Pest Alert

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Charles H. Bronson, Commissioner of Agriculture

The Poliaspis Cycad Scale *Poliaspis cycadis* Comstock (Hemiptera: Diaspididae): A new exotic scale insect for Florida

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INTRODUCTION: The Poliaspis cycad scale (PCS), *Poliaspis cycadis* Comstock (Hemiptera: Diaspididae) was recorded in Florida for the first time from specimens collected on a cycad (*Dioon* sp.) (Cycadaceae) in Homestead (Miami-Dade County), Florida on May 2, 2007, by Holly Glenn (University of Florida). After initial identification at the Division of Plant Industry's Florida State Collection of Arthropods, PCS specimens were confirmed by the Systematic Entomology Laboratory in Beltsville, Maryland.

In 1942, Ferris indicated that PCS was established in North America. This was based on a record from Comstock in 1883 from cycads, *Dioon edule* Lindl., *Cycas revoluta* Thunb., and the crucifer *Microsemia* (=*Streptanthus*) species in the conservatory of the Department of Agriculture at Washington D.C. and an additional collection from the same locality in 1898 on *Dioon edule*. The scale was not reported again until 1993, this time from cycads in a private collection in Orange County, California.

DESCRIPTION: *Poliaspis cycadis* (Figs. 1-2) is very similar in appearance to both the false oleander scale *(Pseudaulacaspis cockerelli* Cooley) (Fig. 3) and the cycad Aulacaspis scale (*Aulacaspis yasumatsui* Takagi). The adult female covers for all three species are 2-4 mm long, oyster-shell shaped and white with a yellow-brown exuviae. Field determination based on the female cover will be difficult. The male covers for both the false oleander scale and the cycad Aulacaspis scale are white, felt-like, tricarinate (appear to have three ridges on white wax cover) and with a brown exuviae. The male cover for PCS has a brown exuviae and a white, felt-like cover, but it is uncarinate (no ridges present on white wax portion of cover). When one of these three scale insects is exposed from underneath the cover, PCS will look more like the false oleander scale by being yellow in color and elongate in shape.

BIOLOGY: The biology of the Poliaspis cycad scale is unknown.

HOSTS: This scale insect is listed from the following hosts: **Cruciferae**: *Microsemia* sp.; **Cycadaceae**: *Cycas circinalis* L., *Cycas revoluta*, *Dioon edule;* **Ericaceae**: *Gaultheria depressa* Hook.f, *Gaultheria rupestris* (G. Forst.) R.Br..

ECONOMIC IMPORTANCE: There is little information on the economic importance of this scale insect.

DISTRIBUTION: It is likely that the PSC is native to the Asian region, but it has been reported from the following: **United States of America** (California, District of Columbia), **India** and the **United Kingdom**.

FLORIDA DISTRIBUTION: Miami-Dade County

REFERENCES:

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Gill, R.J. *1997. The scale insects of California: Part 3. The armored scales (Homoptera: Diaspididae). California Department of Food & Agriculture, Sacramento, CA. 307 p.*

Miller, D.R. and Gimpel, M.E. *2001. ScaleNet, Poliaspis cycadis. 27 June 2001. http://www.sel.barc.usda.gov/catalogs/diaspidi/Poliaspiscycadis.htm*

Fig. 1 Poliaspis cycad scale, *Poliaspis cycadis*, adult male and female covers on cycad (*Dioon* sp.).
Photo credit: Lyle Buss, University of Florida

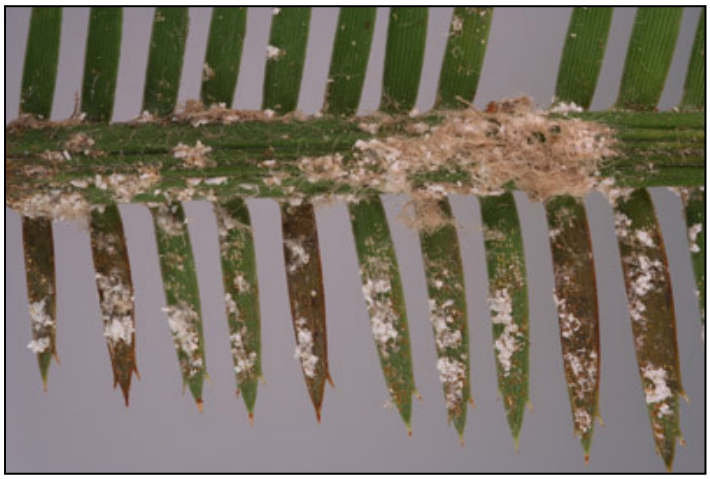

Fig. 2 Poliaspis cycad scale, *Poliaspis cycadis*, infestation on Dioon species.
Photo credit: Lyle Buss, University of Florida

Fig. 3 False oleander scale adult female covers.
Photo credit: Lyle Buss, University of Florida

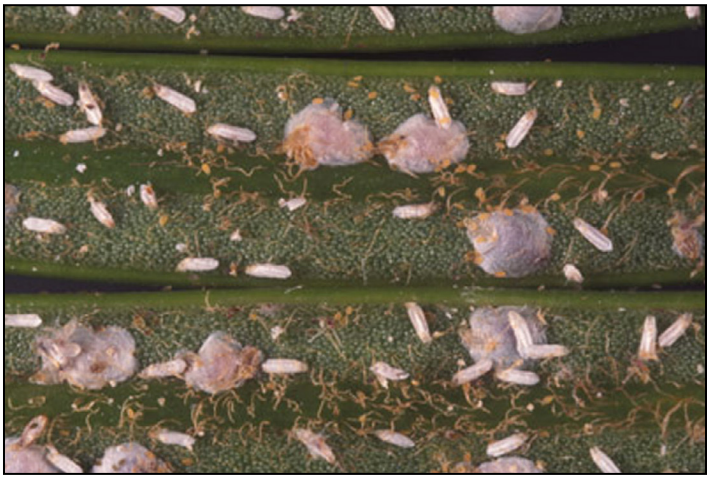

Fig. 4 Cycad Aulacaspis scale male and female covers.
Photo credit: Lyle Buss, University of Florida