

Black Canker and Scab of Willow

Identification, Biology and Management

Black canker and scab of willow (*Salix*) are two diseases that often occur together. Willow blight is often used in reference to simultaneous infections. Both diseases can cause major dieback, defoliation, and tree death in severe cases. Black canker and scab occur throughout the Appalachian and Great Lakes regions and the Pacific Northwest.

Willow scab is caused by the fungus *Venturia saliciperda*. The fungus overwinters on killed twigs and will only infect new shoots next season. Moist weather in spring encourages disease development. Leaves and twigs become less susceptible to infection as they age.



Willow Scab Leaf Symptoms

Black canker is caused by the fungus *Glomerella miyabeana*. This disease occurs later in the season and can cause cankers on larger woody stems than willow scab. The pathogen overwinters as spores on killed twigs.

SYMPTOMS

Symptoms caused by willow scab and black canker are similar. Leaf symptoms include dark brown to black colored spots (lesions). Leaves eventually shrivel, droop, and die as the disease progresses down the leaf petiole toward the stem. Eventually the disease begins to colonize the stem tissue at the base of the leaf petiole to form dark brown to black cankers. In the case of willow scab, an olive-brown velvet spore masses will form on dead leaf and petiole tissue. Black canker produces a peach colored spore mass in early summer on cankers.



Symptoms of black canker and scab.

CONTROL: Black canker and willow scab can be controlled through a combination of cultural and chemical treatments. Chemical treatments consist of properly timed fungicide applications to reduce pathogen infection and symptom development. Pruning out infected stems and twigs and fertilization are effective cultural treatments that will reduce disease severity and improve tree vigor.