Lake Erie Regional Grape Program

Concord Cluster 6/28/2022-
Kim Knappenberger

CROP UPDATE
June 30, 2022

Cornell Cooperative Extension
Lake Erie Regional Grape Program

PennState Extension

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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.

H-2A Meeting

Where: CLEREL
Time: 9:15am-12:30pm

July 11, 2022

LERGP will host an H-2A labor workshop at the Cornell Lake Erie Research and Extension Lab. Those interested in learning more about Ag-business labor challenges can attend the event at 9:00 a.m. on July 11th. The workshop provides an opportunity to share information on the H-2A program as the regional agricultural economy experiences challenges with labor supply and labor costs.

Ag service providers will be on-hand to share their expertise and services in the H-2A world. Growers looking to use this program for the winter of 2023 will need to start their application process now. When getting started, most growers seek out assistance to apply for, recruit or even manage and house H-2A labor.

As part of the event growers will share their experiences in transitioning to H-2A. Key to the success of the transition is changing management practices, recruiting labor and managing new recruits. The event will also focus on the challenges of an inexperienced workforce and techniques to control the costs associated with training and education.

The event will also provide an update on the current regional labor situation. The data that supports the forecast of future labor costs in the region as well as methods of sustainable agriculture that address the labor challenges without H-2A.

REGISTER

Or call Katie to let her know you will be coming!
716-792-2800 ext 201

AGENDA: H-2A Meeting- July 11 at CLEREL

9:15 Coffee and light food

9:30 – 10:15 Round-table – Andy Knight, Andrew Nichols and more
Grower Experiences with H-2A Labor

10:15 – 10:45 F. Brandon Mallory Specialty Crop Farm Labor Contractors, LLC (SCFLC)
Farm Labor Contractors and H-2A

10:45 – 11:00 Break

11:00 – 11:15 Kevin Martin
State of the Labor Market

11:15 – 11:45 Harris Beach LJ D'Arrigo
H2-A Regulations and Filing Process

11:45 – 12:15 Kevin Martin
Reducing Labor Requirements
in Grape Production

This event is FREE but please register so we know how many will be in attendance.

LERGP Summer Demo Day at CLEREL!
August 2, 2022

The Cornell Lake Erie Research and Extension Laboratory Research Demonstration Day Agenda

8:30 AM – Registration and Check In

9:00-10:45 AM – Welcome and Indoor Flash Talks

- Dr. Terry Bates, Director of the Cornell Lake Erie Research and Extension Laboratory, will give the Welcome Opening, history of CLEREL, and Research Overview.
- Dr. Lynn Sosnoskie, Assistant Professor, School of Integrative Plant Science Horticulture Section Cornell AgriTech, will discuss her work with the weed precision spot sprayer.
  Dr. Rob Chancia, Post Doctoral Researcher, Rochester Institute of Technology, Chester F. Carlson Center for Imaging Science, to discuss work on sensor imaging for nutrient deficiency detection.
- Dr. Abhisesh Silwal, Carnegie Mellon University, Robotics Institute Project Scientist, will introduce his work with the robotic pruner.
- Nick Gunner, CEO, Chief Platform Engineer & Lead Designer for Orbitist, to discuss the **Efficient Vineyard Project** and the **MyEV tool**.
- Dr. Debbie Aller, New York Soil Health Alliance Extension Associate, will discuss sustainable soil management practices.
- Nicole Kubiczki, Resource Soil Scientist for the Natural Resources Conservation Service (NRCS), will discuss what to expect at our soil pits.

10:50-12:30 PM - Vendor Show and Lunch

12:30-4:00 PM – Afternoon Tour of Research Blocks and NRCS Gravel and Heavy Soil Pit Presentations

Register Now!

