

## Dothistroma Needle Blight

### The Fungus

Dothistroma is a fungus that affects pine trees during their growing season, and after several years will kill the tree. Red pine and Scots pine are resistant, while Austrian pine and Ponderosa pine are most severely affected<sup>1</sup>.



*Infected pine needles die at the tips, staying green at the base (2).*



*Needle spots and tip death shown on an infected pine tree limb (1).*

### Signs & Symptoms

- Reddish brown spots appear on the needles and form bands around the needle<sup>2</sup>.
- The transition from the infected section at the tip of the needle to the live tissue at the base is very abrupt.
- Needles on lower limbs make up the majority of the infected needles.

### Positive Identification

Dothistroma needle blight often requires lab testing in order to be identified. For more information on the UMN Plant Disease Clinic, visit <https://pdc.umn.edu/>.

### Implications for Minnesota

Dothistroma is slow-moving fungus and takes years to kill an infected tree. It would take prolonged repeated infection to have a serious impact on the state of the tree canopy or landscape<sup>1</sup>.

### Management & Control Considerations

- Do not overcrowd trees when planting to reduce spread of the fungus.
- Prune the lower branches of trees.
- Prevent weed growth around base of tree by placing a thick layer of wood mulch<sup>1</sup>.
- Fungicides can be used to protect pine trees.

### Sources

- 1) <https://extension.umn.edu/plant-diseases/dothistroma-needle-blight>
- 2) <https://hort.extension.wisc.edu/articles/dothistroma-needle-blight/>