Sherrie Smith
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Arkansas Plant Health Clinic Newsletter

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Tulip

One of the most difficult to manage and devastating diseases of Tulips is Tulip Fire, caused by the fungus *Botrytis tulipae.* Tulip Fire affects tulips only. Leaves newly emerging from the soil may be distorted and twisted and wither. If leaves survive emergence, they may have brown lesions that under wet environmental conditions enlarge to large blighted scorched areas, hence the common name “Tulip Fire.” Small oval spots may appear on flowers. During wet weather damaged leaves, stems, and flowers will become covered with a fuzzy, grey mycelial mat. Eventually, small black sclerotia, (seed-like structures) form on the dead tissue. These are the survival stage of the fungus and can persist for long periods in the soil and on debris. Tulips should not be planted for at least three years in a site where the disease has occurred. All bulbs should be checked carefully for signs of decay and the small black sclerotia. This is a very difficult disease to control, and chemicals are not always effective. Iprodione, mancozeb, and 2636 (iprodione + mancozeb), are labeled for Tulip Fire. You may also try a pre-plant bulb dip using Serenade or Actinovate. Follow label for timing and repeat applications. It is more effective to plant in a different location. Do not save bulbs from an infected crop.

Tulip Fire-*Botrytis tulipae*

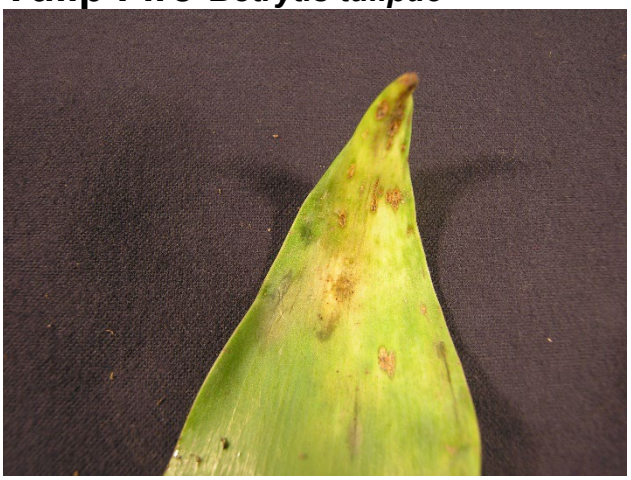

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Tulip Fire Sclerotia-*Botrytis tulipae*

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

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Tulip Fire-*Botrytis tulipae*

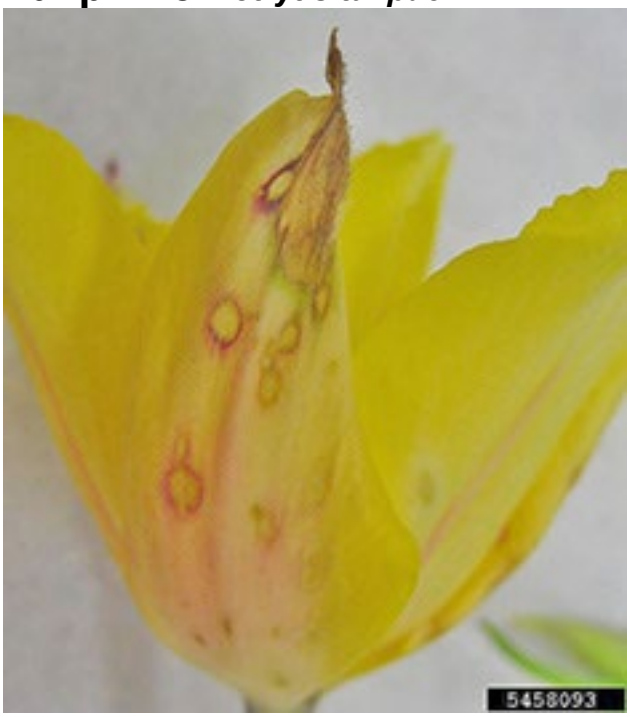

Photo by Sandra Jenson, Cornell University, Bugwood.org

Maple

The most frequently encountered disease we see on maple is time of year is anthracnose. Cool, wet weather in the spring is favorable for outbreaks of Maple anthracnose, caused by the fungus *Gloeosporium apocryptum (Aureobasidium apocryptum).* Symptoms are brown to black lesions along the veins of newly opening leaves. The lesions expand and can cover large areas of the leaves. Buds, leaves, twigs, and branches up to an inch in diameter may be killed. The infected leaves fall from the tree, causing the tree to expend additional energy to re-foliate. Yearly infections by can weaken maple trees, predisposing them to other diseases and to insects. 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.

Arce (Maple) by Keiddy Urrea

La enfermedad más importante que se ataca los arboles de arce en esta época es la enfermedad conocida como antracnosis, la cual es causada por el hongo *Gloeosporium apocryptum, (Aureobasidium apocryptum)*. Este patógeno es favorecido en la primavera por las bajas temperaturas y la alta humedad relativa. Los síntomas de esta enfermedad se presentan principalmente en las hojas, donde se observan pequeñas lesiones de color marrón a lo largo de las nervaduras de las hojas, estas lesiones crecen y pueden llegar a cubrir toda la superficie de la hoja. *Gloeosporium apocryptum* puede causar la muerte de: hojas, yemas y pequeñas ramas de hasta 1 pulgada de diámetro. El material infectado, muere y cae del árbol, causando un gasto de energía a la planta, la cual tiene que producir nuevo follaje. Estas infecciones que pueden ocurrir todos los años causan predisposición del árbol a otros patógenos e insectos. Se recomienda colectar y remover todo el material infectado, si el árbol es pequeño se recomienda podar las ramas afectadas. Realizar dos aplicaciones de

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productos que contengan chlorothalonil or mancozeb or copper en el comienzo de la primavera con un intervalo de 10 a 14 días entre aplicación.

