



Finger Lakes Vineyard Update

Links To

In the Vineyard

Hans Walter-Peterson



Bloom had gotten started in some of our early varieties like Baco, Concord and Niagara as of Monday, and I expect we'll see a lot more varieties following suit over the next week or so. The forecast for the next few days looks pretty wet, which is generally considered to have a negative effect on fruit set in part by making it harder for the caps of the florets to come off the flower. Hopefully it won't have too much of an impact as these varieties go through bloom and pollination over the next several days.

On the positive end, we have been seeing a healthy number of clusters on vines across the board so far, especially in vineyards that were frosted or hit with hail last year. We are not having an especially early or warm season so far this year, so it may be worthwhile to consider making some estimates of crop size, and possibly some crop thinning in order to avoid overly stressing the vines.

Speaking of set, I have included a short article (below) from Alice Wise about the practice of early leaf pulling as a way to reduce fruit set in some tight-clustered varieties. The practice has been tested in a few different regions on different varieties, including work by Bryan Hed at Penn State's Lake Erie research station in Northeast, PA on Vignoles and Chardonnay. Removal of the basal 4-5 leaves (which looks and sounds extreme) no later than trace bloom has shown to be pretty effective at reducing fruit set and making clusters less compact, and thus less vulnerable to bunch rots later in the season. As with many practices, the question comes down to cost. This is not an inexpensive process, obviously. I've seen estimates of \$150/acre if it's done by hand. Can it be done mechanically? Perhaps, especially with some of the newer machines that are better at removing leaves and not damaging clusters.

There's a nice set of slides from a presentation that Bryan gave last year at a Grape IPM Workshop that includes information about early season leaf pulling. You can see the slides by clicking the link:

[Management and research of fruit rot diseases in vineyards – Bryan Hed \(Penn State\)](#)

As with any new practice, I recommend trying it on a limited scale first, to see just how much of an impact it might have in your setting and if the costs can be justified.

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Upcoming Events: more details in Upcoming Events

- Vineyard Tailgate Meeting June 25, 2013
- ASEV– Eastern Section Annual Conference & Symposium July 15–18, 2013

In the Vineyard (Continued from page 1)

From Alice Wise: Long Island Fruit & Veg Update, May 16 2013

Early leaf removal: Many local growers leaf pull certain varieties such as Chardonnay early in the season, even during bloom. The early leafing ensures a less favorable environment for disease as well as better spray coverage at the critical times of bloom and early fruit set. This is especially important for powdery mildew control. There is a body of work emerging that demonstrates the use of early bloom cluster zone leaf removal as a means of reducing cluster compactness. In one Italian study (Am.J.Enol. Vitic. 61:3:372-381, 2010), prebloom vs fruit set and manual vs mechanical leafing were evaluated. Yields per shoot were reduced 30-70% by both methods done prebloom. Leafing at fruit set did not impact yields at all. Penn State grape specialist Mark Chien summarized comments from one of the key Italian researchers who gave a presentation in Ontario in 2012. At this meeting, it was reiterated that 6-7 leaves (i.e. more than we would normally pull) are necessary to get a measurable impact. Apparently, effects can vary by variety and may not show up the first year due to some kind of buffering by the vine. Mark went on to say that he saw vineyards in the Piedmont region of Italy that were stripping half the leaves from 12-16" shoots not just to reduce rot but to reduce the need for cluster thinning, an expensive practice. In an informal trial at LIHREC in 2010, we did trace bloom leafing on some Chardonnay panels. Removal of 6 leaves/shoot just about defoliated most shoots and it indeed was a bit shocking to see. However, there was definitely a treatment effect. The clusters were much looser (fewer berries/cluster) so we achieved our goal; however, berries became very sunburned later in the season. This was 2010 - heat/drought stress must have played a role. Given the potential benefits, early leafing is worthy of at least a trial area. If time allows, try several different treatments by varying variety, timing and/or number of leaves removed. Downside of this practice – timing is critical (early bloom) and it is expensive to implement as shoots are very tender at this time. On the other hand, if it eliminates the need to cluster thin later on and reduces cluster rot, it may be worth it.

