



Crop Update for February 26, 2015

Upcoming Events

Friday, February 27, 2015- Project Reporting Session at CLEREL Wednesday, March 4, 2015- Bud Assessment Workshop at CLEREL Monday, March 16, 2015- Winter Grape Grower Conference- SUNY Fredonia Thursday, April 2, 2015- Core Pesticide Training and NYSDEC Pesticide License Exam-CLEREL Monday, April 6, 2015- Worker Protection Standard Training- Frank Bratt Ag Center Jamestown Thursday, April 9, 2015- Wine Workshop at CLEREL

Use the included forms, go to our web-site or stop in the office to register.

**Check the web-site for more upcoming events and meetings.

IMPORTANT NOTICE

The password for LERGP members to access the web-site will be changing in a few weeks. The new password will only be circulated to those who have renewed their membership. If you have not yet renewed, please choose one of the following methods to keep the valuable information coming to you uninterrupted.

You can enroll using 1 of the following 3 ways:

1- on-line at the LERGP web-site. http://lergp.cce.cornell.edu/. The enrollment tab is in the upper right corner of the home page.

2-Print the form and mail to: LERGP, 6592 West Main Rd. Portland, NY 14769 ATTN: Katie

3- Stop in the office to enroll. *Feel free to call me if you have any questions-792-2800 ext 201*



Cornell University

Building Strong and Vibrant New York Communities Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.

Want to Save Up to \$200 per Acre?



How? you ask. It is easier than you think. Through only the investment of a half hour of your time and the minimal cost of attending the LERGP Growers Conference on March 16 you can get the information you need to save up to \$200/acre by making the correct pruning decisions in your vineyard. We have added a special session to the end of our conference this year to allow Luke Haggerty, Terry Bates and Kevin Martin the opportunity to provide you with the damage assessments that have been completed since our record breaking cold temperatures, as well as, the economic implications of pruning decisions.

And the \$200/acre potential savings is only the start! Even if you pay attention to only half the presentations you will be given access to enough money saving information to, literally, pay yourself hundreds of dollars per hour to attend the conference.

Need Credits?

Come to the LERGP Growers Conference on March 16 and you will have the opportunity to not only hear about Crown Gall from Dr. Tom Burr, Grape Berry Moth from Dr. Mike Saunders, Disease Management Updates from Bryan Hed and Grape Rootworm from Tim Weigle but you will receive 2 NYS DEC Pesticide Recertification Credits as well. We have also applied to, and expect to receive, 4 recertification credits from PDA.





Tired of the cold and snow this winter?

The recent remodel of the Williams Center at Fredonia State University, site of this year's LERGP Growers Conference allows participants to remove their coats upon entry into the Williams Center and not put them back on until they leave for the day. Conference registration, trade show, breaks and lunch are all held on the first floor of the Williams Center and the meeting itself is being conducted in the large meeting room on the second floor which is easily accessible by elevator if needed. We encourage you to come take a break from winter, visit the tradeshow, get money saving tips from research conducted in the Lake Erie Region, have lunch with old friends and get, the ever popular, pesticide recertification credits.

2015 Winter Grape Grower Conference Monday, March 16, 2015 SUNY Fredonia William's Center 8:00am-4:00pm

"Knowledge is Power"

By implementing one tactic learned, you will realize cost savings above and beyond the cost of attending this conference!

And...get DEC credits at the same time! We have applied for 2 credits for NYSDEC and 4 Credits for PDA

Topics to include: Thinning and Return Crop, GIS Mapping, The Art & Science of Crop Estimation, Economics of Crop Estimation, Managing Crown Gall, Grape Berry Moth Management, Disease Management Updates, Grape Rootworm.

> Full agenda available at this link: http://lergp.cce.cornell.edu/event.php?id=164

Register on-line or print the form and mail it in. http://lergp.cce.cornell.edu LAKE ERIE REGIONAL GRAPE PROGRAM

2015 GRAPE GROWERS' CONFERENCE REGISTRATION FORM

to be held at SUNY Fredonia Williams Center on <u>Monday, March 16, 2015</u>

Deadline for registration is March 10, 2015.

