

### CROP UPDATE February 3, 2022

Winter Wonderland in a Vineyard-Jennifer Phillips Russo

**Cornell Cooperative Extension** Lake Erie Regional Grape Program



TANDINA



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2022 Winter Grower Conference Info- please register and join us!

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NEWA Update- Kim Knappenberger

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> <u>Click here to</u> watch LERGP <u>Podcasts</u>

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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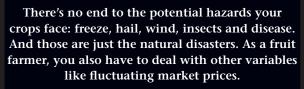


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## LERGP Winter Grape Grower Conference Series

Registration is <u>OPEN</u>!

January 19, 2022-Zoom 9:00am-Noon February 16, 2022-Zoom-9:00am-Noon March 16, 2022-Williams College SUNY Fredonia In Person

Register once for all 3 events- you can attend 1, 2 or all 3. Registration price is for all 3. You can register anytime from now through March 4th, 2022.

We are planning to have guest speakers at all events. February will be Andy Muza and Bryan Hed conducting the Pest Management - What is Your Plan ?

and Lynn Sosnoskie-Assistant Professor for Weed Ecology and Management for Specialty Crops in Cornell's School of Integrative Plant Sciences - Horticulture Section

March-In Person at SUNY Fredonia

Visit <u>LERGP web-site</u> for full information.

February and March will have DEC and PDA credits available.

### LAKE ERIE REGIONAL GRAPE PROGRAM

#### 2022 GRAPE GROWERS' Winter Series CONFERENCE REGISTRATION FORM

SUNY Fredonia Williams Center Thursday, March 19, 2020 Deadline for registration is Friday, March 6, 2020.

Name (1 <sup>st</sup> attendee)		\$			
Farm Name					
Address, City, State, Zip Code					
Phone	E-mail		_		
Are you enrolled in Lake Erie Re	egional Grape Program (LERGP)? Yes_	No			
	REGISTRATION FEES				
LERGP Member 1 <sup>st</sup> attendee	(includes all 3 sessions)		\$ 100.00		
Additional attendee on same			\$ 35.00		
Non- member			\$150.00		
Additional Attendees:		\$ * <sup>p</sup>	lease add a <b>\$25.00 late fee</b> for each		
		\$ res	servation made after March 4, 2022		
		\$			
		\$			
			OTAL \$		
Please make check payable to LE (US funds only)	ERGP (Lake Erie Regional Grape Program	<b>m)</b> and mail to:	Kate Robinson LERGP 6592 W Main Rd Portland NY 14769		
Name	NY DEC/PA PDA NUMB	ER			
Name	NY DEC/PA PDA NUMB	ER			
Name	NY DEC/PA PDA NUMBER				
Date Ck. Rec'd Amoun	t Call Kate at 716-792-2	800 ext 201 with	any questions.		

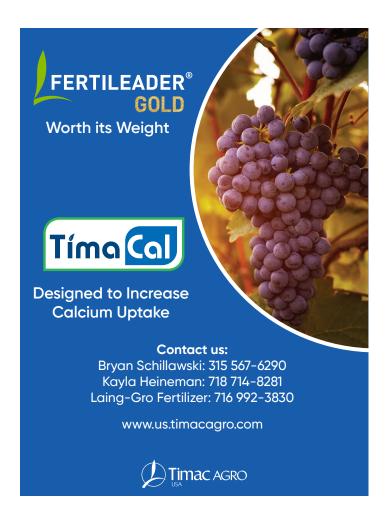


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### Kevin Martin, Penn State University, LERGP, Business Management Educator

### **Business Update**

NYS wage board recommended that overtime requirements be gradually reduced from 60 hours a week to 40. The recommendation provides some details about a phase in process. The 60-hour work week would be reduced by 4 hours every other year, starting in 2024. If the recommendation and phase in schedule are approved by the labor commissioner, farmworkers would be eligible for overtime above 40 hours in 2032.

Some details of the policy changes remain unclear, and it does not make sense to speculate until we see what final approvals look like. However, it does look like we will find out shortly that 2024 will look very different than 2020. Once we know that for sure, the farmers and the industry can plan to adjust.

The outlook for post-emergent materials does not look any better. It appears that commitments at high prices are now being made. The theoretical high prices we saw in December are materializing as grape growers and other farmers begin to stock product for the growing season. While the industry is not prepared to eliminate the use of glyphosate and glufosinate, growers will no doubt be adjusting rates and frequency of application.

It seems likely that under-row treatments will rely more heavily on pre-emergent programs. It also seems like it will make sense to expand the use of cover crops. I've heard growers discussing the implementation of short mowing as a practice. Changing row middle practices is complicated from a business perspective. There are a lot of moving parts. We know these high prices will require some adjustments. However, adjustments that decrease pruning weight or berry size need to be avoided, even as high as these prices are. One option for growers might be something close to business as usual. If prices do come down in a year or two that might be the best option.



