

Finger Lakes Vineyard Update

In the Vineyard

Hans Walter-Peterson



Marquette cluster on
Thursday, June 8

We noted last week that wild grape bloom had arrived in most parts of the Finger Lakes during or just after the Memorial Day weekend. However, we're still waiting for the first signs of bloom in cultivated varieties here. Our earliest varieties at the Teaching Vineyard, Marquette and our seedless table grapes (Jupiter and Marquis), are very close to opening, and given the heat and sunshine we are supposed to be getting over the next several days, I imagine these and several other varieties will start showing signs of bloom in the next couple of days. Just for comparison's sake, Marquette bloomed on June 6 last year, and the table grapes on June 13.

As of today, June 8, our GDD accumulation (measured at Geneva) to date of 399.9 is right on the long-term average for this date.

'Spring Fever' symptoms

We've been noticing in a few vineyards over the past week the development of symptoms of what looks to be a condition called 'spring fever'. Older leaves begin to turn lighter green or even yellow, beginning at the edges and moving inward between the veins, similar to what happens when we see potassium deficiency later in the year (this condition has sometimes been called *false potassium deficiency* because of this). Spring fever generally appears when there is a period of cool temperatures following warmer ones, which we have run into over the past week or so. The cause of the symptoms is believed to be the result not of a deficiency in potassium, but rather an accumulation of a compound called *putrescine* within the leaf tissue. Because of this, it is easy to distinguish between spring fever and actual potassium deficiency by collecting petiole samples from symptomatic and non-symptomatic leaves. 'Spring fever' leaves will show potassium levels at normal levels. The symptoms will usually disappear when warmer temperatures return, like we are expecting beginning today.



'Spring Fever' symptoms on a Thompson Seedless leaf. Source: <http://iv.ucdavis.edu>

In other words, if this is seen in any vineyard blocks, give it a week or two for the symptoms to dissipate before considering doing anything. And if they don't go away, taking a couple of petiole samples can help to determine if you're looking at a nutrient deficiency or not.

Here are a couple of other resources if you want to learn some more about this:

- 'Spring Fever' from UC-Davis - http://iv.ucdavis.edu/Viticultural_Information/?uid=197&ds=351
- 'Pinot Leaf Curl' by Rhonda Smith, Larry Bettiga and Doug Adams (UC Cooperative Extension and UC-Davis) - <http://cesonoma.ucanr.edu/files/218499.pdf>

IPM

Hans Walter-Peterson

We're just about ready to send out the final version of Wayne Wilcox's annual Disease Management Update newsletter, otherwise affectionately known as the 'Magnum Opus'. Along with the IPM Guidelines, this publication (which is totaling about 85 pages this year) is one of the keystone resources that every grower should have nearby to refer to during the season. Keep an eye out for it either tomorrow or Monday in your email, or early next week in your mailbox if you paid for a hard copy.

As we discussed at yesterday's Tailgate Meeting, we've started to see a little bit of just about everything out there at this point in the season. Phomopsis lesions are still fairly easy to find on leaves, but I have not seen any major ones on rachises or at the bases of shoots. I have seen signs of a couple of early downy mildew infections (yellowing oil spots on leaves, but no fluffy white sporulation yet), and a few black rot lesions as well, but fortunately nothing major.

As growers begin to prepare to apply their pre-bloom sprays and move to use materials other than EBDCs, I wanted to throw out a couple of our annual reminders about resistance management, which becomes more important with many of our other materials:

1. Rotate, rotate, rotate! Be sure to check the Resistance Group Number for each fungicide that you use to make sure that you aren't overusing any one group. Just because the name of the material is different doesn't mean that the chemistry is different.
2. Use full rates. This is especially important when using some of the newer "blended" materials like Inspire Super, Revus Top, Luna Experience, etc. A full rate of some of these blended materials may not provide the equivalent of a full rate for each of the chemicals in the blend. Using full rates will ensure that each material has the best chance of success and reducing the selection pressure for resistant types.
3. Most growers shouldn't rely on the strobilurins for control of powdery and downy mildew at this point. Be sure that there is something else in the tank, whether it's another material blended with a strobie (e.g., Pristine) or another component in a tank mix, that will cover both PM and DM.

Insects

I have also found a few grape and potato leafhoppers in some blocks this week. Grape leafhopper damage was seen only on suckers at this point, but over time damage can be found in the canopy as well. As with many pest problems, smaller or young vines with limited leaf area and more susceptible to being impacted than larger vines with more leaf area that can compensate for higher levels of damage. In addition to just feeding on leaves, potato leafhoppers also inject a toxin into the leaves while they feed, causing leaves to turn yellow and curl around at the margins.

A number of insecticides are effective against both types of leafhoppers, including a few (Assail, Sevin, Brigade, Venom) that are not labeled as restricted use pesticides.



