



Arkansas Plant Health Clinic Newsletter

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Oak

Although the damage caused by the Oak lace bug, *Corythucha arcuata*, can be alarming to homeowners, affected trees are usually not seriously damaged. The injury usually occurs late enough into the growing season that tree health is not affected. Adult lace bugs are winged insects 1/8 to 1/3-inch (3.2-8.5 mm) long. They have light colored bodies with dark markings. Nymphs are wingless and spiny. Lace bugs feed on the undersides of leaves by inserting their needle-like mouthparts into leaf tissue. Feeding causes small white or yellow stippling on the leaf surface. Additional evidence of their presence is tar-like droppings of excrement on the undersides of the leaves. Where populations are high, heavy feeding can cause severe leaf discoloration and premature leaf drop. Natural predators such as assassin bugs, lady beetles, green lacewings, and other predators feed on lace bug eggs, nymphs, and adults. If control is deemed necessary for small trees, then insecticidal soaps, fine horticultural oils, permethrin, bifenthrin, lambda cyhalothrin or other pyrethroids, acephate, and carbaryl kill lace bugs.

Oak Lace Bug- *Corythucha arcuata*



**Photo by Jennifer Caraway, University of Arkansas
Cooperative Extension**



Oak Lace Bug Damage- *Corythucha arcuata*



Photo by Jennifer Caraway, University of Arkansas Cooperative Extension

Oak Lace Bug- *Corythucha arcuata*



Photo by Jennifer Caraway, University of Arkansas Cooperative Extension

Oak Lace Bug Eggs- *Corythucha arcuata*



Photo by Jim Baker, North Carolina State University, Bugwood.org

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Holly

There are many species of the fungus *Macrophoma* across a range of hosts. In many cases *Macrophoma* is only weakly virulent on the host plant. We see it on holly leaves injured by winter weather or on leaves injured by the holly leaf spines rubbing against adjacent leaves. Hollies that are closely sheared and have poor air circulation are most susceptible. Remove damaged leaves. In most cases spraying is not necessary. However, if damage is severe homeowners may use Spectracide Immunox; or Ferti-Lome Liquid Systemic Fungicide; or Ortho Max Garden Disease Control; or Ferti-Lome Liquid Fungicide; or Garden Tech Daconil Fungicide Conc.; or Green Light Fung-Away Fungicide; or Bonide Fung-onil Multipurpose Fungicide; or Green Light Systemic Fungicide; or Ferti-Lome Halt Systemic; or Ortho Rose Pride Rose & Shrub Disease Control; or BioAdvanced Disease Control for Roses, Flowers, and Shrubs.

Holly *Macrophoma* Leaf Spot- *Macrophoma* spp.



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Holly *Macrophoma* Leaf Spot- *Macrophoma* spp.



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Eggplant

Verticillium wilt of eggplant, caused by the soil-borne fungus *Verticillium dahliae*, can infect eggplant plants at any growth stage. The growth of young plants may be severely stunted with small yellow-green leaves. On older plants, symptoms include yellowing and wilting of leaves on a few branches or on the entire plant. This usually occurs as the fruit begins to mature. The edges of the leaves roll inward and become brown and dry. The dried leaves and shriveled fruits remain attached to plants that die. Brown discoloration of the vascular tissue is visible in the roots. There are no chemical controls for Verticillium Wilt. Rotations with a non-host crop such as broccoli, corn, wheat, barley, sorghum, or safflower for a period of 2 or more years reduces inoculum but



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does not eliminate it, as the microsclerotia may survive for more than ten years in the absence of a host. In any case, eggplant should not be planted back in that field for a minimum of 3 years. Soil solarization is useful when preparing the ground for the next season. Remove all existing plant debris. Rake the area smooth and wet the soil to a depth of 6 inches (15 cm) or more. Cover with clear plastic sheeting and seal the edges with soil. Allow plastic to remain for at least 4-6 weeks. Resistance to Verticillium Wilt in eggplant has been elusive. The variety Nadia has some intermediate resistance.

Eggplant Verticillium Wilt- *Verticillium dahliae*



Photo by Neal Mays, University of Arkansas Cooperative Extension

Eggplant Verticillium Wilt- *Verticillium dahliae*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Peony

The fungal disease commonly called Powdery mildew, caused by *Erysiphe polygoni*, is unlikely to kill a peony plant. However, the disease is unsightly and can weaken peonies that are infected every season. Powdery mildew appears as a powdery white to gray fungal growth over the surface of the leaves and buds. New growth may be stunted or distorted. Infected leaves may drop from the plant and flowers become distorted and



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unattractive. Powdery mildew spores are spread from plant to plant on wind currents. Peonies that are grown in shade and have poor air movement are more likely to suffer from infection. Planting peonies in full sun with good air movement around plants can help reduce problems with powdery mildew. All diseased parts of the plant should be cleaned up in the fall. In plantings with a history of powdery mildew, fungicides should be applied early in the growing season. Homeowners may use Spectracide Immunox; or Ferti-Lome Liquid Systemic Fungicide; or Ortho Max Garden Disease Control; or Ferti-Lome Liquid Fungicide; or Garden Tech Daconil Fungicide Conc.; or Green Light Fung-Away Fungicide; or Bonide Fung-onil Multipurpose Fungicide; or Green Light Systemic Fungicide; or Ferti-Lome Halt Systemic; or Ortho Rose Pride Rose & Shrub Disease Control; or BioAdvanced Disease Control for Roses, Flowers, and Shrubs.

Peony Powdery Mildew- *Erysiphe polygoni*



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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