Early Rot

Economic Information

Early rot, caused by the fungus *Phyllosticta vaccinii*, can cause severe losses in the field where the growing season is typically long and warm, such as in Massachusetts and New Jersey. Losses in storage are minor if berries are refrigerated. *P. vaccinii* can also attack flowers, stems, and leaves, but losses are usually insignificant.

Symptoms

Early rot initially appears as a small, pale, soft spot on large fruit. The spot expands radially until the entire fruit is rotten. If infection is rapid, fruit generally show little discoloration. In other cases, the spot takes on a bull's-eye pattern of alternating dark and light rings. When flowers and young berries are infected, they shrivel, turn dark, and may become covered with black pycnidia (fungal fruiting bodies). Infected leaves have irregular, reddish-brown spots; pycnidia appear on the upper surfaces of leaves.

Photograph by Steven Vicen

Disease Cycle

*Phyllosticta vaccinii* apparently overwinters in infected leaves. During late spring and early summer, conidia (spores) are released from pycnidia (fungal fruiting bodies). Leaves are infected early in the season. Fruit are infected at late bloom or soon thereafter.

Control

Attempts to infect mature fruit in the laboratory have failed, indicating that mature berries may have some natural resistance to *P. vaccinii*. Effective cultural controls are not known for early rot. If berries are properly refrigerated, further rot during storage is rare. Chlorothalonil is registered for use on fruit rots in some cranberry-growing regions. Applications are recommended at 5-10% bloom, after mid-bloom, and once or twice at 10-day intervals thereafter. Refer to a current product label for up-to-date information on rates, methods of application, and appropriate safety precautions.

Questions or comments? Please contact Dr. Patty McManus.