# **Cornell Cooperative Extension** Finger Lakes Grape Program

June 7, 2023

# **Finger Lakes Vineyard Update**

#### In the Vineyard In This Issue: In the Vinevard pg. 1 The warm and sunny weather over the last week has resulted in a significant push in growth on shoots that survived the freeze two weeks ago. In many locations, IPM pg. 2 those primary shoots are 12" long or more by now. We are also seeing emergence Drought Effects on Weed Mgmt. pg. 4 of shoots from non-count positions and SLF Webinar pg. 6 suckers as well (Photo 1). Ag Supervisor Training pg. 7 Craft Beverage Grant Funds pg. 8 Secondary shoots are just starting to push out from the buds where primary shoots died earlier (photo 2). Depending on weather conditions over the next week, we **Events** pg. 9 should start to see what kind of crop might be carried on these newly emerging GDDs <u>pg. 1</u>1 shoots.





Photo 1 (left). Baco noir vine with growth at both count and non-count shoots. Photo 2 (above). Secondary shoot emerging after freeze damage to the primary shoot.

**Powdery mildew will** 

overwinter on canes and

trunks. These infections cause this scarring on canes and is an easy diagnostic symptom.

#### **Finger Lakes Grape Program**

#### Trace bloom

I mentioned last week that wild grapes were well into bloom. Our earliest varieties like Marquette are reaching trace bloom this week (Photo 3). The cool weather over the next few days will probably keep things from moving too rapidly, but we are now entering one of the two most critical periods of the season.

Warm conditions and minimal stress on the vines help to promote better conditions for bloom and fruit set. Despite the lack of rain for over 2 weeks now, we are not seeing signs of water stress yet. This is primarily due to the fact that the canopies are still relatively small and not demanding a lot of water from the soil at this point. However, vineyards on soils with lower water holding capacities or younger vines with less established root

systems may start to show some symptoms if we don't get some rain fairly

soon. The dry weather is great for disease management programs right now, but getting a little more water into the soil profile as we head into bloom wouldn't be a bad thing either.

#### IPM

The pending arrival of bloom on primary shoots means that growers should be getting ready to apply their pre-bloom sprays in the next week or two, at least in vineyards where the majority of shoots survived the freeze event. All of the major diseases are active (at least to some extent) by this point in the season, so it's important to make sure that upcoming sprays are designed to protect the leaves and clusters from them as they enter the critical bloom period.

#### Phomopsis

As I've mentioned earlier, the dry weather over the past month has kept phomopsis pressure very low. Even so, it is still important to keep protecting tissues from it during this time. The challenge with phomopsis materials like mancozeb this year will be figuring out how best to use it (and not) if there is a significant crop of secondary clusters that need to be protected later on in the season. The 66-day PHI for this material means that it might be unavailable for use on secondaries if there is the potential to harvest primary clusters earlier than them. In these cases, consider using captan or ziram, which have much shorter PHI intervals.



Powdery mildew

Overwintering bodies (chasmothecia), which are found on the bark of the vine, will release their first spores (ascospores) beginning around bud break when there's at least 0.1" of rain (which we've had). After that, subsequent generations of spores can develop and spread without the presence of rain. In other words, our dry weather recently hasn't really slowed development of PM this spring. There are many options for PM control, but given the increasing evidence of resistance, growers should not be relying SOLELY on strobilurins (FRAC 11) for management of powdery mildew during this critical window.



Photo 3. Marquette cluster at the Teaching & **Demonstration Vineyard showing trace bloom** 

#### IPM

#### Downy mildew

Similar to phomopsis, downy mildew also requires the presence of water in order for new infections to develop, so pressure for it has been relatively low up to this point as well. However, the pre-bloom to post-bloom time is not the time to try to "cheat" on disease management programs, so it is still important to include something for downy mildew in a pre-bloom spray. With pressure as low as it currently is, this could simply be an EBDC or captan (ziram is somewhat less effective against downy than mancozeb or captan, according to the IPM Guidelines). These materials all work as preventatives only and are subject to washoff, so reapplication may be necessary soon after a rain event.

As with powdery mildew, there are more and more cases of downy mildew resistance to FRAC 11 materials, as well as FRAC 40 (e.g., Revus and related materials). These materials probably shouldn't be relied on as the ONLY material for downy management at this point in the season. As long as pressure remains low, it might make sense to continue to use less expensive materials, to the extent possible, and save stronger ones like Ridomil, Ranman, Zampro and others for times when pressure is higher.

