

Tree Leaf Diseases Abundant This Spring

By Larry Caplan, Extension Horticulture Educator, Vanderburgh County, IN

For the Evansville Courier and Press, May 21, 2017

The rainy period in April hit us at a perfect time for a wide range of diseases of trees and landscape plants. I had hoped that the early warmup, which had been fairly dry in the tristate, would let us dodge these disease problems. Alas, that didn't happen.

Apple scab is one of the most noticeable diseases we're seeing right now. This fungus disease hits both apples and crabapples. Irregular brown to olive-green spots develop on the leaves, and sometimes the fruit as well. Infected leaves become yellow, then drop. Older, susceptible varieties of apples and crabs will look more dead than alive for most of the summer. A related fungus can cause black spot on rose.

Scab can be reduced with good sanitation. Fallen leaves should be raked up and destroyed as they drop. Fungicides can be used, but they will require multiple applications starting at the green tip stage and continuing every 7 to 10 days until the weather turns hot and dry. For crabapples, use chlorothalonil (Daconil); for apple orchards, use only one of the following: Captan, Immunox, Wettable Sulfur, or home orchard sprays. Avoid using any product that contains insecticides during the bloom period.

The best way to control apple scab is to replace your old, susceptible trees with some of the newer scab-resistant cultivars. Most of the crabs and apples sold by reputable garden centers and mail order catalogs are scab-resistant, but definitely check the tag or description to confirm this.

Fire blight is another disease that is hitting apples and related plants, including crabs, pears, quince, hawthorn, and firethorn. Fire blight is caused by a bacteria, which overwinters in cankers on the branches. In the spring, the bacteria oozes out of the cankers. It enters the new growth through the blossoms or through any injuries to the bark, such as from hail or pruning equipment. Fire blight is most serious during warm, wet weather.

Infected flowers and flower stems wilt and turn brown or black. The infection can cause shoots to wilt and form a shepherd's crook at the end of each infected shoot. Dead, blackened leaves and fruit cling to branches throughout the season, giving the tree a scorched appearance, hence the name "fire blight." If the bacteria makes it into the main trunk, it can kill the tree.

Management for fire blight is very difficult. The most important first step would be to plant species and varieties that are known to be resistant or immune to the disease. My office has lists that contain this information, so email or call me if you're ready to replace your current trees.

Chemical control is generally not recommended in the home landscape. It requires spraying the antibiotic streptomycin several times during bloom, and is not super effective. Pruning during

the growing season can actually spread the bacteria throughout the rest of the landscape, so hold off until winter time.

For more information on disease and pest problems in the landscape, contact the Purdue Extension Service at (812) 435-5287.