

Concord buds at CLEREL-05/09/2023- Jennifer Phillips Russo

### CROP UPDATE May 11, 2023

Cornell Cooperative Extension Lake Erie Regional Grape Program

A PAR



PennState Extension

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# 2023 LERGP Coffee Pot Meeting Schedule

May 3, 2023 10:00am	Double A Vineyards 10317 Christy Rd. Fredonia NY 14063					
May 10, 2023 10:00am	Niagara Landing Wine Cellars 4434 Van Dusen Rd. Lockport NY 14094					
May 17, 2023 10:00am	John Schultz & Sons 9510 Sidehill Rd. North East PA 16428					
May 24, 2023 10:00am	Brian Chess Farm 10289 West Main Rd. Ripley NY 14775					
May 31, 2023 10:00am	Sprague Farms 12435 Versailles Rd. Irving NY 14081					
June 7, 2023 10:00am	NO COFFEE POT MEETING					
June 14, 2023 10:00am	Betts' Farm 7365 East Route 20 Westfield, NY 14787					
June 21, 2023 10:00am	Paul Bencal Farm 2645 Albright Rd. Ransomville NY 14131					
June 28, 2023 10:00am	Gary Young Farm 8401 Gulf Rd. North East PA 16428					
July 5, 2023 10:00am	<b>NO COFFEE POT MEETING</b> Please note-This meeting to cancelled!					
July 12, 2023 10:00am	Zach & Alicia Schneider Farm 771 Bradley Rd. Silver Creek NY 14136					
July 19, 2023 10:00am	NO COFFEE POT MEETING					
July 26, 2023 10:00am	Westfield Ag & Turf					

7521 Prospect Rd. Westfield NY 14787

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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.



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### **Viticulture** Jennifer Russo, Viticulture Extension Specialist, LERGP

#### In the Vineyard

The warmer weather this past week has progessed bud development across the belt. Early varieties have full flat leaves and later varieties are moving along. Below in photo 1 is a Concord shoot at the Cornell Lake Erie Research and Extension Laboratory in Portland, NY. If you are using the Modified Shaulis Field Score Photo 2), this shoot would land between 5.1 and 9.05. If you were using the Eichorn Lornez Scale it would be between a 7 and 9 in Photo 3. Whichever scales that you choose to use, it is getting time to think about your phomopsis spray that we recemmend at 3-5 inches of shoot growth. With the warmer weather this week I expect that growth to continue and the rate at which that happens could be faster than one anticipates.

Per our NY and PA Grape Guidelines, infections are likely to become problematic when the Phomopsis fungus is allowed to build up on dead canes or pruning stubs in the vines and/or when early-season sprays for this disease are omitted. Disease development is strongly favored by prolonged periods of cloudy and rainy weather, which provide both filtered sunlight and high humidities that are optimal for the fungus. We have experienced foggy mornings and heavy dew. Please refer to Chapter 5.2.5 in the Grape Guidelines for more information on the **3- to 5-INCH SHOOT GROWTH (new shoots are 3-5 inches long).** Management programs may need to be intensified (e.g., shorter spray intervals, higher fungicide rates, more efficacious materials) during periods when such conditions occur.

4.0	Budbreak half or more of leaf edge exposed	nce De
4.5	Leaf Emergence	elo
4.8	Full Leaf Blade Visible	pment
5.1	Flat Leaf Stage one leaf perpendicular to shoot	
9.05	First Bloom 5% florets open	Flov
	4.0 4.5 4.8 5.1 9.05	4.0Budbreak half or more of leaf edge exposed4.5Leaf Emergence4.8Full Leaf Blade Visible5.1Flat Leaf Stage one leaf perpendicular to shoot9.05First Bloom 5% florets open

1. Concord grapevine shoot with floret exposed taken at the Cornell Lake Erie Research and Extension Laboratory in Portland, NY

2. Snipit of Modified Shaulis Field Score Shoot and Inflorescence Development



3. Snipit of the Growth stages of Vitis vinifera according to Eichhorn and Lorenz (modified by B.G. Coombe, 1995).

#### PEST MANAGEMENT

#### 3" - 6" shoot growth:

Start disease management protocol for Vinifera and varieties highly susceptible to <u>powdery mildew</u>; Start post-infection disease management protocol for varieties with moderate susceptibility to <u>powdery mildew</u> and high susceptibility to <u>black rot</u>;

Start primary-season protectant disease management protocol for vineyards with a history of severe <u>Phomopsis</u>, <u>downy mildew</u>, and/or <u>black rot infections</u> or vineyards with severe disease pressure the previous year.

