

Florida Department of Agriculture and Consumer Services Division of Plant Industry

A New Continental Record Whitefly in Florida

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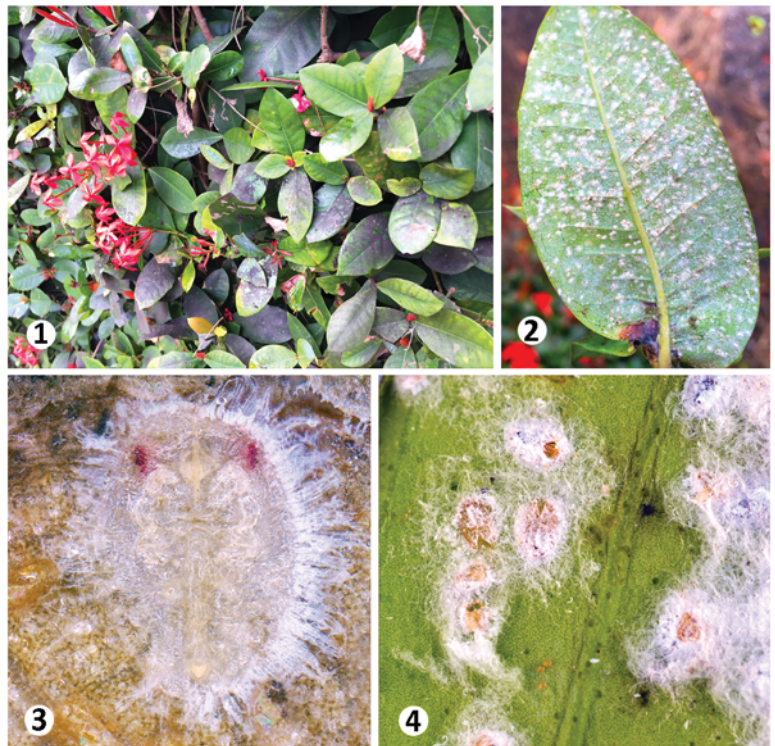
INTRODUCTION: On January 22, 2016 University of Florida (UF) student Zachary Lahey submitted whiteflies for identification that were collected from a heavily infested *Ixora* hedge in a residential area of St. Petersburg, FL. The whiteflies were identified as *Asiothrixus antidesmae* (previously *Aleurothrixus antidesmae*), and the identification verified by Dr. Jon Martin (BMNH, retired) and Dr. Greg Evans (USDA-SEL). *Asiothrixus antidesmae* is an Asian species known in the New World only from Puerto Rico and Guadeloupe. The list below of documented hosts for *A. antidesmae* is from Dubey et al (2010) and based on an examination of many specimens from throughout the range of the pest. Similar to infestations by the wooly whitefly, leaves of infested plants may become covered by both flocculent wax (Fig. 2) produced by the whitefly and black sooty molds that proliferate on honeydew excreted by the whitefly (Fig. 1). *Aleurothrixus floccosus*, the wooly whitefly, has been in Florida for many years, and occasionally builds to severe pest levels, often on *Citrus*, before parasitoids eventually suppress the populations. Wooly whitefly is highly polyphagous with a documented host list in Florida of over 60 species in 50 families. However, more than half of the records in the FDACS-DPI database for wooly whitefly are from *Citrus* spp. Several less frequently infested hosts overlap with those *A. antidesmae*, such as *Smilax* sp. and *Ixora* spp. There is no known predator or parasitoid of *A. antidesmae*.

IDENTIFICATION: Field identification of this whitefly is difficult since the early stages and puparia resemble species in other genera, such as *Aleurotrachelus* and *Paraleyrodes*. The puparia (Fig. 3) also resemble those of *A. floccosus* (Fig. 4), but lack the proliferation of curly wax covering completely the dorsum and eventually the entire population, giving the leaf surface a 'carpeted' appearance. Body color, like that of wooly whitefly, is a pale yellow, but the wax of *A. antidesmae* is confined to a marginal fringe (Fig 3).

HOSTS: Araceae—*Anthurium andraeanum*; Calophyllaceae—*Calophyllum inophyllum*; Clusiaceae—*Garcinia eugeniaefolia*; Dilleniaceae—*Dillenia* sp.; Phyllanthaceae—*Antidesma* sp.; Lamiaceae—*Ocimum* sp.; Rubiaceae—*Gardenia jasminoides*, *Morinda citrifolia*, *Ixora* sp.; Smilacaceae—*Smilax* sp.

REFERENCES:

Dubey, A.K., C.C. Ko, J.H. Martin. 2010. Description of *Asiothrixus* gen. nov. (Hemiptera: Aleyrodidae) and two new species with diagnoses and a puparial key to species. *Zootaxa* 2417: 51–65.



FIGS 1–3. *Ixora* sp. leaves infested with *Asiothrixus antidesmae* (Takahashi). Photo Credit: Zachary Lahey, UF. **Fig. 4.** Wooly whitefly, *Aleurothrixus floccosus*. Photo Credit: Lyle Buss, UF.