You can register by sending in the paper form on the next page or:

REGISTER ONLINE

2022 SUMMER DEMONSTRATION CONFERENCE REGISTRATION FORM

to be held at CLEREL
on Tuesday, August 2, 2022
Deadline for registration is Friday, July 29, 2022

Name (1st attendee) _____ **$**_____

Farm Name _____

Address, City, State, Zip Code _____

_____

Phone_____ **E-mail**_____

Are you enrolled in Lake Erie Regional Grape Program (LERGP)? **Yes**_____**No**_____

REGISTRATION FEES	
LERGP Member attendee	$ 25.00
Non- member	$50.00

Additional Attendees: (Member/non-member fees apply)

*Please add a **$10.00 late fee** for each reservation made after July 29, 2022.

TOTAL $_____

Please make check payable to **LERGP (Lake Erie Regional Grape Program)** and mail to: (*US funds only*)

Kate Robinson
LERGP
6592 W Main Rd
Portland NY 14769

Name _____NY DEC/PA PDA NUMBER_____

Name _____ NY DEC/PA PDA NUMBER_____

Name _____ NY DEC/PA PDA NUMBER_____

Date Ck. Rec'd	**Amount**

Call Kate at 716-792-2800 ext 201 with any questions,
Or e-mail at kjr45@cornell.edu.

REGISTER ONLINE

Viticulture

Jennifer Russo, Viticulture Extension Specialist, LERGP

In the Vineyard

I have spent a few days in vineyards around the belt this week and have noticed a few things of concern. Phomopsis, powdery mildew, black rot, and downy mildew can be found along with Grape Berry Moth webbing, stings, and larva. Please be sure to consult your NY and PA Grape Guidelines and PSU Specialist Bryan Hed's recommendations to help with your IPM decisions. It is important to keep both your fruit and leaves clean for optimum growth.

On Thursday, June 30, 2022, the phenology of the Concord grapevines in the phenology block at CLEREL is Bloom plus 20 days. Concord berry curve research established that at 30 Days After Bloom (DAB) the berries are approximately half of their final berry weight. This is when we recommend that you do your crop estimation because the math is a simple one only needs to multiply by two to estimate the final berry weight. At CLEREL, 30 DAB is on July 8, 2022. Hopefully you noted your bloom date on your LERGP Viticulture Planning Calendar to know when your blocks hit 30 DAB to help guide your management practices. Please watch for your next Newsletter, which will have resources to help guide you through the crop estimation process.

Many of our vineyards have not had rain in quite some time and it is evident in the soil moisture. Just driving along vineyard roads creates dust-cloud wakes behind tractors. Looking around the belt, it is evident that many of you have already terminated your middle rows; this management strategy decreases grapevine competition for water and nutrients during the important duration of rapid shoot growth. Bare ground will heat under the summer's hot sun and soil and surface waters evaporate. Growing biomass in your middle rows is beneficial in many ways, even after termination. The terminated biomass covers the soil. This action shades the soil, lowering the temperature, and slows the rate of water evaporation holding more moisture in the soil for the grapevines.

However, many of us noticed that certain weeds persist even after termination of middle rows. See photo 1. that illustrates marestail that remained after herbicide termination. Dr. Lynn Sosnoskie shared the following article to extend to our stakeholders in efforts to study this dilemma:

Photo 1. terminated middle rows with persistent marestail in a Pennsylvania vineyard.

Herbicide Resistant Horseweed in New York and Possible Implications for Perennial Crop Systems

Lynn M. Sosnoskie, Horticulture Section – School of Integrative Plant Sciences, Cornell AgriTech, 630 W. North Street, Geneva, NY 14456

Horseweed (also called marestail) is a frequently occurring species in where it can be found growing in a variety of habitats including along roadsides, in field crop and vegetable operations, and in berries, grapes, and tree fruit. Often considered a winter annual, horseweed has a wide germination window and seedlings can emerge in the spring, summer, and fall. Herbicide resistance, particularly to glyphosate, is widespread in the US and has recently been identified in New York (see the 2022 summer issue of Fruit Quarterly https://nyshs.org/fruit-quarterly/). Many of these populations were collected from soybean systems where glyphosate is frequently used for managing unwanted vegetation. Two New York populations, collected from a vineyard and an apple orchard in the Finger Lakes Region, were found to be susceptible to glyphosate but resistant to labeled rates of paraquat. Paraquat resistance in horseweed has been formally confirmed, previously, in Belgium (nurseries), Canada (peaches), Japan (orchards, grapes, roadsides, railways), California (almonds), Delaware (soybeans) and Mississippi (soybeans) (https://weedscience.org/Home.aspx).

