



Anthracnose of Willow

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Anthracnose is a term applied to a group of foliage diseases that affect many hardwood tree species. Within the UK anthracnose of willow caused by the fungus *Marssonina salicicola* has become especially prevalent over the past few years. This disease is most prevalent and destructive in early spring when cool, moist weather conditions favour disease development. Infection may result in leaf and shoot blight, defoliation and twig dieback. Several consecutive years of defoliation will severely weaken willows, predisposing them to invasion by insect pests and secondary disease causing organisms such as canker and root decay fungi.

SYMPTOMS

Foliar symptoms include irregular brown to purplish lesions (dead areas) develop usually along leaf veins. Alternately discrete curricular or angular lesions may occur on leaves.

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. Often, the foliage is tufted on the ends of branches, while the centre of the tree is defoliated. Willows defoliated by anthracnose usually produce a second set of leaves in late spring or summer. 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 1).



Figure 1. Twig death caused by anthracnose

CONTROL

Cultural: Diseased leaves should be collected and destroyed and diseased twigs and branches pruned out and destroyed. Periodic pruning will allow light and air penetrations of the crown, which will inhibit disease development by allowing more rapid drying of plant tissue following rains. Fertilisation will maintain tree vigour and help offset the deleterious effects of any premature defoliation.

Chemical: Properly timed fungicide applications in Spring (April-May) will help control anthracnose. Once infection occurs, however, chemical sprays are generally limited. Trunk injections of fungicide can provide many years of protection.