

## ***Ravenelia* Rust Disease on *Senna surattensis***

### **Introduction**

*Senna surattensis* is commonly called glaucous Cassia in the trade or simply Cassia tree by many others. It is frequently planted along roadways, gardens and community landscapes as a small ornamental flowering tree.

The tree is a strong bloomer. As a group, it is capable of flowering from January through December. Many trees have their best bloom in the spring and summer. Others are at their showiest from fall into spring. Late summer and mid winter are usually the two periods of little or no flowering. Mid winter is also when many trees become unkempt.

### ***Ravenelia* Rust Disease**

In the fall of 2012, the winter of 2012 and 2013, a rust disease, *Ravenelia* sp., was determined to be the cause of leaf, flower, stem and branch die-backs of the glaucous Cassia. The problem was reportedly widespread on both the east and west coasts of south Florida. *Ravenelia* rust is not new to the area. It had previously been reported on Cassia, Senna and Chamaecrista spp. Normally, the disease has been fairly mild and restricted to the foliage of the affected plants. The unkempt glaucous Cassia trees of past winters may have been similarly affected. However, this cool season, severe defoliation and twig dieback has occurred. During this period, approximately 80% of the trees in Lee County were affected when casually surveyed by Stephen Brown. Additional laboratory analyses are necessary to determine the species of *Ravenelia* causing damage to the trees.



Doug Caldwell

Early leaf spotting due to the *Ravenelia* rust fungus



Doug Caldwell

Close-up of fruiting bodies and spores of *Ravenelia* sp.

### **Disease Control**

If pruning is required of susceptible trees, it should be done before the start of cooler, fall weather. Even then, it is advisable to disinfect pruning tools when going from tree to tree. Fungicide products such as Bayleton, Banner, Heritage or Pageant have been suggested by Dr. Aaron Palmateer, ornamental plant pathologist with the University of Florida. For best results, application should be made during the early fall. Additional applications may be warranted. Applications made on moderately to severely affected trees may not effectively control the disease. Apply the fungicide as directed by the label. Some trees may be so severely affected that it may be best to remove them from the garden or landscape.

### Seasonal Recovery

By mid-January of 2013, many untreated Ravenelia rust affected trees were recovering from the disease. New growth began appearing on all parts of the stems not killed by the disease.



Top of rust affected leaf



Bottom of rust affected leaf



Dieback of leaves

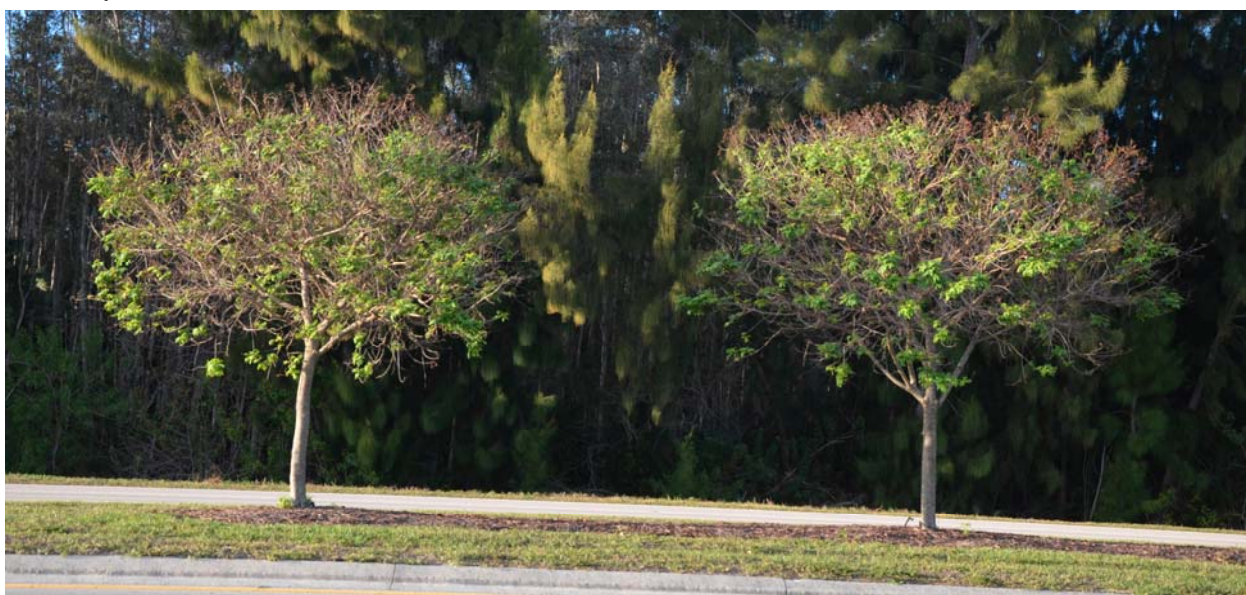


Recovering glaucous Cassia, late January

## Recovery of Untreated Trees



3 January



16 January



7 February



D. Zachau

Before the rust: Mid December, 2011



D. Zachau

After the rust the following year: Mid December, 2012

### Useful Links

[Anthracnose](#)

[Eugenia, Ligustrum, Oleander Disease](#)

[Fusarium Wilt Symptoms of Queen Palm](#)

[Guava Rust on Eugenia and Simpson's Stopper](#)

[Indian Hawthorn Diseases](#)

[Senna surattensis](#)

[Slime Mold in the Garden](#)

[Stinkhorns](#)

All pictures were taken by Stephen H. Brown except where indicated

This fact sheet was reviewed by Dr. Aaron Palmateer; Peggy Cruz and Karen Headlee, Lee County Extension; Pat Rooney, Lee County Master Gardener

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