



Cornell Cooperative Extension

Finger Lakes Grape Program

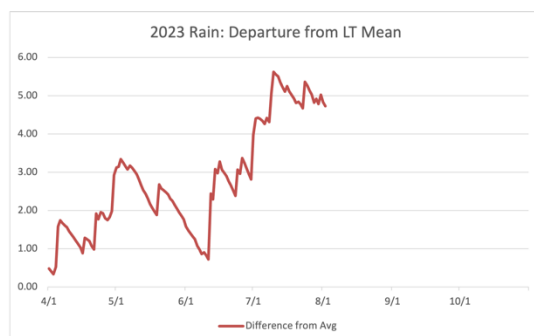
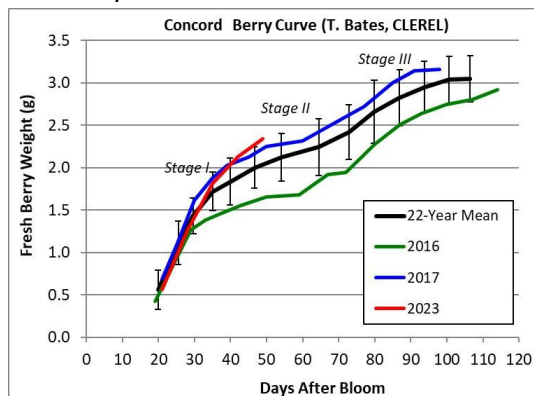
August 3, 2023

Finger Lakes Vineyard Update

In the Vineyard

Veraison is well underway in early cultivars like Marquette (photo), Baco noir and a few others. This is not unusually early for these varieties – at our vineyard, Marquette reaches veraison in late July more often than not, so it seems that our early budbreak this year has not dramatically shifted the ripening period this season (not counting the effect of the freeze damage in May).

We are currently about 5" above our average rainfall for this time of year. A lot of that excess happened back in April, when we had more than double our average of 2.8". The excess rain that we've had in June and July, however, are having a much bigger impact on the vineyards this year. We're seeing that in a number of ways this year, like higher disease pressure, but it is also manifesting itself in larger berry size.



Upper graph: Concord berry weight curve in 2023 (Source: LERGP). Lower graph: 2023 Rainfall at Geneva NY relative to the long-term average. Upward trend means more rain than normal during that time period.

(more on the disease implications of that in the IPM section of this week's newsletter). In my observations this year, fruit set is highly variable depending on location and cultivar. I have seen a lot of vineyards with many "hens and chicks" clusters due to conditions at bloom (most likely), and in these cases larger berry size might have minimal impacts.

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We don't have a historical database of berry size in different cultivars from here in the Finger Lakes, but our colleagues out in the Lake Erie region track Concord berry weight every year from shortly after fruit set through harvest. The latest results from their sampling show that berries are larger than average and even bigger at this point in the season than 2017, another "big berry" year. You can see in the upper graph that the berry size started to diverge from the average (the black line) sometime around 35 days after bloom, which was around mid-June. When we look at our rainfall patterns this year (lower graph), this is almost exactly the same time when our weather turned from dry and cool in May to warm and wet in mid-June. The steep upward trend on the lower graph beginning around June 12 means that rain during that time was higher than average, and which is helping the berries to grow larger than they normally would be. In the case of Concord in western NY this year, the berries are about 15% bigger than normal right now.

This obviously has some implications for harvest if this kind of size increase holds up for the rest of the season. For growers who suffered significant freeze damage to their vineyards earlier this year, it might mean a little bit of extra fruit that wasn't anticipated. Larger berries can also bring about some challenges in the way of cracking and splitting if clusters are too compact

IPM

Disease Management

As I was assembling the weather data for this week's newsletter, I noticed something that perhaps isn't surprising, but I thought was very illustrative of how this season compares to last year. As of Wednesday, August 2, Geneva has received as much rain this season as it did during the entire growing season last year (17.9").

Like I said, probably not surprising to most people, but yet another example of how our growing seasons vary year to year, and what that means for pest management programs year to year. I am getting more calls and messages about black rot than I have in several years, and we're seeing more instances of downy mildew developing as the weather continues in this warm and wet pattern. Later blooming varieties (e.g., Cabernet franc, Syrah, Vidal) are probably still at least somewhat susceptible to new fruit infections from black rot, so it will be important to keep a material in the tank to manage that for another week or two, especially if there has been a history of BR problems in the past. If BR is appearing in any vineyards this year, be sure to note that and remove infected tissues like rachises from the vineyard this winter.

