



New Grape Disease in New England Ripe Rot, caused by *Colletotrichum* spp. is hitting New England vineyards hard after October rains

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Ripe rot (*Colletotrichum* sp.) is a disease effecting grapes at or near harvest time that has long been recognized in more southern areas, especially on muscadine grapes. For the first time, the disease has been recognized in vineyards in southern New England and is causing 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



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

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 green (unripe) stages does not rot until it begins 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'.

Control: Cultural - 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 is allowed to hang on the vine, so timely harvesting of all ripe grapes at each harvest date is recommended.

Chemical - Where the disease is a problem, fungicide applications are critical during the period from bloom until preharvest. 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, which limits its usefulness late in the season.



Ripe rot sporulating on the surface of muscadine grapes. (Photo credit: Dr. Turner Sutton)



Ripe rot on chardonnay grapes (Photo credit: Dr. Chris Steel)