

Cytospora Canker

The Fungus

Cytospora Canker (*Leucostoma kunzei*) is a fungal infection that can affect all species of spruce in Minnesota, Colorado blue spruce (*Picea pungens*) being especially susceptible¹. Although the fungus does not typically kill the infected tree, it can significantly reduce its aesthetic value in the landscape.

Signs & Symptoms

- Needles turn brown to purple and fall off, beginning at branch tips.
- Cankers form on branches near the trunk, exuding a thick layer of resin.
- Wood beneath infected area is dark in contrast to healthy wood around the canker².
- Thread-like yellow spore tendrils may be present on infected branches¹.

Positive Identification

Cankers are often found on mature trees. Dying or dead infected branches show needle discoloration, and cankers can be seen near the trunk covered in a layer of resin.



Branch loss due to *Cytospora* (1).



Branch canker caused by *Cytospora* shown covered in resin (1).

Implications for Minnesota

Cytospora seldom kills spruce trees; however, physical the appearance of the tree will sustain significant damage and deformities with prolonged infection. Trees with severe damage are often removed.

Management & Control Considerations

- Annually monitor spruce for symptoms.
- Remove and dispose of affected limbs in dry weather to reduce spread of the canker.
- Plant more *Cytospora* resistant spruces such as Norway or white spruce¹.
- Chemical control is not recommended for treating *Cytospora* canker.

Sources

- 1) <https://extension.umn.edu/plant-diseases/cytospora-canker>
- 2) <https://www.missouribotanicalgarden.org/gardens-gardening/your-garden/help-for-the-home-gardener/advice-tips-resources/pests-and-problems/diseases/cankers/cytospora-canker.aspx>