Because of this finding, the Specialty Crop Weed Science lab at Cornell AgriTech in Geneva is interested in collecting seed, this summer and fall, from horseweed plants that escape weed control in tree fruit, berry, grape, and Christmas tree systems to better understand the distribution and degree of herbicide resistance in perennial crop production environments. Horseweed seed is wind-dispersed and resistance traits can be easily disseminated across the landscape. Growers

should contact their local CCE specialist or Lynn Sosnoskie in Geneva (lms438@cornell.edu) for assistance if they believe they have resistant horseweed on their farms. For more information about horseweed identification, please see: https://blogs.cornell.edu/weedid/field-crops/horseweed/.

This research was supported by Federal Capacity Funds awarded by the National Institute of Food and Agriculture, U.S. Department of Agriculture and managed by the New York State Agricultural Experiment Station (NYSAES), Cornell University, Geneva, New York, USA.

NOAA's National Weather Service Forecast by 12 Hour Period
Notes: Weather forecasts are sourced from National Oceanic and Atmospheric Administration's (NOAA) National Weather Service.
National Weather Service Forecast (click to link)
NOAA's Disclaimer (click to link)

UTC Forecast Time: 2022-06-29T09:31:15+00:00

Thursday: Sunny, with a high near 84. South wind 7 to 10 mph becoming west in the afternoon.
Thursday Night: Mostly clear, with a low around 69. Light south wind increasing to 6 to 11 mph in the evening.
Friday: A chance of showers, with thunderstorms also possible after 5pm. Partly sunny, with a high near 85. Southwest wind 13 to 15 mph. Chance of precipitation is 30%. New rainfall amounts of less than a tenth of an inch, except higher amounts possible in thunderstorms.
Friday Night: A chance of showers and thunderstorms, then showers likely and possibly a thunderstorm after 8pm. Mostly cloudy, with a low around 67. Southwest wind around 9 mph. Chance of precipitation is 70%. New rainfall amounts between a quarter and half of an inch possible.
Saturday: A chance of showers and thunderstorms before 11am, then a slight chance of showers between 11am and 3pm. Mostly sunny, with a high near 77. Chance of precipitation is 40%. New precipitation amounts of less than a tenth of an inch, except higher amounts possible in thunderstorms.
Saturday Night: Mostly clear, with a low around 63.
Sunday: Sunny, with a high near 77.
Sunday Night: Mostly clear, with a low around 63.
Monday: Mostly sunny, with a high near 81.
Monday Night: Partly cloudy, with a low around 66.
Tuesday: A chance of showers. Partly sunny, with a high near 78. Chance of precipitation is 40%.
Tuesday Night: A chance of showers. Partly cloudy, with a low around 61. Chance of precipitation is 30%.
Wednesday: A chance of showers. Mostly sunny, with a high near 76. Chance of precipitation is 30%.

Historical Growing Degree Days (base 50) for Portland, NY

Notes: Current season accumulation is reported as the thick blue line from January 1 through date of this report. Historical season data is reported between January 1 and December 31 of each year. The legend indicates how many GDDs had accumulated by the same date in previous years and the final total for the year on December 31.
Data is sourced from Cornell's Northeast Regional Climate Center (NRCC) high resolution gridded data service.

