



# Anthracnose:

## Leaf Fungal Diseases

### What is Anthracnose?

Anthracnose is the name given to a group of fungal diseases that cause leaf spots, blotches along leaf veins and distortion of the leaves. Infected leaves eventually drop off the tree. Some of these fungi are capable of infecting twigs, causing lesions and twig dieback.

### Which plants are susceptible?

In this part of the country anthracnose infections are seen most commonly on these trees and shrubs:

green ash	sycamore	linden
white ash	elm	hawthorn
white oak	willow	dogwood
N. pin oak	poplar	rhododendron
N. red oak	river birch	azalea
bicolor oak	aspen	hickory
Norway maple	catalpa	walnut
sugar maple	euonymus	currant
European Birch	lilac	mountainash

*Disease is seen most frequently in trees in first column*

### Infection and spread of anthracnose

Trees and shrubs are most vulnerable to infection by anthracnose in the spring as the leaves are emerging. Weather conditions play a large role in the severity of the disease. In years when the spring is cool and wet the disease can reach epidemic proportions. Conversely, in springs that are dry and warm up quickly, the disease has little impact on the health of the plants.

The disease requires moisture on the leaf surface in order to initiate infection. The length

of time it takes a fungal spore on the leaf surface to germinate and move into the leaf is regulated by temperature. Symptoms of anthracnose tend to be most severe on the lower and inside portions of the canopy as these areas stay wet longer than the more exposed areas of the plant. It is important that the spray from sprinkler systems does not wet the foliage of susceptible plants.

### Control

Anthracnose has the ability to infect beyond the leaf surface into the twigs causing cankers which may eventually kill the twig. These cankers as well as the fallen leaves are the source of the spores that spread the disease. It is advisable to clean up any fallen leaves and prune out deadwood to reduce the amount of spores in the immediate area.

The degree of infection is higher on trees and shrubs that are stressed due to poor nutrition. Plants that have been defoliated or have dead twigs and branches from previous infections will benefit from an application of fertilizer to increase plant vigor.

Spraying trees and shrubs with a fungicide is advisable for plants that have been defoliated in previous years. A single year of defoliation generally does not adversely effect the health of vigorously growing plants. However, repeated defoliations are stressful and decrease the plant's ability to defend itself against pests.

Fungicides must be applied before infections occur. Even if the symptoms are not yet present, spraying after infection will not be as effective.