



LERGP Crop Update

July 10, 2025

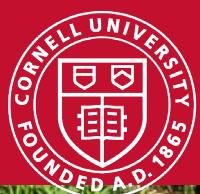
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Terry Bates



Cornell Cooperative Extension
Lake Erie Regional Grape Program



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The next coffee pot meeting is on **Wednesday, July 16** at 9:00am at CLEREL- Grower Demo Day!

Please note the 9:00am start time!!!!

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Come see what we have going on at CLEREL!



CLEREL CROP ESTIMATION AND FRUIT THINNING DEMO DAY

Dr. Terry Bates and Jennifer Phillips Russo will discuss the research behind achieving balanced vineyard conditions through proper fruit thinning practices.

Attendees will learn about crop estimation and fruit thinning techniques for sustainable grape production with balanced vines.

**JULY 16, 2025
9 AM - 12 NOON**



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CORONA
SEASON AFTER SEASON

Viticulture

Jennifer Russo, Viticulture Extension Specialist, LERGP

In the Vineyard

Please join us next Wednesday, July 16th, at CLEREL for our Crop Estimation and Fruit Thinning Demo Day! 🍇

This season, it is very important to know how much fruit you have hanging on your vines and how the vine responds to crop load. We have had many conversations during our coffee pot meetings about the effects of 2024's frost damage and fruiting potential on subsequent rested vines. We are anticipating large crop loads in the affected regions, and managing crop load is crucial for achieving optimal fruit quality, future vine productivity, and ensuring economic viability for growers. Dr. Terry Bates will discuss the research implications of crop estimation and different crop management practices on the quality of grapes, with emphasis on fruit thinning. The integration of scientific research with practical vineyard management is essential for achieving high-quality fruit while maximizing economic returns.

This Crop Estimation & Fruit Thinning Demo Day will start classroom style in the conference room of the Cornell Lake Erie Research and Extension Laboratory (CLEREL) in Portland, NY, at 9 AM. Terry will present data on crop estimation and fruit thinning and answer questions from growers. We have been surveying our grower stakeholders during our Coffee Pot Meetings and have compiled a list of your questions and concerns surrounding this management practice for Terry to address, such as, where to thin (bottom canopy or total canopy), how fast to drive, the speed of the beaters in your harvester, tonnage removal goals, trusting the crop estimation numbers, and more. After the inside portion of the program, we will go outside for the demonstration portion of the program to see thinning in Concord grapes in action, with the ability to ask more questions. We hope to see you on July 16, 2025, for this important demonstration session to help guide you with your management decisions for healthy vines for achieving high-quality fruit while maximizing economic returns and help to ensure your grapes reach maturity for delivery! 🍇



CLEREL CROP ESTIMATION AND FRUIT THINNING DEMO DAY

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Attendees will learn about crop estimation and fruit thinning techniques for sustainable grape production with balanced vines.

**JULY 16, 2025
9 AM - 12 NOON**

This week I want to focus on our Extended Coffee Pot Meeting next week, July 16, 2025, from 9 AM-12 PM at the Cornell Lake Erie Research and Extension Laboratory (CLEREL). As we approach the crucial period of crop estimation, 30 days after bloom, it's essential to understand the intricate dynamics between vine growth, yield expectations, and business decisions. Dr. Terry Bates and I produced a podcast about this Crop Estimation and Fruit Thinning Demonstration Day that is available today. The conversation around crop estimation reveals insights into how balancing crop load can influence vineyard health and economic sustainability over time.

Terry and I discussed the upcoming Lake Erie Regional Grape Program meeting, focusing on crop estimation and fruit thinning in Concord vineyards. Terry explained the concept of the yield-to-pruning weight ratio and how it affects vine energy allocation between crop and wood growth. He noted that last year's low crop due to frost resulted in increased pruning weights, while a heavy crop this year could lead to decreased pruning weights and yield potential for next season. We emphasized the importance of conducting crop estimates at 30 days after bloom to inform management decisions.