As of June 29, 2022 the Cumulative Growing Degree Days since January 1, 2022 for Portland, NY is 818 GDDs. This is only 1.4 GDDs lower than the five-year average GDDs for the same date, note Figure 1.

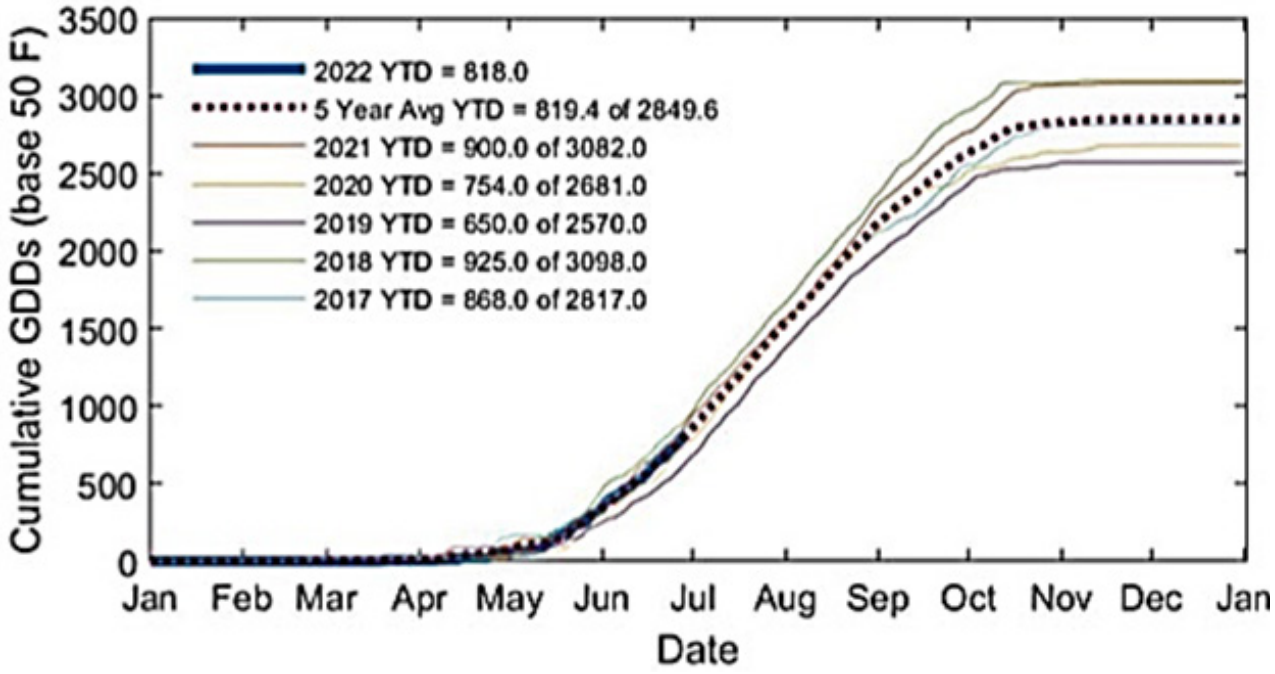


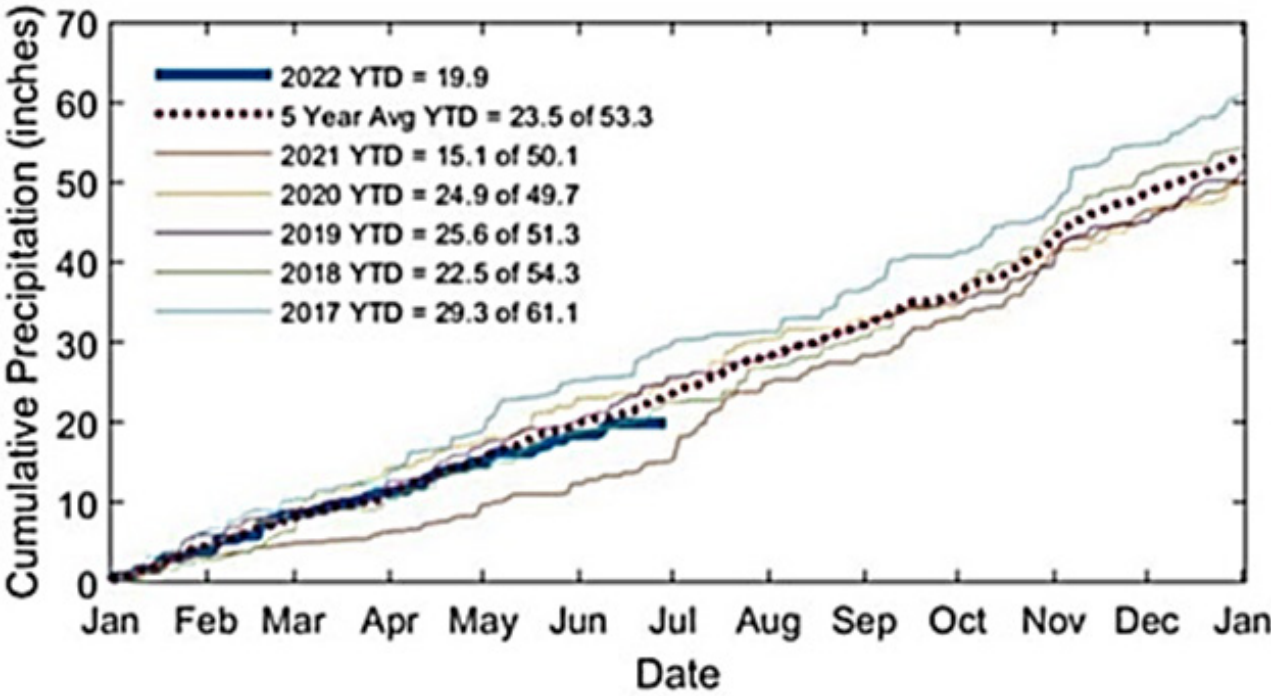
Figure 1. Historical Growing Degree Days for Portland, NY from January 1, 2022 through June 28, 2022

Historical Precipitation (inches) for Portland, NY

Notes: Current season accumulation is reported as the thick blue line from January 1 through date of this report. Historical season data is reported between January 1 and December 31 of each year. The legend indicates how many inches of