas R. Fasulo, Entomology and Nematology Department, University of Florida, Gainesville, FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. U.S. Department of Agriculture, Cooperative Extension Service, University of Florida, IFAS, Florida A. & M. University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Millie Ferrer, Interim Dean



Figure 2. Females of the false oleander scale, *Pseudaulacaspis cockerelli* (Cooley). Credits: University of Florida

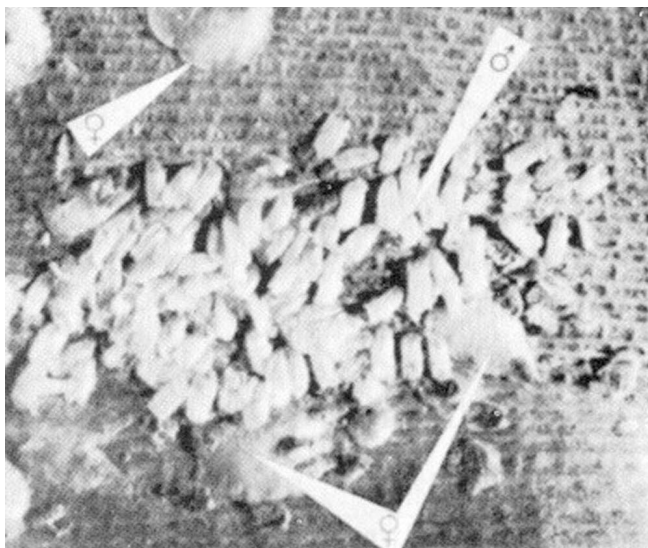


Figure 3. Cluster of male false oleander scales, *Pseudaulacaspis cockerelli* (Cooley), on leaf of bird-of-paradise. A few female scales are present. Credits: Division of Plant Industry

feeding causes chlorotic spots that are visible on the upper leaf surface. These spots are usually several times larger than the scale. Heavy infestations cause the entire leaf to turn yellow and drop prematurely.

Hosts

False oleander scale is probably not a good name as this species has over 100 plant species recorded as hosts in Florida (Dekle 1976). These include: *Magonolia grandiflora*, magnolia; *M. virginiana*, sweetbay; *Aucuba japonica*; *Strelitzia* spp, bird-of-paradise; *Hedera helix*; *Cornus florida*, flowering dogwood; *Taxus* spp.; *Nerium oleander*,

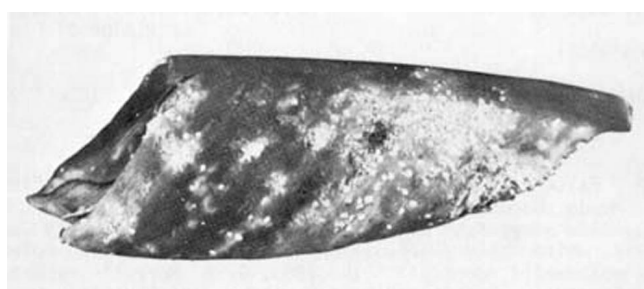


Figure 4. False oleander scales, *Pseudaulacaspis cockerelli* (Cooley), on leaf of bird-of-paradise. Credits: Division of Plant Industry

oleander; *Michelia figo*, banana shrub; *Elaeagnus* spp.; and *Sabal mexicana*, a palmetto (Merrill 1953, Johnson 1991). This scale is also an important pest of *Mangifera indica*, mango (Crane 2006).

Survey and Detection

- All life stages of the scale may be found throughout the year.
- Visually inspect both leaf surfaces.
- If necessary for identification, submit adult female specimens attached to the host plant in a plastic bag or envelope to either DPI or your local county Cooperative Extension Service office.

Management

Scales, especially armored scales are very difficult to control when mature. Examine plants for live scales by crushing the wax cover. Dead scales do not fall from plants. Select pesticides that have the least effect upon other non-target organisms. For established infestations, apply a second application in two weeks. Horticultural oils are often effective and relatively safe on beneficial organisms. Time sprays to coincide with the crawler stage which is most susceptible to insecticides.

For more information see:

Florida Insect Management Guide for Ornamentals

Florida Insect Management Guide for Mango

Selected References

Crane, J.H., and C.W. Campbell. (November 2006). The mango. UF/IFAS Fact Sheet HS-2. <http://edis.ifas.ufl.edu/MG216> (June 2009).

Dekle, G. W. 1976. Florida armored scale insects. Florida Department of Agricultural and Consumer Services, Division of Plant Industry. Arthropods of Florida and neighboring land areas 3: 1-345.

Merrill, G. B. 1953. A revision of the scale insects of Florida. Plant Board of Florida. Bull. 1: 1-143.

Johnson, W.T., and H.H. Lyon. 1991. Insects That Feed on Trees and Shrubs. 2nd ed., rev. Comstock Publishing Associates. 560 p.