## Cytospora canker

Cause: Cytospora kunzei (fungus)

**Hosts:** The primary host is Colorado (blue) spruce. Other spruces, Douglas-fir, balsam fir, red and white pines, hemlock and larch, are infrequently attacked.

**Symptoms:** Wood under the cankered areas of the bark is dark and resin-soaked, compared with light-

colored, healthy tissue.



fungus overwinters in twig and branch cankers. Spores released from fruiting bodies during the growing season infect other branches, particularly at wound sites Trees 15 to 20 years old (or older) suffering from drought, compaction, or poor site conditions are prime targets. Trees aren't usually killed outright, but the loss of major branches destroys the ornamental value of the tree.

How it's spread: The



White patches of resin ooze from cankered areas on the stem.

## Cytospora canker - continued

Management: Improve tree vigor — a layer of mulch around the base retains moisture and helps protect lower branches from wounding by lawnmowers. Keep trees watered during drought periods. Prune out diseased branches when the foliage and wood is dry; clean tools with bleach or other disinfectant after cutting out diseased wood and before cutting healthy tissue.



Needles become off- color, turn purple, then brown and begin to drop off on one or more large branches, usually in the lower part of the tree.