MONITORING REQUIRED: weather parameters of temperature, precipitation and leaf wetness; grape cane gallmaker NYS IPM Fact Sheets for Grapes

# Business Management Specialist Position Posted!!!

As of March 16, 2023, our program has had a vacancy in our Business Management Specialist postion on the Penn State University side, with Kevin Martin's decision to join the grower side of the business. The job posting to fill his position has gone live this past weekend. That means that they are now **ACCEPTING APPLICATIONS!** <u>Click Here to Apply or</u> <u>Share the Job Posting</u>

Below is the job and position description with more information included in the link above. If you know of someone that may be a good fit for the position and meets the below requirments, then please encourage them to apply by clicking Chautauqua County Farm Bureau<sup>®</sup> is working hard to gain workforce options, retain necessary protectants, and ensure policy that benefits our growers



Join Today! NYFB.org 800-342-4143 the link above.

#### JOB DESCRIPTION AND POSITION REQUIREMENTS:

<u>Penn State</u> Cooperative Extension is seeking an Extension Educator to provide commercial grape growers/producers with the knowledge and educational resources necessary to assess production and management practices that will enhance their profitability and sustain the growth of the grape and wine industry in the Lake Erie Region of New York and Pennsylvania. This is a joint program between Cornell and Penn State.

The Extension Educator will provide leadership for planning, implementing and evaluating educational programs that address producer identified needs and opportunities. Emphasis is on business management for commercial growers and small winery operations. This program will include but not be limited to:

- 1) record keeping and business analysis;
- 2) economics of production practices;
- 3) financial management, forms of business organization and taxation;
- 4) labor management; and
- 5) marketing.

#### Qualifications:

This position will be filled as a level 3 or 4, depending upon the successful candidate's competencies, education, and experience. Typical requirements for a level 2 includes a Master's Degree or higher plus 2 years or more of related experience, or an equivalent combination of education and experience. Additional experience and/or education and competencies are required for higher level jobs. Preference will be given to candidates who have a concentration in Business Administration or a closely related field. Coursework in labor management, marketing, database management, agriculture economics, education and communication is desired. Two years relevant experience in Cooperative Extension, Agribusiness, Grape Production, Adult Education or closely related field is required. Five years of relevant experience and knowledge and/or experience in current and emerging Grape and Wine Production and Marketing practices is desired. Salary and educator rank will be commensurate with education, training and experience.

#### **MyEV Workshop**

Dr. Terry Bates, Nick Gunnar of Orbitist, and Jennifer Phillips Russo planned a MyEV workshop per the request of the Lake Erie Regional Grape Program's Advisory Committee for more training on this powerful tool. The workshop agenda began with attendees and their laptops inside to learn how to setup their farm and then venture out into the research vines to collect data on their phones. If you were unable to attend this workshop and are still interested in learning, you can begin with the tutorials online <u>Click Here</u>.

#### **Coffee Pot News**

We have had two of our Coffee Pot Meetings already this growing season, and I was asked to include some of the information that we discussed in the Crop Updates. You will find that information in this section for the rest of the growing season.

This week attendees asked for us to share the links to the Spotted Lanternfly PSA so that they may share with friends and family to start a Community Campaign to bring awareness to others outside of our industry in efforts to be proactive in keeping numbers down in the community and hopefully in

our vineyards as well. Every little bit helps, so please share this widely: <u>Click Here for Spotted Lanternfly PSA (English)</u> <u>Click Here for Spotted Lanternfly PSA (Spanish)</u>



4. Spotted Lanternfly information found on NYS IPM website

Attendees also asked for the information on how to identify Tree of Heaven, one of the Spotted Lanternfly's preferred hosts and the list of chemicals approved in grapes for treatment of Spotted Lanternfly.

Here is a link to Spotted Lanternfly information on our website and also a video on Tree of Heaven that Tim Weigle produced:

<u>Click here fo LERGP SLF information</u> <u>Tree of Heaven Podcast with Tim Weigle</u>

On the next page is a photo taken for the PSU extension publication for Tree of Heaven (Photo 5). For more information <u>Click Here</u>





5. Pictures of Tree of Heaven for identification from PSU website link above.

Below is the excel of chemical treatments for Spotted Lantern fly located on the NYS IPM website <u>Click Here.</u>

#### March 2022 - Insecticides for Control of Spotted Lanternfly (a fulgorid invasive insect) in New York Grapes - Quick Guide

Compiled by Juliet Carroll, Hans Walter-Peterson, Dan Gilrein, and Greg Loeb, Cornell University.

