

Plant Clinic Fact Sheet: **Common Deciduous Tree Diseases in Illinois**



Anthracnose

Anthracnose diseases are caused by a number of different fungi which produce a specific type of fruiting body. Tree anthracnose diseases affect a wide variety of hosts with maple (pictured), oak, sycamore, and ash trees being the most common in Illinois. Large, necrotic lesions with distinct, wavy margins are produced on leaves. Tree anthracnose diseases are favored by cool, wet weather, and symptoms are usually seen in early spring. The pathogen can overwinter in branch cankers on some hosts. While severe infestations can cause complete defoliation

of a tree, it is unusual for these diseases to cause lasting damage and most trees will leaf out again after a few weeks. Sanitation, maintaining tree vigor, and pruning out cankers are recommended for managing anthracnose diseases.

Rusts

There are three common fungal rust pathogens in the genus *Gymnosporangium* that affect deciduous trees. Apple, crabapple, pear, hawthorn (pictured), quince, and serviceberry trees are the most common hosts in Illinois. All three diseases require juniper and red cedar plants as alternate hosts. Spots appear on the upper surface of deciduous leaves in early summer. As the season progresses, the lesions develop a dark orange or brown center surrounded by a yellow halo. Severe infections cause premature defoliation while repeat infections stress the host and reduce vitality. Management for these diseases consists of planting resistant varieties, removing unwanted hosts, and fungicide applications.



Fire Blight

Fire blight is a bacterial disease caused by *Erwinia amylovora* that affects plants in the Rosaceae family. The most common hosts in Illinois are apple, crabapple, pear, hawthorn, quince, and serviceberry. Characteristic symptoms include "shepherd's crooks" at the ends of branches (pictured), and sunken cankers along infected branches. The disease decreases the aesthetic value and fruit production of infected trees, and may be lethal to highly susceptible varieties. Bacterial blast is a disease of minor concern which produces similar symptoms to fire blight; laboratory testing is recommended to confirm the diagnosis. Management techniques for fire blight include pruning out diseased branches, planting resistant varieties, and antibiotic or copper protectant sprays.

