



Finger Lakes Vineyard Update

This will be the final weekly issue of the Finger Lakes Vineyard Update for 2013. We will continue to provide updates on the harvest in the weekly 'Veraison to Harvest' newsletters for the rest of the season.

We will be switching to our winter schedule of sending out Updates every 2-3 weeks. If you have comments or suggestions about how to make the Vineyard Update more valuable to you and your farm, please let us know what they are. We know that these Updates are an important resource for growers, and we want to make sure that they continue to be. The next issue of the Vineyard Update will be on October 23.

- Hans

Links To

2013 GDDs

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In the Vineyard

Hans Walter-Peterson

Much of the harvest over the past several days has been focused on the two most widely planted varieties in the Finger Lakes - Concord and Riesling. After taking a week off in hopes of getting higher sugar levels in their loads, the region's largest Concord processor, Constellation Brands, is open again. While we haven't heard about specific results from them, we have been seeing sugar levels in Concords moving up into a better range for the processors (14-15 Brix).

Riesling samples from last week's Veraison to Harvest newsletter averaged around 18.3 Brix and about 9.7 g/L titratable acidity. Word from several people we have spoken with this week is that sugar levels in some blocks have not been increasing much, even with the return of some rain to refill the soil profile, which had been pretty dry through most of September. Is it too little too late for some vineyards? Maybe, maybe not. We'll be curious to see what the numbers look like this week.



Students from FLCC's Viticulture & Wine Technology program have been busy at the teaching vineyard over the past week, harvesting some small crops from our second year vines and making small lots of wine from them. The students have picked Chardonnay, Zweigelt, Riesling (on Riparia rootstock), and Gruner Veltliner so far, with more Riesling, Cabernet Franc, Lemberger, Corot noir, Vidal and a couple of other varieties still hanging. We'll have some more information about the harvest at the teaching vineyard so far in this week's *Veraison to Harvest* newsletter.

In the Vineyard (continue from page 1)

Bunch Stem Necrosis

We have been seeing bunch stem necrosis (BSN) developing in some blocks around the Finger Lakes over the past couple of weeks, primarily in Cabernet Franc, but it has also been observed in Cabernet Sauvignon, Catawba, and we've seen small amounts in a couple of Lemberger blocks as well.



Left: Shriveled berries on a cluster with bunch stem necrosis.



Right: Brown collapsed rachis on the lower half of this cluster. Notice healthy looking berries closer to the top where the rachis remains intact.

BSN is a “syndrome” characterized by the desiccation or collapse of a part of the rachis, most often at the end of the cluster stem or on shoulders. It is less common for an entire cluster to be affected, but it certainly happens. The collapse of the rachis cuts off the supply of water, sugars and other compounds into and out of the berry, causing it to shrivel. Fruit development essentially stops as sugars stop accumulating in the berry and acid degradation can stop as well.

Symptoms of BSN can appear either early in the season, around bloomtime, or anytime after the onset of veraison. Nobody really knows what exactly causes BSN at either time of the year. It is not caused by a pathogenic organism like a fungus or virus, nor is it related to insect damage. A number of studies have suggested different causes of BSN, including various nutrient deficiencies, climatic conditions like heavy rainfall and cool temperatures, and vigorous vine or shoot growth. No single cause has been definitively proven, and it may be that there are multiple triggers that can cause the problem. Of course, berries can shrivel for other reasons besides BSN including dehydration and another “syndrome” that has been identified in recent years, and simply called “berry shrivel”, which causes somewhat similar symptoms to BSN except that the rachis continues to remain looking green and healthy while the berries shrivel. Like BSN, research is still being done to try to understand the cause of this new phenomenon.

In the Vineyard (continue from page 2)

Once the rachis has collapsed, there is no recommendation for growers about how to manage BSN except to consider dropping clusters that are affected by it in order to keep them from affecting the quality of the remaining fruit at harvest. There is also nothing that we can recommend to prevent it from happening in the first place at this point either, unfortunately. I bring this up only to alert growers that we have been noticing this lately in certain varieties, and that it might be worth considering dropping affected clusters if there is a significant amount in order to improve the uniformity of the remaining crop.

For some more information about BSN, check out:

[‘Current Situation’, by Dr. Tony Wolf \(Virginia Tech University\), Viticulture Notes - October 2013.](#) Tony Wolf describes some data they gathered this year on the incidence of BSN relative to vine and shoot vigor. This data was collected in a trial vineyard where different rootstocks and root restriction treatments were imposed to control growth of Cabernet Sauvignon vines.

[Berry Shivel - All The Same?](#) by Dr. Mercy Olmsted, Washington State University. A nice comparison summarizing some of the different reasons for berries to shivel on the vine, including BSN and ‘berry shivel’.

Krasnow, M., M. A. Matthews, R. J. Smith, J. Benz, E. Weber, and K. A. Shackel. Distinctive symptoms differentiate four common types of berry shivel disorder in grape. *California Agriculture* 64(3):155-159. Link: <http://californiaagriculture.ucanr.edu/landingpage.cfm?article=ca.v064n03p155&fulltext=yes>

2013 GDD Accumulation

We are tracking growing degree day (GDD) and precipitation accumulation again this year, but we will be reporting data from [our weather station located at the teaching & demonstration vineyard in Dresden](#), at Anthony Road Wine Company, instead of using the station at Geneva. We will continue to monitor GDD accumulation and rainfall at Geneva in order to see how our new location compares with it, and to provide context of where we are with regard to heat accumulation compared to our long-term average.

FL Teaching & Demonstration Vineyard – Dresden, NY					
Date	Hi Temp (F)	Lo Temp (F)	Rain (inches)	Daily GDDs	Total GDDs
10/2/13	77.1	58.0	0.00	17.6	2692.5
10/3/13	73.5	51.5	0.00	12.5	2705.0
10/4/13	76.7	60.4	0.07	18.6	2723.5
10/5/13	66.1	60.7	0.16	13.4	2736.9
10/6/13	80.8	61.1	0.48	21.0	2757.9
10/7/13	72.4	54.0	0.90	13.2	2771.1
10/8/13	63.9	47.2	0.00	5.6	2776.6
Oct 2013 Total			1.61"	118.4	
Season Total			21.11"	2776.6	

Apr 1 GDD on October 8, 2013 at Geneva:	2506.7 (exceeds average GDD accumulation)
Average GDD on October 8 (Geneva):	2416.3
Apr 1 GDDs on October 8, 2012 (Geneva):	2799.8

October 2013 Rainfall at Geneva:	1.57"
Average October Rainfall (Geneva):	3.27"

2013 Rain on October 8 at Geneva:	25.06"
Average Rain on October 8 (Geneva):	20.50"

Additional Information

Got some grapes to sell? Looking to buy some equipment or bulk wine? List your ad on the [NY Grape & Wine Classifieds website](#) today!

Become a fan of the [Finger Lakes Grape Program on Facebook](#), or follow us on [Twitter \(@cceflgp\)](#). Also check out our website, “The Grape Lakes – Viticulture in the Finger Lakes” at <http://flg.cce.cornell.edu>.

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