



Cornell Cooperative Extension
Lake Erie Regional Grape Program



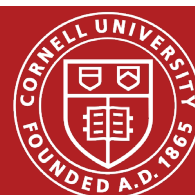
PennState Extension



Crop Update - July 9, 2020

Concord Vineyard at CLEREL
on July 8, 2020. Jennifer Phillip's
Russo

Building Strong and Vibrant New York Communities
Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized
employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.



In this Crop Update:

- In the Vineyards- Jennifer Phillips Russo
- VIP, Mask & Sanitizer Updates-Kim Knappenberger
- In the Vineyard - Andy Muza
- PA Update- Bryan Hed

The Lake Erie Regional Grape Program is a Cornell Cooperative Extension partnership between Cornell University and the Cornell Cooperative Extensions in Chautauqua, Erie and Niagara county NY and in Erie County PA.

Contact Information:

Jennifer Phillips Russo - LERGP Viticulture Specialist:

jjr268@cornell.edu

(716) 640-5350

Kevin Martin – LERGP Business Management Specialist:

Kmm52@psu.edu

(716) 397-9674

Andy Muza – LERGP Disease and Pest Management Specialist:

Ajm4@psu.edu

(814) 825-0900

Kim Knappenberger – LERGP NEWA and Vineyard Improvement Program Contact

Ksk76@cornell.edu

Kate Robinson – Administrative Assistant

Kjr45@cornell.edu

How to join a Zoom meeting video (1 minute):

https://www.youtube.com/embed/vFhAEoCF7jg?rel=0&autoplay=1&cc_load_policy=1

Joining and Configuring Audio & Video (1 minute):

https://www.youtube.com/embed/HqncX7RE0wM?rel=0&autoplay=1&cc_load_policy=1

[Click here to watch recorded Coffee Pot meetings!](#)

Gowan[®]
USA
GOWANCO.COM

Torino[®]
FUNGICIDE

The Only FRAC Group U6 Fungicide
Labeled for Grapes, Cucurbits, Cherries,
and Pome Fruit
Highly Effective on Powdery Mildew
No Cross-Resistance
Protectant / Preventative Action

METTLER[®]
125 ME
FUNGICIDE

FRAC Group 3
Labeled for Grapes and Cucurbits
Controls Powdery Mildew,
Black Rot, & Anthracnose
Protectant + Curative Activity
Highly Systemic

Badge SC **Badge X2**
Fungicide/Bactericide Fungicide/Bactericide

High Quality Copper
Excellent Mixing Characteristics
Highly Active at Lower Rates
Enhanced Crop Safety



EcoSwing[®]
BOTANICAL FUNGICIDE



Flexibility, versatility & a unique approach
for your disease control program
EPA registered with tolerance exemption
Controls Botrytis & Powdery Mildew

QUINTEC[®]
FUNGICIDE

The only FRAC Group 13 Fungicide
Labeled for Grapes, Melons, Winter Squash,
Gourds, Pumpkin, and Stone Fruit
Exceptional Preventative Control
of Powdery Mildew
No Cross-Resistance



Gowan Company
800.883.1844

Torino[®] is a registered trademark of Nippon Soda Company, LTD. Mettler[®], Badge[®] SC, Badge[®] X2 are registered trademarks of Isagro USA. EcoSwing[®], Quintec[®] are registered trademarks used under license by Gowan Company, LLC.

Viticulture

Jennifer Russo, Viticulture Extension Specialist, LERGP

In the Vineyards

In my travels this week, I have had discussions with growers from all around the Lake Erie Grape Belt about their fruit set and status of their vines. I am hearing reports of average crops out there and, with the help of this warm dry weather we have had, the canopies look pretty clean. I have seen Black Rot, Phomopsis, and Powdery Mildew here and there, but for the most part vineyards do not appear to have high disease pressure at this time.

I am also including the Concord Crop Estimation Guide and How to Use It that was distributed in last week's crop update again in this update, see below. Crop estimation is critical to determine whether or not your vines are over-cropped and if thinning is necessary to keep the vine in a healthy balance. Please feel free to call or email if you have any questions about the materials provided.

