



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 welcomed and appreciated.

Maple

Maple anthracnose caused by *Discula* spp. of fungi may cause unsightly discoloration of leaves and defoliation of maples. The damage usually occurs after unusually cool, wet weather during bud break. Single attacks are seldom harmful to the tree, but yearly infections can cause reduced growth and may predispose the tree to other stresses. Symptoms include killing of the buds, twigs, leaves, and branches up to an inch in diameter. The disease causes premature leaf loss. Repeated attacks over successive years can weaken the tree and make it vulnerable to borer attack and other diseases. Good sanitation plays an important role in disease control. All fallen leaves and twigs should be raked up and disposed of. If feasible, prune out dead twigs from the canopy. Fungicides may be used if the tree is valuable. Daconil or Mancozeb should be applied at bud swell, and twice afterwards 10–14 days apart.



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Apple and Pear

Fire blight is rearing its ugly head again. This is a bacterial infection caused by *Erwinia amylovora*. All members of the rose family are susceptible, including pears, apples, cotoneaster, quince, hawthorn, roses, raspberry, and pyracantha. The disease kills blossoms, leaves, twigs, limbs, and occasionally, the entire tree. Infection from previous seasons cause stem and branch cankers that become active in the spring. Cankers are, at first, water-soaked and ultimately dark brown or black. Bark covering the cankered area is sunken, unusually rough and separates from injured tissue. The cankers begin to ooze bacterial slime that is attractive to insects. Trees are vulnerable during bloom, as insects carry the bacteria from bloom to bloom and from tree to tree. Entire blossom clusters wilt and die a few weeks after infection. The spurs supporting the blossoms also die. Infection usually spreads down the twig, sometimes into a main branch. Young infected shoots form a typical shepherd's crook as they wilt. The dead tissue turns brown in apples and black in pears. Dead leaves remain on the tree. This is a difficult disease to control. Planting resistant cultivars is the best solution to controlling this disease. The most susceptible apples include York, Rome, Jonathan, Jonagold, Idared, Tydeman's Red, Gala, Fuji, Braeburn, Lodi and Liberty. Stayman and Golden Delicious cultivars are moderately resistant. Red Delicious, Winesap, Haralson, Liberty, Prima, Priscella, and Redfree apples are highly resistant. Susceptible pears are Bartlett, Bosc, D'Anjou and Clapp's Favorite, while Magness, Moonglow, Maxine and Seckel are highly resistant. Most Asian pears are moderately to highly susceptible with the exceptions of Seuri, Shinko and Singo pears. Susceptible trees should be sprayed at green tip, at 5% bloom and at 50% bloom with Agri-strep, Agri-mycin or a copper fungicide such as Kocide. All dead tissue should be pruned out 10–12 inches below the damage. Cutting tools should be dipped between cuts in a 10% bleach solution (nine cups water to one cup bleach) or in 70% alcohol. Be sure to destroy infected clippings. Don't leave them on the ground.



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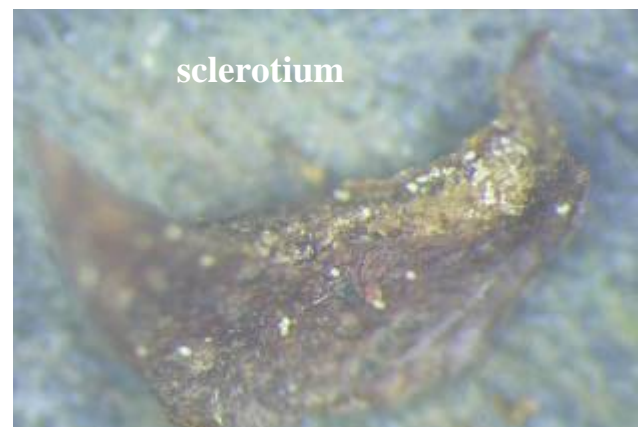
at least five years. This disease affects only the blooms and no other parts of the plants. Sanitation is very important in control of flower blight. All fallen flowers should be gathered and burned. A fresh layer of mulch can help bury remaining sclerotia. Fungicides applied once a week during bloom can significantly reduce flower blight. Bayleton, Dithane, and Zyban are labeled for Camellia flower blight.



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Camellia

Camellias are one of our loveliest blooming shrubs. They grow best in year-round semi-shaded areas. Camellias do not tolerate poorly drained soils. At the same time, they are extremely susceptible to drought because of their shallow root system. When their needs are met, Camellias are generally very healthy, with few problems. However, cool wet springs such as we've seen this season are favorable conditions for the Camellia flower blight caused by *Ciborinia camelliae*. The first symptoms are small, water-soaked spots or large, single, brown areas in the center of the flower. The spots rapidly enlarge to cover most of the bloom. The petals are slimy when touched and the diseased blooms soon fall from the plant. A rim of gray fungal material may be seen at the base of the bloom. After about 15 days, a hard, black sclerotium forms at the base of the flower. Sclerotia remain viable in the soil for

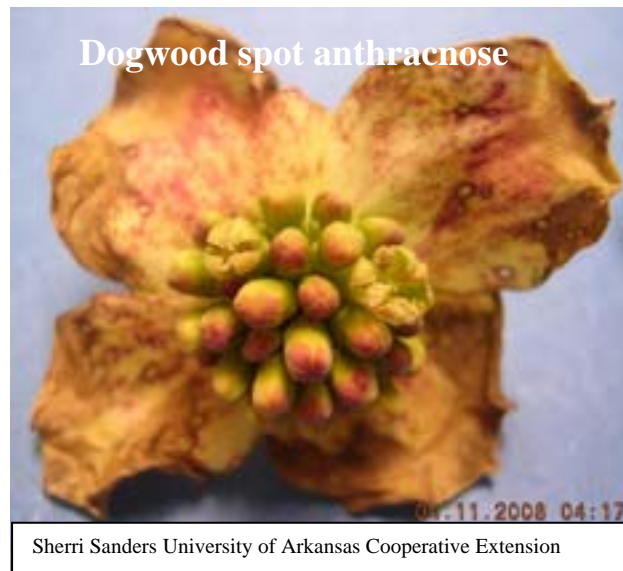


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Dogwood

Spot anthracose, caused by *Elsinoe corni*, attacks dogwood blooms and leaves in the spring. White cultivars appear to be more susceptible than pink ones. The fungus causes uniform, tiny circular lesions with purple borders and centers and almost white centers. The centers of the spots fall out later in the season, giving a shot-hole effect. In wet seasons, the lesions become so numerous that leaves or bracts may become puckered and distorted. With severe infection, buds may fail to open. However, the fungus does not cause dieback of branches. Spot anthracose may be controlled with Daconil or Mancozeb. Spraying should begin when buds begin to open and should be repeated when the bracts have fallen. Spraying should be done four weeks after bracts have fallen, and again in late summer after the flower buds for next season have formed.



Rice herbicide damage on soybean by Bob Scott

Many rice herbicides can damage soybeans. For years, propanil has injured soybeans from accidental death. Propanil typically causes rapid necrosis or burning of leaf and stem tissue (photo 1). More serious injury to soybeans can result from the accidental drift of "ALS" herbicides. These herbicides include: Regiment, Strada, Londax, Permit and Grasp. Injury from these herbicides includes stunting and chlorosis (yellowing) of leaf tissue and stems, especially at the growing points. Characteristic purple mid-veins may also develop on the back of soybean leaves. While soybeans can overcome some drift from these ALS herbicides, damage can often take a lot time to outgrow and yields are often affected.

