Finger Lakes Vineyard Update

INSIDE THIS ISSUE:

IPM

Hans Walter-Peterson

Downy Mildew

Given the weather over the past couple of weeks, it should be no surprise that downy mildew is becoming more common in susceptible varieties. These would primarily be certain hybrids as well as all vinifera blocks. Berries become resistant to new DM infections about 4-5 weeks after bloom, but at this point growers should be more concerned about the amount of mildew on leaves. If the level of infection is still relatively low, incorporating a phosphorous acid product like ProPhyt, Phostrol or Rampart can help to keep existing infections from producing new spores and containing the infection (i.e., these materials don't necessarily "kill" existing infections, but rather act more to keep them from reproducing). A material that is starting to see some use in the Finger Lakes is one that has been around for a while but has generally been avoided because of its cost – Ridomil. This material has always been considered to be one of the best (if not the best) materials against downy mildew, but its high cost compared to other materials has limited its use. Ridomil is a different chemistry from other DM materials from a resistance management perspective, and has both protective and post-infection activity against downy mildew, but is highly susceptible to resistance development. Wayne's guidance in the IPM Guidelines is no more than one or two applications per year. Ridomil is available mixed with either mancozeb (Ridomil Gold MZ) or copper (Ridomil Gold Copper), both of which can provide some amount of additional benefit against downy and black rot. Pre-harvest intervals need to be considered with both materials – Ridomil Gold MZ has a 66-day PHI due to the inclusion of mancozeb, and Ridomil Gold Copper

- **FLGP Tailgate Meeting** *July 14, 2015*
- **40th Annual American Society for Enology and Viticulture Eastern Section Conference** *July 23-25, 2015*

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has a 42-day PHI. As I mentioned, the primary barrier to using Ridomil for most growers is the cost, which is in the range of $40-50 per acre.

Potato Leafhopper

This insect is starting to have a more significant presence in the Finger Lakes than it has in the past several years. We are seeing a number of our vines being affected by them at the Teaching Vineyard, and I have seen finding evidence of them in a number of other vineyards that I have been visiting over the past week or so. The leafhopper does not overwinter here, but arrives from the southeastern U.S. on weather fronts – which we have had a few of this year. Unlike the grape leafhopper that we are a bit more used to, potato leafhoppers have a wide range of host plants that they can live on, but I have been seeing more evidence of potato leafhopper presence in vineyards than I usually do.

Photo 1

Photo 2

While symptoms can appear on any grape variety, all of our *vinifera* varieties and some hybrids, like Cayuga White, are particularly susceptible to damage from them. The leafhoppers tap into the phloem vessels of the plant, injecting their saliva in the process which causes the main symptoms of their feeding – yellowing leaves (beginning along the margins) that eventually start to cup downwards (Photo 1). Nymphs and adults are colored bright green, and can usually be found on the underside of the leaf (Photo 2). The nymphs are unable to fly, and move sideways when they are travelling across the leaf surface, which is another helpful ID tool (watch this 10 second video of a PLH nymph moving on a grape leaf on our YouTube page).

At high enough thresholds, PLH feeding can reduce vine growth and impact fruit ripening by reducing the photosynthetic capacity of the leaves. There is no specific economic threshold for potato leafhopper – the decision about whether to spray or not should depend on the age of the vine, the amount of damage being experienced, and the variety's susceptibility to damage. There are several options for control of PLH listed in the IPM Guidelines. Materials like Sevin, Danitol, Brigade and Baythroid are all effective options, but will only be effective on the foliage that they are applied to. New leaves that emerge after the application will need

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to be protected by subsequent sprays. A couple of neonicotinoid products, Assail and Provado, are labeled for leafhopper control in New York as well. These materials are absorbed into the leaves, providing a longer residual effect and are less susceptible to washing off.

For more information:

R. Isaacs and S. Van Timmeren. "Potato Leafhopper Control in Winegrapes." http://msue.anr.msu.edu/news/potato_leafhopper_control_in_winegrapes. Michigan State University. Posted June 8, 2010. Accessed July 1, 2015.

R. Isaacs, S. Van Timeren, P. Sabbatini and P. Murad. "Managing Potato Leafhopper in Wine Grapes." http://www.isaacslab.ent.msu.edu/Images/talks/Isaacs%20PLH%20GLExpo%20Winegrape%20session%202009%20for%20web.pdf. Accessed July 1, 2015.

Grape Berry Moth

According to the Grape Berry Moth model, warmer sites in the Finger Lakes will be reaching the 810 GDD threshold for potential application of insecticides for the second generation of GBM by this weekend. Growers in vineyards with low to moderate risk for GBM damage should be scouting for their presence over the next several days to determine if there is enough damage on young berries (6% suggested threshold) to warrant a spray for control. Cooler sites are a few days further away from the threshold – pay attention to the GBM model on the NEWA website to determine when scouting and potential sprays should be done.