There have been reports of Grape Berry Moth and we have caught moths in the traps that we check. The NEWA Grape Forecast Pest Model affirms that start of flight of first generation grape berry moth is expected at this time. At Portland, NY, we hit the 810 GDD between the 8th and 9th of July (see photo below). Remember to utilize the Network for Environment and Weather Applications that is a resource for weather data collection, analysis, distribution, and archiving. <http://newa.cornell.edu/index.php?page=grape-diseases>

Map Results More info

Grape Berry Moth Results for Portland

Wild Grape Bloom:

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 7/7/2020: 736 (0 days missing)

Daily Degree Days for Portland								
Base Temp	Past	Past	Current	5-Day Forecast			Forecast Details	
	Jul 5	Jul 6	Jul 7	Jul 8	Jul 9	Jul 10	Jul 11	Jul 12
47.14F - GBM	26	27	32	33	35	34	30	27
Accumulation	689	716	749	782	817	851	881	907

NA - not available Download Time: 7/7/2020

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.

photo 1. Grape Berry Moth Results for Portland, NY on NEWA website

I also have an update from Dr. Katie Gold, Assistant Professor of Grape Disease at Cornell AgriTech:

“Hello all,

While I doubt this is surprising news to anyone, we have finally received confirmation from MSU that QoI resistance has been found in three NY counties: Seneca, Yates, and Ontario. These samples were sourced from 5 total vineyards.

The Miles Lab at MSU has identified Frac11 (also known as strobilurin or QoI) resistant powdery mildew in vineyards located in Seneca, Yates, and Ontario counties. These samples were collected by the Gold Lab in September 2019 from Chardonnay, Pinot Noir, Niagara, and Concord vines. In this pool, 100% of all within-block samples were identified as QoI resistant. [Guidelines from the FRAME Network](#) indicate that under these conditions, there are two recommended paths forward for growers in these counties:

1. If you DID NOT have control problems last season, you can still use FRAC 11 fungicides for powdery mildew control *in tank mix with other fungicide only*.
2. If you DID have control problems last season, you should NOT rely on FRAC 11 fungicides for powdery mildew control any longer.

Additionally, it is recommended that all growers who suspect they may have resistance should check their sprayer calibration and droplet size, application volume, and deposition. Consider shortening application interval and slowing tractor speed (while adjusting calibration accordingly). To receive more specific advice for managing potential FRAC11 resistance in your vineyards, consider participating in the **MSU Great Lakes FRAC11 Resistance Survey**.

MSU Great Lakes FRAC 11 Resistance Survey: The Gold Lab at Cornell is aiding the Miles Lab at MSU in collecting powdery mildew samples from vineyards **anywhere in NY state** for a Great Lakes region survey for FRAC 11 resistance. Any grower in NY can get their vineyard's powdery mildew populations tested for FRAC 11 resistance for free by MSU as part of this survey. If you are interested in providing a sample, please contact [Nancy Sharma](#), a plant pathology graduate student with the Miles Lab, at sharm115@msu.edu. You will receive a kit to test your grape powdery mildew samples in your vineyard. The samples will then be sent in a provided overnight mailer back to MSU. Nancy will provide you with a detailed procedure for sample collection.

Katie Gold and the regional viticulture CCE associates will provide assistance to NY growers in interpreting their results and developing a resistance management plan moving forward. More information can be found at the following link: <https://www.canr.msu.edu/news/grapevine-powdery-mildew-fungicide-resistance-survey>

The Gold and Miles Labs are collaborating on a similar Great Lakes downy mildew FRAC40 resistance survey. Stay tuned for information on this survey and how to provide samples from Katie Gold and your regional CCE associate over the next few weeks.”

I am also working with Dr. Michelle Moyer of Washington State University and the FRAME Network to collect Powdery Mildew samples and send in for resistance testing. So please call (716)-640-5350 or email (jjr268@cornell.edu) me when you notice infections and I will make arrangements to take collections.

Using the Concord Estimation Chart

I wanted to give you a heads up on crop estimation. At the Cornell Lake Erie Research and Extension Laboratory in Portland, NY, we called bloom (50 % cap fall) on June 14, 2020. It is important to record your bloom date each year to know when to get out and take measurements for crop estimation, which is an important component of commercial grape production. I, and others, have written on this topic a few times and you can find articles in the archived versions located here: <https://lergp.com/archived-newsletter-and-crop-updates>.

