

Banyan Stem-Galling Wasp, a New Insect in Hawaii

Hawaii Department of Agriculture (HDOA), Plant Pest Control Branch - August 28, 2012

Insect species: undetermined at this time. Specimens being sent to insect specialists for identification. Belongs to the family Agaonidae (fig wasps).

Description: a black wasp, about 1/16th inch or (2mm) in length (Fig. 3).

First found in Hawaii: July 13, 2012 (samples of infested stems submitted to HDOA by an arborist from the East-West Center, University of Hawaii).

Host: Chinese banyan, *Ficus microcarpa*, family Moraceae (Fig. 1). Tree is native from Ceylon to India, southern China, Ryukyu Islands, Australia, and New Caledonia.

Island Distribution: Oahu (widespread), Hawaii Island (Hilo), and Maui (Kahului, Wailuku).

Biology: The female wasp lays its egg in the young stems. The wasp larva hatches and feeds within the tissue (Fig. 4). As the larva develops, the stem becomes swollen and forms a gall. The larva pupates and the wasp adult eventually emerges (Fig. 5), leaving a distinctive exit hole in the woody tissue (Fig. 2).

Damage: Some leaf drop and dieback of stems, causing canopy to thin out, although our surveys indicate varying degrees of infestation and damage.



1. Chinese banyan, *Ficus microcarpa*.



Figure 3. Stem-galling wasp (1/16th inch)



4. Wasp larva in gall (1/16th inch)



5. Adult wasps in dissected stem galls.



2. Galls in green stem tissue (left side in each picture) and old galls in woody tissue with wasp exit holes (right side).