IPM

Hans Walter-Peterson

Diseases

We're now in the immediate prebloom to early bloom phase of the season, which means we're in the most critical point of the year for good disease control practices. We say it every year – this is the time when everything really needs to be done right, including using the best materials, full rates, proper water volume, driving down every row (yes, every row) and all the rest.

We have to be providing protection against four of our five major diseases at this point – powdery and downy mildew, black rot and phomopsis. Be sure to be using highly effective materials for all of them. Make sure that tank mixes have something for all four of them, and probably including some sulfur or another post-infection powdery product like Nutrol. The other side of that coin is to also make sure that you are avoiding too much overlap of materials as well. There are many materials that are effective against more than one disease, and doubling or even tripling up on any one disease could be a really inefficient use of materials – and your money.

Wayne Wilcox sent a short note to a few of us yesterday saying that he is seeing active infections of powdery and downy mildew, black rot and phomopsis on the foliage of unsprayed vinifera and hybrid vines in his trial block at Geneva. Both Mike and I have been commenting over the past few days that we haven't really been seeing active powdery or downy infections so far, and only very sporadic signs of black rot so far. Phomopsis infections are a little easier to spot, mostly in high-wire cordon trained vines where you would expect to see a bit more of it.

The cool and dry weather over the past couple of days did not trigger the disease models on NEWA for phomopsis, black rot or powdery, but with rain predicted for the next few days, we should expect the potential for some new infections of all four diseases.

IPM (Continued from page 2)

Grape Forecast Models

NEWA Grape Forecast Models

Select a disease or insect:
Grape Diseases

Weather Station:
Dresden (FLGP/FLCC)

Ending Date:
6/5/2013

Calculate

Map
Results
More info

Grape Disease Infection Events for Dresden (FLGP/FLCC)

	Past	Past	Current	Grape Disease 5-Day Forecast					Forecast Details
	Jun 3	Jun 4	Jun 5	Jun 6	Jun 7	Jun 8	Jun 9	Jun 10	
Phomopsis	No	No	No	-	-	-	-	-	
Powdery Mildew	No	No	No	Yes	Yes	-	-	-	
Black Rot	No	No	No	-	-	-	-	-	

Phomopsis - calculates when weather conditions may allow spores to infect susceptible tissue.
Powdery Mildew - runs from bud break until early bloom; calculates when weather conditions may allow overwintered, primary spores (ascospores) to infect susceptible tissue.
Black Rot - calculates when weather conditions may allow spores to infect susceptible tissue.

Phenological stage: Immediate pre-bloom

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 <u>maintain fungicide protection on susceptible varieties</u> , in hedged vineyards, or locations with a history of Phomopsis.
Powdery	A lot of powdery mildew the previous year = More primary inoculum to cause infections this spring. The model logs potential primary infection events. CAUTION: Prolonged cloud cover (lack of sunshine), high RH (>60%) and warm (63-86F) weather significantly increases the risk of powdery mildew infections. Do not delay sprays beyond the 10 inch shoot growth stage for <u>highly susceptible V. vinifera and hybrid varieties</u> .

<http://newa.cornell.edu/index.php?page=grape-diseases>

Insects

Wild grapes were in bloom in much of the Finger Lakes by around May 29. Why is this important? This is the date that most growers should be using (unless you made your own observations this year) as the biofix date for the grape berry moth model this year. The model uses growing degree days, calculated slightly differently than we do for heat accumulation during the season, accumulated since the biofix date to determine when to spray for GBM. The model uses forecast temperatures five days out to estimate when a particular location will reach the threshold (810 GDDs) when applications should be made.

