



Anthracnose of Shade Trees

Anthracnose is a term applied to a group of foliage diseases that affect most hardwood tree species throughout the United States and Canada. Anthracnose is most prevalent and destructive in early spring when cool, moist weather conditions favor disease development. On highly susceptible species such as **sycamores, oaks (especially white oaks), maples, ash and walnut**, anthracnose may result in leaf and shoot blight, defoliation and even twig dieback. Repeat infections can cause gradual decline in tree health.



**Figure 1: Sycamore
Anthracnose**

Foliar symptoms of anthracnose vary considerably among host species. On sycamore, white oaks and maple, large irregular brown to purplish lesions (dead areas) develop usually along leaf veins. On ash, black oaks, **dogwood** and walnut, discrete curricular or angular lesions occur on leaves. Lesions may also develop on flowers and fruit of some hosts (Figure 2).

Lesions on the foliage often coalesce, resulting in distortion, blight and defoliation. Blight and defoliation usually occur in early spring when leaves are small and succulent. Crowns of severely diseased trees appear thin and scrubby. Trees defoliated by anthracnose usually produce a second set of leaves in late spring or summer. On some tree species, including sycamore, white oak and maple, buds and succulent new shoots may be killed as a result of anthracnose. Cankers may also form on twigs and small branches resulting in twig distortion and dieback.



**Figure 2: Anthracnose on
Dogwood flower.**

Management: Sanitation practices and periodic pruning will provide some degree of suppression. Remove fallen leaves and twigs to reduce overwintering fungi that cause anthracnose. Periodic pruning will allow optimum light and air penetration of the crown, which will inhibit disease development by allowing more rapid drying of plant tissue following rains. High nitrogen fertilization will also suppress disease severity.

Properly timed fungicide applications will help suppress anthracnose. Fungicides are applied at periodic intervals during the spring in order to help protect developing plant tissue from infection. Once infection occurs, however, spray treatments are ineffective in preventing further disease development.