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Algal Leaf Spot (*Cephaleuros virescens*) of Cocoplum

Introduction
Algal leaf spot (*Cephaleuros virescens*) is a parasitic green alga that occurs primarily in southeastern states where it may be a common sight on certain plants. Some common plants that are susceptible to this disease includes bougainvillea, cocoplum, crape myrtle, fig, gardenia, holly, Indian hawthorn, jasmine, juniper, magnolia, oak, orchid (Cattleya), philodendron, privet, schefflera, sycamore, and viburnum. This leaf spot is one of the few diseases in which the casual organism is a parasitic alga. Even though this algal disease is most often seen on leaves it will occasionally infect twigs.

Results of Plant Analysis
In April of 2013, cocoplum (*Chrysobalanus icaco*) with leaf spots and defoliation were reported to Lee County Extension. Leaf samples were collected from the affected plants and sent to the Plant Disease Clinic at the University of Florida, Gainesville. The samples tested positive for algal leaf spot.

Disease Conditions
The algal body produces spores that perpetuate its life cycle. Spores survive and spread under high temperatures, moisture and humidity and in combination with windy conditions. Frequent rainfall or irrigation contributes to these conditions. Algal leaf spot is most severe in plants that are weak and in poor vigor. The pathogen has the ability to survive on infected plant debris. This allows the disease to continue year after year.

Symptoms
The disease first appears as raised blotches or spots on the leaf surface. The blemishes are round, green, and somewhat fuzzy or velvety. The green spots will turn reddish-brown with age. Plant tissues often deteriorate and die underneath the spots. This frequently causes partial defoliation.

Algal infections may also occur on twigs. The infected area may become slightly swollen and cracked. The crack may cause the twig to become more susceptible to fungal infection. Blight and stem dieback may occur because of the infection.

Disease Control
Reduce leaf wetness through proper irrigation. Rake and destroy fallen leaves. You may also want to pick off infected leaves from plants that have very minor infections. Application of copper products may also reduce further damage, but will not cure affected plants. Apply copper hydroxide fungicides (Kocide, etc.) according to label direction every two weeks during favorable disease conditions.

Cocoplum leaves and stems infected with algal leaf spot

Front of diseased leaves

Back of diseased leaves

Twig dieback

Coalescing leaf blemishes

Twig dieback and leaf spots

References

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All pictures taken by Stephen H. Brown

This fact sheet was reviewed by Aaron Palmateer, UF Plant Pathologist, Homestead; Karen Headlee, Celia Hill, Peggy Cruz, Lee County Extension; Kitty Tyler, Ron Stewart, Lee County Master Gardeners.

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