Name (1 st attendee)		\$	
Farm Name			
Address, City, State, Zip Code			
Phone	E-mail		_
Are you enrolled in Lake Erie Re	gional Grape Program (LERGP)? Yes	No	
	REGISTRATION FEES		
LERGP Member 1 st attendee	· · · · · · · · · · · · · · · · · · ·		\$ 50.00
Additional attendee on same	farm		
Non- member			\$100.00
	RGP (Lake Erie Regional Grape Progra	\$ \$ \$ \$ \$ m) and mail t	*Please add a \$25.00 late fee for each reservation received after March 14, 201 TOTAL \$ to: Kate Robinson LERGP 6592 W Main Rd Portland NY 14769
Name	NY DEC/PA PDA NUME	BER	
Name	NY DEC/PA PDA NUME		
Name	NY DEC/PA PDA NUMB	ER	
Date Ck. Rec'd Amoun	t Call Kate at 716-792-2	2800 ext 201 v	with any questions.

Business Management

Kevin Martin Penn State University, LERGP, Business Management Educator

Why You Cut, For Your Wallet.

The unfortunately low temperatures last weekend will likely cause an official disaster designation. I'm going to continue to remain as hopeful as I can regarding the impact it will have on native varieties. Realistically, even for Concord growers the cold temperatures provide reason to be concerned. At this point, gathering additional information is important. I'll leave the bud cutting instructions to Luke, but expand on the reasons for cutting your own buds.

- The results of bud cutting will likely impact any pruning decisions not already made. With low temperatures across the region varying by fifteen degrees, on farm cuttings will be critical. Using results from other farms may be misleading and put the grower in a management bind. On farm results will vary significantly. Pruning practices for the remainder of the year may range from minimal/none to business as usual. Bud cuttings indicate significant enough damage to justify substantial changes in pruning for an average grower. However, significant differences between sites also indicate that using average data to influence your decision-making process will lead to undesirable results. Saving over \$200 per acre, if a grower sustained significant damage, is going to be critical for financial recovery. Further, it is possible that reduced trimming will increase crop size.
- Investments and Business Activities: I've heard about the possibilities of contract purchases, equipment purchases, and land purchases. Any major expenditure should involve an evaluation of on farm bud cuttings. Buying a farm? Cut buds. Purchasing a marketing contract? Cut buds. You get the idea. Disasters have an impact on cash flow. Given the current/past value of a national contract, significant damage could provide motivation for a few growers to exit the industry. Certainly, if marginal sites sustain significant trunk damage, this would be a recommended strategy. Investments that do the same and need to be analyzed differently, now that this information is available.
- It will be some time before a real knowledge of trunk damage can be known. For varieties with significant trunk damage growers should consider carefully the risks associated with less hearty varieties and the length of time it takes to realize a return on investment. Individual goals and conditions dictate what is appropriate and, for some, replanting will make sense. Before making major investments, an analysis is warranted. The good news is that the historical data available to existing growers provides some degree of predictability that new growers do not have.
- If cuttings do reveal significant injury, there is no harm in contacting your crop insurance agent early. Last year, some growers received significant financial assistance from TAP. It was not necessarily an easy process but we have learned a lot. Sharing bud-cutting results with FSA and Extension will make the disaster declaration an easier process for impacted counties.

If cuttings reveal consequences severe enough to create financial hardship, getting ahead of the curve can make a bad situation slightly better. A quick analysis of the impact a disaster could have goes a long way. If you need help constructing a cash flow document, please contact me. Sharing this with lenders, both current and potential, will be helpful in building and maintaining those increasingly important relationships.

A small conciliation may turn out to be the impact on the bulk juice market. Most growers have reasonably high average yields for crop insurance purposes. With crop insurance based on long-term prices, a disaster involving only bud loss (not trunks) may turn out to be cash positive. In the meantime, it provides an opportunity for processors to work through some of their surplus by October 2016.

Cultural Practices

Luke Haggerty Viticulture Extension Associate Lake Erie Regional Grape Program

Concord and Niagara Freeze Damage Report

2/26/2015

Luke Haggerty & Dr. Terry Bates Lake Erie Regional Grape Program

Concord grapevines are relatively hardy compared to other grape varieties grown in the eastern US and it is a primary reason why the Concord industry has survived for so long in western NY. This winter, however, has been particularly brutal for both man and grapevine. February 2015 will go down as one of the coldest on record.

