

Ficus Whitefly is Spreading Throughout Collier County

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Above: The defoliation is extensive in one Naples community in mid-September 2009. It looked like Fall in Ohio! Top right: There are lots of insects in ficus foliage, don't mistake the larger planthopper for the 1 mm long ficus whitefly shown above it. Bottom right: The undersides of leaves are coated with a pebbly-like, whitish residue, which is the empty casings or "skins".

Damage by other landscape-attacking insects pales in comparison to this new invader. The ficus whitefly arrived in the Miami River area in late 2007. It was confirmed in Naples for the first time in January 2009 at several addresses in the Shirley Street area. New outbreak sites are listed at the end of this article. There are, most assuredly, other unreported ficus hedges infested with this little whitefly with the scientific name of, *Singhiella simplex*. This isn't a happy scenario for privacy hedges (if the news clip is still posted, see, <http://cbs4.com/video/?id=42272@wfor.dayport.com&cid=5>). In an e-mail on October 9, 2007, Miami-Dade County Extension Educator, Adrian Hunsberger observed, "This whitefly is causing complete defoliation of *Ficus benjamina*, including mature trees. Almost all of the ficus in a 4 mile area (if not a larger area) are dropping their leaves. This is the most devastating pest I have seen and is quickly spreading!"

These whiteflies pose a lethal threat to the many local ficus hedges. If this insect itself isn't lethal, once the ficus hedges start to flush out after a whitefly attack, the ficus thrips move in and curl the leaves like a pea pod causing more leaf drop.

Typically when an out-of-country insect pest arrives, it doesn't show up with its native complex of parasites and predators which keep the populations from swelling into damaging outbreak proportions. Usually, there are some native biologicals which will fill in the gap. Or the U.S. Department of Agriculture searches out attack insects from the pest's place of origin (Burma, China and India) which can be released after a period of testing to make sure the attack insects won't become a nuisance. To date, field investigators have found five lady beetle species, 2 parasitic wasps and green lacewings attacking the whitefly in Florida.

Control strategies are on the drawing board, and from conversations with University of Florida extension educators and researcher Dr. Catharine Mannion, there are some effective, systemic soil-applied root drenches. See info at: http://miami-dade.ifas.ufl.edu/Pests_HT.shtml. These products are a little pricey, but think of the cost of replacing an established hedge or, worse, a specimen banyan tree. There are new products coming into the market place for this pest as this goes to press. Do your homework to determine how much pesticide you will need and the best price. Some new products such as granular (dinotefuran or imidacloprid products) and even a marble size pellet (Bayer CoreTect with imidacloprid) may be easier to apply for the homeowner. There is also one product (dinotefuran) labeled for a bark spray application. The good thing is these systemics will also manage the thrips and the whitefly for 6 to 12 months with one application depending on the product and the dose you use. One must take care to follow the label and not use too much water with root-soil treatments to avoid ground water contamination. Foliar sprays are discouraged in order to protect the attack insects.

Townhall meetings were held at the library on Central Avenue to discuss this pest back on February 7 (57 in attendance) and August 1 (10 in attendance). Please call if you would like for me to address your neighborhood's tactics for dealing with this significant pest. More townhall meetings will be held when we are populated with the returning winter flock.

I was expecting the whitefly to have spread faster than it has. It really seems to be picking up steam recently. In mid-September I was at a community with the largest amount of damage I've seen. Think in terms of hedges almost ½ mile long! Scott Krueger with the Division of Plant Industries says he has seen a recent increase in the whitefly and now "It is everywhere."

What to Look For: Heavy feeding by the adult and the immature stages, which are immobile, flattened and translucent with red eyes, cause yellowing of the foliage and significant defoliation. Let me repeat, significant defoliation and in a short period. The

undersides of leaves are coated with a pebbly-like, whitish residue, which is the empty casings or “skins” left behind by the immature stages as they molt and develop into the adult stage.

Early infestations of ficus whitefly may be easily overlooked. If one shakes the foliage, tiny white, gnat-like, adult whiteflies fly from the foliage, but they are hard to see compared to other species of whiteflies. The body of the adult whitefly is yellow in color and the wings are white with a faint grey band towards the middle of the wing and a grey longitudinal bar on the inside of the back edge of each of the front wings.

There is little literature on the biology of the fig or ficus whitefly. It has been reported on other *Ficus* species: Cuban laurel (*F. microcarpa*), Banyan (*F. bengalensis* and *F. altissima*), clustertree (*F. racemosa*), fiddle-leaf (*F. lyrata*) and strangler (*F. aurea*).

Although your ficus tree or hedge may appear to be dying after losing a lot of leaves, it may not be a goner. If the twigs are still flexible, it may re-leaf in a few weeks. Very Important: if you find an infestation do not put pruning clippings in the yard waste, trash pick-up. Try to contain it as much as possible, to minimize its spread to nearby properties by keeping clippings on your property as mulch or compost or in tightly sealed plastic bags in the sun to kill the pests.

Confirmed ficus whitefly locations include: Sandpiper and Osprey; Tin City; Market & Commercial Blvd.; Mooring Line and 41 area; Sorrenta Villa (at Goodlette-Frank Road and Pompei Lane); Vanderbilt Beach Rd & I-75; 3rd Ave. NW; Whippoorwill Ln.; Whitaker –off County Barn Rd; 5000 block of Logan Blvd.; Yarberry Lane; and the north end of Nursery Lane. See new info as it develops or post your observations at: <http://dougbugs-n-shrubs.blogspot.com/2009/07/identifying-ficus-whitefly-vs-common.html>

Also see:

<http://www.doacs.state.fl.us/pi/enpp/ento/Singhiella%20simplex.html> and our web site <http://collier.ifas.ufl.edu> has fact sheets on hedge species to consider if you want an alternative to ficus.

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