precipitation had accumulated by the same date in previous years and the final total for the year on December 31. Data is sourced from Cornell's Northeast Regional Climate Center (NRCC) high resolution gridded data service.

As of June 29, 2022 the Cumulative Precipitation in inches since January 1, 2022 for Portland, NY is 19.9 inches. This is 3.6 inches lower than the five-year average of 23.5 inches for the same date, note Figure 2.

Figure 2. Culmulative Precipitation in inches for CLEREL in Portland, NY from January 1, 2022 to January 28, 2022.



Updates and Information

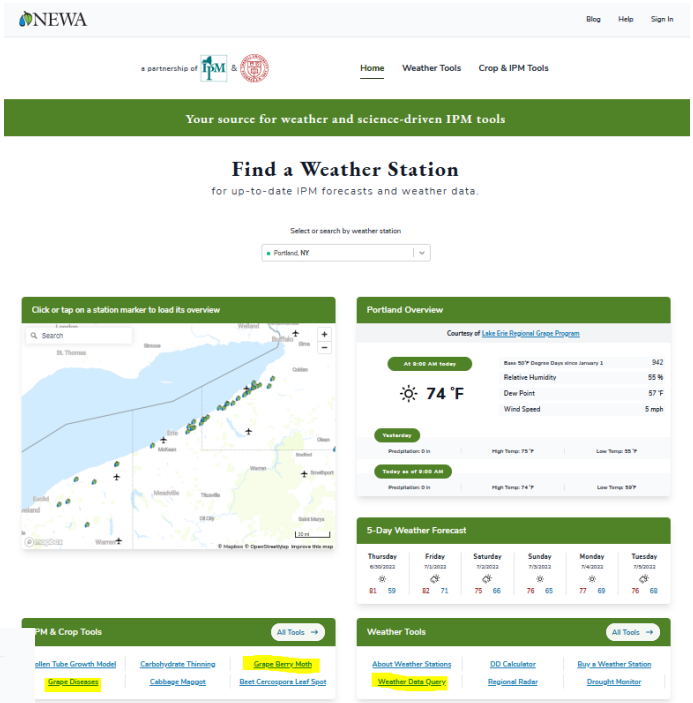
Kimberly Knappenberger, Viticulture Assistant, LERGP

