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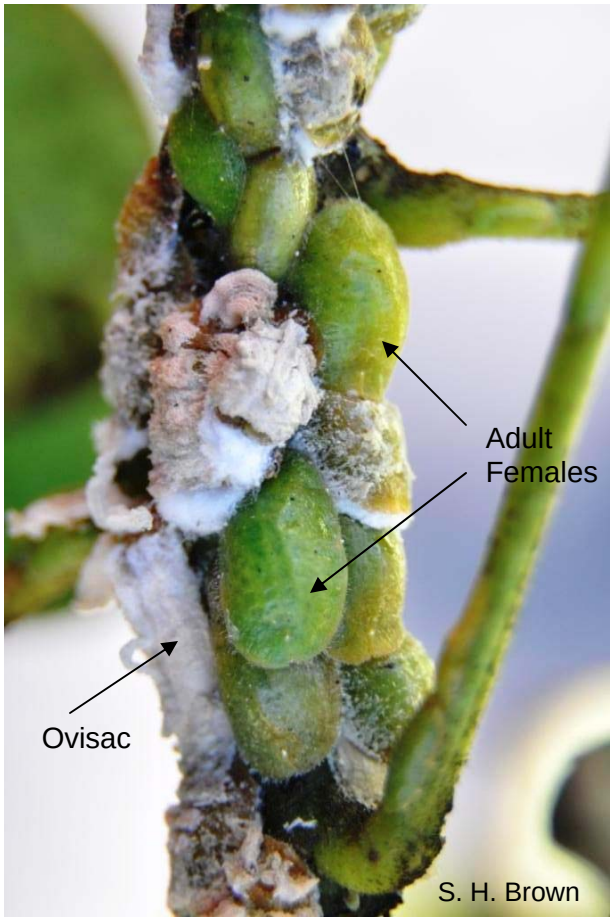
# *Philephedra* Scale on Glaucous Cassia

*Senna surattensis*, Glaucous Cassia, is commonly planted as a roadway and landscape flowering tree throughout much of south Florida. A soft scale, *Philephedra tuberculosa* (family Coccidae), can be found feeding on the tree. The scale feeds on the trunk, stems, and leaves of the plant. Soft scales damage plants by removing plant sap and excreting of honeydew, which serves as a growth medium for sooty mold fungi. The *Philephedra* scales contribute to an unsightly appearance of the plant, with large quantities of white and green scale masses and an abundance of sooty mold fungi. High scale population can cause extensive damage to the plant including stem dieback and eventually death.

*P. tuberculosa* was first reported in South Florida in 1981, and also occurs in Texas. It is also found in many Caribbean countries, and Central and northern South America. It has been reported on more than 50 plant species, including *Alpinia purpurata*, *Annona* spp., *Bursera simaruba*, *Carica papaya*, *Citrus* spp., and *Moringa oleifera*. *P. tuberculosa* can be considered a true polyphagous (feeding on many species of plants) scale insect.

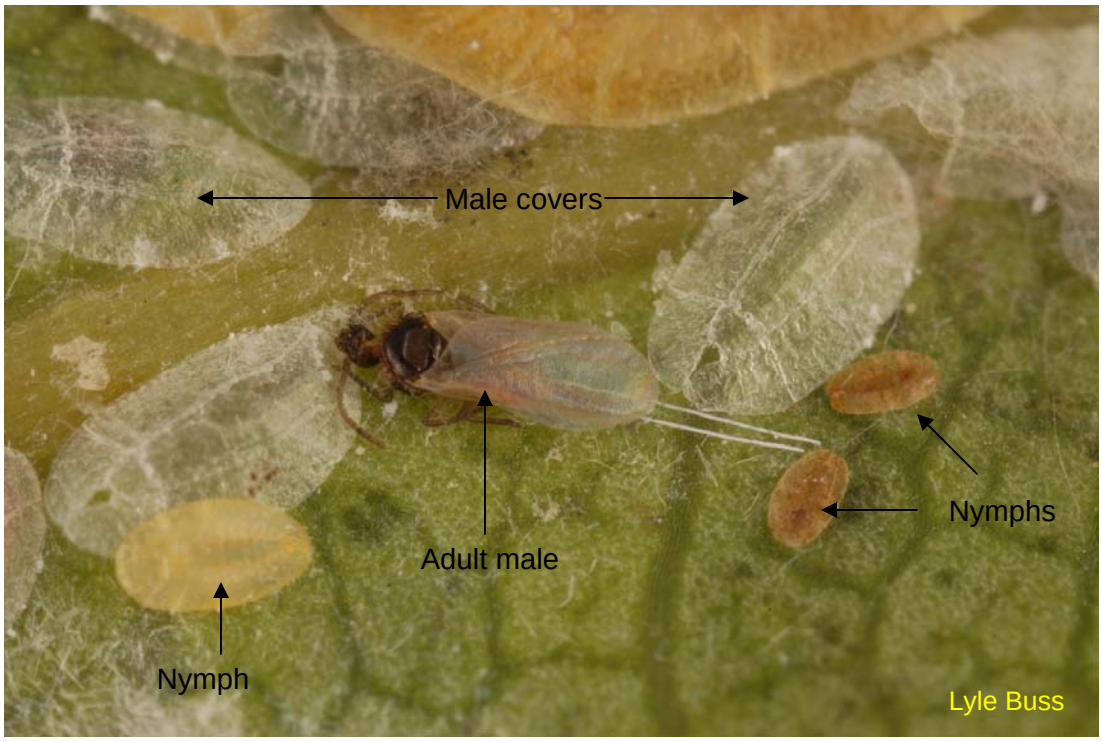

Abundant *Philephedra* scales on trunk and branches of Glaucous Cassia in early December




*Philephedra* scales on stem and leaf petioles of Glaucous Cassia in late December

The female scales cause the majority of the damage. They have an oval or elongate oval body up to 1/4 inch long and are yellow to green in color. Eggs are laid in a case of white wax called an ovisac. The ovisac is attached to the plant and is about three times as long as the body of the female. Males are usually surrounded by crystalline filaments, and make a glassy wax cover.

Horticultural oils are among the most useful of all treatments for soft scales. Soft scales remain susceptible to oils during much of their lives and are particularly susceptible when young. Some soil-applied systemic insecticides (e.g., Imidacloprid) can be effective for control of soft scales. For more information on scale control click here.




A portion of the *P. tuberculosa* colony and its male residents.

Complete metamorphosis sequence of male *P. tuberculosa* scale
Egg → Nymph → Pupa → Adult

Simple metamorphosis sequence of female *P. tuberculosa* scale.
Egg → Nymph → Adult


**Left:** An intact ovisac which contains eggs of the female scales



Honeydew excretion produces sooty mold.

**Left:** Severe damage to Glaucous Cassia caused by the *Philephedra* scales. Picture taken in February.

**References**

Hamon A., B. February 1986. The Genus *Philephedra* Cockerell, in Florida. Entomology Circular No. 281. FDACS.

Nahahara S. & R. Gill. Species: *Philephedra tuberculosa*. USDA

William, J.R., R.A. Arancibia, T.W. Zimmerman & G.S. Hodges. 2008. First Report of *Philephedra tuberculosa* (Hemiptera: Coccidae) in the United States Virgin Islands. Florida Entomologist 91(3): 483-484.

YouTube Florida Wax Scale Video from Collier County Extension

**Click here** for fact sheet on Whiteflies on Cocoplum.

This publication was reviewed by Ian Stocks, Division of Plant Industry, FDACS, Gainesville, FL