



Finger Lakes Vineyard Update

In the Vineyard

Gillian Trimmer

Bloom has arrived! We saw the first few individual blossoms opening on Marquette on Friday, and since then we've had nearly every variety in the vineyard follow suit. Only two of our fourteen varieties haven't shown at least trace bloom: NY81 and Chenin Blanc, but I wouldn't be surprised if they aren't starting to open by the end of the day. Marquette, Jupiter, Chardonnay, and Catawba are already in full bloom, with at least 50% of caps off. Marquis and Diamond aren't far behind, with about 10%-30% of the flowers open. Warm temperatures over the weekend and for the past few days have likely contributed to pushing the vines into action, and we're expecting the entire time period for bloom in the Finger Lakes to be relatively short this year. The heat and sun may also help us on our way to a good fruit set.

In This Issue:

In the Vineyard	pg. 1
IPM	pg. 4
Events	pg. 6
GDD's	pg. 7



Cabernet Franc (on 3309 rootstock) in the Teaching and Demonstration Vineyard at trace bloom on 6/14/17

As far as we can tell so far, bloom seems to be happening at around the same time it has for the past two years, give or take a few days. The chart below shows our recorded bloom dates for 2015, 2016, and 2017 at the Teaching and Demonstration Vineyard in Dresden, but keep in mind that a difference of a day or two may reflect more about when we were able to get into the field to make observations than it does about the exact timing of 50% cap fall- what we consider to be "full bloom".

In the Vineyard (continued from page 1)

Gillian Trimmer

Bloom Date at the Teaching and Demonstration Vineyard in Dresden, NY for 2015-2017

Variety	Full Bloom 2015	Full Bloom 2016	Full Bloom 2017
Riesling 239- 3309	6/20/2015	6/17/2016	
Riesling 239- Riparia	6/15/2015	6/17/2016	
Chardonnay 76	6/14/2015	6/17/2016	6/14/2017
Chardonnay 96	6/14/2015	6/17/2016	6/14/2017
Cabernet Franc- 3309	6/12/2015	6/17/2016	
Cabernet Franc- Riparia	6/15/2015	6/17/2016	
Lemberger- 3309	6/15/2015	6/17/2016	
Gruener 101-14	6/14/2015	6/17/2016	
Zweigelt	6/15/2015	6/18/2016	
Chenin Blanc	no data	6/18/2016	
Marquis	no data	6/13/2016	
Jupiter	no data	6/13/2016	6/14/2017
Catawba	no data	no data	6/14/2017
Cayuga White	6/12/2015	6/14/2016	
Vidal	6/13/2015	6/17/2016	
NY 81	6/13/2015	6/16/2016	
Corot Noir	6/13/2015	6/17/2016	
Marquette- 3309	6/10/2015	6/6/2016	6/12/2017
Marquette- Own rooted	6/11/2015	6/6/2016	6/12/2017

Bloom is one of two times of year when we recommend taking petiole samples. Select 50-100 petioles that are opposite from the first (basal) cluster on a shoot, being sure to sample from a good distribution of vines in the vineyard. For more information on petiole sampling, check out our Petiole Sampling video at <https://www.youtube.com/watch?v=IrvpQWUEQKw>.



Chardonnay at bloom in the Teaching and Demonstration Vineyard

In the Vineyard (continued from page 1)

Gillian Trimmer

Leaf Removal at Trace Bloom

Last week, with flower clusters just on the verge of opening, Tim Martinson and his team set up an experiment to evaluate the use of mechanical leaf removal at bloom. Peter Martini, proud owner of a leaf remover that sends pulses of compressed air into the canopy, drove through his vineyards at Nutt Road for the trial, turning the air on for designated panels, resulting in some shredding of the leaves. Other panels had the first 5 or so leaves removed from each shoot by hand, and still others were left as they were. All will be evaluated for cluster compactness this fall. We already know that the flow of photosynthates to the clusters at bloom can affect set and thereby change cluster architecture—a reduction in photosynthesis during bloom will lead to looser clusters, which in turn are less prone to disease.



Alex Koeberle filming mechanical leaf removal at Anthony Road Vineyard

The relationship between leaf removal at bloom and looser clusters has also already been established, but few commercial growers remove leaves at this time of year due to the large amount of labor required to do so by hand, and the damage that older suction-and-blade styles of leaf removal machines can do to the clusters at this stage. If mechanical leaf removal at bloom can be shown to be both effective and non-destructive to the clusters, there's hope that the struggle against bunch rot just got a little bit easier.

For more information on Tim Martinson's work and what we know about the subject already, check out this November 2015 Appellation Cornell article, ["Manipulating Clusters at Bloom"](#).

