Anthracnose

Anthracnose is a foliar disease caused by a series of fungi that affect shrubs, shade trees and garden plants. The plant will dictate which fungus causes the anthracnose. For example on cucumber it could be *Colletotrichum* while on trees it might be *Discula* (dogwood), *Apiognomonia* (oak or sycamore) or *Kabatiella* (maple). The fungus overwinters in debris or in cankers producing spores in April and May when it is cool and moist. These form small spots to large blotches on foliage.

On woody plants they can cause cankers on the stems, as with roses, which will kill the stem and overwinter there. Trees that develop spots from anthracnose will often drop leaves in June or July. In some cases these may re-grow. If trees are severely affected year after year this can weaken a tree. The infection will overwinter in cankers, buds and in fallen debris.

Trees often infected are maple, sycamore, dogwood and oak. Of these dogwood or Japanese maple are the two that may warrant chemical control. Control strategies for trees include pruning out the infected branches and collecting fallen leaves, burning any debris. Larger trees do not usually need a control with spray so long as proper water and fertility are provided for strength and healthy growth. For Japanese maple or dogwood fungicide can be applied using three applications in early spring, applying the first before leaf buds open. A professional service may be needed to apply fungicides which include mancozeb, chlorothalonil, thiophanatemethyl and propiconazole.

Vegetable plants that are most often attacked by anthracnose include beans, cucumber, pepper, pumpkin, squash, tomato and watermelon. In this case the disease can be deadly as it will attack older leaves causing spots or large lesions which will die and fall. This disease is sometimes mistaken for an insect when the center of each infected spot falls out leaving holes in the leaf. Stems can be infected on smaller seedlings, causing death of the plant. If the disease is severe it will defoliate the plant which will not recover. It can also attack the fruit causing sunken areas.

The disease needs moisture to cause infection and will spread with splashing water. The fungi will overwinter in debris and decomposing organic matter. Control the disease by removing any debris and burning. Do not overcrowd plants and make sure to rotate vegetable families from year to year in the garden. Use fungicides such as Chlorothalonil or those containing copper before symptoms occur if the disease has been present in the past. Purchasing disease resistant varieties can be the best defense against the disease.

The Extension office is open Monday - Friday, located in Kennett, Missouri at 233 North Main Street. For horticulture questions contact the horticulture specialist at 573-686-8064. MU is an equal opportunity/ADA institution.