The arrival of veraison in some early cultivars means that bunch rot management becomes more important in the vineyards from this point forward. Given the conditions so far this year, chances are that botrytis and sour rot will be more of an issue than drier years like 2020. During the bloom and fruit set time period, we were having more rain than normal, so it's very possible that latent infections of Botrytis were able to get established in clusters and will begin to emerge as the berries soften. An additional factor that could promote more bunch rot problems is that berries are bigger than normal this year, thanks to all of the rain, which would lead to more berry splitting and cracking from crowding on the clusters.

Botrytis materials are best applied just after veraison and 10-14 days later. If further applications are needed, be sure that there are multiple FRAC groups involved and that no two sprays use the same FRAC group back to back. From [Katie Gold's Disease Management newsletter](#) this year:

Seven FRAC groups are labeled for Botrytis control, but primarily SDHIs (FRAC 7) and QOIs (FRAC 11) are used. All fungicides labeled for Botrytis control have high risk of resistance development. Do not make more than two applications per season of a given FRAC code and never apply the same FRAC group twice in a row. It is good practice to ALWAYS rotate to unrelated fungicides between SDHI and QOI applications. Endura (high rate), Pristine (high rate), Vanguard, Elevate, Switch, Rovral/Meteor, Luna Sensation, Scala, and Flint Extra (high rate) all provide excellent Botrytis control. Inspire Super, Luna Experience (high rate), Intuity, and Miravis Prime provide good control. ProBlad Verde (formerly known as Fracture) and Botector provide moderate to good control. Double Nickel, Sovran, Oso, and Ph-D provide moderate control. All fungicides registered for Botrytis control provide excellent protective activity on the berry surface. Elevate, Vanguard, and Scala provide good protective activity within the berries and good curative activity against latent infections. It's likely that Switch provides this to some extent as well, given that it contains the same active as Vanguard (just at a lower amount), but this was not tested by the Wilcox program. It should be noted that the level of curative activity against latent infection provided by veraison and post-veraison sprays of these products under field conditions does NOT replace the need for bloom and closure applications when conditions are particularly disease conducive at bloom.

IPM (continued from pg. 2)

Grape Berry Moth

The results from the GBM model this week at our Teaching Vineyard show that the next window for spray applications is approaching at warmer sites like ours. Scouting to determine the need for an insecticide spray should begin around 1470 GDDs on the model. The suggested threshold for insecticide applications in the model is about 15% damage, but given the wet conditions this season, growers with cultivars that are susceptible to botrytis and/or sour rot should probably consider using a lower action threshold. Berry moth wounds, especially at this point in the year, are an easy way for bunch rot organisms to infect berries.

NEWA Station	GDDs (as of 8/3)	Pest Status	Management
Branchport	1204	*	^
Dresden	1535	*	^
Geneva	1397	*	^
Romulus	1416	*	^
Williamson	1198	*	^

* 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.

Penn State Looking for Grower Feedback on Leafroll Virus

The PSU Wine and Grape Team is asking for grower participation in their *Grape Leafroll Virus Survey*, an important initiative aimed at understanding and combating the Grape Leafroll Virus (GLRV).

Grapevine leafroll-associated viruses (GLRV or Grape Leafroll Virus Disease) are widespread in many grape growing areas in the mid-Atlantic region. As the mid-Atlantic region becomes more heavily invested in cultivars of *Vitis vinifera*, which are most susceptible to the effects of these viruses, the disease caused by these viruses will inevitably become a more severe problem for our grape and wine industry. With this survey, we would like to investigate strategies that growers like you would use to control these viruses.

Please use the following link to access the survey: https://pennstate.qualtrics.com/jfe/form/SV_8kT0ehBTZGuQEJ0

Your input and participation in this survey are crucial to the success of our collective efforts in combating GLRV. If you have questions about this survey, don't hesitate to get in touch with Claudia Schmidt, Assistant Professor of Agricultural Economics, Penn State (czs786@psu.edu).

nyswgg



You're invited!

Save the date for the New York State Wine Grape Growers' Equipment Rodeo at Wagner Vineyards on Wednesday, August 9 from 12-5pm. Experience a jam-packed showcase of equipment including harvesters, vineyard tractors, sprayers, canopy management implements, floor management implements, pruners, irrigation and trellis supplies and more. Nickel's Pit BBQ food truck will have food available.



Wagner Vineyards

9322 NY-414

Lodi, NY 14860

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

August 8, 2023 4:30 – 6:00 PM
Tango Oaks Vineyard
5557 NY Rt 414, Hector NY



Our next Tailgate Meeting will be on Tuesday, August 8 at Tango Oaks Vineyard in Hector. These meetings are a time for growers and the FLGP staff to discuss what's going on in the vineyards, ask questions, and learn from each other. There is no set agenda for the most part, so bring questions, observations, thoughts, etc. and let's talk about them. Each meeting has been approved for 1.25 pesticide recertification credits by DEC.

