

ACACIA WHITEFLY, *TETRALEURODES ACACIAE* (QUAINTANCE)
(HOMOPTERA: ALEYRODIDAE)¹

Avas B. Hamon²

INTRODUCTION: Acacia whitefly was described by Quaintance (1900:19-20) as *Aleurodes acaciae* from pupal cases on *Acacia* sp. collected in Chilhua, 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 75µ. The vasiform 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 vasiform 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., *Centrosema* sp., *Centrosema virginiana* Benth., *Chamaecrista* sp., *Dalbergia sissoo* Roxb., *Erythrina falcata* Benth., *Gliricidia sepium* (Jacq.) Steud., *Melaleuca* sp., *Mimosa* sp., *Pithecellobium 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-Fend 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:

Quaintance, A. L. 1900. Contributions toward a monograph of the American Aleurodidae. USDA Tech. Ser. No. 8:9-64.

¹ Contribution No. 416

² Taxonomic Entomologist, Div. of Plant Industry, P.O. Box 1269, Gainesville, FL 32602



Fig. 1. *Tetraleurodes acaciae*, pupa.

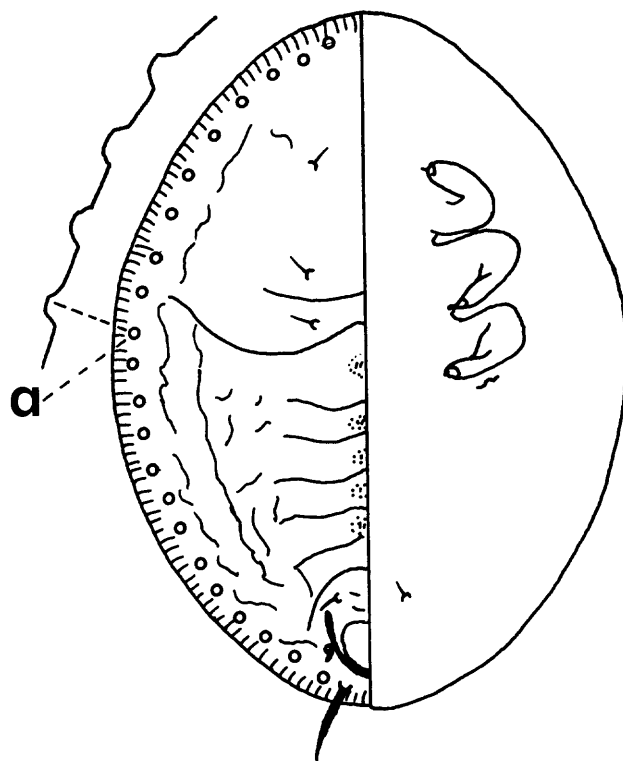


Fig. 2. *T. acaciae*, left side dorsal view, right side ventral view; a) enlargement and lateral view of papillae

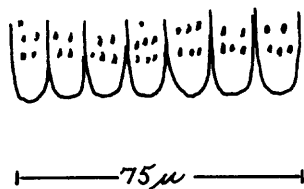


Fig. 3. *T. acaciae*, section of margin.

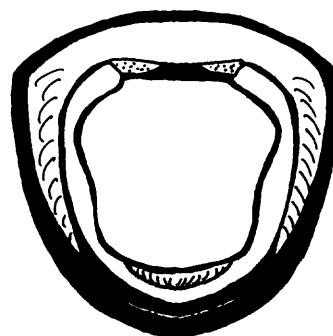


Fig. 4. *T. acaciae*, vasiform orifice, dorsal view.