

Sphaeropsis Shoot Blight and Canker

Fact Sheet

A fungal disease that causes shoot and stem damage

Sphaeropsis is a fungus that commonly infects Red, Austrian, Scots, Mugo, White, and Ponderosa pine, spruce; and Douglas fir. The fungus grows and lives in new shoots of conifers. It eventually infects the main stem of the tree and creates cankers.

Diseased trees can be managed

Spruce, pine, and fir are most susceptible to Sphaeropsis Shoot Blight and Cankers. Once the tree is diseased it can never be cured; however, treatment options are available. These options are dependent upon the stage of disease.

What to look for

Shoot Blight Stage:

- Shoots have brown tips.
- Black fruiting bodies (pycnidia) at base of needles and on old cones.

Canker Stage:

- Cankers that are seeping sap.
- Gray to black sapwood staining.
- Black fruiting bodies under the bark in the canker.

Life Cycle

- Fruiting bodies form in the fall and the following spring on the bark, needles, sheaths and cone scales.
- Fungal spores are dispersed by splashing water.
- Infection can occur throughout the growing season.
- Both blights and cankers can exist on the same tree.

Treatment and Prevention

- Reduce tree stress by reducing or enhancing watering.
- Mulch tree or treat with Root Enhancement System®.
- Reduce source of the disease through proper pruning.
- While this disease is in the "blight stage" on the candles, it can be controlled with an annual fungicidal spray treatment.
- When the disease is in the "canker stage" on the main tree stem, the only management available is to increase tree vigor and enhance its ability to callus over the infected tissues. This procedure will not cure the disease, but will increase its longevity in the landscape.
- Treatment with Cambistat® growth regulator may help control the effects of Sphaeropsis.



Sphaeropsis Shoot Blights
University of Illinois Extension



Resinous canker (bark removed).
USDA Forest Service, Bugwood.org



Sphaeropsis fungus on an Austrian
Pine Cone