#### Black rot

Black rot is mostly an issue when we have higher rainfall amounts, and so the pressure to this point has also been pretty minimal. We have no indications at this point that black rot has developed resistance to any fungicides, including FRAC 11 materials. As always, it is still critical to practice good resistance management by rotating materials with different FRAC codes between sprays, even in lower pressure situations.





# The Effects of Dry Conditions on Weed Management

#### Lynn Sosnoskie, Assistant Professor of Weed Science, Cornell AgriTech

The current weather patterns we have been/are experiencing could significantly impact crop establishment and development; it could also affect weed control success. Although fewer weed seeds may germinate in response to the hot and dry conditions, weeds that do emerge may be more difficult to manage with post-emergence (POST) herbicides. Moisture-stressed weeds are likely to have thicker cuticles (e.g., the waxy coating on the surface of the leaf), which can inhibit the absorption of foliar-applied products. Additionally, plant architecture can be altered if fewer leaves are produced and/or they start to droop; consequently, herbicide capture and retention may be reduced. When weeds are not actively growing, systemic herbicides (such as glyphosate (WSSA 9), growth regulators (WSSA 4), and grass-specific products (WSSA 1)), may not be effectively translocated to their target sites. Although contact herbicides, like paraquat (WSSA 22), could be less affected by hot and dry conditions, herbicide efficacy may still be reduced if spray droplets dry rapidly (either in the air or on plant surfaces) and sufficient coverage is not achieved.

If you are going to make POST herbicide applications, consider the following advice:

Herbicides are most effective when applied at 70 to 85 degrees F, and to vigorously growing plants. Consider making applications to weeds early in the morning, as opposed to the afternoon and evening, when plants have recovered from the previous day's heat may help improve weed control success.

Crop plants may also experience more severe injury when herbicides are applied under high temperature conditions; always read the label to become familiar with registrant recommendations with respect to crop safety. Additionally, under hot and dry conditions, crop plants may be much slower to recover from injury, so pay attention to weather forecasts and time treatments accordingly. If crop injury is a significant concern from an herbicide application, consider an evening treatment, when temperatures are falling instead of rising. This may be a safer option, especially when using contact products.

Treat weeds when they are small (this is a good practice, regardless of weather conditions) to maximize control. Smaller weeds are likely to be more succulent than older and larger ones and may respond better to herbicide applications.

Use adjuvants wisely. Adjuvants may improve weed control but could also enhance crop injury potential. Always read the label for recommendations regarding adjuvant selection and use under hot and dry conditions.

Warm temperatures and reduced soil moisture can also affect the performance of residual, pre-emergence (PRE) herbicides. Without precipitation or irrigation, many soil-applied herbicides cannot be effectively activated (e.g., being moved into the soil water solution so that they can be taken up by emerging weed seedlings). Some herbicides can be mechanically incorporated, although product distribution may be uneven in dry soils. Additionally, the potential for photo-degradation or volatilization may be increased under hot and dry conditions, resulting in reduced herbicide efficacy and/or unintended off-target movement. Wind erosion of dry soils could also result in surface-applied products moving off target.

# Finger Lakes Vineyard Update

#### Finger Lakes Grape Program

#### June 7, 2023

#### The Effects of Dry Conditions on Weed Management

Lynn Sosnoskie, Assistant Professor of Weed Science, Cornell AgriTech

Cultivation of small weeds (e.g., white thread stage) under dry conditions can be effective for eliminating emerged vegetation and moving some PRE herbicides into the soil. However, it can be very difficult to evenly mix soil-applied herbicides into dry soils.

Diligent scouting is critical during this time. It is important to understand what weeds are up and what growth stages they are at to best choose a management plan. Pay attention to the evenness of crop development to better understand the potential impacts of herbicide applications on injury development.

See the following web pages for additional information:

https://crops.extension.iastate.edu/cropnews/2021/04/preemergence-herbicides-dry-soils-and-rain

https://crops.extension.iastate.edu/blog/bob-hartzler/what%E2%80%99s-happening-my-pre-herbicide-soil-surface

https://www.ndsu.edu/agriculture/ag-hub/ag-topics/crop-production/diseases-pests-and-weeds/plant-diseases/herbicide -applications-hot

https://growiwm.org/mechanical-weed-control/

## Spotted Lanternfly Past, Present and Future: Impacts and Management

Webinar, presented by Penn State University Tuesday, June 13, 2023 12:00 – 1:00 PM

#### Click Here to Register

Registration is required to receive the link to access the webinar. Registrants will also receive access to the webinar recording.

During this webinar, Julie Urban will provide an overview of the invasion history of the Spotted Lanternfly in the United States and discuss the known and anticipated impacts on agritourism and the grape and wine industry. She will also provide an overview of ongoing research to improve this pest's management, focusing on mitigating its impact on the grape industry.

