

The Lake Erie Regional Grape Program



Crop Update March 23, 2017





Building Strong and Vibrant New York Communities

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The Password for LERGP web-site and access to Electronic Crop Updates and Newsletters will be changing next week. You will receive the new password in your e-mail. If you have not renewed your membership, you will not receive the new password.

Other dates of interest:

Wednesday, April 5, 2017- Pennsylvania Core Pesticide Training (see enclosed flyer)

Wednesday, April 26, 2017- Core Pesticide Training, CLEREL in the morning, followed by NYS-DEC pesticide Applicator exam in the afternoon

Thank you to all who attended our 2017 LERGP Growers' Conferencein spite of the weather, it was a successful, productive day, and great to see everyone who came out for it!

Business Management

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

Concord Utilization

Kevin Martin

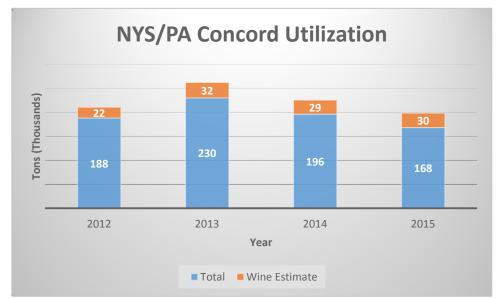
Based on our feedback so far, our growers conference was both well received and well attended. We were lucky enough to have some local talent to fill in for speakers that couldn't make it due to weather. Despite the weather, we also had some brave growers from the east side of Erie, PA and Niagara county that pushed our grower attendance up close to 100% of registrations. I just want to thank all of the growers for their attendance and participation on the conference.

During the winter season one can only talk about production practices so much, since those practices just aren't happening at the moment. Particularly this time of year, but really anytime, it is nice to fill a crop update with a grower question.

As we all know the Concord market has been hit pretty hard by declining demand for juice. More recently the strong dollar and trade politics have not helped the situation. As price and demand for juice decline, there has been a small shift in Concord utilization.

A shift in utilization toward wine is similar to the early stages of the craft beer movement. In the early stages it was easy to ignore. It was also irrelevant to most farmers. As that growth continued, it became large enough to influence the market as a whole. On a National scale, demand for Concord wine is a long way from replacing juice. It isn't even influencing the overall market yet. However, it is likely that this growth will continue has the demand for sweeter wine appears to be generational. Furthermore, the products being created with Concord wine are far more expensive than in the past. This has allowed farm gate value of Concord grapes with an established wine market to remain above \$230 per ton, even on the cash market.

The amount of wine being used is an estimate. Our local wineries obtain juice or grapes from various sources and there is no survey that captures that usage consistently. A typical Concord grower that starts a successful winery could expect to move 35 tons of



Concord through their tasting room if that was their primary goal. On average, regional wineries use 200 tons of Concord annually.* Export to other wineries helps boost the overall average. Many wineries will use other native varieties to supplement or create their core offerings. These

options complicate the ability to forecast growth in Concord demand as the sweet wine industry continues to expand. Most growers with access to the wine market are selling between 15% and 35% of their product to meet that demand. While not sustainable for many growers to switch entirely, it has provided diversification and protection from low juice demand. Operating under the assumption that the market continues to grow, the wine industry will evolve into an important player in Concord demand.

Article was corrected to state that new wineries will use less than 50 tons, through a tasting rooms. The average utilization of our wineries, however, is 200 tons.



Determining the need for respirator use in pesticide applications in grapes

With the current emphasis being placed on the new Worker Protection Standard (WPS) regulations, the regulations that seem to be getting the most attention are those surrounding the use of respirators and the need for respirator fit training. A common question I have been getting is whether or not it is possible to grow grapes using materials that do not require the use of a respirator. My first thought when asked that question is "why wouldn't you want to protect your lungs, and potential future health by not wearing one" but that does not answer the question being asked.

The only way to accurately determine whether or not a respirator is required when mixing, loading or applying a pesticide – whether it be an herbicide, fungicide or insecticide, is to read the label for each product being used. There are two main places on the label that will give you requirements for the use of personal protective equipment (PPE). As shown in Figure 1, Precautionary Statements (typically found on the second page of a label) gives PPE requirements for mixing, loading and applying the pesticide while the Agricultural Use Requirements, Figure 2, will provide information on the required PPE for early entry by workers into treated areas as permitted by the WPS. Notice that in both of these examples, no respirator is required for any activity involving the use of the pesticide.

Figure 1. Example of a pesticide label's Precautionary Statement listing PPE required for its use.

Figure 2. Example of a pesticide label's Agricultural Use Requirements statement on PPE required for early entry into a treated area as permitted by the WPS.

PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals CAUTION

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Personal Protective Equipment:

Applicators and other handlers (other than mixers and loaders) must wear:

- · Long-sleeved shirt and long pants
- Waterproof gloves
- · Shoes plus socks

Mixers and Loaders must wear:

- · Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- · Protective evewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restrictedentry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is: coveralls; waterproof gloves; and shoes plus socks.

Figure 2

With all the generic materials out there now it would be impossible to determine the requirement for all the materials listed for use in grapes in New York and Pennsylvania. However, in an attempt to start answering the question of whether or not grapes could be grown using pesticides without requiring a respirator, the LERGP team accessed the labels for all of the pesticides listed in the tables of Chapter 8, Pesticides for New York and Pennsylvania Vineyards in the *2017 New York and Pennsylvania Pest Management Guidelines for Grapes*. The tables below represent the pesticides we found whose labels require the use of a respirator for either mixing, loading and/or application in one form or another. There are a number of footnotes involved with the tables as restrictions vary due to the type of application that will be used as well as the crop involved. We included information on things like the use of chemigation and aerial applications and for crops like potato to give you an idea of what type of information you may find when reading labels to determine the need for a respirator.

I have only included those materials where we found respirator use was required (whether for grapes, another crop or for a specific application method). DO NOT ASSUME that if a pesticide is not listed in these tables that there is no respirator requirement listed on the label. For a complete list of the materials we checked labels on (both those that do and don't require the use of a respirator) visit our website at http://LERGP.com and look in the drop down menu for WPS under Resources.

Bolding of the text in the following tables indicates there could be a need for a respirator if the material is used in a vineyard spray program. THE ONLY WAY TO DETERMINE THE NEED FOR A RESPIRATOR WHEN APPLYING A PESTICIDE IS TO THOROUGHLY READ THE LABEL.

Table 1. Respirator use required for specific Insecticides listed in 2017 NY/PA Pest Management

Guidelines for Grapes

			Respirator	Respirator
Insecticide Active			Required –	Required -
Ingredient	Trade Name	Formulation	Mixing Loading	Application
Acetamiprid	Assail 70WP	WP	No ¹	No
Beta-cyfluthrin	Baythroid XL	L	No ²	No
carbaryl	Sevin XLR Plus	XLR	Yes ²	Yes ³
Chlorpryifos	Lorsban	EC	Yes	Yes ⁴
	Advanced			
	Lorsban-4E	4E	Yes	Yes⁴
	Vulcan	EC	Yes	Yes ⁴
Cyfluthrin	Baythroid 2E	2E	Yes⁵	No
	Tombstone	E	Yes⁵	No
	Helios E			
Phosmet	Imidan	70W	No	Yes ⁶
Pyrethrins	Evergreen	EC	No	Yes ⁷
Fenbutatin-oxide	Vendex 50WP	50WP	Yes	Yes
Fenpyroximate	Portal		Yes	No

¹respirator needed for potato growers under certain conditions. See label for more information

² respirator as listed on label is required for mixers and loaders supporting aerial or chemigation application

³ If applying with open cab airblast equipment at application rates equal to or greater than 5 quarts of Sevin SLR Plus per acre must wear respirator as listed on label

⁴ Applicators using aerial application equipment do not need a respirator

⁵ Except when using closed mixing loading systems, mixers and loaders supporting aerial or chemigation applications must wear respirator type as listed on the label.

⁶ Motorized ground equipment applicators not in an enclosed cab, applicators dipping pine seedlings, and handlers engaged in cleaning up a spill or leak, or cleaning or repairing contaminated equipment must wear a respirator as described on the label.

⁷ Only applicators and other handlers using hand-held foggers in an enclosed area must wear a respirator.

Table 2. Respirator use required for specific Fungicides listed in 2017 NY/PA Pest Management Guidelines for Grapes

			Respirator	Respirator
Fungicide Active			Required –	Required -
Ingredient	Trade Name	Formulation	Mixing Loading	Application
Aureobasidium				
pullulans	Botector	80WP	Yes	No
Bacillus				
amyloiquefaciens	Double Nickel 55	25WDG	Yes	No
	Double Nickel LC	99AS	Yes	No
Calcium polysulfide	Miller Lime Sulfur Solution	29% liquid	Yes	Yes
	Sulforix	27.5% liquid	Yes	Yes
Captan	Captan 50WP	50WP	Yes ¹	No
	Captan 80WDG	80WDG	Yes ²	Yes ²
Cyprodinil	Vangard	75WG	Yes ³	No
Cyprodinil + fludioxonil	Switch	62.5WG	Yes ⁴	No
iprodione	Rovral Brand 4 Flowable	4F	No	Yes⁵
	Meteor	4F	No	Yes⁵
Mancozeb	Rainshield Dithane F-45	4F	Yes ⁶	Yes
	Rainshield Dithane M-45	80WP	Yes ⁷	Yes
	Penncozeb	75DF	Yes ⁸	Yes ⁸
Ziram	Ziram	76DF	Yes ⁹	Yes ⁹

¹ A respirator, as described on label, is required when mixing, loading, cleaning up spills, cleaning equipment, or otherwise exposed to the concentrate.

