Finger Lakes Vineyard Update

In the Vineyard

Hans Walter-Peterson

There are over 75 different varieties of grapes grown in the Finger Lakes, but we seem to take a little extra note when two of them start to be harvested – Concord and Riesling. Concord harvest started a couple of weeks ago, and will continue for a few more weeks. Over the past several days, some early loads of Riesling have started to make their way to crush pads around the region as well. Last week's samples from the Veraison to Harvest newsletter were in the 19-20 Brix range, and acidity was sitting at around 7-8 g/L, so it's not surprising that some fruit started to come off with those kinds of numbers.

We ended the month of September with less than 50% of our average rainfall at Geneva (1.60" vs. the average of 3.78"), which has been exactly what many vineyards needed in order to keep the early bunch rot infections in check this year. The (mild) downside to this dry weather is that we are starting to see some spots showing signs of drought stress, typically in areas with lighter or shallow soils. Vineyards on deeper, more fertile soils don't appear to be suffering at all right now. A few growers and winemakers have commented to me this week that sugars have not moved up much at all over the past week, which would indicate that perhaps some vines are slowing down due to the dry conditions we have experienced lately. We'll see if our samples this week show the same thing or not. Forecasts for the next week show the potential for a few separate rain events, so growers and wineries will be carefully watching the condition of fruit to determine when to harvest.