### Bud Hardiness as a Tool for Assessing Bud Damage

The Lake Erie Regional Grape Program continues to monitor several varieties in our region for bud hardiness weekly. Digital Thermal Analysis (DTA), which involves collecting and subjecting buds to controlled freezing runs, is a proven method for documenting bud freezing temperatures. Used in conjunction with min/max temperature records, it has been proven to correlate well with observed bud injury in vineyards (determined by direct examination of buds, i.e. 'bud cutting'). This monitoring is not to replace cutting of buds to determine your level of injury and help you make an informed management decision, but to guide you to a more appropriate time to collect buds to cut. Using this information as tool to watch the high and low temps around your vineyard blocks and the Lethal Temperature Exotherm (LTE) that are reported can establish if the low temperatures in your area are close to the where 50 percent (LTE 50) of the buds died in the DTA process. If your temps hover around or are below that LTE 50, then you should collect 100 buds from your blocks to assess. Instructions on how to do that will follow the LTE Table 1 results.

Variety	Date	LTE 10 °F	LTE 50 °F	LTE 90 °F	high	low
Concord High	1/31/2022	-4.79	-13.86	-20.4	30.9	8.4
Concord Low	1/31/2022	-18.38	-22.11	-24.92	30.9	8.4
Riesling 3309	1/31/2022	-10.84	-12.78	-15	30.9	8.4
Vignole	1/31/2022	-9.56	-11.06	-11.76	30.9	8.4
Niagara	1/31/2022	-18.80	-21.53	-24.45	30.9	8.4
Diamond	2/1/2022	-12.44	-14.37	-17.28	43.7	23.2
Delaware	2/1/2022	-10.77	-14.17	-17.14	43.7	23.2
Foch	2/1/2022	-18.58	-21.21	-23.4	43.7	23.2
Seyval	2/1/2022	-0.87	-11.33	-13.68	43.7	23.2
Steuben	2/1/2022	-0.27	-3.12	-6.61	43.7	23.2
Cab Franc	2/1/2022	-0.96	-5.13	-7.24	43.7	23.2
Gewurztraminer	2/1/2022	2.52	-9.81	-10.93	43.7	23.2
Pinot Gris	2/1/2022	-2.65	-10.05	-15.7	43.7	23.2
Aurora	2/1/2022	-13.54	-19.73	-23.3	43.7	23.2
Vincent	2/1/2022	-14.03	-16.89	-18.72	43.7	23.2
lves	2/1/2022	-14.31	-19.46	-22.58	43.7	23.2
Traminette	2/1/2022	-14.48	-15.61	-16.4	43.7	23.2
Elvira	2/1/2022	-20.18	-24.09	-26.9	43.7	23.2

Table 1. The LTE 10, 50, and 90 results from January 31, 2022 and February 1, 2022 for several varieties in the Lake Erie Grape Regions

The following article was well written by Mr. Luke Haggerty and is also located on our website: <u>Click</u> <u>Here</u>

#### HOW TO ASSESS BUD DAMAGE

Luke Haggerty, Viticulture Extension Associate-Lake Erie Regional Grape Program

Cutting buds is necessary to evaluate bud damage after a freeze event. After practice this process is as simple as making a single cut and scoring dead or alive on a sheet of paper. The most important part of accurate bud assessment is cutting the bud at the correct depth. When cuts are made too shallow live buds may appear dead and if you cut too deep dead buds will appear live when they are actually dead. The illustrations in this article show how to accurately cut buds for evaluation.

Collecting canes for sampling:

Collect healthy canes that should have viable buds (canes that would be saved when pruning). There is no need to collect diseased canes, laterals, or bull wood as these types of canes are less hardy and are not expected to have viable buds. Collect samples from areas in the vineyard that will give you the best representation of that area. Collect approximately 10-15 canes (100 buds) from different areas within a vineyard block.

Handling and Timing: If you are assessing your buds after a recent freeze make sure to give the buds enough time to oxidize (turn brown and black) and show the damage they have received. It is best if the canes are left in room temperature for 24-48 hours. From my experience the longer you wait after the cold event the better the damage shows up.

Making the Cut: The following examples show the cutting of a healthy Concord bud (figure 1-4). Remember cutting down to the correct depth is very important. Because depth is important it is best to make a series of shallow cuts when first starting out. Using a razor blade, make a cut that is parallel to the cane taking the top third of the bud off.

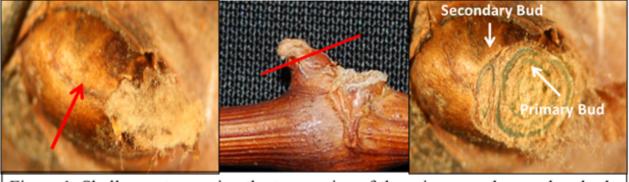


Figure 1. Shallow cut exposing the top portion of the primary and secondary bud.

The cut in figure 1 is too shallow to get an accurate assessment if the bud is alive or dead, but it is a good look at the top portion of a healthy bud. The light brown material surrounding green tissue is normal and is not to be mistaken for damaged tissue.

Figure 2 is an example of the correct depth needed to determine if the primary bud is alive or dead. Bright green tissue signifies if the primary bud is viable/healthy and should be scored as an alive bud. The secondary in the figure 2 needs to be cut deeper for assessment.

