



Unusual Galls on Woody Ornamentals

By Erin Harlow and Dr. Adam Dale

Situation

In 2008, galls or witches' broom were reported to the Extension Office in Jacksonville on ligustrum. Over the next several years, samples were sent to both UF and Division of Plant Industry. Initial reports focused on glyphosate damage, chilli thrips, and phytoplasma. However, in most cases herbicides were not used on the site and no insects or phytoplasma were found despite the large number of samples submitted. After changing our collection methods in the field, the UF Landscape Entomology Lab was able to find a new mite on the damaged material, which was confirmed with Division of Plant Industry. It is a previously undescribed eriophyid mite in the genus *Aceria*. Most of this genus is plant host specific, this does not seem to be the case with this mite. We cannot say for certainty that the mite is the cause of the damage. Further testing is needed, but it does seem to be associated with the damaged plant material.

Bud Distortion on *Loropetalum chinensis*. Plants rarely seem to recover from distortion this severe without pruning.
Photo Credit: Erin Harlow, UF/IFAS



Symptoms

- Early and late stage bud distortion
- Deformed leaves
- Possibly the death of the plant

Collecting Methods

We have learned that how samples are collected is very important for the proper collection and identification of the new mite.

- Samples should be collected in the field if possible.
- Prune off symptomatic plant material and immediately place into a vial with rubbing alcohol.
- Label with collection date, plant species, and location.
- Mail to the Landscape Entomology Lab in Gainesville at P.O. Box 110620, Gainesville, FL 32611.



To send samples you will need vials that seal, rubbing alcohol, the collection address, date, and plant name.

Photo Credit: Erin Harlow, UF/IFAS

What's Causing the Damage?

It is difficult to say what is actually causing the damage to the plant material. The mite has been found on multiple species in association with the damage, but that does not necessarily mean it is actually causing the damage. We are hopeful that further testing for viruses and fungi will be completed over the next several years.



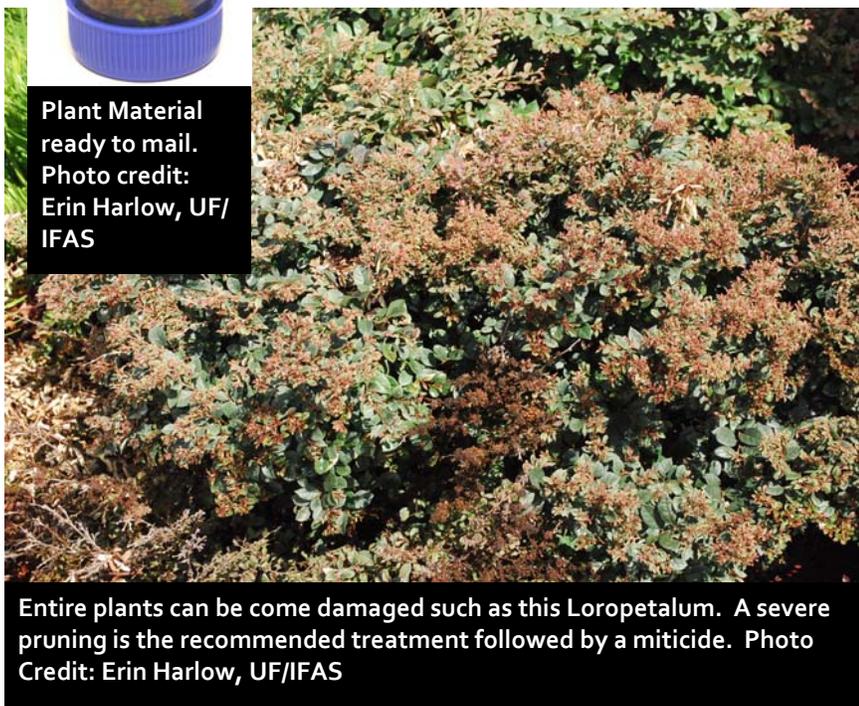
Plant Material ready to mail.
Photo credit: Erin Harlow, UF/IFAS

Possible Host Plants

Host plants that have mites confirmed on the plants include loropetalums, ligustrums, and thyralis. Several other woody plant species have been identified with similar galls, but the mites have not been confirmed on them yet due to samples that had already been treated or incorrect collecting methods.



Bud distortion on ligustrum.
Photo credit: Erin Harlow, UF/IFAS



Entire plants can be come damaged such as this Loropetalum. A severe pruning is the recommended treatment followed by a miticide. Photo Credit: Erin Harlow, UF/IFAS

Treatment Options

Because we have more questions than answers, treatment recommendations are still being determined. At this time, UF recommends pruning off symptomatic plant material, removing the material from the site then treating with a miticide such as abamectin or spiromesifin.

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