

## Sphaeropsis Shoot Blight and Canker

Brian Hudelson, UW-Madison Plant Pathology

**What is Sphaeropsis shoot blight and canker?** *Sphaeropsis* shoot blight and canker is one of the most common fungal diseases of Austrian pine in urban settings in Wisconsin. This disease can also affect other pines including red, jack, Scots and mugo pine, as well as other conifers including cedars, cypresses, firs, spruces and junipers.



*Sphaeropsis* shoot blight and canker killing branch tips of Austrian pine.

**What does Sphaeropsis shoot blight and canker look like?** Initially you may notice branch tips that ooze a large amount of resin. Eventually, these branch tips brown and die. Often, the newest needles on these dead branches will be of different lengths. As the disease progresses, sunken or swollen, discolored areas (called cankers) may form on infected twigs. Heavy resin flow and an absence of tunnels help distinguish *Sphaeropsis* shoot blight and canker from damage caused by insect pests.

**Where does Sphaeropsis shoot blight and canker come from?** *Sphaeropsis* shoot blight and canker is caused by the fungus *Sphaeropsis sapinea* (formerly known as *Diplodia pinea*). The fungus survives in infected shoots and pinecones where it produces small, black fruiting bodies and dark-colored spores.

**How do I save a tree infected with Sphaeropsis shoot blight and canker?** Immediately remove and destroy diseased branch tips. Prune branches 6-8 inches below the point

where they are obviously infected. Prune only in dry weather and clean your shears (e.g., by dipping them in a 10% bleach solution) between cuts so you don't move the fungus from branch to branch. Also, where possible, remove and destroy pinecones from infected trees.

**How do I avoid problems with Sphaeropsis shoot blight and canker in the future?** Stressed trees are more likely to be infected by *Sphaeropsis*. Therefore, minimize any stresses to established conifers. Water your trees adequately, particularly during dry periods. When planting new trees, be sure to allow ample space for roots to grow, avoid compacting the soil around your tree and make sure there is adequate soil drainage. Also fertilize your conifers properly (every 3-5 years), but don't overfertilize, particularly with nitrogen. Finally, you may want to apply a fungicide containing thiophanate methyl at 14 day intervals between bud break and full shoot elongation to help prevent infections. Be sure to read and follow all label instructions of the fungicide that you select to insure that you use the fungicide in the safest and most effective manner possible.

**For more information on Sphaeropsis shoot blight and canker:** See UW-Extension Bulletin A3643, or contact your county Extension agent: