

Whitefly arrives Jan. 2009 in Collier Co.!

Locations with ficus whitefly include:

- BP & Best Western- Mooring Line & 41 area- ficus hedges along alley, west of strip mall
- Shirley Street area
- Tin City -6th Ave S. & 10th St. South
- Sorrenta Villa (Goodlette Frank & Pompei Lane)
- Yarberry Lane
- North end of Nursery Lane
- 5739 Whitaker (east of Co. Barn Rd.)
- Market & Commercial Blvd



This ficus hedge in the Miami area was defoliated by ficus whitefly. Photo by Adrian Hunsberger UF/IFAS Extension

Fig Whitefly is Defoliating Weeping Fig Trees and Hedges

Doug Caldwell, Commercial Landscape Horticulture

What is the most abundant hedge shrub in south Florida? Most would unarguably say weeping ficus (*Ficus benjamina*)! What if this dominant, green-wall, King-of-Hedgery was dethroned and attacked by an insect which caused severe defoliation? Hedges become see-through and street noises are at your front door? What if they died? That isn't a happy scenario for privacy hedges, but it is happening already in central and west Miami (if the news clip is still posted, see, <http://cbs4.com/video/?id=42272@wfor.dayport.com&cid=5>).

In an October 5, 2007 report from Henry Mayer and Adrian Hunsberger (Miami-Dade County UF/IFAS Cooperative Extension Horticulture Educators) visited an area around the Miami River. They state, "The damage is severe. Mature ficus trees are defoliated. On large hedges, we saw stem die back. We saw a little new growth but that was getting nailed with ficus thrips. Also, there were whitefly immatures on the new growth."

In an e-mail on October 9, 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!"

The whitefly is not a fly, but a flying insect that is very similar to some scale insects. It has sucking mouthparts and some species are known to cause sooty mold, but this species does not. Heavy feeding by the adult and the immature stages, which are immobile, flattened and translucent with red eyes, causes yellowing of the foliage and significant defoliation. The undersides of leaves are coated with a pebbly-like, whitish residue (see picture), which is the empty casings or "skins" left behind by molting immature stages as they develop into the adult stage. The body of the adult whitefly is yellow in color and the wings are white with a faint grey band towards the



The pebbly appearance of cast skins on the undersides of leaves indicates the ficus whitefly is active.

middle of the wing and along the inside of the front wing. There is little literature on the biology of the fig whitefly. It is originally from Burma, China and India and also 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*).

What to do: There are natural enemies such as lady beetles and parasitic wasps that may eventually help suppress this pest. Chemicals sprays such as horticultural mineral oil may reduce whitefly numbers, but coverage needs to be thorough. A better approach would be to go with a **systemic root drench** that contains imidacloprid (Bayer Advanced Garden™ Tree & Shrub Control) as it will provide better and longer results. Read the label and do not use near water. 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 refoliate in a few weeks. For more details on management suggestions, see: <http://mannion.ifas.ufl.edu>.



The ficus whitefly has a yellow body with 2 pairs of faint grey bands (see red arrows).

Very Important: if you find an infestation do not place pruning clippings in the yard waste trash pick-up. Try to contain it as much as possible; 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.

If you have this pest, it is better to **back off on shearing**. The hedge needs new leaves to help it survive, so it is better for it to look a little ragged for awhile in the hopes it will survive.

These soil drench treatments will also reduce lobate lac scale which I've noticed a resurgence of on some large ficus trees. If your ficus are covered with a black sooty mold, look more closely at the twigs. If you see 1/16 inch, purplish-dark brown, bow-tie shaped bumps, it is **lobate lac scale**. For more info, see: <http://collier.ifas.ufl.edu/CommHort/HomeCommHort.shtml>. And, besides these ficus pests, we also have the **thrips** that causes a leaf-fold gall and some defoliation and a new gall wasp that causes a small blister like leaf gall, but these aren't as serious as the whitefly and lobate lac scale.

If you are planting a new hedge, I wouldn't use ficus species unless you budget the pricey insecticide soil drench treatments on a regular basis (1 to 2 times per year). We have lists of **alternative hedge species** with pros and cons. Some of these alternatives include allspice, areca palms, Barbados cherry, bottlebrush, buttonwood, cocoplum, firebush (flowers & butterflies!); bamboo (Wamin Buddha's belly or graceful), fiddlewood, Jamaican caper, myrsine, necklace pod, pitch apple, *Podocarpus gracilior*, sea-grape, Simpson's stopper and the use of vines on supports as a screen. See: Native Shrubs for South Florida, <http://edis.ifas.ufl.edu/EH159> and Low Maintenance Landscape Plants for South Florida, <http://edis.ifas.ufl.edu/EP107> and Shrubs Recommended for Perimeter Plantings, www.broward.org/extension/pdf/pipolygransonshrubs.pdf.

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