

Bitter Rot – *Melanconium fuligineum*

Bitter rot of grapes has not yet been observed in Minnesota, but is still an important disease to understand. The fungus creates a very bitter taste in infected berries, and if only 10% of the berries used in a winemaking are infected an entire batch of wine may be undrinkable. This fungus is more common in Southern climates, but may become an issue for Minnesota growers as our climate changes.

Symptoms

The symptoms of bitter rot can be easily confused with those of black rot. The main difference is that bitter rot symptoms appear as brown lesions only on ripe grapes, not on green grapes like black rot. Bitter rot lesions spread around the berry, in concentric circles over a short period of time. The berries will hold their shape, but appear dull brown.

Control Strategies

Melanconium fuligineum, the causal agent of bitter rot, overwinters in plant debris in the vineyard. Mummies, dried berries from the previous season, are the most common source of inoculum. Fungal growth is favored by warm, humid, wet weather.

The most efficient way to control bitter rot is the use of good cultural practices. Sanitation is the critical component to controlling bitter rot. Clear all mummies from the ground after leaf drop or till them into the soil prior to bud break. This will reduce any overwintering inoculum in the vineyard. Utilize pruning and training systems to improve air circulation which promotes rapid leaf drying and allows for full spray coverage and canopy penetration.

For the most current spray recommendations refer to the Ohio State University Extension web site, <http://ohioline.osu.edu/b861/>. If seeking organic certification make sure to verify that each registered fungicide is permitted within the organic certification program.

References

Ellis, M. Bitter Rot of Grape, Ohio State Factsheet, The Ohio State University Extension. <http://ohioline.osu.edu/hyg-fact/3000/3032.html>.

Rombough, L. 2002, The Grape Grower, A Guide to Organic Viticulture, Chelsea Green Publishing, pg. 95-96.