Got Dying Ficus? A New Species of Whiteflies Infesting Ficus in Miami-Dade County

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Since the end of August 2007, we at the Extension office have been receiving calls from concerned people about ficus plants turning yellow and dropping their leaves. A new species of whitefly has been found infesting these plants.

**Description and Damage:** The leaves of ficus trees infested with whiteflies begin to turn yellow before the leaves drop, often in large quantities. Ficus trees without their leaves are one of the most obvious symptoms of a whitefly infestation.

**Host Plants:** *Weeping fig* (*Ficus benjamina*). This plant is commonly used for hedges and seems to be the most susceptible host.

Other species of ficus that are hosts:
- banyan trees (*F. altissima* and *F. bengalensis*)
- strangler fig (*F. aurea*)
- Cuban laurel (*F. microcarpa*)
- banana-leaf fig (*F. maclellandii*)
- fiddle-leaf fig (*F. lyrata*)

This species of whitefly may eventually be found on other species of ficus.
To see if your ficus is infested, look on the underside of the leaves.

Immature whitefly under magnification, underside of leaf

The underside of leaves may have silvery-white tiny spots. These are the old skins of the immature whiteflies.

The adult whitefly is small and flies when your plant is touched. They look like tiny, white moths.

Adult whitefly under magnification. Note tan band across the wings.

Management (for homeowners): Monitor your ficus plants for the early signs of an infestation since it will be easier to manage the pest at this stage.

On smaller plants:
- Insecticidal soap spray
- Horticultural oil spray (Ultra-fine oil, Organocide, Sun Spray, Neem oil, and others)

The above 2 products may be effective, but, thorough coverage of the undersides of the leaves is especially important. It will also be necessary to repeat these applications every 7 to 10 days. Spray late in the day to avoid burning the foliage.

For hedges and larger ficus:
- imidacloprid (Bayer Advanced Tree & Shrub Insect Control, Merit) applied to the soil. Very long-lasting but can not be used near water

Other products that control whiteflies are: bifenthrin (Ortho Bug-B-Gon Max Lawn & Garden Insect Killer), cyfluthrin (Bayer Advanced Rose and Flower Insect Killer, Schultz Lawn & Garden Insect Killer), carbaryl (Sevin), lambda-cyhalothrin (Spectracide Triazicide Once & Done Insect Killer), Malathion, permethrin (Hi-Yield Indoor/Outdoor Broad Use Insecticide), pyrethrins (Bonide Yard & Garden Insect Killer, Spectracide Rose & Flower Insect Spray), and others but they harm natural enemies. Protecting natural enemies is a critical component in the long-term control of this pest.

When applying pesticides, ALWAYS FOLLOW THE LABEL DIRECTIONS
Defoliated ficus may still be alive. If the twigs are still supple, the plant will produce new growth in a few weeks. As soon as new growth is evident, a systemic insecticide containing imidacloprid can be applied to the soil to protect new growth.

To slow down the spread of this pest, do not remove ficus clippings from your yard. The leaves make good mulch and can be left under your plants.

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