Asterococcus sp. prob. yunnanensis Borchsenius (Hemiptera: Cerococcidae)

A New Exotic Scale Insect Pest in Hawaii and the U.S.

Dr. Christopher J. Hodgson, National Museum of Wales, identified a new exotic ornate pit scale insect that is new to the State of Hawaii and U.S. According to Hodgson, this scale is closest to *Asterococcus* sp. prob. *yunnanensis*, however, the genus may need revision as many species descriptions are not clearly defined for this group. Two species, *A schimae* and *A. muratae* are also very close to the specimens from Hawaii and may be synonyms.

Distribution

In Hawaii, A. sp. prob. *yunnanensis* has only been found in Waimea, Hawaii Island. Worldwide, A. *yunnanensis* and A. *schimae* are only known from China, while A. *muratae* is known from China, Japan, Georgia, and the USSR. This represents the first U.S. and Hawaii record of any *Asterococcus* species, as well as the first species of the Cerococcidae family to establish in Hawaii.

Hosts

Recorded host plants of A. sp. prob. *yunnanensis* in Waimea include *Rhaphiolepis indica* (Rosaceae) (This seems to be its preferred host in this area), *Gardenia taitensis* (Rubiaceae), and *Rhododendron sp.* (Ericaceae).

According to Scalenet, hosts of *A. yunnanensis* also include *Alangium* (Cornaceae), *Pterocarya stenoptera* (Juglandaceae), *Cinnamomum camphora* (Lauraceae), and *Rosa* (Rosaceae).





Indian hawthorn (Rhaphiolepis indica) showing black sooty mold and die-back from a heavy infestation.



Damage

Ornate pit scale feeding can cause twig die-back, premature loss of foliage, possible death of plant. Copious amounts of honeydew is excreted, inducing the growth of sooty mold. Thick layers of sooty mold cover the leaves and stems of woody plants, negatively affecting photosynthesis.

Reference

García Morales M, Denno BD, Miller DR, Miller GL, Ben-Dov Y, Hardy NB. 2016. *ScaleNet: A literature-based model of scale insect biology and systematics*. Database. doi: 10.1093/database/bav118. http://scalenet.info



Severe black sooty mold growth on stems and leaves.



Immature scales.



Magnified female scales.

Hawaii Department of Agriculture Plant Pest Control Branch

1428 South King Street

Honolulu, HI 96814

Email: hdoa.ppc@Hawaii.gov

Oahu- 973-9530; Kauai- 241-7132; Maui- 873-3949

Hilo- 974-4146; Kona- 323-7579

Prepared by: Janis N. Matsunaga October, 2016



Severe black sooty mold growth on stems and leaves.



Asterococcus sp. prob. yunnanensis on the woody stem of Indian hawthorn.