#### Who is this for?

- Vineyard managers
- Winery managers
- General public
- Members of the agritourism industry

Members of crop industries impacted by the spotted lanternfly

#### What will you learn?

- Overview of the invasion history of the spotted lanternfly
- Known and anticipated impacts on agritourism and the grape and wine industry

Overview of ongoing research to improve this pest's management

#### This event is free of charge to participants.

This material is based upon work supported by USDA/NIFA under Award Number 2021 70027 34693.

### Staffing and Organizing Your Team

Presented by Cornell's Agricultural Workforce Development Program as part of its Agricultural Supervisory Leadership Certificate Program

Finding the right employees to work on your farm can pose many challenges but hiring the wrong person can be costly! In *Staffing and Organizing Your Team*, you will learn the benefits of professionalizing your Human Resource systems and becoming a preferred employer. Learn how to recruit a candidate pool to find the right employees, and how to avoid bias and discrimination in hiring. You will also learn how to improve your interview and selection process, and how to implement a strong onboarding program. Course topics include:

- becoming a preferred employer
- personnel planning
- job descriptions
- recruiting and interviewing
- hiring and onboarding.

Materials release June 16, 2023, and live weekly Zoom discussions will be held from 3:00 to 4:00 PM ET each Thursday from June 22 through July 27. Continuing education credits will be offered.

#### Click here to register

#### About the Agricultural Supervisory Leadership Certificate Program

Supervisors are critical to the success of farm businesses. They have a major impact both on employees' daily work experiences and on the production performance of the business. The Agricultural Supervisory Leadership (ASL) certificate helps farm supervisors and managers learn and apply human resource management practices and leadership skills that foster rewarding workplaces and drive business results. Confident managers who thoughtfully apply leadership and management skills improve employee performance, develop teams, reduce employee turnover, and increase employee engagement. The courses within the certificate program will offer extensive practice and engagement activities to build confidence and skill sets.

Each course is made up of five to six weeks of instruction on topics aimed to build your leadership and management skills. Instruction includes a combination of prerecorded lectures, reading assignments, written exercises, live discussion sessions, and quizzes. For those looking to learn more on a particular topic, supplemental videos and articles may be recommended by the instructor. To get the most out of the course, students should plan to spend a minimum of two hours each week on combined course activities. Cornell Agricultural Workforce Development's supervisory leadership program consists of six courses. Those who complete all six courses and achieve 70 percent or better on all weekly quizzes will receive an Agricultural Supervisory Leadership certificate.

#### June 7, 2023

## Grant Opportunity for Craft Beverage Producers

#### Alyvia Lewter, Cornell College of Ag & Life Sciences

On Monday, May 15, Governor Hochul announced the launch of Round XIII of the Regional Economic Development Council Initiative. New this year, two new micro programs will award capital grants to support New York State craft beverage manufacturers and non-profit organizations. The CFA is available <u>here</u>; the deadline for applications is Friday, July 28 at 4 p.m. Below is a snippet of the funding streams:

#### 1) Market New York (pg 30 of CFA Available Resources)

#### A. Funding Available: Up to \$15 Million

i. Funding is available for tourism marketing initiatives, capital/construction projects and the recruitment and/or execution of special events, including meetings, conferences, conventions, festivals, agritourism/craft beverage events, athletic competitions and consumer and industry trade shows.

#### 2) Craft Beverage Micro Grant Program (pg 132 of CFA Available Resources)

A. Funding Available: Up to \$5 million

i. Up to \$5 million of funding available to support projects that increase the production capacity, business infrastructure and profitability of businesses licensed to produce wine, beer, spirits, hard cider, and mead by providing matching funds for equipment purchases and facility upgrades.

Additional information on the Regional Economic Development Council Programs can be found by going to CFA Available Resources | Consolidated Funding Application (ny.gov) and selecting Regional Economic Development Council Programs.

# Finger Lakes Vineyard Update

#### Finger Lakes Grape Program

#### **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** 

June 13, 2023 4:30 - 6:00 PM

**Glenora Farms** 

340 Dundee-Glenora Road, Dundee NY

Our next Tailgate Meeting will be on Tuesday, June 13 at Glenora Farms in Dundee. 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:

June 27, 2023: Keuka Lake Vineyards 8882 County Road 76, Hammondsport, NY July 11, 2023: Young Sommer Winery 4287 Jersey Rd, Williamson, NY July 25, 2023: Gage Vineyards 6104 Hicks Road, Naples NY August 8, 2023: Tango Oaks Vineyard 5557 NY Route 414, Hector, NY August 22, 2023: Fox Run Vineyards 670 Route 14, Penn Yan, NY

Crop Loss, Now What? How a Crop Insurance Policy Reacts After a Loss

Wednesday, June 7, 2023 9:00 - 10:00 AM

Presented by the NY Wine & Grape Foundation

The NY Wine & Grape Foundation is presenting a webinar on how crop insurance policies respond to losses and what steps farmers need to take in the event of a loss. The webinar will be led by representatives from Crop Growers LLP.