Maple Anthracnose-*Aureobasidium apocryptum*

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Maple Anthracnose-*Aureobasidium apocryptum*

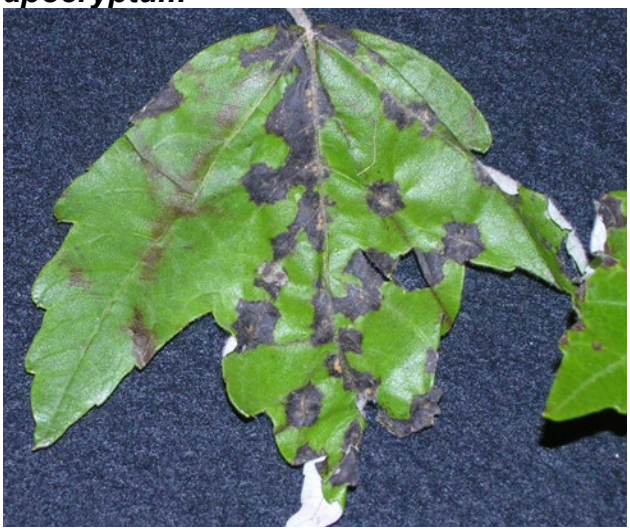

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Ash

Ash is another species of tree prone to anthracnose during cool, wet springs. This is a fungal disease caused a different species of fungus than the previously described maple anthracnose. *Discula fraxinea* is the causative agent. The fungus overwinters on infected twigs, bud scales, and leaf litter. In the spring the spores are carried by rain and wind to newly emerging leaves and tender new twigs. Symptoms are black blotches on the leaves, leaf distortion, and small purplish-brown spots on the leaves. Premature leaf fall can be dramatic when petioles are infected. The tree will re-foliate almost immediately, but year after year of infection followed by having to produce another crop of leaves eventually weakens the tree and permits readier access for insects and other pathogens. Control begins with good sanitation. All fallen leaves and twigs should be raked up and removed. Resistant cultivars should be used when possible. Blue ash *(Fraxinus quadrangulata*) is very resistant. Pumpkin (*F. tomentosa*) and American ash (F. americana) are less susceptible than green ash (F. pennsylvanica) and Chinese ash *(F. chinensis*). Preventative fungicides may be applied at bud swell in the spring followed by a second application two weeks later. Products containing chlorothalonil, or copper may be used.

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Ash Anthracnose-*Discula fraxinea*

Photo by Kevin VanPelt, University of Arkansas Cooperative Extension

Boston Ivy

Guignardia leaf spot, caused by *Guignardia bidwellii*, (*Phyllosticta ampelicida*), is a common fungal leaf spot that affects vining plants such as Boston ivy, Virginia-creeper, and species of grape. On Buckeye trees, the pathogen is a different species, *Guignardia aesculi*. Symptoms on the leaves of vining plants are angular, reddish to gray-brown spots with purplish-brown border. Tiny, black pimple-like structures that are the fruiting bodies of the fungus may be observed in the spots. Dieback may occur if the plant is severely infected. On Buckeye, symptoms first appear on leaves as water-soaked areas which turn reddish brown to brown with yellow borders. These spots coalesce, causing large blotches which curl the leaves. By late summer the whole plant appears scorched. Fallen leaves harbor the spores, so a thorough cleanup of twigs and leaves is important in control of Guignardia leaf spot. As with other leaf spot diseases, infection is intensified by humid conditions. Improving air circulation by keeping weeds and other plants away from valuable specimens helps to reduce disease. All diseased leaves and petioles should be removed. Avoid overhead irrigation. Fungicides are effective applied at bud break during wet springs. Reapply at intervals specified on the label if wet conditions persist. Whenever possible choose resistant varieties. The bottlebrush buckeye (*Aesculus parvifolia* is resistant. Homeowners may use Fertilome Broad Spectrum Lawn and Garden Fungicide, (chlorothalonil), or Hi-Yield Vegetable, Flower, Fruit, and Ornamental Fungicide,(chlorothalonil) or Ortho Maxx Garden Disease Control, (chlorothalonil), or Garden Tech Daconil Fungicide,(chlorothalonil), or Bonide Fung-onil Multipurpose Fungicide, (chlorothalonil), or Spectracide Immunox Plus, (myclobutanil & permethrin), or Bonide Rose Rx Systemic Drench, (tebuconazole), or Bio Advanced Garden-All In-One Fungicide/Insecticide/Fertilizer, (tebuconazole & imidacloprid), or Fertilome 2-N-1 Systemic

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Fungicide,(tebuconazole & imidacloprid),or Bonide Infuse Systemic for Turf and Ornamentals, (thiophanate-methyl).

Boston Ivy Leaf Spot-*Guignardia bidwellii* (*Phyllosticta ampelicida*)

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Boston Ivy Leaf Spot-*Guignardia bidwellii* (*Phyllosticta ampelicida*)

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Buckeye Leaf Blotch-*Guignardia aesculi.*

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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