I am simply copying and pasting the Concord Grape Crop Estimation Guide, based off of Dr. Terry Bates' research, and the information on how to use that guide. We have all of this information listed as a resource on <https://lergp.com/>. At CLEREL we need to do our crop estimations on July 14th, 2020 and that date will creep up on us fast. So I wanted you to be armed with the tools you need before your 30-days post bloom date creeps up on you. Please note that if you do not know your bloom date, you can estimate it using our information and your recollections of when bloom was happening in your blocks. I would suggest keeping Viticultural records this season to begin to recognize trends in your own business.

The "Crop Estimation Chart" referred to in these steps can be found under the Crop Estimation Table tab, <https://lergp.com/crop-estimation-table>, as well as at the end of this article which can also be found at <https://lergp.com/using-the-concord-estimation-chart>.

Bloom date and days after bloom:

This system is based on bloom date, and in order to be accurate you need to know when your grapes were at 50% bloom. The 50-year average date for 50% bloom is June 14th, and this year CLEREL called bloom on June 14, 2020. Count off starting at your bloom date and accrue the respective days-after-bloom (DAB). On the chart the DAB is found in the shaded "Time of Season" and not to be confused with "% of Final Berry Weight" directly below.

Row Spacing:

Like bloom date, you need to know your vine spacing. Row spacing determines the length of a row that will equal 1/100th of an acre. The wider the row, the shorter the sampling length. For example, sampling a block with a 10' row you will need to clean pick 45.9 feet. If your rows are at 7.5' spacing, you need to clean pick 58.1 feet. If you have 9-foot row spacing and your panels are at 24 feet then this should be easy. However, it is best to determine your row spacing and cut a length of rope to guide your sampling lengths rather than rely on post lengths that have been changed out over the years.

Sampling:

Once the row spacing and sample distance is calculated, clean pick and weigh the samples. The more samples you take, the better your prediction will be. It also helps to take samples from areas of known variation across the vineyard. For example, take 2-3 samples from high vigor, medium vigor, and low vigor sections of the vineyard and apply your predictions appropriately to those sections. If you are using a harvester to clean pick panels walk behind afterwards to assess how many grapes are still on the vine/or that are on the ground.

Using the Chart:

Once you have the sample, the chart does the rest of the work for you. Follow the corresponding DAB down and the respective weight over and you have the estimated tons/acre at harvest. For example, let's say it's July 25th or 40 DAB (bloom on June 15th) and the average from 4 samples weighs 100 pounds. I would have an estimated 8.3 tons/acre potential crop.

Things to keep in mind:

If you have an accurate bloom date for your vineyard, follow the crop estimation chart to predict final harvest weight. If you're not and you are using the actual berry weight samples to come up with your multiplication factor, be reasonable in what you think your final berry weight will be. Some vineyards tend to have smaller average weights and some tend to be larger – and you should be starting to get an idea where your vineyard fits. Be reasonable – it is unlikely (highly unlikely) that your Concord

vineyard will average 4.0g berries at harvest even if your 30 DAB weight was 2.0 g.

Getting it right is important. Underestimating crop potential can lead to delayed harvest waiting for the grape to ripen and the BRIX to rise. Overestimating a crop load may result in unwanted thinning or unnecessary expensive chemicals being used to care for a crop that is not there.

Having an accurate crop estimation can help you make many cultural practice decisions thought the rest of the season. The following is a break-down of the process.

Crop estimating at 30 DAB for 'Concords' is common for most growers. When the berries are at 50% of the final berry weight (like the example shown above) all you needed to do for final estimation is shift the decimal point over one place. However, the estimation table will work throughout the season. One thing to keep in mind when using the chart is to double check you are using time of season (DAB) in the shaded area to match up the column below.

Concord Crop Estimation Guide

Collecting a little bit of information from the vineyard during the growing season can greatly improve your prediction of final yields with better accuracy than the eyeball method. Know your Bloom Date, Space Between Vines, and Space Between Rows. Calculate how many vines equate to 1/100th of an acre, and know how many Days After Bloom (DAB) samples were collected.

