



Finger Lakes Vineyard Update

In The Vineyard

Hans Walter-Peterson

Between plenty of water in the soil and some warm days, and a smaller than normal crop in many cases, canopies are filling (over-filling, in some cases) fairly quickly. Hedging is beginning to take place in a number of vineyards in order to prevent shading of the fruit zone and functional leaves, and leaf pulling in vinifera and some hybrids will almost be necessary in order to get adequate fruit exposure for disease management and ripening.

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Fruit in most of the varieties at the Teaching Vineyard is between BB and pea sized at this point. Set looks pretty good for the most part as well, except in Lemberger where we have pretty scraggly clusters this year. We have heard and seen this happening in a few other Lemberger blocks as well.

Winter Injury Follow-Up Survey

First of all, thank you to those who filled out the online survey asking about impacts of the winter weather on this year's crop. We had 65 responses from across the state, which will help us to assess the impact of the cold temperatures this winter on crop levels.

For the past week, we have been revisiting many of the blocks that we sampled at the end of March for our winter injury survey of bud damage, to assess how much or how little crop there is in each of these locations. We are assessing those varieties that most likely experienced injury and/or that might be sought outside of the state – Riesling, Chardonnay, Cabernet Franc, Lemberger, Pinot gris, Merlot and Gewürztraminer. Similar surveys are being conducted by our colleagues

Upcoming Events

DEC Mock Inspection for Worker Protection Standards

July 22 & 23, 2014

Tailgate Meeting Dalrymple Farm

July 22, 2014

In The Vineyard (Continued from page 1)

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in the Lake Erie and Hudson Valley regions as well as northern New York. In addition to gaining a better understanding of the impact of this winter, one of the goals of this survey is to determine just how much crop loss there has been in different varieties across the state, which may trigger a provision in the Farm Winery law that allows growers to purchase fruit from outside of New York if there is greater than a 40% loss of any given variety. We will be wrapping up the survey work this week, and reporting our findings to the Department of Ag & Markets soon afterwards. We will pass along the results of this survey as well when it is finished.

Two of the main things that we are noticing in the Finger Lakes as we do this survey is that 1) there are fewer dead vines than we initially thought there would be (good news), and 2) there are a lot of secondary shoots filling canopies in many vinifera blocks this year. The lack of crop on these vines means shoot growth is pushing ahead without fruit to balance it out.

IPM

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Disease

We have reached the point in the season where berries are becoming resistant to new infections by powdery and downy mildew and black rot (botrytis is obviously a whole different story).



Source: Annemiek Schilder, MSU

Black rot – Berries are highly susceptible to infection for 2-3 weeks after bloom, and then develop resistance to further (new) infections by 5-8 weeks after bloom. Concord and other native varieties tend to develop resistance earlier than vinifera varieties. Fortunately, we have seen very few signs of black rot in vineyards this year. Note the small white dot near the center of the infection. These can sometimes be confused with phomopsis fruit infections. Most phomopsis infections will begin from the point where the berry attaches to the rachis, while black rot infections will usually start elsewhere on the berry.

Powdery mildew – As with the other diseases, fruit is most susceptible during the first few weeks after bloom. Concord and similar varieties will develop resistance to new fruit infections when they are about 0.25” in diameter (pea sized, roughly), while vinifera and some hybrids will take until bunch closure or so to become fully resistant. It is not unusual to see “new” infections appear after this time, but this is mostly the result of small infections that get established during the susceptible period earlier in the season and then grow to the point of being visible later on. We are seeing some powdery mildew infections in vineyard blocks, especially where canopies are dense and little sunlight (and spray material) can penetrate. Of course, leaves and other green tissues on the vine remain susceptible to infection up through harvest.



Finger Lakes Vineyard Update

Finger Lakes Grape Program

July 16, 2014

IPM (Continued from page 2)

Hans Walter-Peterson



Downy mildew – As we've mentioned before, this is the primary disease we are seeing in vineyards at this point in the season. Most symptoms that we are seeing now are lesions on the leaves, but we have found a few clusters that have been affected by the disease as well. Fruit will develop resistance to further downy infections sometime around 4 weeks after bloom, which would be about now in most cases, while leaves and shoots are susceptible throughout the season. As with powdery mildew, it is possible to find "new" DM infections later in the year, but these infections occurred earlier in the season and remained dormant until conditions were better suited for the infection to spread, or may be the result of infections on the rachis which causes berries to shrivel, or to remain hard and fail to turn color.

Insects

We are now past the time for spraying insecticides to control grape berry moth, according to our GDD model (<http://newa.cornell.edu/index.php?page=grape-diseases>). Larvae are protected inside berries at this point, and therefore any control measures taken right now would not be effective. During this time, though, it is still prudent to be on the lookout for damaged berries or webbing in clusters in areas where there is moderate or high risk for GBM damage. How do you know if your vineyard is a high, intermediate or low risk vineyard for GBM damage? Refer to the grape berry moth risk assessment protocol (<http://nysipm.cornell.edu/publications/grapeman/files/risk.pdf>), which will walk you through several steps in order to determine which risk category your vineyards might fall into. The protocol includes some very good general advice for scouting as well.