On February 16th, early morning temperatures reached damaging levels for most regionally grown varieties, including Concord. Our NEWA weather stations across the Lake Erie region ranged from -17°F to -29.9°F. Throughout the winter months, Luke Haggerty collects Concord canes and sends them to the New York State Agricultural Experiment Station in Geneva for bud hardiness evaluation

(http://grapesandwine.cals.cornell.edu/extension/bu d-hardiness-data/). The Concord bud hardiness data for the February 3^{rd} sampling, the last sample prior to the Feb 16th freeze, showed the temperature at which 50% of the primary buds would freeze (LT₅₀) to be -21.5°F.

Lake Erie Grape Region NEWA Weather Data						
Location	Date	Low (F)				
North East Lab, PA	2/16/15	-21.0				
Harborcreek, PA	2/16/15	-20.6				
North East Escarpment	2/16/15	-20.3				
Ripley	2/16/15	-20.0				
Portland Route 5	2/16/15	-23.2				
Portland CLEREL	2/16/15	-22.2				
Portland Escarpment	2/16/15	-17.0				
Dunkirk Airport	2/16/15	-26.0				
Silver Creek	2/16/15	-22.2				
Sheridan	2/16/15	-26.6				
Versailles	2/16/15	-29.9				
Appleton	2/17/15	-8.3				
Somerset	2/17/15	-7.9				
Lockport	2/16/15	-13.0				

With the low temperature range recorded on Feb 16th, the LERGP team initiated a bud assessment protocol for Lake Erie vineyards. In the assessment, 20 fruiting canes were collected from each of 63 vineyard locations across the Lake Erie grape belt, transecting the belt from east to west and from the lakeshore to the escarpment. The LERGP team dissected over 5,500 individual buds and scored primary and secondary bud mortality.



Figure 1: The effect of minimum air temperature (2/16/2015) on primary bud mortality of Concord and Niagara grapevines from the Lake Erie AVA. Fruiting canes were collected from ~60 different vineyard locations across the grape belt and 5,500 individual buds (4,267 Concord, 1,233 Niagara) were dissected and scored as alive or dead. Temperature was determined from the closest available weather station. Each point is the mean for all buds collected at that temperature.

Take Home Points:

- Bud mortality increased with decreasing temperature (Concord $LT_{10} = -18$, $LT_{50} = -23$, $LT_{90} = -29$). These data support the pre-freeze Portland Concord bud hardiness data measured in Geneva. (Meaning: If your vineyard hit -23 °F, there is a good chance you have 50% primary bud death.)
- As expected, Niagara had more primary bud death than Concord at a given temperature. Niagara is generally more cold tender than Concord.
- When the primary bud was scored as dead, approximately 22% of the secondary buds were still alive. In general, secondary and tertiary buds are more cold hardy because they are less differentiated and less susceptible to ice nucleation. Secondary buds typically carry about 1/3 of a crop and this can be factored in when estimating the 2015 crop potential.
- Although these data are a guide for assessing bud damage in your vineyard, there was also substantial variation in bud mortality (+/- 30%) at a given temperature likely because of variations in vine health/management or discrepancies in temperature from where canes were collected in the vineyard and the closest available weather station.
- Visit NEWA (<u>http://newa.cornell.edu/</u>) to look up the weather station closest to your vineyard and find the low temperature around 7AM on 2/16/2015. Compare your low temperature with the chart above as a starting point on what you might expect for primary bud mortality.
- We strongly encourage you to further assess bud damage across your vineyard blocks to identify areas which may have more or less damage.
- Visit CLEREL or attend Luke Haggerty's workshop to learn how to dissect and evaluate buds in your vineyard.

We would like to thank the growers who brought canes into CLEREL for this assessment. As we change our focus to determining the source of the wide damage variation we will no longer be accepting canes here at CLEREL for bud cutting assessment. We know determining bud damage in your vineyards is very important to you. On March 4th (next Wednesday) we will host a bud cutting/assessment workshop here at CLEREL to train and or refresh interested growers on bud cutting and assessment techniques. See flyer below.

