

Pest Alert

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Florida Department of Agriculture and Consumer Services, Division of Plant Industry
Charles H. Bronson, Commissioner of Agriculture

The Cassava Lace Bug, *Vatiga illudens* (Drake) (Hemiptera: Tingidae), A new exotic lace bug in Florida

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INTRODUCTION: A population of cassava lace bugs (*Vatiga illudens* Drake) (Fig. 1) was found on cassava plants at a residence in West Palm Beach, Palm Beach County, on 3 November 2009 by Florida Department of Agriculture and Consumer Services, Division of Plant Industry inspector Lane Smith. This species is known to be a pest of cassava in the Neotropics but was not known previously from the US.

DESCRIPTION: Adult cassava lace bugs are elongate brown bugs about 3-4 mm long (Fig. 2). Nymphs are spiny and pale (Fig. 3). Antennae of older nymphs are dark with white bands near the tips. Damage is typical for lace bugs. Leaves become stippled on top and have dark spots on the undersides. Stippling tends to be most severe in the middle of the leaf and near the veins (Fig. 4). There are two major pest species in the genus *Vatiga* that damage cassava (Neal & Schaefer 2000). *Vatiga illudens* has two small horns on the front of the head (Fig. 5), whereas *Vatiga manihotae* (Drake) has only one horn in the middle of the front of the head (Froeschner 1993). Occasionally, *V. illudens* specimens have only one horn, but in that case, the single horn is not in the middle of the head. The proximal antennal segments of *V. manihotae* are relatively longer than those of *V. illudens*. Both species cause similar damage and have similar distributions. Apparently, mixed populations are common in their native ranges; however, so far, only *V. illudens* has been found in Florida.

BIOLOGY: *Vatiga illudens* is a relatively important pest in Brazil. Laboratory studies indicate that the nymphal period is 13.5 days, and adult longevity averages 27 days. There are five nymphal instars (Farias 1987).

HOSTS: *Manihot esculenta* Crantz (including various junior synonyms).

ECONOMIC IMPORTANCE: Although leaf damage from cassava lace bugs can be severe, the relationship between lace bug populations and yield of marketable roots is not clear. The problem of yield loss measurement is compounded by the fact that mixed populations of pests, including other species of lace bugs, are common (Bellotti *et al.* 1999). Younger plants appear to be more susceptible to damage than older ones, and prolonged periods of dry weather exacerbate lace bug problems (Bellotti *et al.* 1999).

NATURAL ENEMIES: Few natural enemies have been observed (Bellotti *et al.* 1999).

DISTRIBUTION: Florida, Cuba, Haiti, Dominican Republic, Jamaica, Puerto Rico, St. Eustacius, Trinidad, Brazil, Colombia, Ecuador, Guayana and Venezuela (Froeschner 1993). Other than Florida, it is not known which of these localities represent the native range of *Vatiga* spp. and which ones support introduced populations.

FLORIDA DISTRIBUTION: Palm Beach County.



REFERENCES:

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- Neal, J.W. Jr. and C.W. Schaefer.** 2000. *Lace Bugs (Tingidae), Pages 85-137 In C.W. Schaefer and A.R. Panizzi, eds., Heteroptera of Economic Importance. CRC, Boca Raton. Pages 115-116.*



Figure 1. Cassava lacebugs on cassava leaf.
Photo credit: Ray Buchholz and Lane Smith



Figure 2. Adult cassava lacebug.
Photo credit: Michael Thomas



Figure 3. Cassava lace bug nymph.
Photo credit: Lyle Buss, UF



Figure 4. Damage from cassava lacebug.
Photo credit: Susan Halbert



Figure 5. Anterior aspect of cassava lace bug. Note pair of small horns on the anterior angle of the head near the antennae.
Photo credit: Michael Thomas