Current Conditions – S. Schloemann

Harvest is underway in most areas and is complete in some. Dry conditions have prevailed until recently so disease management actions have not been needed in recent weeks. Recent rains have elevated the potential for cluster rot, mainly from latent Botrytis inoculum. See article below for an update on available management options for this time of year.

Another consequence of dry conditions during the veraison to harvest season is higher than normal bird pressure in the vineyards. This points out the need to be ready to keep birds out of the vineyard with netting or other deterrence methods. Vineyard managers should have these tactics in place before bird damage is seen in the vineyard. Once birds are aware of fruit (especially after exposed by leaf pulling), it is harder to keep them out of the vineyard.

For more information:

- The Economic Impact of Bird Damage to Wine Grapes
- Late Season Bird and Deer Control in Vineyards
- Bird Damage Prevention for Norther New England Fruit Growers

Drought Relief Resources; USDA Tree Assistance Program (TAP) – S. Schloemann, T. Smiarowski and P. Russell

Orchard, vineyard, small fruit and nursery tree & shrub growers who experience losses from natural disasters during calendar year 2016 may be eligible for assistance under TAP, which is administered by the USDA – Farm Service Agency (FSA). Producers must submit a TAP application either 90 calendar days after the disaster event or the date when the loss is apparent.

TAP was authorized by the Agricultural Act of 2014 as a permanent disaster program.
TAP provides financial assistance to qualifying orchardists and nursery tree growers to replant or rehabilitate eligible trees, bushes and vines damaged by natural disasters.

Eligible tree types include trees, bushes or vines that produce an annual crop for commercial purposes. Nursery trees include ornamental, fruit, nut and Christmas trees that are produced for commercial sale. Trees used for pulp or timber are ineligible.

To qualify for TAP, orchardists must suffer a qualifying tree, bush or vine loss in excess of 15 percent mortality from an eligible natural disaster. The eligible trees, bushes or vines must have been owned when the natural disaster occurred; however, eligible growers are not required to own the land on which the eligible trees, bushes and vines were planted. If the TAP application is approved, the eligible trees, bushes and vines must be replaced within 12 months from the date the application is approved. The cumulative total quantity of acres planted to trees, bushes or vines, for which a producer can receive TAP payments, cannot exceed 500 acres annually.

Interested growers should contact the FSA Office that serves their farming operation. Questions regarding eligible trees, vines and bushes should be directed to the FSA Offices. See the UMass Fruit Advisor website for more information.


Cluster Rot Control

Alice Wise, Wayne Wilcox, Cornell University

A list of the Botrytis control options along with their PHI – preharvest interval. The last four materials list sour rot suppression or control on the label. Solid research results on sour rot control are lacking so proceed with caution.

Rovral: Due to resistance in years past, Rovral should not be the workhorse of your program. However, if you've been giving it a rest, it may be a useful when used on a limited basis. The use of an adjuvant improves control. Stylet Oil (assuming proximity to sulfur sprays is not an issue) is a good choice. Note: avoid application of oil on hot, humid days and/or to drought stressed vines. PHI = 7 days.

Vangard: Vangard is absorbed into the berries, so it's rainfast and has limited post-infection activity. There doesn't seem to be any data showing improved performance by adding an adjuvant. Vangard is highly prone to resistance development, so its use should be strictly minimized. The label allows a maximum of two applications per season, but keep it to a single spray each year unless you really get into a bind. Scala has the same chemistry and mode of action as Vangard, the two have performed similarly in a limited number of head-to-head tests. PHI = 7 days.

Elevate: Unrelated to any other on the market. There is a resistance risk, not as
significant as that for Vangard. The label allows a maximum of three applications per season, but European guidelines recommend just one, in rotation with unrelated materials. PHI = 0 days.

**Oxidate**: Oxidate is formulated to stay on the outside of the waxy cuticle covering leaves and berries. In trials on Chardonnay at LIHREC, it burned out Botrytis sporulation. However, since the fungus is established in the flesh of the berry, new sporulation reappeared within a week. The temporary reduction in sporulation may help to reduce the spread of spores, particularly if repeat applications are used. Use of Oxidate in combination with or in addition to botrycides may be a better strategy but it is still unclear if the addition of Oxidate will enhance control. Sour rot is listed on the label. Oxidate 2.0 is OMRI approved. PHI = 0 days.

**Double Nickel**: The active ingredient (ai) is *Bacillus amyloliquefaciens* strain D747, a proprietary strain of common soil microorganism which produces secondary metabolites harmful to cell walls and membranes of fungi and bacteria. Labeled for Botrytis and sour rot. Wilcox results: in 2015, it did not provide good control of Botrytis bunch rot. OMRI certified. PHI = 0 days.

**Fracture** (Blad): The active ingredient (ai) – *Banda de Lupinus albus doce*, a polypeptide derived from germinating sweet lupine plants, it breaks down fungal cell walls. Labeled for Botrytis; has a 2ee for suppression of sour rot. Wilcox results: good control of Botrytis bunch rot in 2015; not yet tested for sour rot. Company is reportedly seeking OMRI approval. PHI = 1 day.

**Timorex Gold**: The active ingredient (ai), tea tree oil, is a naturally occurring product that is found in various herbs, spices and fruits but is concentrated in the leaves and terminal branches of the tea tree, *Melaleuca alternifolia*. It degrades rapidly through volatilization with 90% gone within 24 hours so there is no forward protection. The label claims control of Botrytis and sour rot. There has been no testing in NY, proceed with caution. PHI = 2 days. *(Source: Long Island Fruit & Vegetable Update, No. 25, 9/22/16)*

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