Stippling on Concord caused by feeding of grape leafhopper



Leaf margins yellowing and curling due to potato leafhopper

eNEWA for Grapes

Tim Weigle, NYS Grape IPM Specialist

Would you like to see the current weather and grape pest information found on NEWA (Network for Environment and Weather Applications) <http://newa.cornell.edu> without having to click through the website? Then eNEWA is for you. eNEWA is a daily email that contains current weather and pest model information from a station, or stations, near you. The email will contain; 1) high, low and average temperature, rainfall, wind speed and relative humidity 2) the 5-day forecast for these weather parameters, 3) GDD totals (Base 50F), 4) 5-day GDD (Base 50F) forecast and 5) model results for powdery mildew, black rot, Phomopsis and grape berry moth. The weather information is provided for not only the current day but for the past two days as well.

We will continue eNEWA for Grapes in 2017. You can choose from any number of stations located near you for delivery of this information via email each day at a time specified by you. Please keep in mind that you will receive a separate email (approximately 3 pages in length) for each station you choose. Once during the growing season and again after harvest, you will be asked to complete a short survey to assist us in improving the eNEWA for grapes email system. If you would like to be a part of this project just fill out the form found in this newsletter and return to: thw4@cornell.edu or send to me at Tim Weigle, CLEREL, 6592 West Main Road, Portland, NY 14769.

=grape-diseases

Grape Forecast Models

NEWA Grape Forecast Models

Select a disease or insect:
Grape Diseases

State:
New York

Weather station:
Dresden (FLGP/FLCC)

Ending Date:
6/8/2017

Calculate

Map Results More info

Grape Disease Infection Events for Dresden (FLGP/FLCC)



	Past	Past	Current	Grape Disease 5-Day Forecast				
	Jun 6	Jun 7	Jun 8	Jun 9	Jun 10	Jun 11	Jun 12	Jun 13
Phomopsis	Yes	No	Combined	Combined	Yes	-	-	-
Powdery Mildew	No	No	No	No	No	-	-	-
Black Rot	Yes	No	Combined	Combined	Yes	-	-	-

Phomopsis - calculates when weather conditions may allow spores to infect susceptible tissue.
Powdery Mildew - calculates primary infection when weather conditions may allow overwintered, primary spores (ascospores) to infect susceptible tissue; runs from bud break until pre-bloom. Once primary infections have occurred, secondary infections (disease spread) are possible every day. The threat is greatest when temperatures are between 65 to 90 degrees F and is particularly high when conditions are cloudy.
Black Rot - calculates when weather conditions may allow spores to infect susceptible tissue.

Phenological stage: 10 inch shoot

Choose the phenology stage for the grape variety of interest to display management messages. Concord grape phenology is estimated by the model from historical records for this variety.

Disease	Disease Management
Phomopsis	At this time, protect against rachis infections and prevent infections that move from berry stems into the fruit later in the season. Monitor infection events and maintain fungicide protection on <u>susceptible varieties</u> , in hedged vineyards, or locations with a history of Phomopsis.
	A lot of powdery mildew the previous year = More primary inoculum to cause infections this spring. The model logs potential primary infection events.


Accuracy of the weather data is the responsibility of the owners of the weather station instruments. NEWA is


2017 eNEWA Grape Project Subscription Sign-Up

Subscriber information

Name _____

Email address _____

City _____

Select Location(s) (circle as many as you like, or write in below)

<u>Lake Erie Region</u>	Sheridan	Lakemont
Appleton, North	Silver Creek	Lansing
Appleton, South	Versailles	Lodi (Lamoreaux)
Dunkirk	<u>Finger Lakes Region</u>	Lodi (Shalestone)
Erie	Aurora	Lodi (Standing Stone)
Harborcreek	Branchport	Penn Yan
North East Escarpment	Dresden (FLGP/FLCC)	Romulus (B. wood Grove)
North East Lab	Dundee (Weimer)	Romulus (Thirsty Owl)
Portland	Fayette 3 Brothers	Varick (Swedish Hill)
Portland Escarpment	Geneva	Watkins Glen
Portland Route 5	Geneva (Bejo)	Watkins Glen (Lakewood)
Ransomville	Hector	
Ripley	Interlaken (Airy Acres)	

Select eNEWA Delivery Times (write in times below) Delivery requests should be on the hour.

Mail to: Tim Weigle, CLEREL, 6592 West Main Road, Portland, NY or scan and email to thw4@cornell.edu

June 6th 2017 Tailgate Recap

Gillian Trimmer

To everyone's amazement, the sun came out yesterday, right on cue for our Tailgate Meeting at Fox Run Vineyards. All of the rain lately has left us with plenty to talk about as far as diseases go, particularly as we approach one of the most critical times of year for protecting the crop. Just a bit of scouting in nearby vineyards before the meeting yielded lesions from black rot, phomopsis, downy mildew... Hans and I had a number of ailing leaves available for "show and tell" this time around. We also noticed plenty of vines with "spring fever", which Hans describes in more detail in the "In the Vineyard" section of this Update, and were able to show several leaves displaying the yellowing associated with that. In quintessential Tailgate Meeting fashion, discussion of leaf chlorosis and nutrient uptake led to an animated discussion on boron deficiency, toxicity, application methods, and application timing, as well as a broader conversation on how various plant nutrients move through the soil.

