

AGRICULTURAL EXPERIMENT STATION
Oregon State College
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ANTHRACNOSE OF BLACK RASPBERRY (BLACK CAPS) IN OREGON
by
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Many inquiries are made concerning the control of anthracnose on black (black cap) raspberries. In recent years this fungous disease has been responsible for considerable damage to canes of black raspberry in western Oregon. It also may be found on certain odd varieties of red raspberry, such as the Latham, Lloyd George, Chief, and hybrids of these, but the chief commercial variety, Cuthbert, is seldom if ever infected under weather conditions prevailing in western Oregon. All varieties of the black raspberry and purple sorts grown here are susceptible to anthracnose. Blackberries and loganberries for the most part are not infected with this disease, but they are usually infected with the leaf and cane spot disease described in Oregon Experiment Station Circular of Information No. 222.

Anthracnose is caused by the fungus, Elsinöe veneta. On young shoots of black raspberry, the disease may be recognized by circular sunken spots about 1/8 inch or more in diameter. These are purplish at first, turning grayish. As the canes age, the anthracnose spots become deeper and the margins become raised and purplish. This disease is particularly serious providing rains continue late in the spring, when spots on the canes may be plentiful enough to cut off considerable sap flow. Look for the symptoms near the ground on the canes produced this year. They will be the fruiting canes of next year. Most of the infection spots will be on the side of the cane toward the center of the plant. In very severe cases they may be scattered 12 - 20 inches up the canes.

When anthracnose is prevalent in black cap plantings, the grower will notice an uneven ripening of the berries and that especially the top of the berries dry up or have whitish spots on the top of each drupelet. These whitish, dried spots are usually caused by anthracnose infections and constitute one of the indications that the disease is altogether too prevalent and needs control measures.

CONTROL MEASURES

For the control of raspberry anthracnose in Oregon the following recommendations are made:

Use of clean planting stock. Disease-free tips should be used for the new planting of black raspberries. Cut away enough of the stub of the old cane on the tip so that what remains of it will be completely buried when planted.

Cultural practices. All old fruiting canes should be cut out and burned as soon as practical after harvest.

Spray program. Sometimes anthracnose is not severe enough to warrant the cost of a spray program, but where sprays are needed the following schedule is recommended:

(1) Lime-sulphur. Apply lime-sulphur as a dormant spray, at least not later than when the buds just begin to open. All canes should receive a thorough covering of spray, which is made up by using 8 to 10 gallons of 32° Baume lime-sulphur diluted with enough water to make 100 gallons of spray material.

(2) Bordeaux mixture (3-3-50). This spray should be used in the spring when the new succulent canes are 3-12 inches high. If rainy weather prevails, repeat the latter when the canes are 14-20 inches high. Plants should not be sprayed, however, later than a week before the blossoms open because of possible spray injury. Only the bases of young canes should be sprayed with Bordeaux mixture, care being taken to avoid spraying the foliage of old canes. Even with the best of care one might get some foliage injury using bordeaux in the spring.
