ACACIA WHITEFLY, TETRALEURODES ACACTAE (QUAIN TANCE) (HOMOPTERA: ALEYRODIDAE)\textsuperscript{1}

Avas B. Hamon\textsuperscript{2}

INTRODUCTION: Acacia whitefly was described by Quaintance (1900:19-20) as Aleurodes acaciae from pupal cases on Acacia sp. collected in Chihuahua, Mexico. It is also known from California on Acacia and Bursera microphylla A. Gray.

DESCRIPTION: The adult body is uniformly light yellow and of the typical aleyrodid shape. The wings are powdery-white, and the red eyes are incompletely divided. Pupal case (fig. 1) is shiny black, moderately convex, and is surrounded by a short, even band of white wax. In younger specimens a middorsal longitudinal ridge is present, and on each side of this ridge a depression is evident. The submargin has a wide and distinct vertical rim. This rim is crenulated (fig. 2) and separated from the dorsal disc by a row of short cylindrical papillae (fig. 2a) which appear as circular discs when observed from above. The marginal indentations (fig. 3) are uniform, and there are 7 in 75\mu. The vasisform orifice (fig. 4) is subcircular with the operculum nearly filling it. The lingula is bulbous, covered with minute spines, and does not extend beyond the vasisform orifice.

DIAGNOSIS: T. acaciae is characterized by the short cylindrical papillae around the submargin which separates it from all species of whiteflies in Florida. It should not be confused with the citrus blackfly (Aleurocanthus woglumi Ashby) because T. acaciae lacks visible dorsal spines.

ECONOMIC IMPORTANCE: Recent reports of damage to powder puff, Calliandra haematocephala Hassk. have been received from the Miami, Fla. area. Some very heavy populations on the same host have been observed in the Largo-Clearwater area of Florida.

DISTRIBUTION: This species occurs in Cuba, Mexico, and southern California. In Florida it is reported from Brevard, Broward, Dade, Hillsborough, Martin, Monroe, Pinellas, and St. Lucie counties.

HOSTS: In addition to the hosts of original description it is found on the following: Bauhinia sp., Bauhinia variegata L., Calliandra sp., Calliandra haematocephala Hassk., C. surinamensis Benth., Cassia sp., Cassia alata L., C. fasciculata Michx., C. fistula L., Centrosera sp., Centrosera virginiana Benth., Chamaecrista sp., Dalbergia sissoo Roxb., Erythrina falcata Benth., Glimiridia septum (Jacq.) Steud., Melaleuca sp., Mimosa sp., Pithcescellophium dulce Benth., P. unguis-cati Mart., Pseudobombax ellipticum (HBK) Dug. (syn. Bombax ellipticum HBK), and Rosa sp. The most common host in Florida is Calliandra haematocephala.

CONTROL: Controls currently recommended by IFAS of the University of Florida include Diazinon 4E, Diazinon 50% WP, Dimethoate (Cygon 2E and De-Pend E-267), Malathion 57% EC, Meta-Systox-R 25% EC, and Systox 2 EC. Nearly all situations will require 2 applications 2 weeks apart. The chemical label should be consulted for mixing directions and SAFETY PRECAUTIONS.

LITERATURE CITED:

\textsuperscript{1} Contribution No. 416
\textsuperscript{2} Taxonomic Entomologist, Div. of Plant Industry, P.O. Box 1269, Gainesville, FL 32602
Fig. 1. *Tetraleurodes acaciae*, pupa.

Fig. 2. *T. acaciae*, left side dorsal view, right side ventral view; a) enlargement and lateral view of papillae.

Fig. 3. *T. acaciae*, section of margin.

Fig. 4. *T. acaciae*, vasiform orifice, dorsal view.