² Respirator must be worn by all handlers except (1) applicators driving motorized equipment, and (2) mixers/loaders/applicators participating in backpack, low pressure hand-wand/handgun, and dip treatments, and (3) mixers/loaders participating in aerial applications.

³ A respirator, as described on label, is required for mixers and loaders for aerial and groundboom applications.

⁴ Mixers and Loaders for aerial, groundboom, and chemigation applications must wear filtering facepiece respirator.

⁵ Applicators using hand held equipment must wear chemical-resistant headgear for overhead exposures and a dust/mist filtering respirator or a NIOSH approved respirator with any N, R, P, or HE filter.

⁶ For lettuce and peppers aerial application occupational handlers performing mixing/loading operations are required to wear a particulate respirator with an N, R, or P filter, NIOSH approval prefix TC 84-A. Also for potato seedpiece treatment when opening the bag or loading/pouring the treated seed/seed pieces. Also for turf on sod farms mixers/loaders supporting chemigation applications to turf on sod farms.

⁷ All handlers must wear a NIOSH approved respirator with a dust/mist filter with MSHA/NIOSH approval number prefix TC-21C or any N, R, P or HE filter.

⁸ Aerial applications on broccoli, cabbage, lettuce, and peppers requires that occupational handlers performing mixing/loading operations observe the additional mitigation measures of wearing a particulate respirator with an N, R, or P filter, NIOSH approval prefix ZTC-84A. Also for potato

seedpiece treatment when opening the bag or loading/pouring the treated seed. Also mixers/loaders supporting aerial applications to walnuts must wear a particulate respirator.

⁹ All handlers must wear dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N, R, P or HE filter. Label does not address PPE for applicators as a separate PPE requirement so we defaulted to requirements for handler.

				Respirator
Herbicide Active			Respirator Required –	Required -
Ingredient	Trade Name	Formulation	Mixing Loading	Application
diuron	Direx, others	4L	Yes ¹	Yes ¹
	Direx 4L	4L	Yes ¹	Yes ¹
	Karmex DF	80DF	Yes ¹	Yes ¹
	Karmex XP	80DF	Yes ¹	Yes ¹
fluazifop-P-butyl	Fusilade DX	2EC	Yes ²	No
flumioxazin	Chateau SW	51WDG	Yes ³	Yes ³
glufosinate-				
ammonium	Rely	1EC	Yes ⁴	No
	Rely 280	2.34EC	Yes⁵	No
	Touchdown Total,			
glyphosate	Traxion	4.17L	Yes ⁶	No
	Roundup Ultramax	5L	Yes ⁶	No
indaziflam	Alion	SC	Yes ⁶	No
paraquat	Gramoxone SL	2L	Yes ⁷	Yes ⁷
simazine	Princep Caliber 90 and others	90WDG	Yes ⁸	No

Table 3. Respirator use required for specific Herbicides listed in 2017 NY/PA Pest Management Guidelines for Grapes

¹ Respirator as listed on label is required for mixers, loaders, other applicators (not including pilots, flaggers and groundboom applicators) and other handlers.

² Mixers/loaders supporting aerial applications to crops over 720 acres per day must wear a PF5 respirator.

³ Aerial application to artichoke, mixer/loaders must also wear filtering face piece respirator. For ground boom application to olive and pomegranate, mixer/loaders must also wear filtering face piece respirator.

⁴ Ensure adequate ventilation. If not adequate, use a chemical cartridge-type respirator approved by the National Institute of Occupational Health and Safety.

⁵ Mixers/loaders supporting aerial applications must wear a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N, R, P or HE filter.

⁶ A NIOSH-certified combination air-purifying respirator with an N, P, R or HE class filter and an organic vapor cartridge may be used under certain circumstances where airborne concentrations are expected to exceed exposure limits (e.g. emergency spills).

⁷ A dust mist NIOSH-approved respirator with any N, R, P, or HE filter for applicators and other handlers, and mixers and loaders. Face shield as well for mixers and loaders.

⁸ A NIOSH-approved respirator with a dust mist filter (with MSHA/NIOSH approval number prefix TC-21C or with any N, R, P, or HE filter) must be worn by mixers and loaders supporting groundboom applications.



