Citrus Pest Quick Guide: Citrus Whitefly (*Dialeurodes citri*)

Life Cycle

Citrus whitefly eggs are small (0.2–0.3 mm), pale yellow, and smooth. Citrus whitefly has 3 nymphal instars. Nymphs are generally translucent and oval shaped, with no legs or antennae. Pupae gain a thickened skin through which eye spots are sometimes visible.

The citrus whitefly adult is a 3.2 mm long winged insect that is covered with a white waxy powder, causing it to have no pigmentation or distinguishing marks. It is significantly bigger than the silverleaf whitefly found on vegetables.

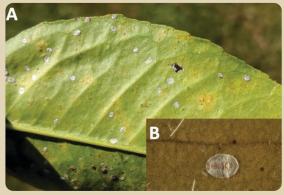
The adult female citrus whitefly can lay up to 150 eggs on the underside of immature leaves.

Spring and summer are the most common times to see citrus whiteflies. Populations of citrus whiteflies tend to increase during the summer.

Damage

Citrus whiteflies prefer to feed on citrus but are also known to infest other plants such as lingustrum and gardenia. Whiteflies damage citrus by ingesting large quantities of sap, much of which is excreted as honeydew; this honeydew promotes development of sooty mold.

Citrus whitefly has historically been controlled by a suite of predators including the entomopathogenic fungus *Aschersonia aleyrodis*, which can collapse entire populations of whiteflies.



(A) Citrus whitefly nymphs on satsuma. (B) Close up of single citrus whitefly nymph.

Credit: X. Martini and L. Buss, respectively



Aschersonia aleyrodis fungus on the underside of a satsuma leaf.
Credit: D. Mayo, UF/IFAS



Aschersonia aleyrodis on satsuma. Credit: D. Mayo, UF/IFAS



Citrus adult whitefly. Credit: L. Buss, UF/ IFAS

- 1. This document is ENY-2037, one of a series of the Entomology and Nematology Department, UF/IFAS Extension. Original publication date April 2022. Visit the EDIS website at http://edis.ifas.ufl.edu for the currently supported version of this publication.
- 2. X. Martini, assistant professor, Entomology and Nematology Department, UF/IFAS North Florida Research and Education Center; L. M. Diepenbrock, assistant professor, Entomology and Nematology Department, UF/IFAS Citrus REC; K. L. Ray, summer 2019 student intern; and J. D. Burrow, Extension program manager, UF/IFAS Citrus REC; UF/IFAS Extension, Gainesville, FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. For more information on obtaining other UF/IFAS Extension Publications, contact your county's UF/IFAS Extension office. U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A & M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Andra Johnson, dean for UF/IFAS Extension.