



These blister deformations on Cuban-laurel (left) are caused by a small gall wasp that arrived in early 2007. The view on the right shows a cut open gall with the individual cells where the larvae of the wasp develop protected by the surrounding gall tissue.

Ficus Trees Under Severe Insect Attack!

Doug Caldwell, Commercial Landscape Horticulture

I've discussed ficus problems recently in the past and normally wouldn't repeat so soon. However during property inspections, which I make at the request of landscape maintenance companies and HOA landscape clubs and managers, I've observed a rather alarming amount of insect activity and felt that the citizens should be aware of the severity of what I'd call a double-barreled outbreak. About 90% of the ficus hedges I've observed have about 70 to 80% of the new foliage distorted by these insects which could result in significant leaf-drop and twig dieback as these insects have repeating generations and just don't go away after a few months. Both the Cuban-laurel (*Ficus microcarpa* [or *retusa*]) and the weeping fig (*Ficus benjamina*) have separate insect pests that may cause some defoliation.

The new blister leaf gall arrived for the first time in Florida, in Naples of course, in early 2007 and attacks only the Cuban-laurel. It is caused by a small wasp about 1.5 mm long in the genus *Josephiella*. The galls consist of a series of bumps that may run together and distort the foliage. This may develop into more than an aesthetic issue, as I originally described it in a June 23, 2007 column. The female wasp "stings" the foliage and inserts eggs. As the larvae grow into little white larvae the plant tissue swells around each larva and provides nourishment. Information is lacking on the biology of this pest.

Most landscapers are familiar with the common leaf distortion on Cuban-laurel caused by a little black thrips from southeast Asia. The leaf responds to the sucking type feeding of this thrips by folding upward along the midvein. This results in a misshapen leafroll that resembles a pea pod. Because this gall hasn't normally been very abundant, it is of little concern.



The weeping fig thrips arrived in 2003 and, as this picture shows, is causing leaf fold galls in outbreak proportions. Open up the leaf fold and see all the thrips inside. The word “thrips” is always in the plural even if it is only one thrips!

Our ever-abundant weeping fig wasn't bothered by this Cuban-laurel thrips. In 2003, another species of thrips arrived from southeast Asia. This one makes a similar leaf-roll distortion, but only on the weeping fig leaves. In the June, 2007, column, I stated, “This damage hardly affects these vigorous ficus trees.” But, because they have damaged a lot of foliage, there could be premature leaf-drop. Oh, and then besides lobate lac scale attacking ficus trees, there are more insects on the way. Both the ficus whitefly and fig wax scale are causing dieback of trees and hedges in the Miami and Homestead areas. For more on these various pests, go to: <http://creatures.ifas.ufl.edu/> and <http://www.doacs.state.fl.us/pi/enpp/pi-pest-alert.html> .

What To Do: Because these insects are protected by plant tissue, the wasp larvae inside a fleshy gall and the thrips feed inside the folded leaf, most types of foliar applications won't affect these insects. A product with acephate, which is mildly systemic may reduce numbers, but certain formulations of this insecticide can have a strong sulfur odor (I'm being polite here!). Foliar applications of products with spinosad may help. Either foliar or soil applications of products with imidacloprid or dinotefuran may help also. The soil treatments will be pricey, but should provide longer results, say 6 months, instead of 10 to 14 days with foliar applications. Stay tuned until we learn more about these pests.

Hopefully we will have some natural predator or parasitic insects that will enter into the picture and minimize the damage these pests are causing. There is already a predator, the minute pirate bug, which you may also find inside the galls. If you see these inside 5 of 10 leaf fold galls, you may back-off the pesticides and see if the good guys can slow the thrips populations. See this link for pictures of this predator: http://creatures.ifas.ufl.edu/orn/thrips/Cuban_laurel_thrips.htm



Minute pirate bug (*Montondoniola moraguesi*) Photo by L. Osborn

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