LERGP 2017 COFFEE POT MEETING SCHEDULE

Date T	ime	Location	Address
May 3, 2017	10:00am	John Mason Farm	8603 West Lake Rd. Lake City, PA 16423
May 10, 2017	10:00am	CLEREL	6592 West Main Rd. Portland, NY 14769
May 17, 2017	10:00am	Brant Town Hall	1272 Brant Rd. Brant, NY 14027
May 24, 2017	10:00am	Peter Smith Farm	4472 Van Dusen Rd. Lockport,NY 14094
May 31, 2017	10:00am	Dan Sprague Farm	12435 Versailles Rd. Irving, NY 14081
June 7, 2017	10:00am	Betts' Farm	7365 East Route 20 Westfield, NY 14787
June 7, 2017	3:00pm	Archer Pratz Farm	9318 Lake Rd. North East, PA. 16428
June 14, 2017	10:00am	Jeff Schultz Farm	2707 Albright Rd. Ransomville NY 14131
June 14, 2017	3:00pm	Orton Farm	10646 West Main St. Ripley, NY 14775
June 21, 2017	10:00am	North East Fruit Growers	2297 Klomp Rd. North East, PA 16428
June 21, 2017	3:00pm	Kirk Hutchinson Farm	4720 West Main St. Fredonia, NY 14063
June 28, 2017	10:00am	Peter Loretto Farm 1	0854 Versailles Plank Rd. North Collins, NY 14111
June 28, 2017	3:00pm	David Nichols Farm	1906 Ridge Rd. Lewiston, NY 14092
July 5,2017	10:00am	Leo Hans Farm 1	0929 West Perrysburg Rd. Perrysburg, NY 14129
July 12, 2017	10:00am	Szklenski Farms	8601 Slade Rd. Harbor Creek, PA 16421
July 19, 2017	10:00am	Liberty Winery	2861 Route 20, Sheridan, NY 14135

2017 PESTICIDE CORE CREDIT RECERTIFICATION MEETINGS

WEDNESDAY, APRIL 5, 2017

North East Township Building 10300 West Main Road (Rt. 20) North East, PA 16428 -OR-

Girard Township Municipal Building 10140 Ridge Road (Rt. 20) Girard, PA 16417

Program 10:00 A.M. to Noon

Program: 2:00 P.M. to 4:00 P.M.

Core Credit Topics:

- Pesticide Resistance Management Andy Muza, Lake Erie Regional Grape Program
- Pesticide Safety Quiz Show featuring PPE and Exposure Review Quiz Ruth Benner, Penn State Extension Erie County.

The meeting is approved for <u>4 core pesticide re-certification credits</u> by the Pennsylvania Department of Agriculture. No New York DEC Pesticide Credits are available for these meetings.

The cost for attending this meeting is \$10.00 per person.

Seating is limited so registration is required. Please register via the CVENT registration system at http://extension.psu.edu/erie/events or call us at 814-825-0900 to complete your registration by phone.

- On Back – 3/3/17 Worker Protection Standards Meeting This publication is available in alternative media on request.

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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 26, 2016 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 April 17, 2017.

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 roomCOST:\$100REGISTRATION:NYS Department of Environmental Conservation (DEC) requires you toregister for entrance to the exam session with the Buffalo DEC office at (716) 851-7220.

DEADLINE for registration to take the test is April 17, 2017. 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 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.

2017 CORE PESTICIDE TRAINING REGISTRATION FORM Wednesday April 26, 2017

Space is limited – pre-registration is required.

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

ATTN: Kate					
Lake Erie Region	nal Grape Pro	gram			
CLEREL					
6592 West Main	Road				
Portland, NY 14	769				
Name(s)					
ivanic(s)					
Address					
Address					
Phone					
Number attendi	ng	_			
Registration an	ld payment t	oy Monday A	April 17, 2017	(\$15 per pers	son)

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 Mike Nierenberg or Shaun Conrad at (716) 851-7220 no later than April 10, 2017 to provide ample time for them to provide you with an exam application form and test instructions.



Agricultural-Environmental

JARED MOSIER

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LERGP Website Links of Interest:



Check out our new Facebook page!!

Cornell Lake Erie Research & Extension Laboratory Facebook page https://www.facebook.com/Cornell-Lake-Erie-Research-and-Extension-Laboratory-678754995584587/?fref=ts

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.



WOODS NO TILL VINEYARD DRILL Available for Rent Contact Mike @ Larry Romance & Son 716-679-3366 Tractorsales@netsync.net





Lake Erie Regional Grape Program Team Members:

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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



Cornell University Cooperative Extension



College of Agricultural Sciences