Example:

- **Row and Vine Spacing.** If 9' between rows the table provides the 1/100th acre calculation for you which equals **48.4 feet**.
- How many vines are in **48.4** feet if vines are spaced **8** feet apart? **$48.4/8=6.05$ vines (round down to 6)**
- **Use Spatial Map to direct Sample locations to capture vineyard variation.**
- **Clean Pick Fruit from Calculated 1/100th Acre (In this example it equals 6 vines from $48.4/8$).** Clean pick fruit from 2 vines from high vigor zone, 2 vines from medium vigor, and 2 vines from low vigor.
- **Total Weight of lbs of Fruit Collected.** Weigh each sample taken above, be sure to subtract the weight of the bucket or bin used from total weight. Sum weights from all 6 samples to get total weight.
- **Consult [Table](#) to Find Corresponding Crop Estimation.**

MECHANICAL CROP ESTIMATION

Cut a length of rope to guide your sampling lengths, lay it down along the row, clean pick with the harvester the length of the rope, weigh lbs of fruit collected. Walk behind afterwards to assess how many grapes are still on the vine/or that are on the ground.

Using the chart:

Once you have the sample, the chart does the rest of the work for you. Follow the corresponding DAB down and the respective weight over and you have the estimated tons/acre at harvest. For example, let's say it's July 25th or 40 DAB (bloom on June 15th) and the fruit weighs 100 pounds. Crop estimated 8.3 ton/acre potential crop.

[Click here](#) for a pdf of this information.

Crop Estimation and Thinning Table

Dr. Terry Bates: Crop Estimation and Thinning Table: 7/16/2003

Pounds of Fruit Removed in 1/100th of an Acre	Time of Season														
	20DAB	25DAB				30DAB	40DAB	50DAB	Veraison				Harvest		
	% of Final Berry Weight														
	20	25	30	35	40	45	50	55	60	65	70	75	80	90	100
10	2.5	2.0	1.7	1.4	1.3	1.1	1.0	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.5
20	5.0	4.0	3.3	2.9	2.5	2.2	2.0	1.8	1.7	1.5	1.4	1.3	1.3	1.1	1.0
30	7.5	6.0	5.0	4.3	3.8	3.3	3.0	2.7	2.5	2.3	2.1	2.0	1.9	1.7	1.5
40	10.0	8.0	6.7	5.7	5.0	4.4	4.0	3.6	3.3	3.1	2.9	2.7	2.5	2.2	2.0
50	12.5	10.0	8.3	7.1	6.3	5.6	5.0	4.5	4.2	3.8	3.6	3.3	3.1	2.8	2.5
60	15.0	12.0	10.0	8.6	7.5	6.7	6.0	5.5	5.0	4.6	4.3	4.0	3.8	3.3	3.0
70	17.5	14.0	11.7	10.0	8.8	7.8	7.0	6.4	5.8	5.4	5.0	4.7	4.4	3.9	3.5
80	20.0	16.0	13.3	11.4	10.0	8.9	8.0	7.3	6.7	6.2	5.7	5.3	5.0	4.4	4.0
90	22.5	18.0	15.0	12.9	11.3	10.0	9.0	8.2	7.5	6.9	6.4	6.0	5.6	5.0	4.5
100	25.0	20.0	16.7	14.3	12.5	11.1	10.0	9.1	8.3	7.7	7.1	6.7	6.3	5.6	5.0
110	27.5	22.0	18.3	15.7	13.8	12.2	11.0	10.0	9.2	8.5	7.9	7.3	6.9	6.1	5.5
120	30.0	24.0	20.0	17.1	15.0	13.3	12.0	10.9	10.0	9.2	8.6	8.0	7.5	6.7	6.0
130	32.5	26.0	21.7	18.6	16.3	14.4	13.0	11.8	10.8	10.0	9.3	8.7	8.1	7.2	6.5
140	35.0	28.0	23.3	20.0	17.5	15.6	14.0	12.7	11.7	10.8	10.0	9.3	8.8	7.8	7.0
150	37.5	30.0	25.0	21.4	18.8	16.7	15.0	13.6	12.5	11.5	10.7	10.0	9.4	8.3	7.5
160	40.0	32.0	26.7	22.9	20.0	17.8	16.0	14.5	13.3	12.3	11.4	10.7	10.0	8.9	8.0
170	42.5	34.0	28.3	24.3	21.3	18.9	17.0	15.5	14.2	13.1	12.1	11.3	10.6	9.4	8.5
180	45.0	36.0	30.0	25.7	22.5	20.0	18.0	16.4	15.0	13.8	12.9	12.0	11.3	10.0	9.0
190	47.5	38.0	31.7	27.1	23.8	21.1	19.0	17.3	15.8	14.6	13.6	12.7	11.9	10.6	9.5
200	50.0	40.0	33.3	28.6	25.0	22.2	20.0	18.2	16.7	15.4	14.3	13.3	12.5	11.1	10.0