Links To

Leafroll and Red Blotch Virus Symptoms

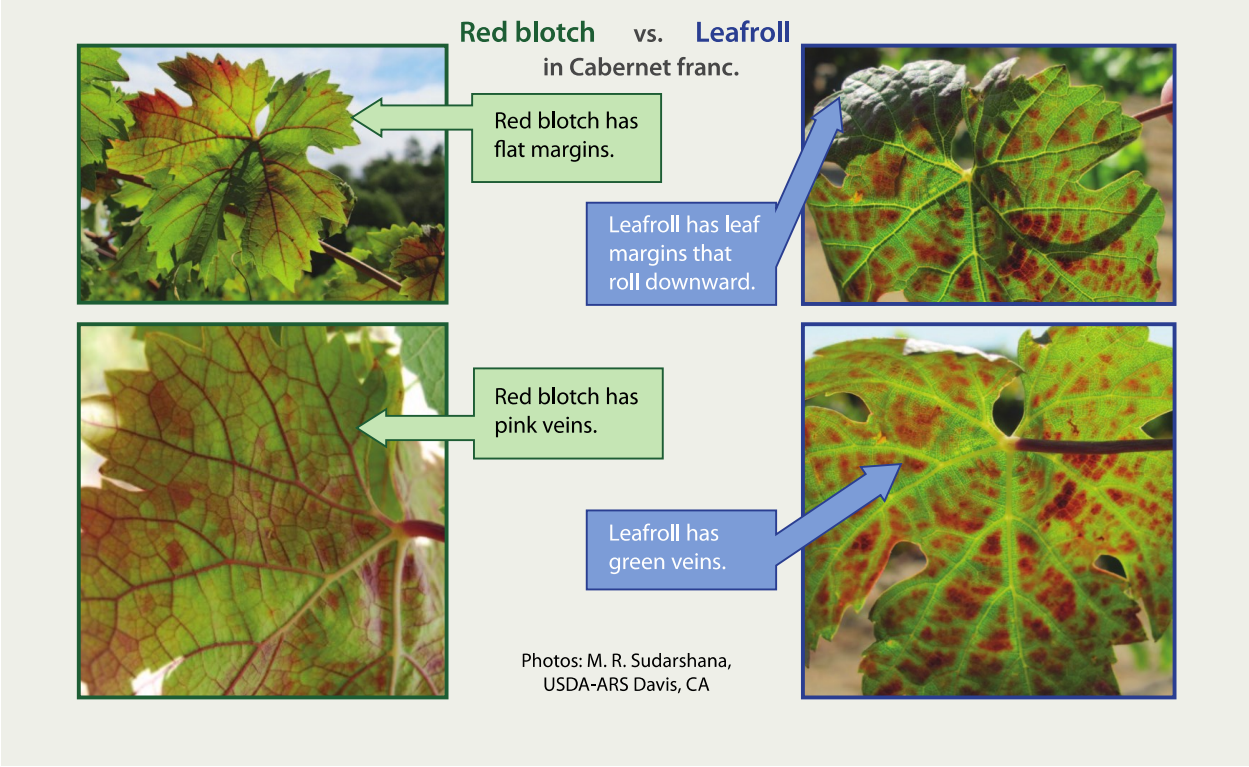
Hans Walter-Peterson

Over the past couple of weeks, we have been noticing an increase in vines with reddening leaves, which (among other things) can be a very distinct symptom of either infection by grapevine leafroll virus, which we have heard a lot about in the Finger Lakes over the past few years, or possibly a new virus that has just recently been identified in grapevines called grapevine red blotch-associated virus (GRBaV). Dr. Marc Fuchs, virologist at the Experiment Station in Geneva, has played a central role in the identification of GRBaV, along with other scientists at Cornell and the University of California. The virus has been found in a number of states, including New York, and in a range of red fruited varieties including Cabernet France, Pinot noir, Merlot and Cabernet Sauvignon (the virus has also been identified in Chardonnay and Riesling). We have also seen red blotch-like symptoms in Zweigelt vines in our teaching vineyard and one other commercial block on Seneca Lake.

The disease symptoms associated with the virus can sometimes be confused with leafroll virus, as both cause leaves to turn red in red fruited varieties. However, there are two distinct differences that can help to distinguish between the two:

1. Leaves on vines infected with red blotch virus will have veins that turn pink or red, in contrast to vines infected with leafroll virus which have veins that will remain green (see photos).

2. Second, the edges of leaves on vines infected with leafroll virus will usually curl down. Leaf edges on red blotch infected vines, in contrast, stay fairly flat.



Source: "Grapevine Red Blotch Disease" National Clean Plant Network Fact Sheet. February 2013.

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Leafroll and Red Blotch Virus Symptoms (continue from page 2)

The main impact of the disease appears to be similar to that caused by leafroll virus, in that sugar accumulation is four to six Brix lower than fruit from uninfected vines at harvest. As with leafroll, the virus is primarily spread through cuttings taken from infected vines and planted in new blocks. There is evidence that suggests there is also a biological vector that can transmit the virus, but nothing specific has been identified yet.

As we have suggested in the past for leafroll, vines that are showing symptoms of infection should be flagged while those symptoms are still visible in order to quantify how heavily the vineyard is infected. We would appreciate hearing from growers who thinks they might be seeing symptoms of red blotch disease in any vineyard blocks this fall, as we would like to get a sense of where we might want to follow the development of this disease in the future.

Other resources on Grapevine Red Blotch Disease:

- "Grapevine Red Blotch Disease" published by the National Clean Plant Network.
- Grapevine Red Blotch Disease brochure, published by USDA-ARS.
- Grapevine Red Blotch: New technology identifies virus, Practical Winery & Vineyard magazine – April 2013.
- Grapevine Red Blotch Disease: An Emerging Issue. Webinar recording featuring Dr. Marc Fuchs (Cornell Univeristy), Rhonda Smith (UC Cooperative Extension, Sonoma County) and Dr. Deborah Golino (UC Davis Foundation Plant Services). March 27, 2013.

Zweigelt leaves displaying reddening veins, possibly indicating infection by GRBaV. Laboratory analysis is the only way to confirm the virus' presence.

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**
9/25/13	69.7	41.1	0.00	5.4	2605.9
9/26/13	69.7	46.2	0.00	8.0	2613.8
9/27/13	68.6	46.8	0.00	7.7	2621.5
9/28/13	72.2	48.1	0.01	10.2	2631.7
9/29/13	72.8	49.7	0.00	11.3	2642.9
9/30/13	77.5	53.2	0.00	15.4	2658.3
10/1/13	75.3	58.0	0.00	16.7	2674.9
Sept 2013 Total			2.01”	354.6	
Season Total			19.50”	2674.9	

Apr 1 GDD on October 1, 2013 at Geneva:	2419.9 (currently 7 days ahead of average)
Average GDD on October 1 (Geneva):	2379.0
Apr 1 GDDs on October 1, 2012 (Geneva):	2740.2
September 2013 Rainfall at Geneva:	1.60”
Average September Rainfall (Geneva):	3.73”
2013 Rain on October 1 at Geneva:	23.49”
Average Rain on October 1 (Geneva):	19.75”

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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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