IPM

Hans Walter-Peterson

With the arrival of bloom, we've gotten a couple of questions this week about timing of sprays in relation to where the vines are in the bloom period (just starting, midway through, etc.). While we call the two very important sprays around this time period the "pre-bloom" and "post-bloom", implying that they should be applied before bloom starts and after it is finished, it is more important that sprays are being applied at appropriate intervals between them based on the materials being used and the weather conditions between sprays. Bloom can get stretched out in some years, sometimes taking more than two weeks between early varieties getting started and later varieties finishing up, so it's almost inevitable that some varieties will get sprayed during the bloom period most years. Bottom line: keep the intervals where they should be, regardless of what stage of bloom you're in (unless you're restricted to using EBDC materials to only before bloom starts), and be sure to be using the strongest materials you can during these couple of sprays.

Quick summary of new fungicides in 2017

The following are summaries of some (not all) of the new fungicides mentioned in [Wayne Wilcox's Disease Management newsletter](#) that went out last week. This information is blatantly "borrowed" from his write-up, along with the [2017 Grape IPM Guidelines](#), both of which contain much more information about these materials, and which you really should read before using any of these products. As always, thanks to Wayne for the information.

Luna Experience: Luna Experience is a product that combines two ingredients – tebuconazole (a sterol inhibitor, Group 3) and fluopyram (a SDHI, Group 7). Labeled for use against powdery mildew, black rot and Botrytis. It has provided excellent control of powdery mildew and Botrytis at the 6.0 oz/acre rate in Wayne's trials, but a higher rate of 8.0-8.6 oz/acre is recommended to get good control of black rot during the immediate post-bloom period. If using for Botrytis control at veraison or later, consider bumping up to the higher rate depending on the disease pressure. It is a restricted use pesticide in New York.

Zampro: Zampro is another combination product, containing dimethomorph (the same active ingredient in Revus, Group 40) and ametoctradin, which is a new chemistry unrelated to any other materials currently available. Even though it is a combination product, it is only labeled for control of downy mildew. It has protective activity, as well as post-infection and anti-sporulant activity as well. Zampro is also a restricted use material in New York.

Fracture: This material has actually been available for a couple of years, but may still be new to many growers. It is one of a growing number of "biological" fungicides on the market, derived from a plant protein. It has shown good control against Botrytis, and has a one day PHI, which might make it a good option for late-season use close to harvest. It is also labeled for powdery mildew control, and showed some efficacy in one NY trial.

Rhyme/Topguard EQ: Both of these products contain a DMI fungicide called flutriafol (so same resistance group, Group 3, as other sterol inhibitors). Rhyme contains only flutriafol, and as a DMI provides excellent control of black rot. Powdery mildew control is going to vary based on the level of resistance that has developed in a particular area. Wayne found the 4 oz. rate of Rhyme to provide marginal control of powdery, so he suggests using the 5 oz. rate.

IPM (continued from page 2)

Hans Walter-Peterson

Topguard EQ combines flutriafol with azoxystrobin (a strobilurin, Group 11). According to Wayne, the azoxystrobin can provide some further control of powdery mildew beyond what the flutriafol does alone, plus it also provides protective activity against black rot which fits nicely with the post-infection activity of flutriafol against the disease. The labeled rate is 5-6 oz/acre, and again, Wayne suggests that the higher rate appears to provide better control. Quadris Top is another material that combines azoxystrobin with a DMI fungicide (difenoconazole). Wayne notes that the difenoconazole in Quadris Top seems to have a little better efficacy against powdery mildew than flutriafol when pressure is high, so that might be something to consider if choosing between these two products. Because of their similarity, the decision may just come down to price.

Neither Rhyme nor Topguard EQ are labeled as restricted use materials (nor is Quadris Top, for that matter).

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](#). 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>.

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
6/7/17	69.9	49.6	0.00	9.8	484.4
6/8/17	77.3	48.9	0.00	13.1	497.5
6/9/17	77.9	52.8	0.00	15.4	512.8
6/10/17	84.4	62.7	0.00	23.6	536.4
6/11/17	88.8	68.8	0.00	28.8	565.2
6/12/17	89.6	67.6	0.00	28.6	593.8
6/13/17	81.4	65.8	0.02	23.6	617.4
Weekly Total			0.02"	142.8	
Season Total			9.34"	617.4	

GDDs as of June 13, 2016: 534.6

Rainfall as of June 13, 2016: 4.44"



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	182.5	480.8	+2
July		641.1	
August		591.7	
September		353.5	
October		106.4	
TOTAL	527.3	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	0.52"	3.61	
July		3.36	
August		3.13	
September		3.64	
October		3.22	
TOTAL	9.29"	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!

Cornell University Cooperative Extension provides equal program and employment opportunities. CCE does not endorse or recommend any specific product or service. This program is solely intended to educate consumers about their choices. Contact CCE if you have any special needs such as visual, hearing or mobility impairments.



FINGER LAKES VINEYARD UPDATE

Is published by

Cornell Cooperative Extension

Finger Lakes Grape Program

Ontario, Schuyler, Seneca, Steuben, Wayne and Yates Counties

417 Liberty Street, Penn Yan, NY 14527

315.536.5134