

Plant Disease Notes

Fungal Gummosis of Peaches

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Three species of the fungus *Botryosphaeria* have been shown to cause fungal Gummosis. The disease gets its name from the large amount of gum oozing from diseased tissue. The disease causes a general decline of infected trees and is often confused with mechanical injury, insect borers, and other tree diseases.

Symptoms. The earliest symptom appears on young bark as small spots with oozing resin, generally centered on a lenticel. The fungus kills the tissue just under the bark beneath these gummy deposits, causing sunken lesions about $\frac{1}{2}$ to $\frac{3}{4}$ inch in diameter. Lesions become impregnated with gum, and the excess accumulates in blobs on the surface of the bark. Other lesions not exuding gum are also often present. When lesions become numerous, they often merge to form large, dead, blackened, cankered areas of bark tissue. Layers of diseased bark peel off as the tree grows, but may remain attached to the tree by the blackened gummy exudate, giving the canker a crusty, flaky appearance. Cankers may enlarge and girdle and kill scaffold limbs and fruiting branches. It should be noted that gum exudation is not diagnostic for this disease as other factors may cause this symptom.

Persistence and Transmission.

The fungus overwinters in infected bark and in dead and dying wood. Spores are produced on the dead bark of cankers, dead limbs, and on prunings left on the orchard floor. These spores are spread in splashing or wind-driven rain. Wounds, particularly those caused at the time of pruning, are the most common sites of infection. Infection also occurs through lenticels. The fungus grows in the outer layers of bark and wood. In response, the tree repeatedly forms new tissue in attempts to wall off the invasion by the pathogen. This results in layers of diseased bark tissue that peels off as the tree grows.

Control. Removal of dead wood in or near the orchard is important, particularly in a new planting where the disease is not yet established. The dead wood can act as the source of fungal inoculum and should be removed from the orchard site or destroyed mechanically with a flail-type mower.

Careful pruning is recommended to avoid leaving dead stubs on the tree that act as entryways for the fungus into the tree. Branches pruned properly, (i.e., cut just outside the collar at the base of the branch) heal relatively quickly compared to stub cuts that

may not callus over. Summer pruning should be avoided because the fungus can colonize wounds rapidly at this time of year.

Trees of low vigor are more susceptible to fungal Gummosis. Reducing water and nutrient stress can reduce disease incidence and severity. Avoid planting new orchards in poor soils.



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Use chemicals only according to the directions on the label. Follow all directions, precautions, and restrictions that are listed.

For more information, call your county Extension office. Look in your telephone directory under your county's name to find the number.

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