Visit NYSPAD www.dec.ny.gov/nyspad/products to search for primary label and 2(ce) or 24(c) information. Read the pesticide label and 2(ce) recommendation or 24(c) special local need label for directions, details, and additional restrictions. Must have 2(ce) or 24(c) in possession when applying the material.

GRAPES										
Product (registration type)	Al1	Use Restrictions	EPA Reg No.	IRAC Group <sup>2</sup>	Rate/A	REI <sup>3</sup>	PHI⁴	Probable efficacy on nymphs	Probable efficacy on adults	
@Actara (2(ee))	thiamethoxam	NYS, LI	100-938	4A	3.5 oz	12 hr	5 d	Excellent	Excellent	
<sup>@</sup> Drexel Carbaryl 4L (2(ee))	carbaryl	NR	19713-49	1A	2 qts	2 days; 6 days if girdling or cane turning	7 d	Excellent	Excellent	
" Imidan 70WP (2(ee))	phosmet	NYS	10163-169	18	1.333 lb to 2.125 lb	14 days, see label. No U-pick allowed	≤ 1.333 lb/A = 7 d > 1.333 lb/A = 14 d	Excellent	Poor	
<sup>#@</sup> <u>Dupont</u> Avaunt (2(ee))	indoxacarb	NR	352-597	22A	6 oz	12 hr	7 d	Excellent	Poor	
Brigade WSB (2(ee))	bifenthrin	F	279-3108	3A	8 - 16 oz	12 hr	30 d	Excellent	Excellent	
Brigade WSB (researcher 2(ee))	bifenthrin	F	279-3108	3A	10 oz	12 hr	30 d	Excellent	Excellent	
* Brigade 2EC (2(ee))	bifenthrin	F	279-3313	3A	6.4 fl oz	12 hr	30 d	Excellent	Excellent	
Brigade 2EC (24(c))	bifenthrin	F	279-3313	3A	6.4 fl oz	12 hr	postharvest	Not relevant	Excellent	
* Hero (2(ee))	zeta-cypermethrin & bifenthrin	F	279-3315	3A	5 - 10.3 fl oz	12 hr	30 d	Excellent	Excellent	
# <sup>®</sup> Mustang MAXX (2(ee))	zeta-cypermethrin	F	279-3426	3A	4 fl oz	12 hr	1 d	Excellent	Good	
* Sniper Helios (2(ee))	bifenthrin	F	34704-858	3A	3.2 - 6.4 fl oz	12 hr	30 d	Excellent	Excellent	
Danitol 2.4 EC (2(ee))	fenpropathrin	F	59639-35	3A	16 - 21.33 fl oz	24 hr	21 d	Excellent	Excellent	

Use Restrictions: NR = None; NYS = Restricted-use by the DEC, requires applicator certification; F = Federal restricted-use, requires applicator certification; LI = no use on Long Island.

\*Rating based on different product with same AI. @Tested on peach only. "Assumed excellent at high rate per acre. Rotate between IRAC groups to prevent resistance.

<sup>c</sup> Contact only, thorough coverage. No residual efficacy. <sup>^</sup>Approved for organic use in NY. <sup>p</sup> May be phytotoxic, follow label restrictions. <sup>a</sup> Restricted Entry Interval (hr = hours). <sup>a</sup> Restricted Entry Interval (hr = hours). <sup>3</sup> Restricted Entry Interval (hr = hours). <sup>4</sup> Pre-Harvest Interval (d = days).