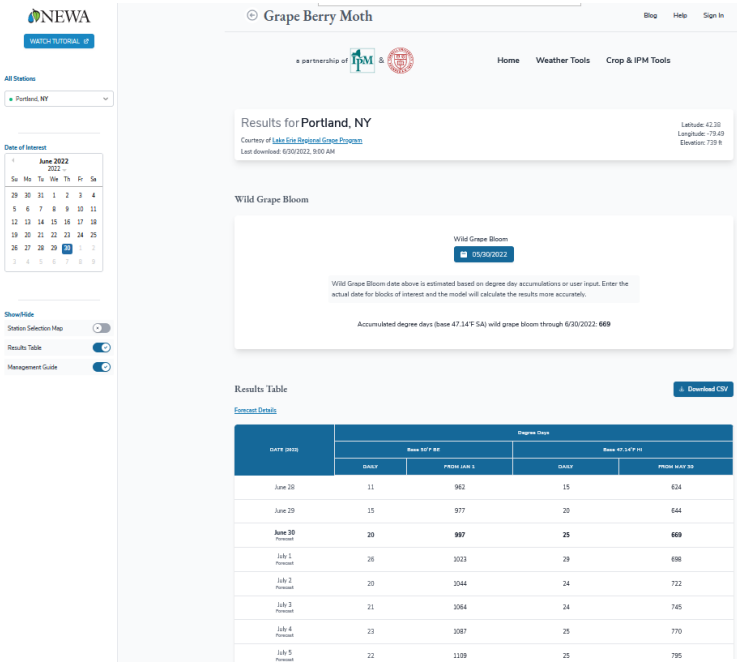
Vineyard Improvement Program

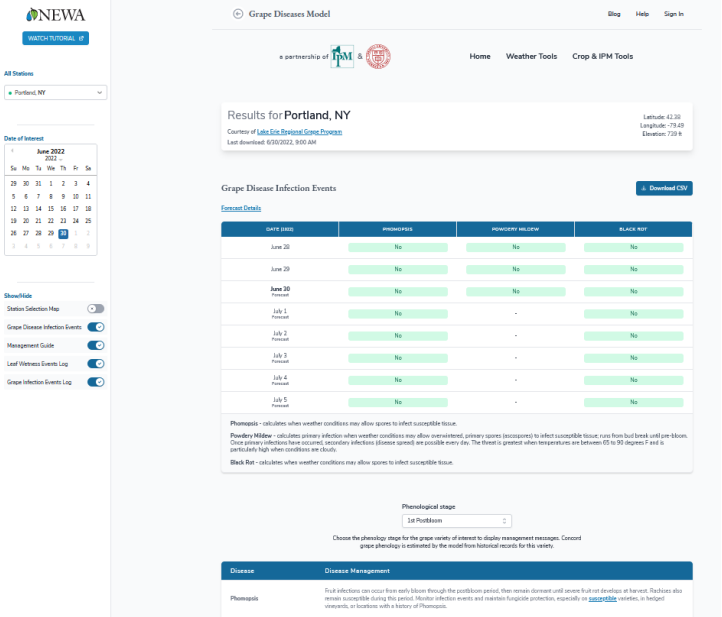
We are in the last year of the Vineyard Improvement Program which means that any removals/ replants need to be finalized this year and all expenses reported by January 2023. If you are thinking of removing a Concord vineyard please contact Kim at ksk76@cornell.edu or 716-792-280 ext 209. Currently we will be able to reimburse 50% of removal expense, but it is unlikely that we will be able to reimburse replant expenses (25%) due to the time limitation. To learn more about how the program works visit https://lergp.com/about-vip. If you would like to apply click on VIP Application or click this link https://lergp.com/vip-application.