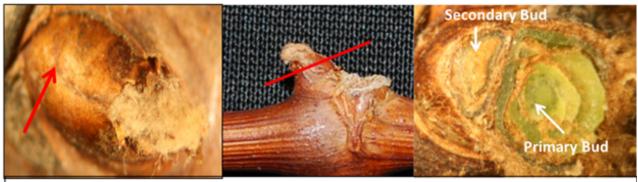


Figure 2. Cut exposing primary bud at correct depth for assessment and top portion of secondary bud.

Figure 3 shows the secondary bud cud at the correct depth for assessment. Be careful not to cut too deep. Figure 3 is the lowest I would recommend cutting for evaluation.

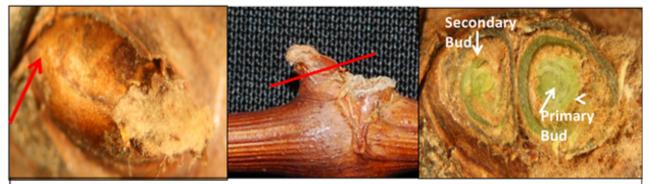


Figure 3. Cut exposing secondary bud at correct depth for assessment, primary bud is almost cut too deep for accurate assessment.

Figure 4 shows a cut that is too deep for a good assessment. The green tissue you see in this picture is the bud cushion. In most cases of freeze damage the bud cushion will still be green and is the reason it is important not to cut too deep.

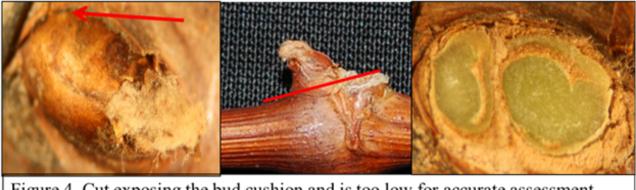


Figure 4. Cut exposing the bud cushion and is too low for accurate assessment.

**Tips:** Make several cuts when you first start evaluating buds. Take time to use some sort of magnification (reading glasses or magnifying glass) to get a good look. Good lighting can make a world of difference. The light brown material surrounding the bud tissue in figures 1-3 are okay and are examples of healthy buds. Key color indicators of freeze damage are gray, brown/green tissues, dark green, dark brown, and black (see examples in figure 6). Practice makes perfect. Cut 200 buds

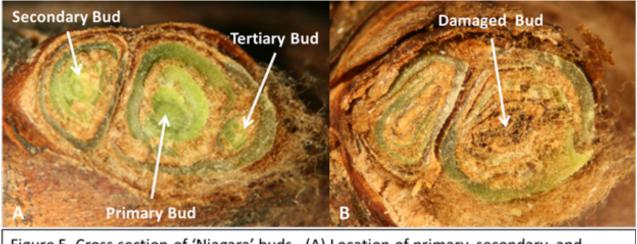


Figure 5. Cross section of 'Niagara' buds. (A) Location of primary, secondary, and tertiary buds. All buds are viable. (B) Freeze damage to primary bud.

before you start scoring the damage... or as many as it takes for you to feel comfortable with what you are seeing.

All pictures in this article were taken by Luke Haggerty

For more information on how to assess winter injury to buds or to see a video tutorial view: <u>Assessing Winter Cold Injury to Grape Buds</u>



Figure 6. Examples of freeze damage on grape buds.





# Updates and Information

Kimberly Knappenberger, Viticulture Assistant, LERGP

### NEWA

I hesitate to write this... but the stations in our region seem to be behaving themselves lately and are just clipping along collecting the data that is available this time of year. One thing that they are unable to accurately report right now is precipitation. There are no melting mechanisms in either the Rainwise or HOBO stations. Occasionally when the sun melts the snow or we have a brief warm up we will get some precipitation recorded, but it is not accurate.

If you are interested in a general reading, we do post the precipitation weekly (on Mondays) for the Portland station located at CLEREL on the website lergp.com. Ted Taft collects the snow daily that has fallen into our Standard Rain gauge, which is located by the barn. The overflow can is taken indoors where it is allowed to melt and then measured to the nearest hundredth of an inch. This measurement is recorded as is the temperature to determine the depth of snow for that 24 hour period of time. To find the year to date measurements go to lergp.com and scroll down to the Key Stats Today section.

Current Concord Phenology at CLEREL				
1/31/2022				
GDD (Base 50) from Jan 1 = 0				
GDD (Base 50) from Apr 1 = 0				
(as reported on NEWA.cornell.edu – Portland station)				
Precipitation from Jan 1 = 3.03" (liquid - melted snow)				
= 41.1" snow				
35-year average precip for Jan. 31 = 2.76"				
Bud Break at CLEREL this year				
Bloom at CLEREL this year				
Veraison at CLEREL this year				



Just a reminder: We have plenty of gallons of sanitizer to share if you need some. Please e-mail me at <u>ksk76@cornell.edu</u> to arrange a pick up time.