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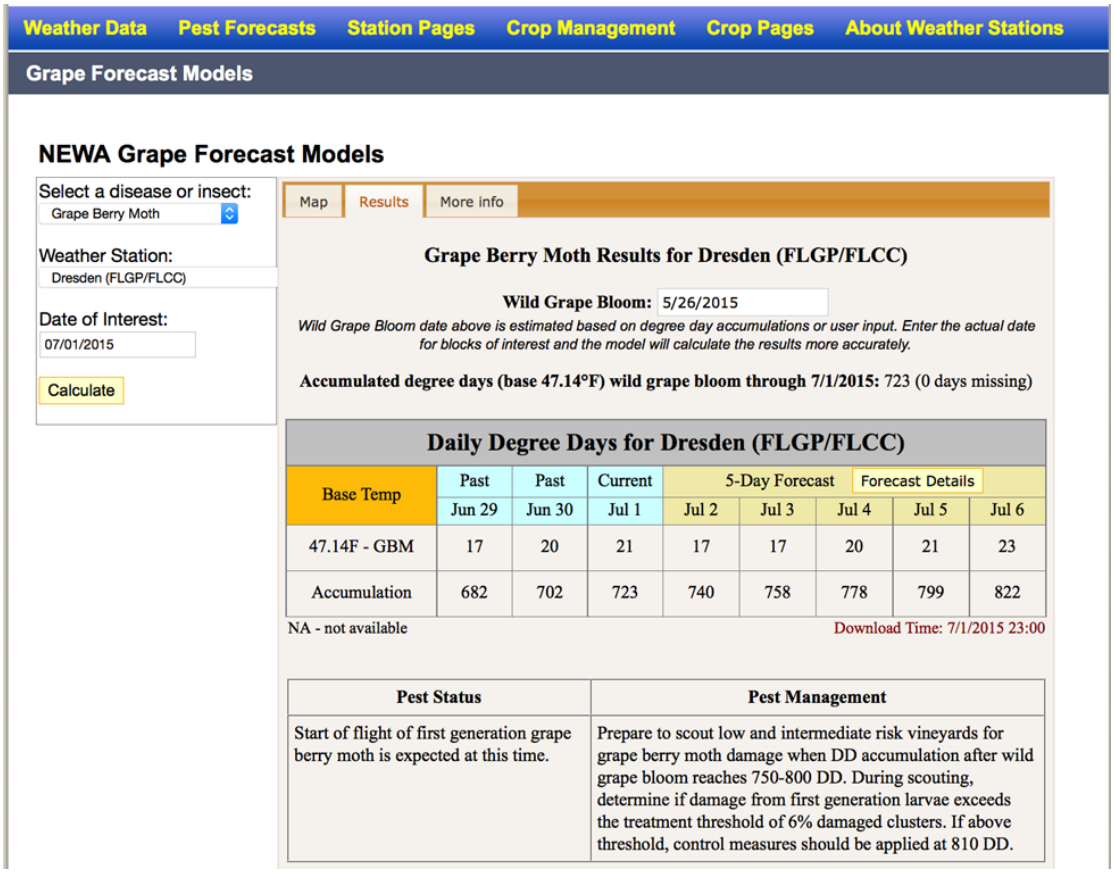

Weather Data | Pest Forecasts | Station Pages | Crop Management | Crop Pages | About Weather Stations

Grape Forecast Models

NEWA Grape Forecast Models

Select a disease or insect: Grape Berry Moth

Weather Station: Dresden (FLGP/FLCC)

Date of Interest: 07/01/2015

Calculate

Map | Results | More info

Grape Berry Moth Results for Dresden (FLGP/FLCC)

Wild Grape Bloom: 5/26/2015

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 7/1/2015: 723 (0 days missing)

Daily Degree Days for Dresden (FLGP/FLCC)

Base Temp	Past	Past	Current	5-Day Forecast				Forecast Details
	Jun 29	Jun 30	Jul 1	Jul 2	Jul 3	Jul 4	Jul 5	Jul 6
47.14F - GBM	17	20	21	17	17	20	21	23
Accumulation	682	702	723	740	758	778	799	822

NA - not available

Download Time: 7/1/2015 23:00

Pest Status	Pest Management
Start of flight of first generation grape berry moth is expected at this time.	Prepare to scout low and intermediate risk vineyards for grape berry moth damage when DD accumulation after wild grape bloom reaches 750-800 DD. During scouting, determine if damage from first generation larvae exceeds the treatment threshold of 6% damaged clusters. If above threshold, control measures should be applied at 810 DD.