Row Spacing determines length of 1/100th of an acre
 10.0 feet row spacing = 43.5 feet = 1/100th of an acre
 9.5 feet = 45.9 feet = 1/100th of an acre
 9.0 feet = 48.4 feet = 1/100th of an acre
 8.5 feet = 51.2 feet = 1/100th of an acre
 8.0 feet = 54.4 feet = 1/100th of an acre
 7.5 feet = 58.1 feet = 1/100th of an acre

Calculation

43, 560 square feet per acre
 Divide by row spacing and then
 divide by 100 to get 1/100th of an acre

Example:

A grower has 9 foot row spacing and clean picks 48.4 feet at 25 days after bloom. The fruit weighs 80 pounds and the grower estimates that the berries are between 35% and 40% of final berry weight. According to the table, the crop estimate is between 10.0 and 11.4 tons per acre.

Disclaimer:

This table gives the relationship between time of season and % final berry weight on an average year. Year to year variability in weather related berry growth adds error to this table. Information on current year berry growth can be obtained from the Fredonia Vineyard Lab (or) it is strongly suggested that individual growers start collecting berry weight information from their own individual vineyard blocks.

Table 1. Dr. Terry Bates Crop Estimation and Thinning Table: 7/16/2003



Clover Hill Sales LLC

10401 Sidehill Road, North East, PA 16428

814-725-3102

sales@cloverhillsales.com

www.cloverhillsales.com



DURAND WAYLAND



WOODS

Woods Equipment Company



EDWARDS

EQUIPMENT COMPANY



CENTRAL BOILER



TISCO



STOLTZFUS SPREADERS

Harvester Parts and Belting
 Southern Yellow Pine Posts
 Tractor Tires & Tubes • And So Much More!



Your most powerful mobile device.

T3F: A compact, comfortable, heavy-duty tractor for narrow rows. Combine great value with comfort in this low-profile, heavy-duty tractor from New Holland. It's perfect for orchards, nut groves, vineyards, hopyards, blueberry farms—any operation where you need a utility tractor for low-clearance areas.

NEW HOLLAND AGRICULTURE
newholland.com

Larry Romance & Son Inc.

2769 Rt 20

Sheridan NY 14135

716-679-3366

www.LarryRomanceandson.com

	<p>NORTH EAST FRUIT GROWERS 2297 KLOMP ROAD, NORTH EAST, PA 16428 814.725.3705 NEFRUITGROWERS@VERIZON.NET OPEN YEAR-ROUND MONDAY - FRIDAY 8AM - 5PM OPEN SATURDAYS APRIL- NOVEMBER 8AM - NOON</p>	
<p>DRYSHOD WATERPROOF FOOTWEAR The world's most wearable rubber boot. dryshodusa.com</p>	<p>ALL-NATURAL Aspen Song WILD BIRD FOOD</p>	

5th Annual Invasive Species Mapping Challenge July 9, 2020 by Joellen Lampman

iMapInvasives has put out a call for help and we're happy to do our bit. Check out this citizen science project looking at increasing the amount of information regarding invasive species throughout New York. Written by Mitchell O'Neill, End User Support Specialist for iMapInvasives.

There is one more weekend in the 5th Annual Invasive Species Mapping Challenge – ending Wednesday July 15th! Join this citizen science effort to fill data gaps for four key invasive species in New York State's official invasive species database, iMapInvasives. The species are jumping worm, tree-of-heaven, water chestnut, and European frogbit – which have wide-ranging impacts on land and water resources, agriculture, gardening, and recreation.

In this webinar, the iMapInvasive's team cover the identification of these species and how you can participate.

