Cane Diseases of Brambles

*Leptosphaeria coniothyrium, Elsinoe veneta, and Didymella applanata*

**Introduction**

Several fungi commonly cause cane diseases on brambles.

**CANE BLIGHT** is caused by the fungus *Leptosphaeria coniothyrium*. Although cane blight may occur on all brambles it is most common on black raspberry.

**ANTHRACNOSE** is sometimes called cane spot, this disease is caused by the fungus *Elsinoe veneta*. Anthracnose is a serious disease of purple and black raspberries. The anthracnose fungus may also infect blackberries. Red raspberries, however, are not seriously affected by this disease.

**SPUR BLIGHT** is caused by the fungus *Didymella applanata*. All raspberries can become diseased, but red raspberries are more prone to infection by the spur blight fungus than other brambles. Blackberries are not affected.

**Symptoms and Signs**

**CANE BLIGHT** On new canes, symptoms often do not show up until late in the growing season. Dark brown cankers appear on the canes and are always associated with a wound, pruning cut, or stub (Figs. 1 & 2). Fruiting canes that are infected produce weak growth and wilt as fruit begins to ripen. Dark brown cankers may be found on the canes below the weak or wilted growth.

**ANTHRACNOSE** In the spring, distinct, small, purple spots appear on the young canes. As the spots enlarge to 1/4" diameter, their centers become grayish and their borders remain purplish. When many spots occur on a cane, they may grow together weakening or girdling/killing the new cane. Canes weakened by anthracnose infections may die during the winter or the following year before fruiting. Leaves and berries may be infected by this fungus. Tiny spots with light gray centers and purple margins will form on leaves. Berries that become infected will rot, appear misshapen, and have poor flavor.

**Figure 1: Cane Blight caused by *Leptosphaeria coniothyrium*** (provided by the Plant Disease Diagnostic Clinic, Cornell University)

**SPUR BLIGHT** shows up on new growth in mid to late summer as dark brown or purplish lesions around the buds. Infected buds slowly shrivel and the following spring produce weak shoots or may fail to grow altogether. By this time the brown or purplish lesions around the buds will appear ashy gray. Cracks and splits may form in the bark as the blight progresses.

**Disease Cycle**

The **CANE BLIGHT** fungus produces spores in tiny, black structures in the diseased bark especially near the bud. These structures release spores during wet
Management Strategies

The same cultural management practices may be used for spur blight, anthracnose, and cane blight. In March or April before new canes emerge, prune dead, diseased, or weak canes and destroy or trash them. Since these diseases are favored by moist conditions, keep the brambles properly spaced and pruned so they will dry quickly after rain or irrigation.

Red raspberry varieties that are most susceptible to spur blight include Royalty, Titan, Taylor, Canby, Skeena, Matsqui, Williamette, Reveille, and Sentry. Brandywine, Killarney, Latham, Madawaska, Festival, Hilton, and Newburg are less susceptible to the disease.

Some lime sulfur products may also be registered to manage anthracnose. In New York, Lilly Miller Polysul Summer & Dormant Spray Concentrate is registered for this use in the Home Garden. Apply according to label directions. The first application should be applied when no more than 1/2 inch of green is pushing out of the buds. Sprays applied after the green tips show 3/4" or more may burn the leaves.

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