



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.

Field Peas

Stinkbugs can cause serious damage to Southern Peas by puncturing the pods to feed on developing beans. Research has shown that one adult stinkbug can damage up to 59 seeds. The seeds become malformed, shriveled and distorted, with puncture marks clearly visible. Cowpea curculio can cause similar symptoms. However, Curculios lay their eggs inside feeding wounds which hatch into small larvae. The larvae feed on several of the seeds before boring a hole through the pod wall to escape and pupate in the ground. Stinkbugs lay eggs on the undersides of leaves and on stems. Stinkbug eggs hatch into nymphs that look like small bugs. Stinkbug nymphs do not develop inside the pods. Flail mowing prior to pod set can prevent stinkbug outbreaks. Thiodan, Karate Z, and Mustang Max are labeled for both stinkbugs and Cowpea curculio. Insecticides should be applied when 2 stinkbug per 10 row feet are found. Curculio control should begin when pods are 1/2" long and continue at 5 day intervals. Follow label for specific intervals.

Cowpea Stinkbug damage



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Walnut

All walnuts are susceptible to Walnut Bacterial blight caused by *Xanthomonas juglandis*, with Persian walnuts being the most susceptible. New shoots, young leaves, and the husks of developing nuts can be infected from spring through fall during wet weather. The disease does the most damage if it occurs during flowering time. Younger trees are most affected. Older wood is not susceptible, and bacterial blight rarely kills the tree. However, entire nut crops can be lost when environmental conditions favor the disease during fruit set. The bacterium overwinters in buds that usually look healthy. The first symptoms are small, water-soaked spots, which enlarge, turn reddish-brown, and then black. Walnut Bacterial blight can be controlled by planting in soil with a pH above 6.0, and avoiding high rates of nitrogen and not over-watering. Damaged stems should be pruned out and destroyed. Prune only during dry weather. Copper sprays have had some effectiveness in reducing nut damage. The first copper spray should be applied at bud break, the second at female bloom, and the third at fruit set.

Walnut Bacterial blight- *Xanthomonas juglandis*



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Hydrangea

Hydrangeas are widely used in the home landscape, valued for their versatility and showy blooms. A range of sizes and colors are available. Several cultivars bloom more than once a season. Although they are for the most part hardy and healthy, several fungal diseases can attack them. Cercospora leaf spot is a common leaf pathogen on hydrangea. On big leaf hydrangea small circular purple to brown spots appear first on lower leaves, with infection gradually spreading up the plant to new leaves. The centers of older spots become tan to light gray with a purple halo. Heavily spotted leaves turn yellow and may fall to the ground. The spots on oak leaf hydrangea are often angular instead of circular. Removing diseased leaves and avoiding overhead irrigation will usually slow development of this disease. Protective fungicides may be applied with good results. Heritage or a product containing chlorothalonil, or mancozeb, or myclobutanil, or thiophanate-methyl may be used.

Rose

Knockout roses are immensely popular in the landscape. They are valued for their compact size, continuous bloom, and resistance to Rose Black spot. On the down side, they have no scent and are not immune to several other rose diseases. Rose Cercospora leaf spot, caused by *Cercospora rosicola*, produces small circular spots 1-4mm in diameter that may coalesce to form irregular, purple to reddish brown areas with pale brown, tan, or grey centers. Leaves that have many lesions turn yellow and are prematurely shed. Leaf loss usually begins at the base of the canes and gradually spreads upwards through the canopy towards the top of the plant. With rose varieties that have good resistance such as Knockout, a monthly spray with a product containing chlorothalonil or myclobutanil is effective. Seriously susceptible cultivars of rose should be sprayed at weekly intervals. Crowded plantings with poor air circulation and overhead irrigation are most likely to develop disease problems.

Hydrangea Cercospora leaf spot- *Cercospora hydrangeae*

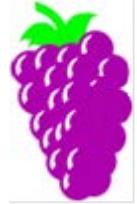


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Rose Cercospora leaf spot- *Cercospora rosicola*



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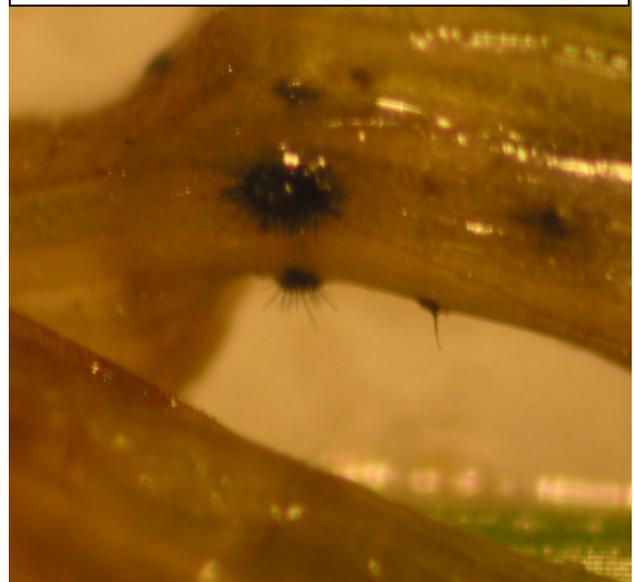
Rose Cercospora leaf spot- *Cercospora rosicola*



Paul Bachi, University of Kentucky Research and Education Center,
Bugwood.org.jpg

Homeowner fungicides that are effective are Scotts Lawn Fungus Control, Green Light Systemic Fungicide, Fertilome Systemic Fungicide, Monterey Fungi-Fighter, and Ortho Lawn Disease Control. Fungicide application timing is critical for satisfactory disease.

Turf Anthracnose-*Colletotrichum graminicola*



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Turf

Anthracnose foliar blight, caused by *Colletotrichum graminicola*, usually occurs during periods of high temperature stress. Symptoms are a reddish brown discoloration of leaves and reduced shoot density. Sometimes, but not always, oblong reddish lesions appear. A basal blight can also occur that kills the crowns. This is more likely to occur during cool, wet springs. Small patches of plants or scattered individual plants turn yellow and die. Infected stems show a water-soaked or black rot of the crowns. Large areas can eventually be affected. The fruiting bodies, (acervuli), with their distinctive hair-like structures are readily seen with a hand lens. Anthracnose is most often a problem on turf that is stressed by factors such as low mowing height, mechanical injury, high temperatures, compacted soils, poorly drained soils, and soils with inadequate nutrition. Measures should be taken to correct any of the problems mentioned above. Fungicides registered for anthracnose control are Daconil Ultrex, Daconil WeatherStik, Banner Maxx, Lynx, Endorse, Heritage, Compass, Insignia, Cleary 3336, and Chipco Signature.