

Cytospora Canker

TREE DOCTOR TIPS

Cytospora Canker (*Cytospora kunzei*)

DESCRIPTION:

The plant pathogenic fungus *Leucostoma kunzei* (formerly *Valsa kunzei*) is the causal agent of cytospora canker, a disease of some conifers found in the Northern Hemisphere, predominantly on Norway spruce (*Picea abies*) and Colorado blue spruce (*Picea pungens*).

HOSTS:

Blue spruce, Norway spruce, hemlock, red cedar, fir and white pine.

BIOLOGY AND SYMPTOMS:

The infection starts on the lower limbs and gradually works up the tree limb by limb. The needles go from a dull yellowish-green to a purple-brown, eventually dropping, leaving branches bare. The branches dry out because the infection blocks normal water movement through the tree. The fungus, *Cytospora kunzei* is a weak parasite that primarily attacks weakened trees. Drought, low fertility, mechanical injury, insect feeding, and poor soil conditions are all examples of factors that can make trees more vulnerable to cytospora canker. Cytospora is usually found on trees over 15 years old. The spores, which are produced in cankered areas, can disseminate via rain, wind and insects.

MANAGEMENT:

There is no known cure for cytospora canker. Fungicide treatments are not recommended. The Davey Institute recommends maintaining the health and vitality of susceptible trees to manage the disease; healthy trees are less susceptible to cytospora canker. If infected, good tree health will slow the progress of the disease. During periods of drought, provide supplemental watering for landscaped trees. Remove infected branches. Cut at least a foot below the canker and sterilize pruning tools between cuts. To reduce spore spread, avoid pruning during wet weather. Removing dead and infected limbs during the dormant season is recommended.



FIGURE A. CYTOSPORA CANKER SIGNS ON BLUE SPRUCE

The scientists at **The Davey Institute** laboratory and research facility support our arborists and technicians in diagnosing and prescribing based on the latest arboricultural science. For specific treatment and application details, your arborist may consult *The Davey Institute PHC Handbook*.