GRAPES									
Product (registration type)	Alı	Use Restrictions	EPA Reg No.	IRAC Group <sup>2</sup>	Rate/A	REI <sup>3</sup>	PHI⁴	Probable efficacy on nymphs	Probable efficacy on adults
<sup>c</sup> Pyronyl Crop Spray	Pyrethrin+PPO	NYS	89459-26	3A	12 fl oz	12 hr	0	Good	Good
* Swagger (2(ee))	bifenthrin & imidacloprid	F	34704-1045	<mark>3A</mark> , <mark>4A</mark>	7.6 - 12.8 fl oz	12 hr	30 d	Good to Excellent	Good to Excellent
<sup>c</sup> BotaniGard MAXX	Beauveria bassiana (strain GHA) + pyrethrins	NR	82074-5- 68539	UN, <mark>3A</mark>	8 - 32 fl oz	12 hr	Until spray has dried	Good	Good
<sup>c</sup> Xpectro OD	Beauveria bassiana (strain GHA) + pyrethrins	NR	82074-5	UN, <mark>3A</mark>	8 - 32 fl oz	12 hr	Until spray has dried	Good	Good
Aza-Direct (2(ee))	azadirachtin	NR	71908-1- 10163	UN	1.0 – 3.5 pints	4 hr	0 d	Good	Good
<sup>cAp</sup> M-Pede (2(ee))	potassium salts of fatty acids (insecticidal soap)	NR	10163-324	UN	1-2 gals (1-2% v/v solution)	12 hr	0 d	Good	Good
<sup>c^</sup> Mycotrol ESO	Beauvaria bassiana	NR	82074-1	UN	0.25-1 -qt	4 hr	0 d	Good	Good
<sup>c</sup> ^ BoteGHA ES	Beauveria bassiana (strain GHA)	NR	82074-1	UN	0.25-1 qt	4 hr	Up to day of harvest	Good	Good
<sup>c</sup> BotaniGard ES	Beauveria bassiana (strain GHA)	NR	82074-1- 68539	UN	0.25-2 qt	4 hr	Up to day of harvest	Good	Good

Use Restrictions: NR = None; NYS = Restricted-use by the DEC, requires applicator certification; F = Federal restricted-use, requires applicator certification; LI = no use on Long Island.

\*Rating based on different product with same AI. @Tested on peach only. \*Assumed excellent at high rate per acre. Rotate between IRAC groups to prevent resistance.

<sup>c</sup> Contact only, thorough coverage. No residual efficaey. <sup>^</sup>Approved for organic use in NY. <sup>p</sup> May be phytotoxic, follow label restrictions. <sup>a</sup> Mode of Action, IRAC group code. (UN = undesignated) <sup>a</sup> Restricted Entry Interval (hr = hours). <sup>4</sup> Pre-Harvest Interval (d = days).

# PA Update

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

**Weather:** We have accumulated just 18.6 growing degree days over the past 10 days of May, with 1.26" of rainfall. A frost event on April 27 damaged new shoots in some vineyards in eastern Erie county PA. the damage was sort of centered along route 20. With a little gdd accumulation since then, it is now easier to tell how affected the "touched" buds are at this point (figure below). Warm drier weather into this weekend will move things farther along, making the extent of the damage easier to determine.



Damaged (on the right: brownish, dull in color) and healthy (on the left: bright pink and green) Concord buds in a vineyard along route 20 in Harborcreek PA, after a frost event on April 27.

**Phenology:** At our location along the lake, Concords in our Cemetery road block have about 1 to 2 inch shoots. At the southern side of the belt, shoots are more like 2 to 3 inches in length. Aside from some temps in the 70s this weekend, which might spur some more growth, low growing degree accumulations have kept vine growth to a crawl, and will continue to do so through the forecastable future next week.

Diseases: This is your annual reminder that our first disease issue during early shoot growth is Phomopsis cane and leaf spot. New shoots are vulnerable to infection just after shoot growth begins, and inflorescences are generally first vulnerable at about 3" of shoot growth. If you're trying to decide whether or not to put that early shoot growth mancozeb spray on, the research indicates that this early spray is probably the most important one for Phomopsis if conditions are wet. Wetness/rainfall during early shoot growth releases spores of Phomopsis from overwintering wood sources and creates the conditions for development of this disease that can leave scabby black lesions and cankers on the first few nodes/internodes of shoots and, most importantly, on inflorescences. Heavy infection at the base of the shoots (Figure 1) may result in weakening of the shoot and shoot breakage under windy conditions. Leaf infections are far less serious, appearing as pinhead sized black spots surrounded by a yellow halo (Figure 2), but they do indicate the presence of an overwintering source of the Phomopsis fungus. Infections on stem tissue of inflorescences can result in fruit rots during later stages of ripening, months after the infection period took place: early infections of the cluster stem tissue can progress into berries during ripening and cause fruit to rot and/or shell before or during harvest (Figure 3). After fruit are formed, they are generally at risk of direct infections until a couple weeks or so after bloom, when inoculum sources normally get 'milked out'.



