



Arkansas Plant Health Clinic Newsletter

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Persimmon

Native persimmons, *Diospyros virginiana*, are a common sight in woodlands and along fence rows. Persimmon forms a multi-trunked or single-stemmed deciduous tree to 25 ft. (7.6 m) high and at least as wide. They make a handsome small ornamental tree in the landscape. Although native persimmon fruits are edible, most of the persimmons grown for their fruit are Oriental persimmons, *Diospyros kaki*. Oriental persimmons can be divided into two classes—astrigent and non-astrigent. Astrigent varieties have tannins that disappear as the fruit ripens and softens. They will make your mouth pucker and give you a “dry mouth” feeling. Non-astrigent persimmons, however, can be eaten when still firm and crisp, without any astringency. Our native persimmon is astrigent. Whichever variety of persimmon is selected, persimmon fruit are an excellent source of vitamins A and C. They are consumed raw and in cookies, cakes, breads, puddings, and jams, among other ways.

A significant fungal pathogen that may affect yield is leaf spot caused by *Pseudocercospora diospyricola*. Symptoms begin as small necrotic spots that develop into angular lesions. Lesions may coalesce to form larger blotches on the

leaf. Leaves turn yellow and fall from the tree prematurely. Severe infections can cause trees to defoliate in late August as the fruit begin to ripen. Problems related to defoliation include failure for fruit sugar to properly accumulate, poor fruit ripening, biennial bearing tendencies with low overall yields, and increased vulnerability to freeze damage. Infection occurs at shoot expansion, at leaf formation, and at flowering in the spring. Control can be obtained by applying a fungicide cover spray during full bloom and again 3 to 4 weeks later. Abound and Daconil Weather Stik are both labeled for control of *Cercospora* Leaf Spot in persimmon. *Alternaria*, *Gloeosporium*, and *Phyllosticta* are three additional aggressively pathogenic fungal genus found on persimmon fruit and leaves.

Persimmon *Cercospora* Leaf Spot-*Pseudocercospora diospyricola*



Photo by Sherrie Smith, University of Arkansas
Cooperative Extension



Persimmon Cercospora Leaf Spot-*Pseudocercospora diospyricola*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Tulip Poplar

Liriodendron or Tulip Poplars are very large, attractive, fast-growing trees. They attain heights of 80-120 ft. (24-37 m) and are desirable landscape specimens due to their attractive pyramidal form and pretty leaves and flowers. Tulip poplars have few disease or insect problems. That said, we recently received a sample with anthracnose caused by the fungus *Colletotrichum gloeosporioides*. This leaf disease usually appears late in the growing

season and is more unsightly than dangerous to the tree's health.

Symptoms are brown to black lesions along the veins of leaves. The lesions expand and can cover large areas of the leaves. During moist periods, orange spore masses may be seen in the lesions. Good sanitation is critical in anthracnose control. All fallen leaves and twigs should be raked up and removed from the planting. If the tree is small enough to make pruning practical, infected twigs should be pruned out of the canopy. A product containing chlorothalonil or mancozeb or copper may be applied at bud swell in the spring, and twice afterwards at 10-14-day intervals.

Tulip Tree Anthracnose-*Colletotrichum gloeosporioides*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension



Sherrie Smith
Ricky Corder

Tulip Tree Anthracnose- *Colletotrichum gloeosporioides*



Photo by Sherrie Smith, University of Arkansas
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Vinca

Vinca minor is a fast growing, perennial, evergreen vine. It is so vigorous that it can be difficult to eradicate once established. It is one of the few groundcovers that thrives when planted beneath trees and is happy in most soils. However, some stands of vinca are plagued by Phoma Stem Blight, caused by the fungus *Boeremia exigua*. Symptoms are black lesions on the stems, yellowing, wilting, and death. Small black pycnidia (fruiting bodies of the fungus) may be seen with a hand lens. Wilting and death of the stem occurs when the lesion completely encircles the stem. Wet weather and overhead irrigation favor disease development and spread. Generally, Phoma

Stem Blight slows its progression with hotter, drier weather. The exception is in beds that have a history of the disease and are under overhead irrigation. It helps to improve air circulation by pruning overhanging plants. Decaying and dead tissue should be removed from the bed if possible. Work should only be done in the beds when plant foliage is dry. Where the problem is severe, planting through perforated weed barrier to keep the vining parts from direct soil contact has proved helpful. Copper fungicides and mancozeb are among the fungicides that are effective. Sprays should be applied from bud break in the spring until midsummer.

Vinca Phoma Blight-*Boeremia exigua* formerly *Phoma exigua* var. *exigua*



Photo by Sherrie Smith, University of Arkansas
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Vinca Phoma Blight-*Boeremia exigua* formerly *Phoma exigua* var. *exigua*



**Photo by Sherrie Smith, University of Arkansas
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Loropetalum

Loropetalum are cold hardy in USDA zones 7-10 and are easy to grow, versatile shrubs. They prefer some afternoon shade and moist, well-drained, acidic soil with plenty of organic matter. They are very tolerant of drought conditions once established.

The bacterium *Pseudomonas savastanoi* causes galls on oleander, olive, ash, privet, and forsythia as well as loropetalum. Symptoms are wilting, dead shoots, stems, and plant death. During wet weather bacteria may ooze from the galls. The bacterium is believed to enter plant tissue through wounds caused by pruning as well as through weather events such as hail and freeze injury. A few galls do not seriously impact the plant, but unfortunately the galls can become numerous rather quickly. The main signs of the disease are dark-colored, rough-textured galls or knots on twigs and branches. The galls begin as small hardly noticeable rough spots but can enlarge to cover 6 or more inches (15 or more cm) of the stem. Bacterial gall is a very difficult disease to control. Removal of all galled branches may help slow the disease. Remove galls several inches (10 or more cm) below the damage, dipping pruners in 10% bleach solution between cuts. Prune only during dry weather. The application of copper fungicides or copper bactericides after pruning may also be beneficial. An alternative is to remove the plant entirely.



Loropetalum Bacterial Gall- *Pseudomonas savastanoi*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

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Loropetalum Bacterial Gall- *Pseudomonas savastanoi*



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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