[CLICK HERE FOR MORE INFO](#)

Updates and Information

Kimberly Knappenberger, Viticulture Assistant, LERGP

VIP

The New York State Department of Agriculture and Markets through the Lake Erie Regional Grape Program has established this reimbursement grant opportunity funded by the Southern Tier Agricultural Industry Enhancement Program. Our goal is not to remove Concord grapes from the industry, but instead to remove abandoned, unwanted or poorly producing Concord vineyards and then replace them with an agricultural commodity. This can even be with a new Concord vineyard. Removing sources of pest and infection will help neighboring commercial vineyards by reducing the amount of inoculum present and reducing the inputs required to keep those vineyards “clean”. So far we have had 22 applicants for this program and are in the process of finalizing our fourth payment. The amount of Concord acreage represented on those applications amounts to over 320 acres and of those acres, about 90 are currently committed to being replanted as grapes. Quite a bit of that acreage is intended to be used for field crops.



If you have, or know someone that has, a vineyard that might resemble the one pictured here, take a look at the website to see what we can do to help. Go to lergp.com and click on the Vineyard Improvement Program button in the middle of the page.

Update to Distribution of Hand Sanitizer and Masks:

On Monday, July 13th we will be having another distribution day at CLEREL in Portland from 10:00 AM to 12:00 noon. We have received more masks and small spray bottles, in addition to the gallon jugs of hand sanitizer. If you are interested in picking up some supplies please **sign up for your free product at chautauqua.cce.cornell.edu/resources/hand-sanitizer-and-face-masks-request**. If wearing masks and having hand sanitizer available for your employees or visitors is a part of your NY Forward plan, make sure you get your free supplies!

Cornell Cooperative Extension Chautauqua County is distributing free hand sanitizer and face masks to producers in Chautauqua County. Sanitizer and face coverings from the NYS Department of Agriculture have been brought to Chautauqua County through a partnership with CCE Chautauqua and Chautauqua County department of Building and grounds.



Production farms of **any type** are welcome to come pick up hand sanitizer. These farms can include **dairy, livestock, grapes, vegetables, farm stands, U-Pick, nursery, equine, and craft beverage**. If you know of anyone that still needs some please send them the link to register. Once registered you will be contacted at the number left on the online request form to confirm pick up time.

For those of you who have already picked up gallon jugs of hand sanitizer with the hand pump, I'm sure you have noticed how fast and how much comes out. A simple trick that some have tried is to put a piece of a pool noodle or pipe insulator on the pump to keep it from pressing all the way. This will reduce the amount of sanitizer dispensed.

LaPorte
Farm Equipment
"Large and small, we sell them all"

Sales - Parts - Service
Westfield NY (716) 326-4671

CASE IH
AGRICULTURE

laportefarmequipment.com

Custom Built 2 Tank Weed Sprayer

We sell and service CaseIH Tractors, Oxbo Harvesters, and Turbomist Sprayers. We also custom manufacture single and dual tank sprayers, spray booms, pre-pruners, brush sweepers, & wire winders.

PA Update

Andy Muza, LERGP Extension Team & Penn State Extension- Erie County

In the Vineyard (7-9-20) –

Grape Berry Moth – This week I checked 4 High/ Severe Risk sites (7/6-7) to determine the extent of egg laying that was occurring. At each site I randomly examined 50 clusters in border areas for the presence of eggs (Figure 1).

The percentage of clusters with eggs at these sites were: 0%, 4%, 22%, and 24% (12/50). This indicates the variability that can occur from site to site, even in high risk vineyards, and emphasizes the importance of scouting each vineyard block.

Scouting for eggs is time consuming and difficult (due to their small size) so it is not recommended (Figure 2).

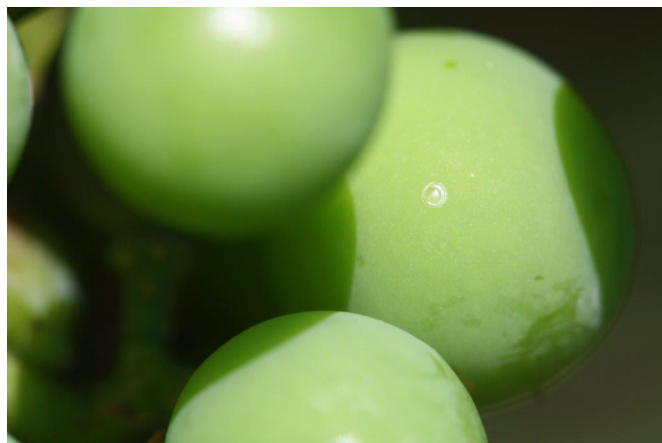


Figure 1. Grape berry moth egg on Concord berry. Photo – Andy Muza, Penn State.