NEWA

As we are flying through this growing season just a quick reminder to keep an eye on newa.cornell.edu. Here you can not only find the current weather conditions, but you can find historical weather data, the growing degree days for grape berry moth, and the models for Phomopsis, powdery mildew and black rot with suggestions for disease management.
Just click on Grape Diseases or Grape Berry Moth to view the models. Be sure to enter the nearest station in the station selection bar and for the Grape Berry Moth model check to see if the wild grape bloom is correct for your location.





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protect the future vineyards and
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NYFB.org 800-342-4143

PA Update

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

Weather: At our location by the lake, June will finish up much drier and a little warmer than average with a mere 1.12 inches of precipitation (long term average of about 3.2") and about 540 growing degree days (gdds; long term average of about 517). This has been the driest June since 2005 (1.11" precipitation). From April 1, this puts us several days ahead of average in terms of heat accumulation and about 1.8" below average in terms of precipitation. We might see some rain Friday night (70% chance), but it is not forecast to generate a black rot infection period…we'll see.

Phenology: Here by the lake, we are about 2 weeks past bloom for Concord, not quite beyond the fruit susceptibility period for powdery mildew on Concord, but nearly there. Concord berries are considered about resistant to powdery mildew when they reach about a quarter inch in diameter. Some berries in clusters are already at that stage, and some are not.

Diseases: There have been no infection periods for black rot, downy mildew, or Phomopsis in 3 weeks, and so no fruit infection of these diseases is expected to be found at this time. Hopefully everyone has applied that first post bloom spray in a timely fashion (within 10-14 days of the pre bloom spray) and are beginning to contemplate what, if anything, to apply for the second post bloom spray. In most years, that second post bloom spray will depend heavily on how well you've controlled diseases to date, based on the presence/absence of active disease on leaves and fruit (determined by scouting). However, the complete absence of infection periods over the past 3 weeks, for 3 of the 4 major diseases, means that the only threat is from powdery mildew at this time.

Powdery mildew: For spray decisions regarding powdery mildew, research at Cornell has shown that *in most* years, lightly cropped Concord vines will benefit little from continued control measures against powdery mildew, once fruit are resistant (about when Concord fruit are a quarter inch in diameter). Conversely, Concord vines with above average to large crops will benefit from continued efforts to control powdery mildew, to keep canopies operating at maximum fitness and ensure that you reach minimum sugar standards by harvest. Note the use of the term, "*in most years*": if conditions turn poor for ripening (cloudy and wet), all bets could be off. Juice grape growers do not have to apply "top notch" materials at this time but could resort to a Nutrol (plus surfactant), a Harvest-More (not a fungicide, but will add a little potassium and control mildew by about 30%), a copper/lime spray, a tebuconazole product (which will add black rot protection too). **For large crops,** you could also continue to use the 'heavier hitters' like Quintec, Vivando, Cevya or Endura, but make sure you rotate FRAC groups and do not use any one of these more than twice per season. A tank mix of Nutrol or Harvest-More with these latter materials would help to delay the development of resistance.

Sensitive hybrids and Vitis vinifera are another story; continue to protect fruit of these varieties against powdery mildew for at least another 2 weeks. Materials like Aprovia/Aprovia Top, Miravis Prime, Gatten, or Luna Experience, will continue to provide excellent control of powdery mildew. Just be sure you rotate FRAC groups each time. A tank mix with sulfur is also highly recommended for sulfur tolerant wine varieties.