The Importance of Crop Estimation

Crop estimation serves as a critical tool for growers, allowing them to gauge potential yields and make informed decisions. Understanding your vine size in relation to expected crop load is key. For some growers, pruning and thinning may seem like mere agricultural practices, but they also represent a choice that could directly affect profitability. Sometimes this decision boils down to whether a grower intends to harvest a larger quantity of grapes, even when the conditions may not guarantee perfect ripening. When confronted with the prospect of harvesting a bigger crop, growers must weigh (note the intention of my wording) the potential profits against the risks of varying yield sizes in subsequent years. A grower who opts to "hang the big crop" might succeed in generating immediate income, but this could lead to a lower yield in the next season due to overtaxed vines and run the risk of potentially not ripening all of the fruit.

A balanced viticulture model is crucial. Season-to-season fluctuations can upset the overall health of a vineyard, as we saw in 2024. Variability in crop size can create financial worries, which growers need to navigate with care. We touched on how last year's frost created unexpected fluctuations, prompting the need for strategies to balance out these effects. This demonstration day will walk growers through the crop estimation process and fruit thinning decision making and techniques. It is our intention to aid growers in adopting a forward-thinking mindset that prioritizes consistent vine health and uniform yields will not only stabilize profits but also foster sustainable practices in viticulture.

Terry and I discussed the importance of fruit thinning in vineyards, particularly for overcropped vines. Terry explained that thinning involves carefully removing fruit to balance vine growth and improve fruit quality. He emphasized that proper machine setup and gentle handling are crucial to avoid damaging vines. It is our hope to demonstrate these techniques on Wednesday and encourage attendees to join and reach out with questions. [Click Here to Listen to the Podcast.](#)

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VERAISON TO HARVEST PODCAST



1 The Vines S5E8: Crop Estimation and Thinning Demo Day

Between the Vines



1x More Info Share

00:39 | 43:39



Between The Vines S5E8: Crop Estimation and Thinning Demo Day

43:39



Between The Vines S5E7: Fertilizer Calculators For Concord Vineyards (Beta)

31:55



Between The Vines S5E6: Concord Crop Estimation Calculator (Beta) by Dr. Terry Bates

44:56



Between The Vines S5E5: General discussion on vineyard phenology and market

34:21



Between The Vines S5E4:Disease Management talk with Katie Gold

42:55



NEW YORK WINE CLASSIC AWARDS CEREMONY

Thursday, July 17 | 6:00 PM

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Erie Horticultural Society Chicken BBQ Meeting Agenda- 2024

Location: Gravel Pit Park, 10300 W Main Rd, North East, PA 16428

Date: Wednesday, July 30th 2025

Time: 4:00 PM- 7:00 PM

A three-hour chicken BBQ and meeting with two core credits and one category credit in the afternoon, providing growers with updated information and research in juice and wine grape production, as well as best practices for pesticide application. Registration is free, and dinner will be provided.

- **4: 00 PM Start:** Equipment show and vendor tables
- 4:30 PM (30 minutes) 1 core recertification credit
 - **Title:** "Worker Protection Standard- What does compliance look like?"
 - **Speaker:** Joni Davis
 - **Description:** Inform-Protect-Mitigate. The whole reason for the regulation is to make sure those who work for you know what they are being exposed to, how to protect themselves from that exposure, and what to do if they are exposed to pesticides while working on the farm. During this talk, you will learn what it takes to gain compliance and how to maintain it year after year.
- 5:00 PM (30 minutes) 1 category recertification credits
 - **Title:** "Update on vineyard weather stations and insect pest research"
 - **Speaker:** Kim Knappenberger and Flor Acevedo
 - **Description:** Discussion of the benefits of hosting weather stations within the vineyard, including degree day models and infection period estimation, and updates on management strategies for grape berry moth and spotted lanternfly.
- 5:30 PM (30 minutes) 1 core recertification credit
 - **Title:** "Pesticide best practices and legal changes to labels for the coming growing season"
 - **Speaker:** Megan Luke
 - **Description:** Brief update regarding label changes to pesticides commonly used in grapes (ziram, captan, mancozeb), and overview of upcoming changes, including use of the EPA's Mitigation Menu and the Bulletins Live! 2 website.
- 6:00 PM (Dinner)
- 7:00 PM **End**