Figure 2. Grape berry moth egg circled by black marker. Photo – Andy Muza, Penn State.

However, scouting blocks for damaged clusters is recommended to determine injury levels (see: “Bulletin 138, Risk Assessment of Grape Berry Moth and Guidelines for Management of the Eastern Grape Leafhopper” page 4, <https://ecommons.cornell.edu/handle/1813/5202>).

Still TIME to SPRAY

By this Saturday (7/11) all but 3 of the NEWA stations in the region will have reached or surpassed 810 GBM Degree Days. If you have not yet applied an insecticide application in high risk vineyards, there is still time. The GBM Model indicates that if a contact insecticide is used (e.g. pyrethroids and carbamates) then apply

by 900 GBM DD. However, by next Wednesday (7/15) all but 2 of the NEWA stations in the region will have reached this mark. Check the GBM Degree Day Model in NEWA <http://newa.cornell.edu> choosing the closest station near your vineyard to determine degree days for your blocks.

Again, **Don't neglect scouting your low and intermediate risk sites** to determine if injury levels indicate that a spray may also be needed in these areas.

PA Update

Bryan Hed, Research Technologist, Lake Erie Grape Research and Extension Center

Weather: At our location by the lake, June finished up a little wetter and warmer than average with 3.44 inches of precipitation and about 555 growing degree days (gdds). To date, July has been hot and bone dry with little to no opportunity for diseases like downy mildew, black rot, or Phomopsis to do their dirty work. We have accumulated about 1041 growing degree days since April 1.

Phenology and Diseases: We are currently at about 2-3 weeks past the end of bloom and Concord/Niagara berries should be nearing that time when they are resistant to powdery mildew. There is rain in the short-term forecast for Saturday, July 11, that could generate infection periods for black rot, Phomopsis, and downy mildew. The vast majority of vineyards are pretty clean except maybe for a little powdery mildew on clusters. If you are seeing black rot symptoms on fruit/leaves, a second post bloom application of fungicide is recommended. This year, fruit is likely to remain susceptible to black rot until about the end of July. As for downy mildew, fruit may be fast developing resistance to direct infection, but cluster stems will remain susceptible for 2-3 weeks longer, especially for susceptible varieties like Niagara and many wine grape varieties. Infection of cluster stem tissue can still lead to crop loss through shelling and "leather rot" of berries. Pay attention to wetting periods and know what is developing in your vineyards through scouting.

As disease control begins to shift to protecting leaves from powdery mildew, take stock of your yield estimates that you'll be conducting soon. Vineyards with heavier than average crops will benefit from continued mildew protection to maximize the efficiency of canopies for sugar production. There is no formula for just how long you need to continue leaf sprays for powdery mildew; it depends on how much above average your production is; the more 'above average' your crop is, the more affordable are the extra leaf sprays and the longer protection will be needed to keep canopies clean and productive to get the crop ripe. Lets just hope we get some much needed rain to keep vines from shutting down photosynthesis.

Mosier-Maille Ag Consulting Soil and Crops

Jared Mosier

Consultant
(814) 923-1372

7472 Buffalo Rd.
Harborcreek, PA 16421



Dave Maille

Consultant
(814) 572-5781

mmagconsulting@gmail.com

Other links of interest:

[LERGP Web-site:](#)

[Cornell Cooperative Extension website:](#)

[Cornell CALS Veraison to Harvest Newsletter:](#)

[Efficient Vineyard:](#)

[Appellation Cornell Newsletter:](#)

COVID-19 resources:

Need information? View the following Cornell CALS and CCE Resource Pages Updated Regularly

General Questions & Links:

<https://eden.cce.cornell.edu/>

Food Production, Processing & Safety Questions:

<https://instituteforfoodsafety.cornell.edu/coronavirus-covid-19/>

Employment & Agricultural Workforce Questions:

<http://agworkforce.cals.cornell.edu/>

Cornell Small Farms Resiliency Resources:

<https://smallfarms.cornell.edu/resources/farm-resilience/>

Financial & Mental Health Resources for Farmers:

<https://www.nyfarmnet.org/>

Cornell Farmworker Program

www.farmworkers.cornell.edu

www.trabajadores.cornell.edu (en espanol)

