

# Cankers

## **Cryptosphaeria Canker** *Cryptosphaeria lignyota* (Fr.:Fr.) Auersw.

**Host:** Aspen

**Symptoms/signs:** Young infections and canker margins are orange to light brown. The cankers are long (3 meters or more) and narrow (2-10 centimeters wide), appearing as grayish depressions in the bark, with callus ridges forming at the edge. Dead bark adheres to the canker face. Inner bark is black and sooty with obvious fibers and small, light-colored flecks (<2 mm). Light orange, tiny asexual fruiting bodies may form near the edge of the canker. Clusters of black, flask-shaped sexual fruiting bodies (perithecia) develop beneath bark dead for more than 1 year. *Cryptosphaeria populina* also causes stain in the sapwood and heartwood and causes a yellow-brown, mottled decay.

**Biology:** Spores of *Cryptosphaeria populina* are released during wet weather and infect fresh wounds in the inner bark and wood. The fungus eventually colonizes sapwood and



Figure 216. *Cryptosphaeria* colonizes sapwood and cambium.

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heartwood, causing discoloration and decay, before penetrating the bark and causing a canker. Brown, mottled decay develops in the central part of the column of discolored wood. Mortality occurs not from bark necrosis as it may seem, but because the pathogen kills a large volume of sapwood.

**Effects:** Trees up to 15 centimeters d.b.h. may be killed within 3 years, with older trees taking longer to girdle. Branch cankers are often found on large trees, where they girdle the branch and enlarge onto the trunk. The decay associated with the canker predisposes infected trees to wind breakage.

**Similar Insects and Diseases:** Bark that has been dead for more than 1 year from *C. lignyota* is black, stringy, and sooty-like, similar to sooty-bark canker (*E. pruinosa*). However, they are easy to distinguish, because of the lenticular-shaped fruiting structures and barber pole design of *E. pruinosa*, both lacking in a *Cryptosphaeria* canker.

**References:** 38, 44, 92