*This is a FREE Event but you **MUST REGISTER !***

REGISTER ONLINE HERE

**or call Katie at
716-792-2800 ext 201**



DATE:

August 12, 2025

TIME:

9:00 a.m.-5:00 p.m.

LOCATION:

**Quarry Hill Winery & Orchard
8403 Mason Rd #2
Berlin Heights, OH 44814**

REGISTRATION COST:

Early Registration: \$45 per person until July 1

Late Registration: \$60 per person July 2 until August 1



New Sprayer Technologies and Best Practices: Vineyards and Orchards

This workshop will feature presentations on best spraying practices using conventional sprayers and new sprayer technology, including spray drones and Intelligent sprayer units. The afternoon will provide field demonstrations showing adjustments to improve effectiveness of conventional sprayers as well as sprayer operation and calibration demonstration. This workshop is being developed by OSU, MSU, and PSU Extension Specialists and the USDA-ARS Application Technology Research Unit. Registration is required. Please see the agenda for program details. Lunch and workshop materials are included with registration.

REGISTER AT GO.OSU.EDU/SPRAY2025



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Updates and Information

Kimberly Knappenberger, Extension Support Specialist, LERGP

NEWA Location	Wild grape bloom date*	DD total on 7.10.25	Forecasted DD for 7.15.25
Burt (NYS Mesonet)	6/9/25	775	930
Newfane (Chateau Niagara)	6/5/25	882	1041
Ransomville	6/3/25	955	1114
Lockport	6/3/25	943	1100
Brant	5/29/25	1005	1150
Versailles	5/30/25	955	1103
Hanover	6/4/25	917	1066
Silver Creek (Route 5)	6/4/25	906	1055
Silver Creek (Double A)	5/30/25	1003	1152
Dunkirk (Route 5)	6/4/25	895	1043
Sheridan	5/29/25	1010	1159
Sheridan (Liberty)	5/31/25	986	1135
Forestville	6/3/25	935	1083
East Fredonia	6/4/25	903	1053
Fredonia (NYS Mesonet)	6/4/25	895	1047
Brocton Escarpment	6/3/25	924	1072
Portland/Portland LERGP West	6/3/2025	932/952	1081/1106
East Westfield	6/4/25	895	1047
Westfield	6/3/25	933	1079
Westfield (South)	6/3/25	940	1090
East Ripley	6/2/25	964	1109
Ripley	6/3/25	952	1104
Ripley Escarpment	6/3/25	934	1087
Ripley State Line	6/3/25	944	1097
North East State Line	6/4/25	895	1040
North East Escarpment	6/3/25	934	1081
North East Sidehill	6/3/25	926	1072
North East Lab	6/4/25	897	1044
Harborcreek	6/2/25	968	1124
Harborcreek Escarpment	6/4/25	879	1029
Lake City	6/2/25	954	1106
Lake City (Mason Farms)	6/3/25	941	1093

Table 1. Phenology-based Degree Day model results for Grape Berry Moth by NEWA station location in the Lake Erie Region. *Estimated date provided by NEWA website

NEWA

The Grape Berry Moth Growing Degree Day chart shows that most stations are reporting over 900 GBM GDD accumulated so far since wild grape bloom. NEWA reminds us that the 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 the GBM GDD accumulation reaches 1470-1620. 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.

