



Common questions about the gumbo limbo spiraling whitefly (Aleurodicus rugioperculatus)



Photos: H. Glenn, UF/IFAS

1. Is the tree going to die?

In most cases, this whitefly will NOT kill healthy, large trees and palms, however, small, newly planted or unhealthy plants with extremely high infestations could possibly die. The type and level of damage (leaf damage, leaf drop, branch dieback, decline, etc.) will be dependent on the type of plant. This whitefly does NOT cause the sudden leaf drop as seen with the ficus whitefly.

The most noticeable symptoms of this whitefly are: a heavy deposit of flocculent, white, waxy material that covers leaves; a sticky substance called honeydew that is excreted by the whiteflies and black sooty mold that grows on the honeydew. Both the honeydew and sooty mold will coat plant surfaces as well as objects or other plants below or near the infested tree. Sooty mold is a fungus but is not a plant disease, however, it may interfere with photosynthesis, and if excessive, may reduce plant growth, and may cause early leaf drop. The white waxy material, honeydew, and sooty mold usually wear off following control of the whitefly infestation



Photo: H. Mayer, Miami-Dade Extension

2. What is the best management?

When a new pest, such as the gumbo limbo spiraling whitefly first arrives, it often reaches very high populations and sometimes can be very damaging. In subsequent years after its arrival, further outbreaks frequently show a steady decline in severity as natural controls help reduce the infestation. After several years the impact is usually greatly reduced. Although some insecticide use may be necessary, it is very important to understand the importance of natural enemies and the need to focus on long-term, biologically based management. Some useful strategies are:

- Make sure the insect has been properly identified. There are many species of whiteflies and similar looking insects found on landscape plants. Contact the UF/Miami-Dade County Extension office for a proper identification and recommendations (305 248-3311).
- Monitor plants for early signs of infestation. The spiraling eggs are easy to see and are a good target to look for. It is easier and cheaper to treat when the infestation first starts. Do not wait until you see the leaves covered in white floccules of wax, honeydew, or sooty mold.
- Be aware of the presence of natural enemies like lady bugs, parasitic wasps, and others. They will be very helpful for long-term management.
- Avoid the use of insecticides that can kill the natural enemies when applied as a foliar spray.
- After controlling the whitefly infestation, the white, waxy material and sooty mold that remains on the plant will take time to disappear unless hosed off.
- On small trees, palms, and fruit trees ultra fine horticultural oil and insecticidal soap can help control this pest, but 2 or more applications will be necessary 7-10 days apart. These products are available at garden centers and retail nurseries. Follow the label directions. Soaps and oils are less destructive to beneficial insects than other contact insecticides.
- Systemic insecticides are products that move through the vascular tissue of the plants. Whiteflies are poisoned as they feed on the plant sap. Contact insecticides, as the name implies, must make contact in order to kill the insect. Contact products can also kill beneficial insects. Systemic

insecticides can provide longer term control than contact insecticides particularly if the systemic insecticide is applied to the soil or trunk. For the above reasons it is recommended that where possible it is preferable to use systemic products.

- Systemic insecticides applied to the soil take time to work. Expect the product to start controlling the pest after about 1-2 weeks for small trees, palms and shrubs, and up to a month for large trees, and palms. However, systemic insecticides often last 9 to 12 months if applied to the soil.
- Be aware that some trees naturally lose their leaves during the dry season (late winter for gumbo limbo). Early spring is a good time to apply systemic insecticides to the soil.
- For fruit trees only, make sure that the plant is listed on the pesticide label and do not deviate from label instructions as to how and when to use the product. If tropical fruit trees are not listed on the label, do not use the insecticide.



Photo: H. Mayer, Miami-Dade Extension

3. Who can apply the insecticide?

If you are a homeowner, you can purchase and apply any non-restricted use pesticide to plants on your property, but not those outside your property line. In most parts of Miami-Dade County, the homeowner is responsible for trees planted in the swale (right-of-way) in front of their property. If the plants are in a homeowner association public area, right-of-way, commercial or industrial area, the property owner needs to hire a pest control company. Ask for proof of the proper pesticide license. In the State of Florida, anybody who is going to be paid to apply pesticides must have the proper pesticide license.

.4.-Do I need to prune or remove my tree?

You don't need to prune or remove your beautiful tree. It will cost you more money to remove the tree than the treatment. Don't panic! In the vast majority of cases the tree will survive. However, if a tree is in need of pruning, it is best to remove any branches prior to applying the insecticide. Follow good arboricultural practices to do that!

5.-What else I need to do?

When insects feed on plants, it puts the plants under stress. Therefore, proper watering and fertilizing is important to keep the tree as healthy as possible. If the palms are in bad shape, it is suggested to apply fertilizer (i.e. palm special 8-2-12-4) at the recommended label rate. Also, if you prune an infested tree/shrub or if your infested palms lose their fronds, take them to your closest landfill to prevent further spread of this whitefly!

For more information, please contact the Miami-Dade Extension Service at 305-248.3311 or our website <u>http://miami-dade.ifas.ufl.edu</u>. Look for the gumbo limbo spiraling whitefly link in the center of the page.

By: Henry Mayer, Commercial Urban Horticulture Agent, John McLaughlin, Urban Horticulture Program Assistant, Adrian Hunsberger, Urban Horticulture Agent, Laura Vasquez, Florida Yards & Neighborhood Coordinator, Teresa Olczyk, Extension Director, Miami-Dade Cooperative Extension Division; and Dr. Catharine Mannion, UF/ IFAS. October 2010.

The Miami-Dade Cooperative Extension is a partnership of the Miami-Dade Consumer Services Department and the University of Florida's Institute of Food and Agricultural Sciences (IFAS).

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Employment Opportunity – Affirmative Action Employer authorized to provide research, educational information and other services only to individuals and institutions that function without regard to race, color, sex, age, handicap or national origin. U.S. DEPARTMENT OF AGRICULTURE, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF FLORIDA, IFAS, FLORIDA A. & M. UNIVERSITY COOPERATIVE EXTENSION PROGRAM AND BOARDS OF COUNTY COMMISSIONERS COOPERATING

> For sign language interpreters or materials in accessible format or other ADA Accommodations please call Donna Lowe at (305)248-3311 x 240 at least five days in advance.