

Metaleurodicus cardini in Florida
(Homoptera: Aleyrodidae: Aleurodicinae)¹

Avas B. Hamon²

SYNONYMY: *Aleurodicus cardini* Back 1912, Canadian Entomol. 44: 148-51.
Aleurodicus (Metaleurodicus) cardini Back; Quaintance and Baker 1913. p. 75-77.
Metaleurodicus cardini (Back); Bondar, 1923. p. 81.

INTRODUCTION: Cardin's whitefly, *Metaleurodicus cardini* (Back), has been known in Florida since 1917. It was originally described from Cuba and was named for Prof. Patricio Cardin. This whitefly is usually innocuous, but under some situations can become a damaging pest. These situations usually occur when something has disrupted the parasite/predator complex.

DESCRIPTION: The pupal case (Fig. 1) is just short of 1 mm. long and 0.6 mm. wide. It is elongate oval in shape and elevated on a vertical marginal waxen fringe. The pupal case color is yellowish white and becomes semitransparent when empty. Parasitized pupal cases are blackish throughout or in spots (Back 1912). Dorsum of pupal case has 5 pairs of large compound pores with a reduced number of locules. Smaller pores with a star-shaped internal matrix are scattered over the dorsal surface. A row of bilocular wax pores are present around the dorsal submargin. The vasiform orifice is subcordate in outline, with the cephalic margin straight, and the operculum is somewhat rectangular in shape. The lingula is spatulate, slightly exserted and armed with 4 long setae (Quaintance and Baker 1913). The adult (Fig. 2) is greenish yellow with a fine dusting of white wax. The wings are somewhat dusky with a conspicuous dark spot near the center of each wing. As females deposit eggs, a fine trail of fluffy white wax (Fig. 3) is rubbed from a tuft of wax on the underside of the female abdomen.

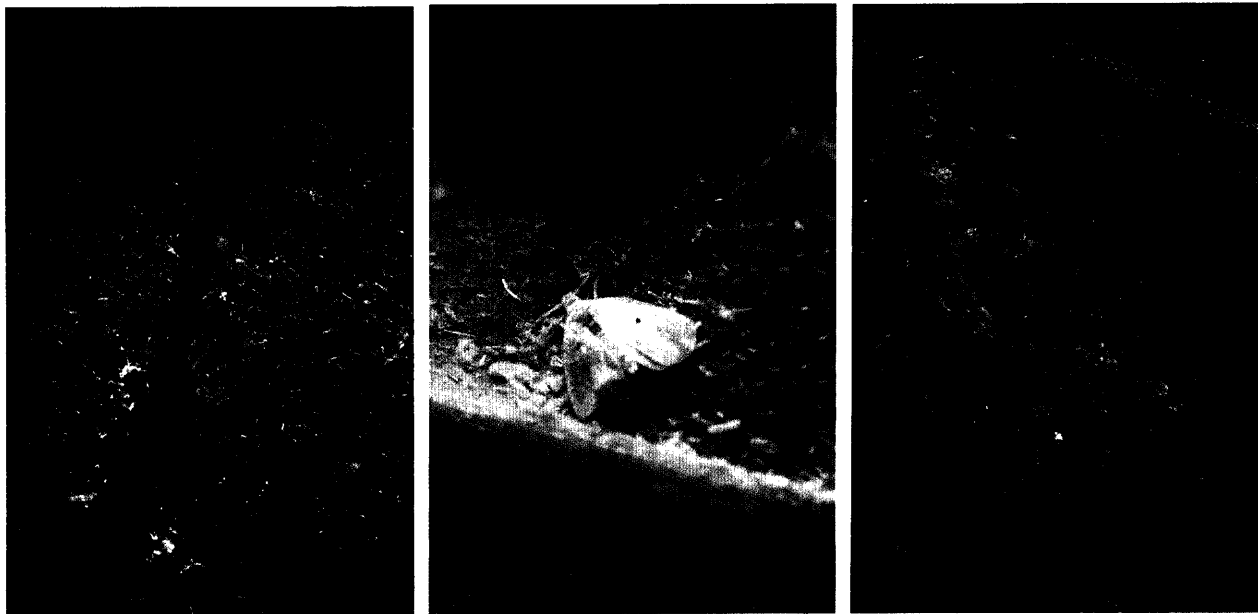


Figure 1-3. 1) *Metaleurodicus cardini*, pupal cases; 2) *Metaleurodicus cardini*, adult; 3) Fluffy wax trails deposited by adult female *Metaleurodicus cardini*.

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

DIAGNOSIS: The adult is distinguished readily from all other whiteflies known in Florida by the distinct dark spot on each wing. The pupal case will require a microscope slide preparation. The pupa is separated from other Florida species by the 4 pairs of abdominal cup-shaped compound pores with reduced loculi, and the 5th pair on the cephalic segment. The only other species known in Florida, *Metaleurodicus griseus* (Dozier) (NEW COMBINATION), has 6 abdominal pairs of compound pores, and occurs only on *Eugenia* spp. in Florida.

DISTRIBUTION: Known from Gainesville to South Florida, and it is much more common in the subtropical areas. Foreign distribution includes Cuba, Bermuda, and Jamaica.

HOSTS: The most common host in Florida is *Psidium guajava*. Other hosts from the DPI files are: *Citharexylum fruiticosum*, *Dipholis salicifolia*, *Duranta repens*, *Duranta* sp., *Eugenia* sp., *Malpighia glabra*, *Melaleuca quinquenervia*, *Paurotis wrightii*, *Pimenta dioica*, and *Plumeria* sp. Additional hosts from the literature are: *Citrus sinensis*, *Citrus* sp., and *Citharexylum spinosum* (Mound and Halsey 1978).

SURVEY AND DETECTION: Inspect the undersides of leaves for white fluffy wax trails, pupal cases, and adult whiteflies with a dark spot on each wing. This is the only whitefly in Florida easily identified from the adult.

LITERATURE CITED:

- Back, E.A. 1912. Notes on Cuban whiteflies with descriptions of two new species. Canadian Entomol. 44: 145-153.
- Bondar, G. 1923. Aleyrodidos do Brasil. p. 81. Bahia.
- Mound, L.A. and Halsey, S.H. 1978. Whitefly of the world. British Museum (Natur. Hist.) and John Wiley and Sons, Chichester. p. 244.
- Quaintance, A.L. and Baker, A.C. 1913. Classification of the Aleyrodidae Part I. Tech. Ser. Bur. Ent. U.S. 27: 75-77.