For those not yet to 900, contact insecticides are still useful because the larvae have not all entered the berry for protection. 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. "For materials that are contact insecticides, e.g. pyrethroids and carbamates, apply between 811 and 900 DD."

Grape Rootworm

Grape rootworm is not consistently a pest in local vineyards, but it has been seen quite a bit this growing season. These pests are present when you observe chain-like feeding on the leaves. Grape rootworm spends most of its life cycle underground feeding on grape roots which can quickly cause a decrease in vine vigor if ignored. The adult beetle can begin appearing in vineyards in late May – early July when it emerges from the soil and starts feeding, mating and laying eggs on vine trunks or canes. After the eggs hatch the larvae crawl into the soil and attach themselves to grape roots. They remain there for 1-2 years while completing their development. Since the adult stage is the only time this pest is above ground, it is the stage that should be targeted for control. Scout vineyards for the distinctive chain-like feeding pattern on the leaves to determine if there is a need for an insecticide application. Please consult your guidelines for specific insecticide instructions.



Figure 1 Rootworm Feeding Damage on leaf



Figure 2 Rootworm Feeding damage on leaf

PA Update

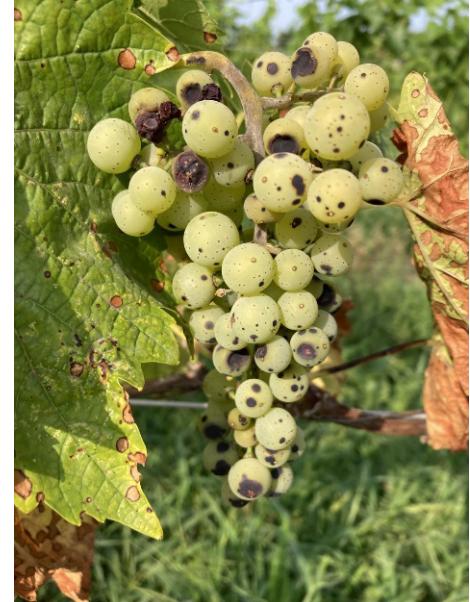
Jessica Clippinger, Lake Erie Grape Research and Extension Center

Here at the lab in North East, PA, we are looking to put on our second post-bloom spray. While not as critical a spray as the 1st post-bloom spray, this spray is important for black rot, downy mildew, and powdery mildew control. **Scout often** for these diseases in your vineyard now, to ensure timely management of epidemics. The good news is that new Phomopsis infections are very unlikely once berries are pea sized. Since we have had a wet spring and early summer, most Phomopsis spores have already been released from last year's wood. Phomopsis sprays are no longer necessary this year.

Here is the breakdown by disease:

Black Rot:

The most important black rot sprays are the immediate pre-bloom and first post-bloom spray, however, a second post-bloom spray is still recommended, and it could be necessary if symptoms are visible on leaves or fruit, or if the vineyard has a history of black rot infections. Spray options include **strobilurin** fungicides (FRAC11: Abound, Flint, Pristine, Sovran, Quadris Top, Topguard EQ), which are very good protectants but provide little postinfection control (apply *before* an infection period). Strobilurins have not displayed a loss of effectiveness against black rot, but *they are no longer effective against downy and powdery mildew due to resistance*. Many **DMI fungicides** (FRAC 3) are very effective against black rot and can provide post infection activity up to 72 hours after the start of infection. These include difenoconozole products (NOT for use on Concord: Aprovia Top, Revus Top, Quadris Top, Inspire Super), flutriafol products (Rhyme, Topguard EQ), as well as Mettle (tetraconazole), Cevya (mefentrifluconazole, don't apply with stylet oil) and Rally (myclobutanil). **Miravis Prime** (FRAC 7, pydiflumetofen) also provides good black rot control and does not wash off. **Mancozeb** (and Ziram if you have it) are good protectants but are prone to washing off in heavy rains.