Registration is open to all New York State wineries and grape growers. You can register by following this link.

# GRAPE MEETING



June 7, 2023

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#### **Upcoming Events**

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#### **GiESCO Conference Professional Day**

Thursday, July 20 Cornell University

The <u>GiESCO</u> conference is one of the most important viticulture meetings in the world. Scientists from all over the globe attend this meeting. In July, many of the world's experts in viticulture and related fields will be coming to Cornell for this important gathering.

While much of the week is devoted to scientific talks and tours, the final day of the conference is devoted to information that is geared towards more practical use by the industry, especially the local growers and winemakers, and this year THAT IS YOU!!

On Thursday, July 20, the *Professional Day* will feature industry relevant, applied viticulture topics presented by international speakers.

Keynote speakers (and topics) are:

- Dr. Nick Dokoozlian, E&J Gallo (The vineyard of the future)
- Dr. Kaitlin Gold, Cornell University (Remote sensing for disease detection)
- Dr. Michela Centinari, The Pennsylvania State University (The threat of the invasive insect spotted lanternfly).

Other topics will include:

- Managing grapevine diseases with UV radiation
- New fumigation alternatives
- Vineyard nutrient budget and sampling protocols
- Response of vineyard soils to biochar
- and other timely topics that address grower challenges.

I encourage all of you to consider attending this one-day workshop that is devoted to the local industry. The Professional Day can be attended in person on the Cornell Campus (\$150) or virtually via Zoom (\$75).

Here is the link to register:

https://app.certain.com/profile/form/index.cfm?PKformID=0x33447239940&&varPage=register



June 7, 2023

#### 2023 GDD & Precipitation

FLX Teaching & Demonstration Vineyard – Dresden, NY							
Date	Hi Temp (F)	Lo Temp (F)	Rain (inches)	Daily GDDs	Total GDDs		
5/30/23	85.1	56.3	0.00	20.7	366.7		
5/31/23	85.3	57.4	0.00	21.4	388.1		
6/1/23	88.7	61.0	0.00	24.9	412.9		
6/2/23	88.3	60.4	0.00	24.4	437.3		
6/3/23	71.2	58.6	0.00	14.9	452.2		
6/4/23	66.6	47.5	0.00	7.1	459.2		
6/5/23	73.8	50.7	0.00	12.3	471.5		
Weekly Total			0.00"	125.5			
Season Total			7.00"	471.5			

GDDs as of June 5, 2022: 522.3

Rainfall as of June 5, 2022: 5.74"



Seasonal Comparisons (at Geneva)

#### **Growing Degree Days**

	2022 GDD <sup>1</sup>	Long-term Avg GDD <sup>2</sup>	Cumulative days ahead (+)/behind (-) <sup>3</sup>
April	135.9	62.8	+13
Мау	216.8	256.3	+3
June	77.1	484.6	+4
July		646.1	
August		597.4	
September		360.2	
October		112.5	
TOTAL	429.8	2519.8	

<sup>1</sup> Accumulated GDDs for each month.

<sup>2</sup> The long-term average (1973-2022) GDD accumulation for that month.

<sup>3</sup> 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 <sup>4</sup>	Long-term Avg Rain ⁵	Monthly deviation from avg <sup>6</sup>
April	5.73"	2.80"	+2.97"
Мау	1.90"	3.07"	-1.17"
June	0.00"	3.56"	
July		3.43"	
August		3.21"	
September		3.47"	
October		3.41"	
TOTAL	7.63"	23.02"	

<sup>4</sup> Monthly rainfall totals up to current date

<sup>5</sup> Long-term average rainfall for the month (total)

<sup>6</sup> Monthly deviation from average (calculated at the end of the month)

June 7, 2023

#### 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 <u>http://flgp.cce.cornell.edu</u>.

Got some grapes to sell? Looking to buy some equipment or bulk wine? List your ad on the <u>NY Grape & Wine</u> <u>Classifieds website today!</u>

#### Finger Lakes Grape Program Advisory Committee

Eric Amberg- Grafted Grapevine Nursery 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 Steve Sklenar– Sklenar Vineyard Justine Vanden Heuvel- Cornell University Peter Weis – Weis 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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