Here is the schedule for Tailgate Meetings for the rest of 2023:

- August 22, 2023: Fox Run Vineyards
 670 Route 14, Penn Yan, NY

Vineyard Equipment Rodeo

Sponsored by the NYS Wine Grape Growers
Wednesday, August 9 11:30 AM – 5:30 PM
Wagner Vineyards

Save the date! The NYS Wine Grape Growers have organized a day of vineyard equipment displays and demonstrations that will be held at Wagner Vineyards in Lodi, NY. More information to come soon, but be sure to put this on your calendars.

Gold Vineyard Pathology Field Day

Wednesday, September 6 9:00 AM
Jordan Hall @ Cornell AgriTech
630 W North Street, Geneva NY

Registration by email to Dave Combs at dbc10@cornell.edu by September 1.

The Gold pathology lab is hosting a field day on Wednesday September 6th at Cornell AgriTech in Geneva. Registration will start at 8:30AM at Jordan Hall and the program at 9:00AM. This will be open to industry representatives as well as New York grape growers who want to see not only the technology that the lab is working with for early grape disease detection, but also have a rare opportunity to peruse the vineyards where the fungicide efficacy trials take place at Cornell AgriTech. Some of the technology that will be demonstrated will be the phytopathobot- capable of detecting disease with HD cameras; Mjollnir and M-600 drones – equipped with lidar, multispectral and hyperspectral cameras, as well as the handheld hyperspectral camera – recently proven to detect the longevity of active fungicides on the leaf surface. Lab members will also be discussing the extensive fungicide testing programs against powdery mildew, downy mildew, black rot, botrytis, sour rot and phomopsis. Carpooling is encouraged as travel to the field sites will be in personal vehicles.

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2023 GDD & Precipitation

FLX Teaching & Demonstration Vineyard – Dresden, NY					
Date	Hi Temp (F)	Lo Temp (F)	Rain (inches)	Daily GDDs	Total GDDs
7/27/23	85.1	71.2	0.19	28.2	1530.8
7/28/23	91.2	68.0	0.00	29.6	1560.4
7/29/23	82.2	60.1	0.74	21.2	1581.6
7/30/23	75.0	58.3	0.00	16.7	1598.2
7/31/23	73.8	59.2	0.13	16.5	1614.7
8/1/23	73.0	55.8	0.00	14.4	1629.1
8/2/23	79.2	51.8	0.00	15.5	1644.6
Weekly Total			1.06"	142.0	
Season Total			16.05"	1644.6	

GDDs as of August 2, 2022: 1767.6

Rainfall as of August 2, 2022: 11.15"

Seasonal Comparisons (at Geneva)



Growing Degree Days

	2022 GDD ¹	Long-term Avg GDD ²	Cumulative days ahead (+)/behind (-) ³
April	135.9	62.8	+13
May	216.8	256.3	+3
June	470.9	484.6	+3
July	702.1	646.1	+4
August	29.1	597.4	
September		360.2	
October		112.5	
TOTAL	1554.7	2519.8	

¹ Accumulated GDDs for each month.

² The long-term average (1973-2022) 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.

2023 GDD & Precipitation

Precipitation

	2023 Rain ⁴	Long-term Avg Rain ⁵	Monthly deviation from avg ⁶
April	5.73"	2.80"	+2.97"
May	1.90"	3.07"	-1.17"
June	4.61"	3.56"	+1.05"
July	5.64"	3.43"	+2.21"
August		3.21"	
September		3.47"	
October		3.41"	
TOTAL	17.88"	23.02"	

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)

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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!

Finger Lakes Grape Program Advisory Committee

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Gregg McConnell- Farm Credit East
Matt Doyle- Doyle Vineyard Management
Eileen Farnan- Barrington Cellars
Chris Gerling- Cornell University Extension
Mike Colizzi- E & J Gallo
Tina Hazlitt- Sawmill Creek Vineyards
Cameron Hosmer- Hosmer Winery
T.J. Brahm – Randall Standish Vineyards

Herm Young– Young Sommer Winery
John Santos- Hazlitt 1852 Vineyards
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Cornell Cooperative Extension Finger Lakes Grape Program

Hans Walter-Peterson—Team Leader
Donald Caldwell—Viticulture Technician

The Finger Lakes Grape Program is a partnership between Cornell University and the Cornell Cooperative Extension Associations in Ontario, Seneca, Schuyler, Steuben, Wayne and Yates Counties.

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