

FUNGUS ON EVERGREENS

-While a healthy spruce will retain its needles for 5-7 years, spruce infected by several different fungal pathogens may only hold the current year's needles.
 -To help prevent infection: do not allow sprinklers to spray the tree directly, plant in sunny locations, and consistently treat with fungicide in cool, wet springs.

Rhizosphaera Needle Cast

Black Hills & blue spruce are the most susceptible, while Norway spruce are relatively resistant. A spray can only protect uninfected foliage, it cannot "cure" existing infections. Fungicide application programs must occur a minimum of three consecutive years to be successful. Severe defoliation can occur quite rapidly and without indication that the disease is even present. Needles closest to the trunk are affected while tips of branches remain green. Tiny black spots arranged in neat rows are visible on infected needles, which turn purplish-brown in early spring. Damage typically starts on lower branches and moves up the tree. Shaded North sides of a tree are usually infected first, since those needles stay wet longer after rain or watering.

Lirula Needle Blight

Black hills spruce are the most susceptible species but it can affect blue and Norway spruce. In late summer, second year needles become discolored, yellow/brown. In some cases, horizontal black bands form across infected needles. The lower branches are the first infected. Needles eventually turn grayish-brown but remain attached to the tree for several years.

Sirococcus Shoot Blight

Affects the current year's growth on spruce, pine and hem-lock. Infected needles become chlorotic, die, turn reddish-brown, and drop. Growth in the infected tissue is stopped, causing hook-shaped tip growth. Small, black fruiting bodies form on killed tissue in late summer. This disease often causes tips of branches to be killed randomly throughout the canopy. It may be mistaken as herbicide or winter damage. Infected shoots should be clipped and destroyed to prevent spore dispersal.

Sneed-Spruce Needle Drop

A disorder known as SNEED or spruce needle drop will affect Norway, Black Hills, and Colorado spruce. The symptoms are yellowing and browning of older needles by the end of the summer. The name indicates an almost "overnight" drop of needles except the newest at the tips of the branches. The needles themselves have no markings, but the twigs or branches are covered with tiny pimple-like spores. Poor planting environments, wet soils, compacted soils, drought, heat, or poor planting may influence this condition.

Treatment

Spray Fertilome Broad Spectrum Fungicide (Chlorothalonil) on the needles when they are 1/2"-2" long (May). A second spray should be 3-4 weeks later. If the spring is wet and cool, shorten the spray intervals and repeat every 10-14 days through early July. Spray the entire tree to the point of runoff.