BUD ASSESSMENT WORKSHOP

Please join us for this informative workshop that focuses on how to assess bud injury. This 1-2 hour workshop will address the current damage and provide growers with the skills needed to assess bud damage.

What to bring:

Collect mature wood that would be expected to yield healthy or viable buds. Canes should be ~10 buds per cane and you should bring 7 to 10 canes per cultivar that you want examined. Canes should be collected 24 to 48 hours prior to the workshop.

Please RSVP to Luke Haggerty at <u>llh85@cornell.edu</u>



CLEREL March 4, 2015 1-3pm 6592 West Main Rd Portland, NY 14769

Members: FREE Non-members: \$10.00



Cornell University Cooperative Extension Cornell and Penn State Cooperative Extension

Lake Erie Regional Grape Program

6592 West Main Rd, Portland, NY 14769716-792-2800662 N. Cemetery Road, North East, PA 16428-2902814-725-4601850 East Gore Road, Erie, PA 16509-3798814-825-0900

"CORE" Pesticide Training and Pesticide Applicators License Exam April 2, 2015 Cornell Lake Erie Research and Extension Laboratory (CLEREL) 6592 West Main Road Portland, NY 14769

Space is limited ---Pre-registration is required for both sessions

CORE TRAINING

WHEN:9 AM to 12:15 PMWHERE:CLEREL Meeting roomCOST:\$153.0 Pesticide recertification credits in the CORE category have been applied for.

The CORE training session is also designed as a review prior to taking the Commercial or Private Pesticide Applicator exam but is not required prior to taking the exam.

Preregistration for the training using the enclosed course registration form is required by March 26, 2015

Questions on the training session should be directed to Kate at (716) 792-2800 ext 201

PRIVATE AND COMMERICIAL NYS PESTICIDE EXAMINATIONS

 WHEN:
 1 PM

 WHERE:
 CLEREL Meeting room

 COST:
 \$100

 REGISTRATION:
 NYS Department of Environmental Conservation (DEC) requires you to

 register for entrance to the exam session with the Buffalo DEC office at (716) 851-7220.

DEADLINE for registration to take the test is March 26, 2015. To register, call the DEC at (716) 851-7220. You will then be sent an exam application form and test instructions by the DEC.

Any questions about your eligibility to take an exam or the status of your current certification should be directed to the Buffalo DEC office at (716) 851-7220.

Commercial Applicators: You will need the "Core Manual" and the category manual for the area(s) in which you will be certifying.

Private Applicators: You will need to get the "Core Manual" plus the private category manual for the area in which you will be certifying.

CORE and category training manuals are available through the Cornell Store by using the attached order form or by calling (800) 624-4080 or the web-site link: http://store.cornell.edu/c-876-manuals.aspx

Questions on Pesticide Examinations should be directed to the NYS DEC at (716) 851-7220.

2015 CORE PESTICIDE TRAINING REGISTRATION FORM Thursday, April 2, 2015

Space is limited – pre-registration is required.

To register for the training, fill out and return registration form to:

ATTN: Kate Lake Erie Regional Grape Program CLEREL 6592 West Main Road Portland, NY 14769	
Name(s)	
Address	
Phone	
Number attending	
Registration and payment by Thursday, March 26, 2015 (\$15 per person)	
Make Checks Payable to: Lake Erie Regional Grape Program	

IMPORTANT: This registration is for the CORE training session only.

If you wish to take the exam for a NYS DEC Pesticide Applicators License you must contact the Buffalo office of the NYS DEC by calling (716) 851-7220 no later than March 26, 2015 to provide ample time for them to provide you with an exam application form and test instructions.