NEWA Grape Forecast Models

Select a disease or insect:
Grape Berry Moth

Weather Station:
Dresden (FLGP/FLCC)

Date of Interest:
6/5/2013

Calculate

Map
Results
More info

Grape Berry Moth Results for Dresden (FLGP/FLCC)

Wild Grape Bloom: 5/29/2013

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 6/5/2013: 165 (0 days missing)

Base Temp	Past	Past	Current	5-Day Forecast					Forecast Details
	Jun 3	Jun 4	Jun 5	Jun 6	Jun 7	Jun 8	Jun 9	Jun 10	
47.14F - GBM	12	11	13	13	16	16	18	18	
Accumulation	151	162	175	188	204	220	238	256	

NA - not available Download Time: 6/5/2013 12:00

Pest Status	Pest Management
First generation of grape berry moth larvae are hatching and beginning feeding. Grape berry moth will not be at significant population levels in all but the highest risk vineyards.	Research has shown that this insecticide timing for the first generation provides little, if any, additional control of grape berry moth in vineyards classified as being at low, intermediate or high risk for grape berry moth damage. However, an insecticide timed with the immediate postbloom fungicide application can be used in vineyards experiencing significant crop loss from grape berry moth on a yearly basis or in high value vinifera blocks.

Upcoming Events

Vineyard Tailgate Meetings

Tuesday, June 11, 2013 5:00 – 6:30 PM

Hosmer Winery

6999 Route 89, Ovid NY 14521 ([click here for map](#))

These are a series of informal meetings held with growers in different locations around the Finger Lakes during the growing season. Meetings are held every other Tuesday afternoon, starting at 5:00 PM and usually ending around 6:30 PM. During the day of each meeting, Mike and I visit a few growers and vineyards near the meeting location to get a sense of what has been happening in the area, and give us some ideas about some potential topics for the meeting later that day. There will also be ample time to discuss any questions or issues that others want to bring up as well. There is no need to register ahead of time – just show up when you can, and leave when you have to.

There will be 0.75 pesticide recertification credits available for each meeting. As with other events where credits are available, you need to be present at the beginning of the meeting to sign the meeting roster – make sure to have your card with you - and stay until the end to receive your certificate.

Here is the schedule for the rest of our Tailgate meetings this season:

Date	Address
June 25	Dr. Konstantin Frank's Wine Cellars, 9749 Middle Road, Hammondsport NY 14840
July 9	Hermann J. Wiemer Winery, 3962 State Route 14, Dundee NY 14837
July 23	Vine Country Farms (Roy & Gordon Taft), 8531 County Rd 79, Prattsburgh NY 14873
August 6	Atwater Vineyards, 5055 Route 414, Hector NY 14841
August 20	Goose Watch Winery, 5480 Route 89, Romulus NY 14541

ASEV-Eastern Section Annual Conference and Symposium

July 15-18, 2013

Winston-Salem Marriott and Embassy Suites

Winston-Salem, North Carolina

Join us for the 38th Annual American Society of Enology and Viticulture Eastern Section Conference and Symposium July 15-18, 2013 in Winston-Salem, North Carolina.

On Monday, July 15th, there is a **preconference tour** of North Carolina wineries and vineyards. The **conference** will begin with technical/research presentations on Tuesday and Wednesday, July 16th -17th and include Tuesday's Oenolympics Grazing Dinner with Wines of the East and Wednesday's Sparkling Wine Reception and Grand Award Banquet.

The conference will be followed by the **Symposium on Advances in Red Wine Production: Berry to Bottle** on Thursday, July 18th. The Symposium, designed for vineyard managers and winemakers, will feature experts in red wine production.

Additional information about registration, lodging and conference events can be found at <http://www.asev-es.org>.

We look forward to seeing you in North Carolina!

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 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
5/29/13	82.4	59.7	0.22	21.1	395.0
5/30/13	87.7	66.8	0.00	27.3	422.3
5/31/13	90.5	66.9	0.00	28.7	451.0
6/1/13	87.4	65.8	0.00	26.6	477.6
6/2/13	80.2	66.3	0.07	23.3	500.8
6/3/13	66.0	52.8	0.00	9.4	510.2
May 2013 Total			3.41"	381.6	
Monthly Avg - May			3.08"	238.7	
Season Total			5.66"	510.2	

Average GDD on June 4: 363.8

Average Rain on June 4: 6.41"

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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