In The Vineyard

Hans Walter-Peterson

Growth is taking off in many vineyard right now, thanks to an (over)abundance of water in the soil. For the month of June, the weather station at Geneva recorded 7.28” of rain in June, which is twice the long-term average for the month. We’ve seen a few hedgers out making their first pass already. Fruit set has come and gone, on primary shoots at least, and I’ll stand by my assessment from last week that set seems to be all over the board.

While it is not 100% true, there are many canopies that are turning light green or yellowish-green in color. There are a number of reasons that these kinds of symptoms can show up, but in most cases this is likely the result of roots that are trying to take up nutrients in water-logged soils. This is a time when vines are trying to grow leaves, shoots and increase berry size, and the demand for nutrients is very high. Roots require oxygen in order to respire (just like us), giving them energy and the ability to extract nutrients from the soil. If all of the pores and spaces between the soil particles are filled with water, there is less oxygen for the roots and they become less efficient at nutrient uptake. Barring the presence of other issues, we should see most canopies return to a more normal color if we can have an extended break from the rain and the soil can dry out a bit.

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Upcoming Events

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.

FLGP Tailgate Meetings

Next Meeting: Tuesday, July 14 5:00 – 6:30 PM

Wagner Vineyards

9322 Route 414, Lodi NY 14860

Our annual series of tailgate meetings continues on Tuesday, July 14, at Wagner Vineyards in Lodi.

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. The DEC has approved 1.0 pesticide recertification credits for each Tailgate Meeting this year.

Dates and locations for the rest of this year's Tailgate Meetings can be found under the 'Events' section of our website.

40th Annual American Society for Enology and Viticulture – Eastern Section Conference

July 23-25, 2015

Clarion Hotel & Conference Center

30 Lake Shore Drive E

Dunkirk, NY 14048

AMERICAN SOCIETY FOR ENOLOGY AND VITICULTURE
Eastern Section

Join us for the 40th American Society of Enology and Viticulture – Eastern Section (ASEV-ES) conference in Dunkirk, NY on July 23-25, 2015. The host hotel for the ASEV-ES Conference will be the Clarion Hotel Marina and Conference Center in Dunkirk, NY. On Thursday, July 23 there will be a **pre-conference tour** of New York vineyards and wineries. The **conference** will begin with technical presentations on Friday and Saturday, July 24-25 and include Friday's Oenolympics & Grazing Dinner with Wines of the East and Saturday's Sparkling Wine Reception and Grand Awards Banquet.

For further registration, housing and program information, please visit http://www.asev-es.org/.

2015 GDD & Precipitation

FLX Teaching & Demonstration Vineyard – Dresden, NY					
Date	**Hi Temp (F)**	**Lo Temp (F)**	**Rain (inches)**	**Daily GDDs**	**Total GDDs**
6/24/15	76.6	59.6	0.00	18.1	914.7
6/25/15	77.7	60.3	0.14	19.0	933.7
6/26/15	73.8	59.0	0.01	16.4	950.1
6/27/15	65.0	55.9	1.01	10.5	960.5
6/28/15	65.5	55.3	0.60	10.4	970.9
6/29/15	74.0	58.1	0.00	16.1	987.0
6/30/15	77.6	61.6	0.12	19.6	1006.6
Weekly Total			**1.88”**	**110.1**	
Season Total			**13.80”**	**1006.6**	

GDDs as of June 30, 2014: 959.3

Rainfall as of June 30 2014: 12.83”

Seasonal Comparisons (at Geneva)

Growing Degree Days

	2015 GDD [1]	Long-term Avg GDD [2]	Cumulative days ahead (+)/behind (-) [3]
April	40.8	65.2	-7
May	408.4	248.6	+8
June	444.9	481.5	+5
July		640.6	
August		588.6	
September		347.6	
October		105.5	
TOTAL		2477.6	

[1] Accumulated GDDs for the month.

[2] The long-term average (1973-2014) GDD accumulation for that month.

[3] Numbers at the end of each month represent where this year’s GDD accumulation stands relative to the long-term average. The most recent number represents the current status.

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2015 GDD & Precipitation (continued from page 6)

Precipitation

	2015 Rain [4]	Long-term Avg Rain [5]	Monthly deviation from avg [6]
April	2.54”	2.90	-0.31”
May	2.97”	3.11	-0.14”
June	7.28”	3.60	+3.68”
July		3.42	
August		3.17	
September		3.63	
October		3.25	
TOTAL		23.08”	

[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

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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