



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.

Rose

Cercospora leaf spot of roses is not as well known as the extremely destructive disease Black spot of roses, but can be equally damaging on susceptible cultivars. *Cercospora pueri* and *Cercospora rosicola* are the species of *Cercospora* that cause leaf blights of rose. *Cercospora* leaf spot is characterized by tiny brown to purple circular leaf spots on the leaf surface. The centers of the spots gradually turn tan to gray. Heavily infected leaves turn yellow and fall prematurely as in Black spot. It is important to maintain good growing conditions for roses. They should receive at least six hours of direct sun daily (morning is best) in a site that allows good healthy air movement around each bush. A pH of 6.0-6.8 is ideal for roses. Roses require 2 inches of water a week for best bloom. However, overhead irrigation should be avoided as this promotes fungal diseases such as *Cercospora* leaf spot and Black spot of roses. Applications of fungicides such as Daconil, Eagle, Heritage, and Compass give excellent control when applied every 7-10 days. Homeowners may use Daconil; Bayer advanced Garden-Disease Control for Roses, Flowers, Shrubs; and Fertilome Liquid Systemic Fungicide, among others.

Rose Cercospora



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Rose Black Spot



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Hickory

Phylloxeras are small, sap-eating, greenish insects of the genus *Phylloxera*, closely related to the aphids. Phylloxeras feed on leaves and roots, and many species produce galls on deciduous trees. Their life cycle is complex; some species known to pass through may different stages. The Hickory phylloxera, *Phylloxera caryaecaulis*, attacks the stems and twigs of hickories. These insects forms galls in late spring on leaf stems and new shoots. The hollow galls contain the young Insects. In summer, they reach maturity and leave the galls, which turn black. The galls are elongated to globular and cause distortion to the shoots. Eggs remain over winter in the old galls and in crevices of the bark. A spray just before the buds swell of Malathion or insecticidal soap, or Asana, or Centric, or Phaser, or Warrior, or Thiodan gives good control. The galls do little real harm to healthy trees but can weaken those already stressed.

Grape

Unlike the Hickory phylloxera, the Grape Phylloxera, *Daktulosphaira vitifoliae*, is a very destructive pest of commercial grapes. High populations of phylloxera can result in premature defoliation, reduced shoot growth,



and reduced yield and quality of the crop. This phylloxera attacks roots as well as leaves. Sevin, Danitol, and Assail are registered for grape Phylloxera. Open galls and look for crawlers to time sprays, usually in May or mid-June.

Hickory Phylloxera



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Grape Phylloxera



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Turf

The prolonged wet weather and warmer temperatures have brought an increased number of Pythium blight samples to the clinic. Pythium species cause a number of diseases of turf grasses, attacking leaves, stems, and roots. Foliar blight causes circular spots 3/4-6.0 inches in diameter during hot, humid weather. In closely mowed lawns, the patches appear as small discolored spots, but can enlarge rapidly. On taller turf, the spots are usually larger and more irregular in shape. The leaves in these areas appear dark and water-soaked in the mornings. The leaves feel oily when rubbed between the fingers, giving rise to the common name Grease spot. When humidity remains high, the diseased leaves become covered with a white or gray, cottony mycelium. On Bent grass or Bluegrass, the spots initially appear orange or bronze-colored, with or without gray "smoke rings". Infected leaves turn light brown to tan and become shriveled and matted when dry. Numerous patches may coalesce into large irregular areas of dead grass. Pythium blight typically appears in low lying or wetter areas of the turf. Pythium also causes crown and root rots. Symptoms are a general decline of the grass, with thinning, off-color, and slowed growth. This can occur in small patches, or affect large areas. On golf greens, the patches appear as small, diffuse yellow patches of turf. The patches may coalesce into larger patches of reddish brown turf. Roots and stolons may be blackened and rotted, although sometimes the roots will appear quite normal. Water management is the most important aspect of control of pythium diseases. The pathogen must have free water to infect and cause disease. Irrigate early in the day so turf can dry. De-thatching is recommended if thatch depth exceeds 1/2 inch. Avoid heavy applications of nitrogen in spring and summer. Avoid mowing in moist, hot weather. Heritage, Koban, Terrazole, Chipco Alette Signature, Prodigy, Fore, Subdue Maxx, Banol, Alude, and Junction are labeled for the treatment of Pythium blight. Homeowners may use Mancozeb or Monterey Alette.



Pythium root rot



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Fabraea fruit spot



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Fabraea leaf spot



Sherrie Smith University of Arkansas Cooperative Extension

Pear

Fabraea leaf spot, *Fabraea maculata*, is particularly severe on pear and quince, although it is sometimes also found on Apple, Amelanchier, Chaenomeles, Cotoneaster, Crataegus, Mespilus, Photinia, Pyracantha, and Sorbus. This disease is also known as pear leaf blight, leaf spot, black spot, leaf scald, fruit spot, and quince leaf spot. This disease on photinia is called Entomosporium leaf spot. On young leaves, the lesions first appear as tiny reddish-purple spots on wither surface. The spots get larger, turn brown to dark brown with a yellow halo, and fall prematurely. Characteristically, leaves are lost at the bottom of the tree first. Sometimes the tree becomes almost naked except for some foliage at the very top of the tree. Fruit lesions resemble leaf lesions, except severely infected fruit may crack. Current year's shoots may get superficial cankers but these are non-persistent. Severe infections can reduce tree vigor and yield. Fabraea leaf spot can be controlled with three to five fungicide applications during the growing season. Sprays are not nearly as effective unless fallen leaves and fruit are cleaned up as they provide most of the inoculum for new infections. Ferbam, Rubigan, Mancozeb, Ziram, Procure, Sovran, Flint, and Pristine are effective against Fabraea leaf spot.