Questions on insect pests also came up, so we spent a bit of time discussing the life cycles, methods of control, and thresholds of damage at which it might be economically worthwhile to control grape cane gallmaker, grape cane borer, plume moth, and grape berry moth. Plume moth, grape cane gallmaker, and grape cane borer are all considered relatively minor pests; with the exception of a few areas where population pressure is heavy, they typically don't cause enough damage to be worth taking effort to control. Grape berry moth is, in contrast, often enough of a problem to consider devoting energy to reducing populations levels through removal of wild grapes in nearby hedgerows and/or spraying. Timing of grape berry moth spray applications should be based on scouting and, at this time of year, the NEWA pest forecast model. Last night's meeting also provided an opportunity for Hans and I to gather feedback from the group. We really want to know: What workshops and equipment demonstrations would you like to see? Where should we focus our research efforts to answer your questions? How can we best meet your needs? You don't need to come to a Tailgate Meeting to share your ideas with us, though. Give us a call or send us an email with your thoughts anytime!

Many thanks to Scott Osborn and John Kaiser for hosting us on the patio of Fox Run, and to Brittany Griffin, who in addition to making all of the administrative and IT gears and grommets of the Finger Lakes Grape Program go, also managed to come out to help us with this meeting. Our next Tailgate Meeting will be on June 20th from 4:30-6 PM at Barron's Pratt Barn Vineyard in Canandaigua. See you then!



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.



Tailgate Meeting

Tuesday, June 20 4:30 – 6:00 PM
Barron Pratt Barn Vineyards
4990 State Route 21
Canandaigua, NY 14424

Our fourth Tailgate Meeting of the year will be held at Barron Pratt Barn Vineyards, on Tuesday June 20th.

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. 0.75 DEC recertification credits will be available.

ASEV –Eastern Section Annual Conference

July 10-12, 2017
Charlottesville, VA

Join us for the 42nd American Society of Enology and Viticulture-Eastern Section (ASEV-ES) Conference in Charlottesville, VA on July 10-12, 2017.

On Monday, July 10 there will be a **preconference tour** of Virginia vineyards and wineries. The **conference** will begin with technical/research presentations on Tuesday and Wednesday, July 11-12 and include Tuesday's Oenolympics with Wines of the East Reception and Wednesday's Sparkling Wine Reception and Grand Awards Banquet.

New this Year: Industry Workshop on Wednesday, July 12 to feature invited speakers to discuss **"Pioneering Wine Grape Varieties Adapted to the Challenges of the East"**.

Further information is available at the [ASEV-Eastern Section website](http://www.asev-es.org). Information on the program and registration costs is available in the [conference registration packet](#), or register for the meeting online at <http://www.asev-es.org/regform1.php>.

Finger Lakes Vineyard Update

Finger Lakes Grape Program

June 8, 2017

2017 Growing Degree Days and Rain Fall

FLX Teaching & Demonstration Vineyard – Dresden, NY					
Date	Hi Temp (F)	Lo Temp (F)	Rain (inches)	Daily GDDs	Total GDDs
6/1/17	68.9	51.2	0.00	10.1	427.3
6/2/17	66.2	46.0	0.00	6.1	433.4
6/3/17	69.9	49.3	0.00	9.6	443.0
6/4/17	67.7	48.5	0.16	8.1	451.1
6/5/17	71.8	57.3	0.37	14.6	465.7
6/6/17	65.5	52.4	0.00	9.0	474.6
6/7/17	69.9	49.6	0.00	9.8	484.4
Weekly Total			0.53"	67.1	
Season Total			9.32"	484.4	

GDDs as of June 7, 2016: 466.7

Rainfall as of June 7, 2016: 4.40"



Seasonal Comparisons (at Geneva)

Growing Degree Day

	2017 GDD ¹	Long-term Avg GDD ²	Cumulative days ahead (+)/behind (-) ³
April	125.8	64.0	+12
May	219.1	252.7	+3
June	55.1	480.8	0
July		641.1	
August		591.7	
September		353.5	
October		106.4	
TOTAL	399.9	2490.3	

¹ Accumulated GDDs for each month.

² The long-term average (1973-2016) 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.

2017 Growing Degree Days and Rain Fall

Precipitation

	2017 Rain ⁴	Long-term Avg Rain ⁵	Monthly deviation from avg ⁶
April	3.42"	2.85	+0.57"
May	5.35"	3.08	+2.27"
June	0.28"	3.61	
July		3.36	
August		3.13	
September		3.64	
October		3.22	
TOTAL	9.05"	22.95"	

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 at <http://flgp.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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