DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System

Sherrie Smith

SPDN
Southern Plant Diagnostic Network

Department of Plant Pathology

PLANT HEALTH CLINIC NEWS

Issue 1-March 2, 2015

This bulletin from the Cooperative Extension Plant Health Clinic (Plant Disease Clinic) is an electronic update about diseases and other problems observed in our lab each month. Input from everybody interested in plants is welcome and appreciated.

Turf

In spite of the fact that winter still has a grip on the state, the Plant Health Clinic has started receiving turf samples with patch diseases. The biggest disease issue with Zoysia is Large Patch, caused by the fungus *Rhizoctonia solani*. Stolons and basal leaf sheaths develop water soaked black to reddish brown lesions. Irregular circular patches develop that may be from several feet to more than 25 feet in diameter. Sometimes a smoke colored or orange halo may be observed early in the morning at the margins of the patch. Diseased shoots are easily detached from their points of attachment. Roots are discolored but not rotted. In the most badly affected turf, entire lawns may be blighted. Large Patch is also a common patch disease of Bermuda, with symptoms occurring earlier in the spring than Zoysia. Typically, symptoms in Zoysia occur two to eight weeks after green up, or in the autumn. Sometimes symptoms slowly disappear during the growing season as surviving tillers start filling in the killed spots. Night irrigation, shade, and excessive amounts of nitrogen increase both severity and incidence of patch diseases. Complete fertilizers with time release nitrogen should be used instead of quick release nitrogen. Apply 0.5 pound of nitrogen per thousand square feet approximately three weeks after the grass turns green in late May. No more than two pounds of nitrogen total should be applied per growing season to Zoysia. A soil test is useful to see where fertility levels are. Good drainage is essential for a healthy lawn. The turf should be de-thatched if thatch accumulates to more than 0.5" thick. De-thatching should be done while grass is actively growing. Fungicides may be applied once in the spring between March 15 and April 15, and again in the fall between September 20 and October 10. Heritage, Prostar, Eagle, Instrata, and Bayleton are labeled for Large Patch. For large patch, soil test for pH and nutrients. Avoid night watering. Homeowners may use products labeled for control of Rhizoctonia diseases. Products containing azoxystrobin, or flutolanil, or mycobutanil, or triticonazole, or triadimefon have proven effective when applied per label.

Zoysia Large Patch-*Rhizoctonia solani*

Michelle Mobley University of Arkansas Cooperative Extension

Crapemyrtle

The Crapemyrtle Bark Scale (CMBS), *Eriococcus lagerstroemiae*, is an imported pest from Asia, known to be a pest on crapemyrtle and pomegranate in its native range. It was found for the first time in Arkansas in Little Rock in January 2014. At this time, it has been discovered in Pulaski, Garland, and Miller counties in Arkansas. The first sign of infestation commonly noticed by homeowners and landscapers is black sooty mold on the trunk and branches. This occurs because scale insects feed on the sap of the plant, excreting excess amounts of the sugars. The sticky residue called honeydew attracts colonization by sooty mold fungi. When the sooty areas are examined closely, the white to gray felt-like females may be seen on small twigs, branches, and the trunk of the crapemyrtle. They are often heavily concentrated near pruning wounds or under the exfoliating bark of the trunk. Dozens of pink eggs are laid under the females which then die. The eggs hatch into pinkish crawlers. After several days the crawlers molt, lose their legs and antennae, settle into one spot and become permanently stationary. They secrete white threads that become the protective white to gray felt-like covering over their bodies. The males emerge winged and after finding a female, mates and dies. There may be several generations in Arkansas. As with any heavy infestation of sap feeding insects, plants become weakened by repeated attacks. Control takes a

