DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System

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SPDN
Southern Plant Diagnostic Network

Department of Plant Pathology

PLANT HEALTH CLINIC NEWS

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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.

Yew

Yews are lovely evergreen shrubs that thrive as long as their needs are met. They require well-drained, fertile soil with a neutral pH. Yews do very well in full sun to part shade. They can be sheared into formal shapes or allowed to grow naturally. One thing they absolutely can't tolerate is boggy soils. In soil that is wet all the time, Phytophthora root rot is an issue. Symptoms are yellowing, needle cast, wilting, and death. On heavy soils, it helps to plant in raised beds. Once symptoms are noticeable, yews are difficult to save. Improve drainage and avoid overwatering. Water yews only when dry. Professionals may apply Subdue Maxx.

Yew Phytophthora root rot-
***Phytophthora* spp.**

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Yew Phytophthora root rot-
***Phytophthora* spp.**

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Lemon

The adult stage of the Citrus leafminer is a moth, *Phyllocnistis citrella*. This moth attacks oranges, mandarins, lemons, limes, grapefruit, kumquats, and calamondins, among others. The female lays eggs in the evening and at night, singly and usually on the underside of the leaf along the midvein. The egg resembles a water droplet, and hatches in 2-10 days depending on temperatures. As soon as the larva leaves the egg it enters the leaf tissue and begins feeding. They tunnel in the tissue leaving tell-tale tracks (mines). Larvae go through 4 molts taking 6-22 days to reach pupa stage. They pupate at the leaf margin under a slight curl of the leaf in special pupal cells. The Citrus leafminer life cycle takes 2-7 weeks to complete, again depending on weather and temperature. Symptoms of infestation are serpentine patterns on the leaf. Heavy infestations cause the leaves to become curled and distorted. Very seldom are trees seriously injured by leafminers. Once new growth hardens off in the spring, the tree is safe from further damage. As a consequence, insecticides are not usually worthwhile, with the possible exception of trees less than four 4 old. Sprays containing Spinosad are effective when applied at 2-week intervals and after a rain. Spraying should not begin until leaf damage is seen. Cultural controls consist of avoiding nitrogen

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applications when leafminers are active, and avoid pruning live tissue more than once a year.

Citrus Leafminer-*Phyllocnistis citrella*

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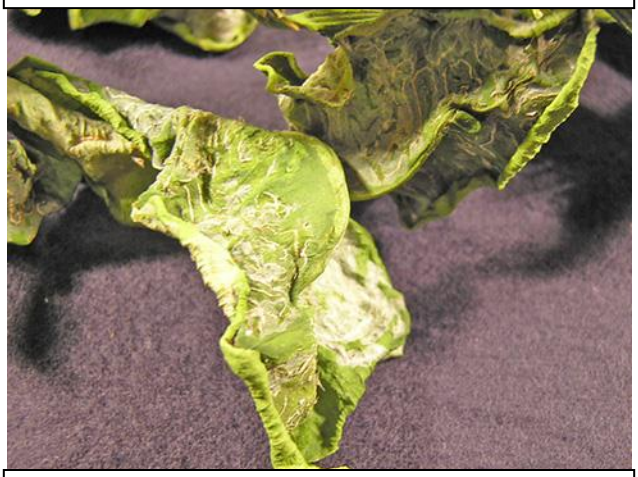
Citrus Leafminer-*Phyllocnistis citrella*



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Azalea

Azalea Bark scale, *Eriococcus azalea,* attacks azalea, rhododendron, Andromeda, hawthorn, poplar, and willow. This insect is found on bark and stems where it feeds with its piercing sucking mouth on the phloem of the plant. The phloem carries the carbohydrates, and as a consequence excess sugary sap called honeydew is excreted by the scale insects. This attracts saprophytic fungi that give a black or sooty appearance to bark, stems, and leaves. The females overwinter and lay eggs in the spring. The eggs hatch into crawlers. During the crawler stage, scale insects may be killed using insecticides containing cyhalothrin, or bifenthrin, or carbaryl, or cyfluthrin. Adults and eggs may be killed by smothering them with fine horticultural oil in early spring before new growth appears. Spray a solution of five tablespoons of oil per gallon of water. Spray until runoff on twigs, leaves, and stems.

Azalea Bark scale-*Eriococcus azalea*

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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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