WORKER PROTECTION STANDARD TRAINING

When: MONDAY, April 6, 2015

Where: Frank Bratt Agricultural Center 3542 Turner Road Jamestown, NY 14071

Cost: \$10.00 Register and pay by sending registration to: LERGP ATTN: Katie 6592 West Main Rd. Portland NY 14769

Program conducted by Tim Weigle NYSIPM SPecialist, LERGP Team Leader

Program: 10:00 A.M. - 11:30 AM

Topics covered:

- 1. Pesticides can be dangerous. You and your employer have responsibilities.
- 2. Protecting yourself from pesticides
- 3. Signs and symptoms of pesticide poisoning
- 4. Health effects and emergency first aid
- 5. Personal protective equipment
- 6. Respirators
- 7. Heat stress
 - 10 minutes for questions
- 8. How to read pesticide labels
- 9. Transporting and sorting pesticides
- 10. Mixing and loading pesticides
- 11. Cleaning and disposing of pesticides and pesticide containers
- 13. Flagging
- 14. Applying pesticides
- 15. Cleaning up
- 16. Working safely with pesticides

11:00 AM – 11:30 AM The WPS in a Vineyard Situation

Worker Protection Standard Training Session, Monday, April 6, 2015

Name:_____

Address:_____

Phone:_____

Additional Registrants:



This program serves as safety training for pesticide handlers and also to satisfy the worker protection standard training required for all farm employees. Attendees will also qualify for DEC Pesticide credits.

Date Rec:

Check #:



Winery Quality Control Workshop

Thursday, April 9, 2015 Registration: 8:30am; Program- 9:00am-4:00pm Cost:\$50.00 per person(includes morning coffee and lunch) Where: CLEREL, 6592 West Main Rd. Portland NY 14769 716-792-2800 ext-201



Denise Gardner, Enology Extension Associate, Penn State University Chris Gerling, Enology Extension Associate, Cornell University Anna Katharine Mansfield, Associate Professor of Enology, Cornell University





While wineries are heavily regulated in the areas of sales and taxes, they receive relatively little oversight or direction when it comes to plans and procedures to minimize product risk. Every winery should have standard operating procedures (SOPs) for production, sanitation and analysis in order to ensure not just wine quality but also worker and consumer safety. As the Food Safety Modernization Act (FSMA) is implemented, concepts like hazard analysis and critical control points (HACCP) will become more and more ubiquitous. This workshop will teach wineries about identifying, measuring and mitigating potential risk areas while also providing the tools to create SOPs and quality assurance plans.

Please Register by Wednesday, April 1, 2015

Name of Winery represented:	Phone:		
Email:			
Name(s) of attendees: 1)	2)	3)	
4) 5)	6)		
Total cost @ \$50.00/person xperson/p	beople = \$		P
Please make checks payable to LERGP an LERGP, 6592 West Main Rd. Portland NY Contact Kate at kjr45@cornell.edu or 716	7 14769, ATTN: KATE	formation.	Lake Erecond Program

***You may also register on-line at http://lergp.cce.cornell.edu/. You can register up to 10 participants and pay with a credit card.

THE INTERNATIONAL SOCIETY FOR HORTICULTURAL SCIENCE (ISHS) Presents

"<u>II International Workshop on Vineyard Mechanization and</u> <u>Grape and Wine Quality</u>"

July 26- July 29, 2015 Fredonia, New York, USA

Sponsored by the ISHS working group on Vineyard Mechanization and Vine Berry Fruits

In collaboration with Cornell Lake Erie Research & Extension Laboratory Portland, NY and Cornell University New York State Horticultural Society New York State Agricultural Experiment Station, Geneva



Invitation

On behalf of the ISHS Fruit Section Working Group on Vineyard Mechanization and Vine Berry Fruits, we invite you to an International Workshop on Vineyard Mechanization and Grape and Wine Quality to be held in Fredonia, New York, USA.

The <u>II International Workshop on Vineyard Mechanization and Grape and Wine Quality</u> will be held from Sunday, July 26 to Wednesday, July 29th 2015 at SUNY Fredonia. The workshop will kick off on Sunday with a Shaulis Symposium focused on grapevine physiology and mechanized grapevine production. Monday will be a full day technical and winery tour to the Cornell Lake Erie Research and Extension Laboratory and Lake Erie Region wineries. This will be followed by a day and a half of technical presentations and posters on: precision viticulture, sensing technologies, variable rate management, fruit quality, and economics.

Primary Topics of the Symposium

- Horticulture: Grapevine Physiology and Mechanized Production
- Engineering: Mechanized Tools for Vineyard Operations
- Sensing Technology: Spatial Vineyard Measurement
- Variable Rate Management: Zonal Application for Yield and Quality
- Fruit Quality and Economics: Impact of Mechanized Systems

Sponsors

E. & J. Gallo Winery

If you would like to sponsor this event, please call Katie at 716-792-2800 ext 201 for more information.

