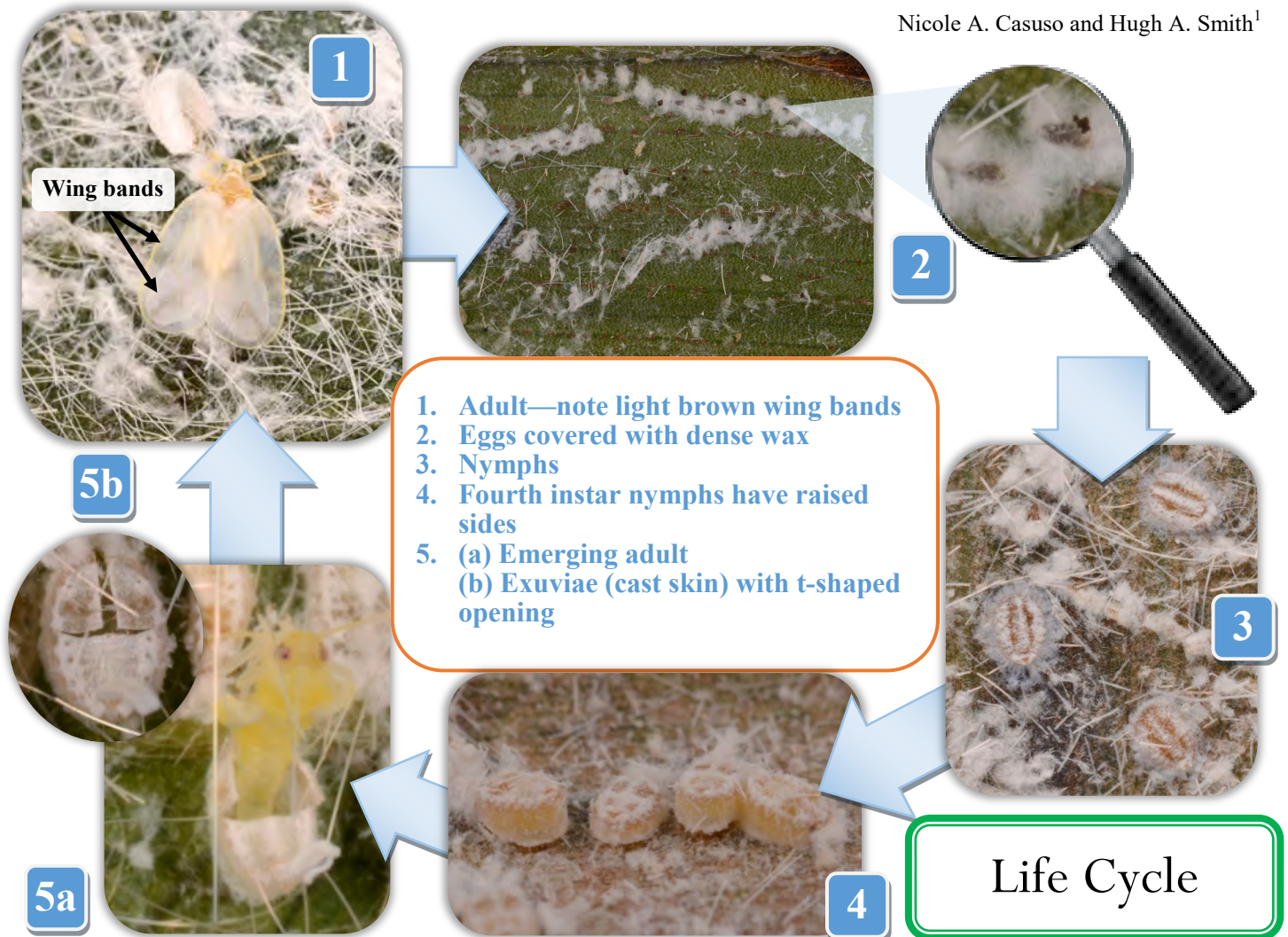


Rugose Spiraling Whitefly, *Aleurodicus rugioperculatus*



Rugose spiraling whitefly eggs are laid in a **spiral pattern** on leaf undersides.



Sooty mold resulting from rugose spiraling whitefly infestation on *Cocos nucifera*.

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Rugose Spiraling Whitefly, *Aleurodicus rugioperculatus*

General Morphology:

What does it look like?

Adults are large compared to other whitefly species, about 2.5 mm long. Two irregular light brown bands run across the wings. Adult females lay spirals of creamy white to yellow elliptical eggs.

Eggs are covered with white wax. Adult males have pincer-like structures at the end of the abdomen. Nymphs range from light to golden-yellow, are flat to slightly convex oval, and measure 1.1 to 1.5 mm long. Nymphs produce dense cottony wax and long, thin waxy filaments.

General Biology:

What is its life cycle?

1. Adult females oviposit eggs onto a host.
2. Eggs hatch into first instar crawlers, which find a feeding site and settle.
3. There are four nymphal stages, which are immobile.
4. Winged adults emerge from a T-shaped slit in the exoskeleton of the fourth nymphal stage.
5. The entire life cycle takes about 30 days.

Plant Hosts and Geographical Range

This polyphagous species feeds on over 118 hosts including coconut palm, gumbo limbo, and other fruits and ornamentals. Rugose spiraling whitefly is thought to be limited to Belize, Guatemala, Mexico, and Florida in the United States. It was first detected in Florida in 2009 and is considered a major pest.

Natural Enemies: Predators & Parasitoids

Predatory beetle (*Nephaspis oculata*) and lacewing larvae (*Ceraeochrysa* sp.) have been seen feeding on whitefly nymphs. Parasitic wasps belonging to the genera *Encarsia* and *Aleuroctonus* have also proven to be effective biological control agents.

Signs & Symptoms: *What type of damage does it cause?*

- ❑ Honeydew (a sugar-rich excretion) along with heavy, white wax, collects on the host plant, promoting sooty mold growth and reducing photosynthesis.
- ❑ Distinct spiral egg-laying pattern can be found on the undersides of leaves as well as non-plant surfaces such as cars, walls, or windows.
- ❑ Direct feeding by dense whitefly infestations may cause premature leaf drop, leaf damage, branch die-back, and decline.

For additional information on managing whiteflies, see *Managing Whiteflies on Landscape Ornamentals*. 2017. E. A. Buss, C. Mannion, L. Osborne, and A. Dale. Publication ENY-317. <http://edis.ifas.ufl.edu/mg254>. For assistance identifying and managing whiteflies, contact your local Extension office.