Downy Mildew:

For susceptible varieties, berries do not acquire resistance to downy mildew until about 3 weeks after bloom, but berries can still be infected until 4 or 5 weeks after bloom via pedicel infections. Leaves of susceptible varieties never become highly resistant to infection and even older leaves can become heavily infected when disease pressure is high. Downy mildew can complete its life cycle in as little as 4-5 days repeatedly when temperatures are optimal and rain/or high humidity conditions persist fueling the development of an epidemic that can defoliate vines if not managed properly. In 2023 and 2024, high levels of downy mildew resistance were found to strobilurins (FRAC 11: Abound, Flint, Pristine,



Sovran, Quadris Top, Topguard EQ), carboxylic acid amides (Revus, Revus Top), and phosphorous acid (ProPhyt, Phostrol, Rampart, Reliant) in the Lake Erie region. *Therefore, it is no longer recommended that these products be solely relied upon for downy mildew control.* Spray options for downy mildew include the multi-site inhibitors **mancozeb** (note 66-day preharvest interval), **captan**, and **copper**. These would need to be applied at a tight interval of 7-10 days due to not being rainfast or protecting new shoot growth. **Ridomil** (FRAC 4: mefanoxam) and **Ranman** (FRAC 21: cyazofamid) as well as **Zampro** (FRAC 45 and 40: ametoctradin and dimethomorph) provide good to excellent control of downy mildew but are all prone to resistance development, and each should not be used more than twice in a season. But they can be rotated to help delay resistance development. If disease pressure is low, biologicals such as **Howler EVO** or **Theia** could be included within a conventional fungicide rotation.

Powdery Mildew:

Powdery Mildew is visible in vineyards now, still more so on the underside of leaves, but is also starting to be more common on the upper surface of leaves. Primary infections that rely upon rainfall have already occurred and we are now into secondary infections that do not need a wetting period to continue. With temperatures in the 70s and 80s, new colonies can develop within 5-6 days. Fortunately, Concord fruit becomes immune to powdery mildew within 2 weeks after fruit set or when berries reach 0.25 inch diameter. For those expecting a large crop, protecting leaves may help to ensure minimum brix levels are achieved, especially if the weather remains cloudy. *V. vinifera* are considered resistant 3-4 weeks after bloom. Leaves remain susceptible throughout the season. Powdery mildew fruit infections at this time can contribute to bunch rots later in the season.

Spray options include less expensive materials for leaf management of juice grapes and continued excellent protection for *V. vinifera* and susceptible hybrids.

Some very effective options are **Endura**(boscalid), **Gatten**(flutianil), **Quintec**(quinoxyfen) and **Cevya** (mefentrifluconazole: don't use with stylet oil on Concord as it can burn leaves). **Sulfur** is a good powdery mildew tank mix for *V. vinifera* (but is phytotoxic to Concord and should not be sprayed within 2 weeks of an oil spray). There is possible powdery mildew resistance to Vivando (metrafenone), but this is not confirmed yet. Strobilurin resistance, however, is confirmed and will provide *little to no control* of powdery mildew. As a general rule of thumb, (determined from Bryan Hed's work) newer fungicides perform better than older fungicides and can ripen a larger crop. If disease pressure is low and varieties are not too susceptible to powdery mildew, biologicals could be included in a powdery mildew fungicide rotation. These include: **Howler EVO**, **Theia**, **Ecoswing**, and **Stargus**.



Links of Interest:



Cornell Cooperative Extension:

<https://cals.cornell.edu/cornell-cooperative-extension>



Efficient Vineyard:

<https://www.efficientvineyard.com/>



LERGP:

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

<https://lergp.com/>



NYSIPM:

<https://cals.cornell.edu/new-york-state-integrated-pest-management>



Veraison to Harvest:

<https://cals.cornell.edu/viticulture-enology/research-extension/veraison-harvest>



Spotted Lanternfly Pocket Guide:

<https://lergp.com/spotted-lanternfly>