For detailed information and registration for this event, please use the following link: http://events.cals.cornell.edu/ishs



Viticulture, enology and marketing for cold-hardy grapes



Webinar Schedule

Webinars are generally presented on the second Tuesday (subject to change) of each month from November through April, once at noon and again at 7 PM Eastern (11 AM and 6 PM Central).

November 20, 2014

"Trellis Design and Construction and Pruning Fundamentals Prior to Your First Cut" Steve Lerch, Cornell University and Mike White, Iowa State University

December 16, 2014

"Stuck on you – Sulfur Spray Residues in the Vineyard and Winery" Chris Gerling and Gavin Sacks, Cornell University

January 13, 2015

"Emerging Cold Hardy Wine Grape Cultivars" Tom Plocher, Northern Winework, Inc. and Mark Hart, Mt. Ashwabay Vineyard & Orchard

February 10, 2015

"Comparing and Contrasting Vertical Shoot Positioning and Top Wire Cordon Training Systems" Tim Martinson, Cornell University; Bob Utter, Flying Otter Vineyard and Winery; and John Thull, University of Minnesota

March 10, 2015

"Tannin Addition and Retention in Red Hybrid Wines" Anna Katharine Mansfield, Cornell University

April 14, 2015

"Branding Studies for Cold Climate Wines" Bill Gartner, University of Minnesota

Information about upcoming webinars is sent via the Northern Grapes Project Webinar Series email listserve. If you are not a member, and would like to join, go to the <u>Contact Us</u> page to send an email.



The Northern Grapes Project is funded by the USDA's Specialty Crops Research Initiative Program of the National Institute for Food and Agriculture, Project #2011-51181-30850

Follow this link to the web-site for information on this webinar series: http://northerngrapesproject.org/?page_id=252

LERGP Website Links of Interest:



Check out our new Facebook page!!

Cornell Lake Erie Research & Extension Laboratory Facebook page https://www.facebook.com/pages/Cornell-Lake-Erie-Research-Extension-Laboratory/146971918664867

Table for: Insecticides for use in NY and PA: http://lergp.cce.cornell.edu/submission.php?id=69&crumb=ipm|ipm

Crop Estimation and Thinning Table: http://nygpadmin.cce.cornell.edu/pdf/submission/pdf65_pdf.pdf

Appellation Cornell Newsletter Index: http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cornell/

Veraison to Harvest newsletters: http://grapesandwine.cals.cornell.edu/cals/grapesandwine/veraison-to-harvest/index.cfm

Go to http://lergp.cce.cornell.edu/ for a detailed calendar of events, registration, membership, and to view past and current Crop Updates and Newsletters.





Lake Erie Regional Grape Program Team Members:

Andy Muza, (ajm4@psu.edu)Extension Educator, Erie County, PA Cooperative Extension, 814.825.0900
Tim Weigle,(thw4@cornell.edu) Grape IPM Extension Associate, NYSIPM, 716.792.2800 ext. 203
Kevin Martin, (kmm52@psu.edu) Business Management Educator, 716. 792.2800 ext. 205
Luke Haggerty, (llh85@cornell.edu) Grape Cultural Practices, 716.792.2800 ext. 204

This publication may contain pesticide recommendations. Changes in pesticide regulations occur constantly, and human errors are still possible. Some materials mentioned may not be registered in all states, may no longer be available, and some uses may no longer be legal. Questions concerning the legality and/or registration status for pesticide use should be directed to the appropriate extension agent or state regulatory agency. Read the label before applying any pesticide. Cornell and Penn State Cooperative Extensions, and their employees, assume no liability for the effectiveness or results of any chemicals for pesticide usage. No endorsements of products are made or implied.

Cornell University Cooperative Extension provides equal program and employment opportunities. Contact the Lake Erie Regional Grape Program if you have any special needs such as visual, hearing or mobility impairments. CCE does not endorse or recommend any specific product or service.

> THE LAKE ERIE REGIONAL GRAPE PROGRAM at CLEREL 6592 West Main Road Portland, NY 14769 716-792-2800



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College of Agricultural Sciences