



## Arkansas Plant Health Clinic Newsletter

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### Lemon

The Citrus Leafminer, *Phyllocnistis citrella*, attacks oranges, mandarins, lemons, limes, grapefruit, kumquats, and calamondins, among others. The adult stage of the Citrus Leafminer is a moth. 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. Therefore, insecticides are not usually worthwhile, except for trees less than four years 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 applications when Leafminers are active and avoiding pruning live tissue more than once a year.

### Citrus Leafminer-*Phyllocnistis citrella*



Photos by Sherrie Smith, University of Arkansas Cooperative Extension

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## **Azalea**

Azalea Bark Scale, *Eriococcus azaleae*, attacks andromeda, azalea, hawthorn, poplar, rhododendron, and willow. This insect is found on branches and stems where it feeds with its piercing-sucking mouth on the phloem of the plant. The phloem carries carbohydrates, and these insects will suck up more carbs than they need, excreting the excess as a sugary sap called honeydew. This sap attracts saprophytic fungi that give a black or sooty appearance to branches, 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 azaleae***

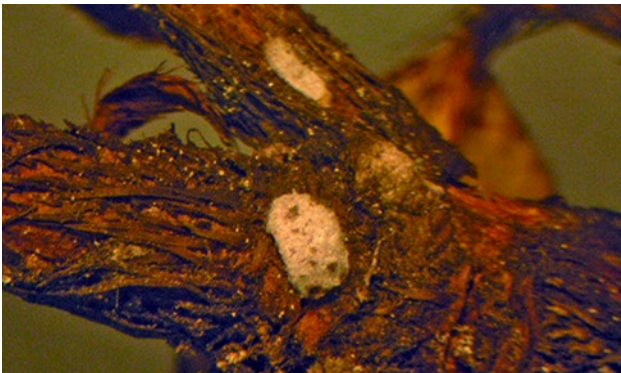


Photo by Sherrie Smith, University of Arkansas Cooperative Extension

## **Azalea Bark Scale-*Eriococcus azaleae***

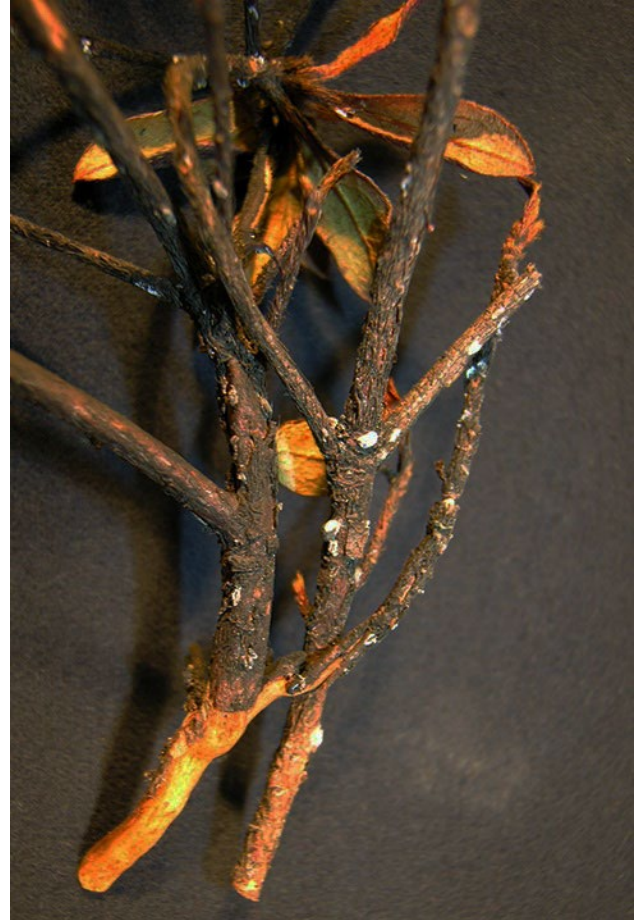


Photo by Sherrie Smith, University of Arkansas Cooperative Extension

## **Yew**

Yews are lovely evergreen shrubs that thrive if 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.**



**Photo by Sherrie Smith, University of Arkansas  
Cooperative Extension**

### **Yew Phytophthora Root Rot- *Phytophthora* spp.**



**Photo by Sherrie Smith, University of Arkansas  
Cooperative Extension**

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.

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