

# Disease

## Diplodia Shoot Blight and Canker

*Diplodia sapinea*



### A fungal disease that causes shoot and stem damage

Diplodia is a fungus that commonly infects Red, Austrian, Scots, Mugo, White, and Ponderosa pine, spruce; and Douglas fir. The fungus grows and subsists 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 Diplodia 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<sup>®</sup>.
- 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 tree, but will increase its longevity in the landscape.



Diplodia Shoot Blights  
University of Illinois Extension



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



Diplodia fungus on an Austrian Pine Cone  
Rainbow Treecare Photo Library



*When caring for trees it is important to make a complete evaluation of all environmental conditions to accurately diagnose all stress factors and prescribe care based on specific circumstances. This prescriptive care will help your tree meet its full potential.*

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