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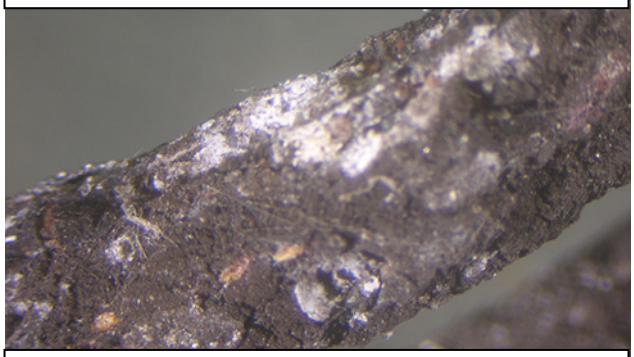
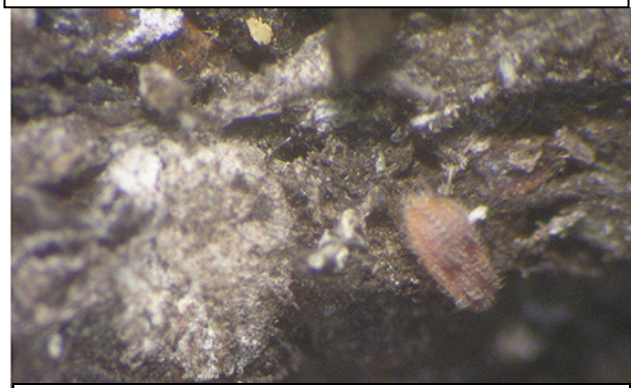
concerted effort. Recommendations include washing the trunk and limbs within reach with a soft brush and mild solution of dishwashing soap. A winter application of dormant oil is believed to be helpful. Be sure to apply thoroughly to bark crevices and wounded areas as well as other parts of the plant. Systemic insecticides used as soil drenches applied to the root zone have been found to be effective when applied between May and July. Imidacloprid (Merit® or Bayer Advanced™ Garden Tree and Shrub Insect Control), thiomethoxam (Meridian®) and dinotefuran (Greenlight Tree and Shrub Insect Control with Safari) have been shown to give decent control.

Crapemyrtle Bark Scale- *Eriococcus lagerstroemiae*



Ricky Corder University of Arkansas Cooperative Extension

Crapemyrtle Bark Scale crawlers and adult- *Eriococcus lagerstroemiae*



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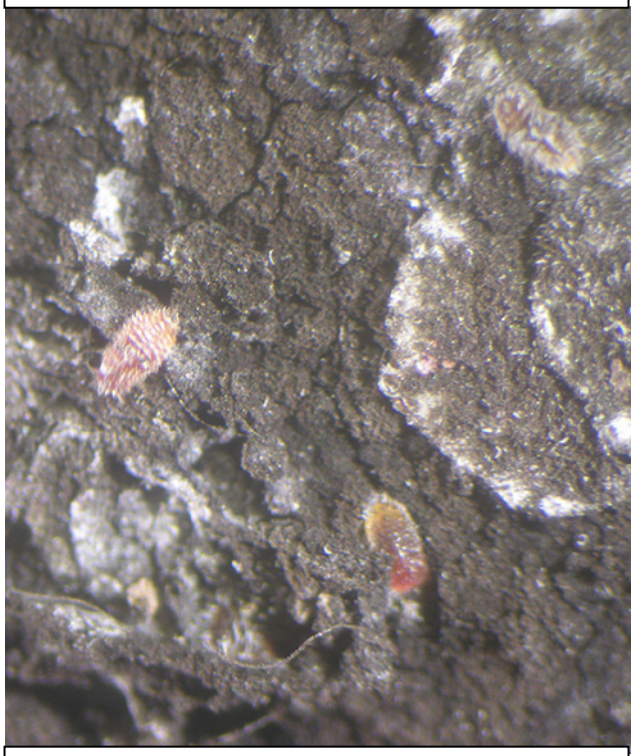
Crapemyrtle Bark Scale crawlers- *Eriococcus lagerstroemiae*



Ricky Corder University of Arkansas Cooperative Extension

Peach

It is time to treat for Peach Leaf Curl, caused by *Taphrina deformans* if this was not done in the fall after leaf fall. In order for treatment to be effective, it must happen after leaf fall and before bud break in the spring. Copper fungicides or a fungicide containing chlorothalonil may be used. Once bud break occurs it will be too late to treat for the coming season. Symptoms are thickened blistered looking areas of the leaves and leaf curling. The blistered areas start as green, but change to red. A gray mass of spores are produced during wet spells. New twigs may be thickened and distorted. Fruit on rare occasions will also be blistered.

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Peach Leaf Curl- *Taphrina deformans*

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Request for help from Dr. Robbins:

Root knot nematode populations are needed for our Arkansas species study. I am a nematologist in the department of Plant Pathology in Fayetteville. My student and I are trying to amass populations of as many species of Root knot nematode (Meloidogyne sp.) as possible for species identification using molecular techniques. At present no root knot species in Arkansas have been identified using molecular technology. We are interested in receiving populations from home gardens, shrubs, flowers, trees and grasses. For samples we need about a pint of soil and feeder roots in a sealed plastic bag that is plainly identified by plant host, location (City County, physical address, collector and date of collection). Please send samples to us at the follow address:

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