Fig. 1 Lesions at the base of the oldest internodes result in scabby areas that weaken the shoot.



*Fig. 2 Leaf infections of Phomopsis cane and leaf spot on Concord grape. These are rarely consequential, but they do indicate the presence of overwintering inoculum in the trellis.* 



Fig. 3 Phomopsis fruit rot on ripe Vignoles and Niagara grapes; from infections of the cluster that occurred months earlier.

Phomopsis management with fungicides should begin at about 3-5" inches of shoot growth, but this is a ball-park figure. In early spring, this stage of development is a swiftly moving target, so monitor your crop daily and watch weather forecasts, <u>paying close attention to the prediction of lengthy wetting periods during this early shoot growth period.</u> You'll need to apply that first mancozeb spray for Phomopsis before the next substantial rain period. Currently, there is a 30% chance of rain Friday and a 30% chance of rain next Tuesday. Unfortunately, it is difficult to accurately forecast rain, even a few days out. Other materials like Captan and Ziram can also be used for Phomopsis control. These are all protectant type materials that have no "reach back" activity; they <u>have to be applied *before* an infection period, to do their job</u>. You don't have to use full rates of these 'protectants' for that first early shoot spray to be effective.



## PA Update Megan Luke, Penn State Extension Viticulture and Tree Fruit Educator

#### PA Update

Warm sunny weather has accelerated growth, although much of northwestern PA is still a bit behind western NY- phenologically speaking anyway! Concords at the LERGREC are at a ~5.1 on the Modified Shalis Index (as reported by Bryan Hed, Figure 1), Reisling (Figure 2) and Grüner Veltliner Figure 3) are at 4.8 and 5.1 respectively, and Chambourcin (Figure 4) are only 4.5.









As we approach the 3"-5" shoot growth stage, it's important to start expanding scouting efforts from flea beetle and cutworm to plant bugs, including the banded grape plant bug and *Lygocorus inconspicuous*. These insects are typically found in vineyard areas that are bordered by woodlands.

**Banded Grape Bug &** *Lygocorus inconspicuous* – Plant bug nymphs emerge in the spring from overwintering eggs. Nymphs are small (1/8 -1/4 inch) and difficult to see in flower clusters. Banded grape bug nymphs are green with brown colored wing pads and antennae with alternating black and white segments (Figure 5). Lygocorus inconspicuous nymphs are light green and smaller than BGB nymphs (Figure 6). Both types of nymphs have piercing - sucking type mouthparts and feed on flower pedicels and florets in a cluster. Feeding can result in floret drop, reduced berry set and fewer clusters. Scout for these insects by examining flower clusters on about 100 shoots in different areas in the vineyard. These insects are often found near vineyard edges and may not be widespread throughout the vineyard. Treatment threshold to prevent economic loss is 1 nymph per 10 shoots.

The easiest method of scouting these insects is to tap flower clusters over a paper plate and count the nymphs that fall off, using an optical magnifier can aid in identification. Only the nymphal stage of these insects is harmful in grapes.

#### Banded Grape Bug identification and scouting technique: video





Photo Credit: Joe Ogrodnick, Cornell University; courtesy Greg Loeb

Photos courtesy of Cornell IPM, Joe Ogrodnick and Greg Loeb

**If you are a PA grower** the Penn State Wine and Grape Team has an important survey out regarding herbicide drift. Our goal is to help both grape growers and herbicide applicators by identifying if knowledge gaps exist; if identified, these will be used as future focus points for Penn State Extension specialists. Please consider taking our survey - even if you think you have not: (1) caused herbicide drift; and/or (2) been impacted by herbicide drift.

#### Herbicide drift survey: here

**Final update:** For the Pennsylvania LERGP members: the *2023 NY-PA Pest Management Guidelines for Grapes* is now available! Please contact me or meet me at the office to receive your copy, I will also have a few at the upcoming Coffee Pot meeting. I will be reaching out to confirm mailing addresses on Friday.

#### Megan Luke Office hours and contact information:

Office schedule (*May 15<sup>th</sup>-19<sup>th</sup>*)

M/W 8am-4:30pm CLEREL Portland, NY T 9am-5pm LERGREC North East, PA Th 9am-5pm Erie Co. Cooperative Ext. Summit Municipal Bldg. Erie, PA

#### **Contact information:**

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