Though this article appeared in a midsummer newsletter, it seems prudent to review the options. Some of the newer products have not been thoroughly evaluated, particularly for sour rot control. Note that these materials are most effective when directed at the cluster zone, easy to do with VSP training. Some labels, such as Botector, specify a cluster zone spray. Simply including a material with a canopy spray will likely render it much less effective.

**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. PHI (pre-harvest interval) = 7 days.

**Vangard** - Vangard is absorbed into the berries, so it’s rainfast and has limited postinfection 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.

**Botector** - Active ingredient (AI): *Aureobasidium pullulans*, a biological fungicide that has been used locally with some success. The label cautions about tank mixing other fungicides as they may be detrimental to this organism. OMRI approved. 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.

**Fracture** (Blad) - 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.

**Double Nickel** - 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.
**Timorex Gold** - The a.i. 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 hrs 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.

**Vacciplant** – Al laminarin, a polysaccharide sugar that occurs naturally in plants. Classified as an SAR inducer, that is, it supposedly causes plants to turn on their own natural defenses. Labeled for just about every grape disease. Recommended as part of an integrated program, in fact, label states to tank mix with another registered material if pressure is heavy. PHI = 0 days. *(Source: Long Island Fruit & Vegetable Update, No. 23, Sept. 21, 2017)*

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