

Rugose Spirling Whitefly

Urban Horticulture

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Photos: H. Glenn, UF/IFAS

Florida is a hotbed of new pests; it seems like we get them all of the time. One of the latest pests to infest our landscapes is the Rugose Spirling Whitefly, *Aleurodicus rugioperculatus*. This insect is from Central America and was first spotted in Florida in 2009 in Miami. It was originally called gumbo limbo whitefly after the tree that it seemed to prefer feeding on. Unfortunately it has many host plants now, not just gumbo limbo. (Some favorites include gumbo limbo, white bird of paradise, coconut palm, and even live oak.) Even more unfortunately, it has made its way north to Pinellas County. First spotted out on our beach towns, it now seems to be found countywide.



Honeydew and sooty mold on hibiscus, Adult rugose spiraling whiteflies, photos: UF/IFAS

How do you know if you have a spiraling whitefly problem? Oh, you will know! You may find the undersides of leaves covered in a white waxy material and the tops of the leaves covered in a black sooty mold. This sooty mold is particularly troubling because it will amass on anything and everything below an infested plant, included cars, other plants, patio furniture, pool decks, etc. This black sooty mold is really a secondary problem to the whitefly problem. You see, whiteflies feed on the plant sap and excrete a sticky substance called honeydew, which the mold grows on. This mold is not directly harmful to the plant, but it is unsightly and can prevent the plant from getting enough sunlight if enough leaf surfaces are covered. Sooty mold can be removed by hand from plants with water and gentle scrubbing.

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Back to the insect though... The adult lays its eggs in a spiral pattern on the undersides of the leaves. The young stages of this insect feed on the plant fluids with piercing/sucking mouthparts, which cause stress to the host plant. (And this is what causes the honeydew-sooty mold mess.)



Egg spirals, photos UF/IFAS

The spiraling whitefly does have biological enemies in the form of some predatory bugs that attack it, but we are not yet sure of how effective they will be. Any treatment you provide should protect these natural enemies as much as possible- we need them for long-term pest control. Keep in mind that not all plants with spiraling whitefly need to be treated with anything. It is possible to watch and wait a while to see if natural enemies respond. In fact, if you have a small plant and a small whitefly problem you may be able to control the pest with a strong stream of water if done a few times a month.

If you need to do more because the plant seems stressed, read on. If the plant under attack is small then it is possible to treat with an insecticidal soap or horticultural oil. (Always follow label instructions carefully.) You must apply to all leaf surfaces, so this is only useful when you can reach all of the leaves- top and bottom. Keep in mind though, that this will kill any insect it contacts, including the good predatory bugs.

For larger plants and/or more problematic infestations the University of Florida researchers recommend a systemic insecticide. You could do a soil drench treatment with a systemic insecticide such as Merit, Bayer Advanced Tree and Shrub Insect Control, or Safari. These are all products you can buy and apply yourself. This is very useful for plants so large that you could not apply a contact product. They are also beneficial because they will only affect the insects feeding on the plant and not the predatory bugs that feed on other insects. Protect that army of good bugs! Important to know: if you use a systemic insecticide on an edible crop make sure the insecticide is labeled for that crop- this includes coconut palms if the coconuts will be eaten. Another option would be trunk injection of a systemic insecticide but this is best performed by a licensed pesticide applicator.

For more great info on the rugose spiraling whitefly visit the following links:

UF/IFAS Fact Sheet: <http://trec.ifas.ufl.edu/mannion/pdfs/Rugose%20spiraling%20whitefly.pdf>

UF/IFAS Featured Creature: http://entnemdept.ufl.edu/creatures/orn/Aleurodicus_rugioperculatus.htm

Florida Dept. of Agriculture and Consumer Services Pest Alert:

<http://freshfromflorida.s3.amazonaws.com/aleurodicus-rugioperculatus-pest-alert.pdf>