End Rot

Economic Importance

End rot is caused by the fungus *Godronia cassandrae* f. *vaccinii* (the asexual stage is *Fusicoccum putrfaciens*). End rot occurs in all cranberry-growing regions, and is mainly a post-harvest disease. *G. cassandrae* can also cause a twig blight and leaf spot, but only the rotting of fruit in storage is economically important.

Symptoms

End rot typically begins at the blossom end of the berry. The rotted tissue is soft, watery, and clearly delineated from sound tissue. Gas formed during the rotting process bloats the berry and makes it elastic to the touch. If pressed too hard, however, the berry bursts. Hence, infected berries are called "poppers." Berries eventually collapse and turn yellow or brown.

Photograph by Steve Vicen.

Disease Cycle

The fungus overwinters in old bark and plant debris left after harvest. It also resides in apparently healthy vines throughout the year. *G. cassandrae* can be isolated from new shoots, blossoms and the blossom end of young fruit, but rot usually occurs only after fruit are damaged or start to senesce. Infection probably also takes place when fruit are damaged during harvest.

Control

Differences among cultivars in resistance to end rot vary from location to location. In Wisconsin the cultivars Beckwith, Bergman, Early Black, Howes, McFarlin, Pilgrim, Stevens, and Wilcox are relatively resistant; Ben Lear, Crowley, and Searles are susceptible. In the Pacific Northwest, Stevens and Bergman appear to be susceptible. Excessive use of nitrogen fertilizer during the growing season, prolonged periods of flooding, and bruising and damaging berries during harvest all may contribute to end rot. Chemical control is usually necessary only on berries destined for long-term storage and fresh market sale. Chlorothalonil is registered for use on fruit rots in some cranberry-growing regions. 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.