GBM Model output for July 16 at Dresden

Grape Forecast Models

Select a disease or insect:
Grape Berry Moth

Weather Station:
Dresden (FLGP/FLCC)

Date of Interest:
7/16/2014

Calculate

MapResultsMore info

Grape Berry Moth Results for Dresden (FLGP/FLCC)

Wild Grape Bloom: 5/31/2014

Wild Grape Bloom date above is estimated based on degree day accumulations or user input. Enter the actual date for blocks of interest and the model will calculate the results more accurately.

Accumulated degree days (base 47.14°F) wild grape bloom through 7/16/2014: 1032 (0 days missing)

Daily Degree Days for Dresden (FLGP/FLCC)

Base Temp	Past	Past	Current	5-Day Forecast			Forecast Details	
	Jul 14	Jul 15	Jul 16	Jul 17	Jul 18	Jul 19	Jul 20	Jul 21
47.14F - GBM	24	24	18	15	19	21	24	25
Accumulation	1002	1026	1044	1060	1078	1100	1124	1149

NA - not availableDownload Time: 7/16/2014 10:00

Pest Status	Pest Management
Second generation larvae are protected within berries and completing their development.	The most effective time for treatment of second generation grape berry moth is over. Prepare to scout all vineyard blocks for grape berry moth damage when DD accumulation reaches 1470-1620 DD. During scouting, determine if the number of damaged clusters from previous generation exceeds the treatment threshold of 15%. If above threshold, control measures should be applied starting at 1620 DD.

Upcoming Events

Don't forget to check out the calendar on our website (<http://flgp.cce.cornell.edu/events.php>) for more information about these and other events relevant to the Finger Lakes grape industry.

DEC Mock Inspection for Worker Protection Standards

Tuesday, July 22 2014 1:00 – 3:00 PM

DeMarree Fruit Farm

7654 Town Line Road, Williamson, NY

Wednesday, July 23 2014 10:00 AM – 12:00 PM

New York State Agriculture Experiment Station

Jordan Hall

630 W North St., Geneva, NY 14456



FLGP Tailgate Meeting

Tuesday, July 22 5:00 – 6:30 PM

Dalrymple Farm

7890 County Rd. 131, Ovid NY 14521

Our next Tailgate Meeting will be held on Tuesday, July 22 at 5:00 PM at the Dalrymple Farm in Ovid.

These meetings are held every other week at various grape farms around the Finger Lakes, and are intended to be informal, small-group meetings where FLGP staff and growers can ask questions and discuss issues about vineyard management, IPM strategies or other topics appropriate for that point in the growing season. Growers are eligible to receive 0.75 pesticide recertification credits at each meeting this year.

Here are the dates and locations of the rest of our Tailgate Meetings this season.

Date	Address
August 5	Hunt Country Vineyards, 4021 Italy Hill Road, Branchport NY 14418
August 19	Dr. Frank's Vinifera Wine Cellars, 5230 Route 414, Hector NY 14841

Finger Lakes Vineyard Update

Finger Lakes Grape Program

July 16, 2014

2014 GDD Accumulation

2014 GDD & Precipitation

FL Teaching & Demonstration Vineyard – Dresden, NY					
Date	Hi Temp (F)	Lo Temp (F)	Rain (inches)	Daily GDDs	Total GDDs
7/9/14	77.2	61.2	0.00	19.2	1161.1
7/10/14	74.4	57.3	0.00	15.9	1176.9
7/11/14	80.3	54.8	0.00	17.6	1194.5
7/12/14	84.8	63.1	0.00	24.0	1218.4
7/13/14	77.9	68.5	0.22	23.2	1241.6
7/14/14	81.4	63.8	0.12	22.6	1264.2
7/15/14	80.9	65.5	0.05	23.2	1287.4
Weekly Total			0.39"	145.6	
Season Total			13.58"	1287.4	

GDDs as of July 15, 2013: 1347.2

Rainfall as of July 15, 2013: 12.08"



Seasonal Comparisons (at Geneva)

Growing Degree Days

	2014 GDD ¹	Long-term Avg GDD ²	Cumulative days ahead (+)/behind (-) ³
April	52.1	65.6	-3
May	298.3	247.3	+3
June	516.9	480.6	+4
July	300.7	642.3	+4
August			
September			
October			

¹ Accumulated GDDs for the month.

² The long-term average (1973-2013) GDD accumulation for that month, or up to the most recent records in the current month.

³ Numbers at the end of each month represent where this year's GDD accumulation stands relative to the long-term average. For example, at the end of April 2014, we were 3 days behind average accumulation. The most recent number represents the current status.

2014 GDD Accumulation (continued from page 9)

Precipitation

	2014 Rain ⁴	Long-term Avg Rain ⁵	Monthly deviation from avg ⁶
April	2.90"	2.90"	0.00"
May	3.64"	3.11"	+0.53"
June	3.23"	3.60"	-0.37"
July	1.71"	3.31"	
August			
September			
October			

⁴ Monthly rainfall totals up to current date

⁵ Long-term average rainfall for the month (total)

⁶ Monthly deviation from average (calculated at the end of the month)

Additional Information



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

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

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FINGER LAKES VINEYARD UPDATE

Is published by

Cornell Cooperative Extension

Finger Lakes Grape Program

Ontario, Schuyler, Seneca, Steuben and Yates Counties

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