Black rot: I do not expect anyone to find black rot fruit infections due to the almost total lack of rain-

fall since bloom, but just keep in mind that black rot fruit susceptibility is still there for all varieties for another 3 (Concord/natives) to 5 (Vitis vinifera) weeks or so. If you see leaf infections (from infection periods in May), know that there is still the potential for fruit infections IF the weather turns wet AND you have that inoculum source (leaf lesions, mummies (from last year) in the trellis).

Downy mildew: Niagara clusters will still retain some susceptibility to downy mildew infections through the cluster stems, for probably another 2 weeks or so beyond the end of direct fruit susceptibility (until about mid July?). There is rain in the forecast for Friday that could result in a 'resurrection' of downy mildew, so stay vigilant if you're growing a susceptible variety (any vinifera and sensitive hybrids, Niagara and Catawba). Copper/lime, Revus/Revus Top (not on Concord), Phosphorous acid products, Ranman, and Zampro are all very effective. Ziram will provide some protection from downy mildew, but is not as effective as mancozeb or captan.

And one last thing: For premium wine varieties, now is the time to do leaf removal in the fruit zone. Leaf removal can be done by machine or by hand and generally provides sizable reductions in bunch rot on rot susceptible wine varieties (Riesling, Vignoles, Pinot noir and gris, Chardonnay, etc). Leaf removal at this time can result in a reduction in bunch/sour rots of about 50% or more at harvest. Leaf removal can also improve fruit quality and may even reduce manual harvest costs (the clusters are easier to see and remove if you're hand harvesting).

2022
LERGP
Coffee Pot Meeting Shedule

April 27, 2022	10:00am	Arrowhead Winery	12073 East Main St. North East, PA 16428
May 4, 2022	10:00am	Militello's Farm Supply	2929 Route 39 Forestville, NY 14062
May 11, 2022	10:00am 6:00pm	John Mason, Mason Farms Virtual Zoom Meeting	8603 West Lake Rd. Lake City, PA 16423 register now
May 18, 2022	10:00am	Andrew Nichols	1850 Ridge Rd. Lewsiton, NY 14092
May 25, 2022	10:00am	Alicia & Zach Schneider	771 Bradley Rd. Silver Creek, NY 14136
June 1, 2022	10:00am	Knight Farms	18 Shaver St. Ripley, NY 14775
June 8, 2022	10:00am 6:00pm	TrolleyLine Vineyards Virtual Zoom Meeting	12029 Middle Rd. North East, PA 16428 register now
June 15, 2022	10:00am	Dan Sprague Farm	12435 Versailles Rd. Irving, NY 14081
June 22, 2022		NO COFFEE POT MEETING	
June 29, 2022	10:00am	Betts' Farm	7365 East Route 20 Westfield, NY 14787
July 6, 2022	10:00am	Paul Bencal Farm	2645 Albright Rd. Ransomville, NY 14131
July 13, 2022	10:00am 6:00pm	Liberty Winery Virtual Zoom Meeting	2861 Route 20, Sheridan, NY 14135 register now
July 20, 2022	10:00am	Beckman Farm	2386 Avis Dr. Harbor Creek, PA 16421
July 27, 2022	10:00am	Arrowhead Spring Winery	4746 Town Line Rd. Lockport, NY 14094

Virtual Coffee Pot Meetings Registration: You MUST Register to attend!

If you take a look at the coffee pot schedule, you will notice that we have 3 virtual coffee pot meetings scheduled in addition to our in person meetings. They will be in the evenings on the second Wednesday of the months. If you are planning on attending and receiving pesticide credits, you must register on our web-site. In addition to registering, you must supply a copy of your license, date of birth and phone number to me at kjr45@cornell.edu.

The team is excited to be and about visiting the growers during this growing season. We hope that you can come out and join us for some of these meetings.