

Colletotrichum Ripe Rot in Grapes, an Emerging Threat in New England Viticulture

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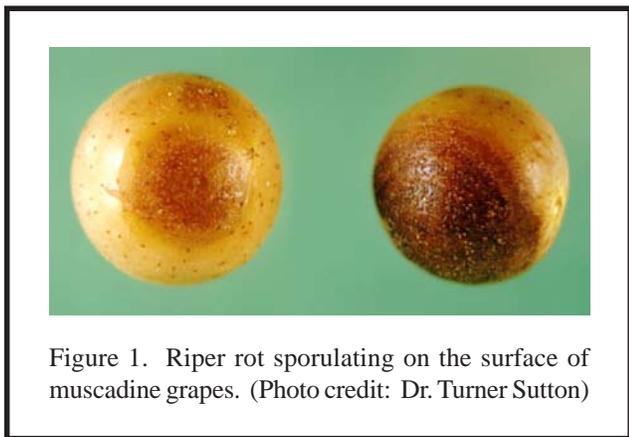
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Ripe rot (*Colletotrichum* sp.) is a disease affecting grapes at or near harvest time that has long been recognized in southern areas, especially on muscadine grapes. For the first time, the disease has been identified in vineyards in southern New England and has caused some significant crop losses.

Symptoms

Rotted berries turn uniformly dark brown over part or all of the berry and have pink or orange spore masses



on the surface. As infected fruit mature, lesions first appear as slightly sunken or flattened rotted areas. Tiny black fruiting bodies (acervuli) develop within the lesion in a circular arrangement. Rotting fruit are

characteristically covered with masses of sticky, pink or salmon-colored spores. As lesions expand, the entire grape eventually rots, and may drop or become shriveled or mummified as it decays.

Ripe rot infections can occur at any stage of fruit development, but fruit infected in the unripe stages do not rot until they begin to ripen. Once infected grapes begin to rot and produce spores in the vineyard, the disease can spread rapidly to other ripe fruit. The most devastating losses to this disease occur on susceptible cultivars during rainy harvest seasons. Generally speaking, dark-skinned cultivars are more resistant, while white cultivars are more susceptible. But, we are finding infections in many types, e.g., Chardonnay, Merlot, Cabernet Franc, and Gewurztraminer.

Cultural Control

Before spring arrives, remove or disk into the soil over-wintered mummies left on the trellis and ground from the previous season. Good canopy-management practices are essential for management of ripe rot. Shoot thinning, leaf removal, pruning, cluster thinning, and shoot positioning are all cultural practices that open the vine canopy to air and light, reducing the amount of moisture trapped within the canopy and allowing better penetration and spray coverage of fungicides. Ripe rot is even worse when overripe fruit are allowed to hang on the vine, so timely harvesting of all ripe grapes at each harvest date is recommended.



Figure 2. Masses of salmon-colored spores discharging in wet weather (Photo credit: Dr. Turner Sutton)



Figure 3. Ripe rot on Chardonnay grapes. (Photo credit: Dr. Chris Steel)

Chemical Control

Where the disease is a problem, fungicide applications are critical during the period from bloom until just prior to harvest. In areas that routinely need

to manage this disease, the control of ripe rot is mainly with captan. The other fungicide labeled for Ripe Rot is Pristine®; however, the pre-harvest interval for this material is 14 days, limiting its usefulness late in the season.

