LERGP Crop Update July 21, 2016

Important dates:

July 27, 2016- last Coffee Pot Meeting of the growing season 10:00am- Tom Tower 759 Lockport Rd. Youngstown NY 14174

See the flyers for more information on the following events:

August 2, 2016- Wine Quality Workshop (rescheduled from April 13, 2016) at CLEREL

August 3, 2016- Grape Twilight Meeting and Erie County Horticulture Society's Annual Chicken BBQ

August 11, 2016 Craft Beverage Summit at CLEREL

August 31, 2016- Cornell Vegetable Program Field Day at CLEREL

September 1, 2016- Cover Crop Conference at CLEREL





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.



Contact: Darcy Telenko, Regional Vegetable Specialist Cornell Cooperative Extension- Cornell Vegetable Program

Phone: 716-652-5400 x178 (Office) E-mail: dep10@cornell.edu



FRESH MARKET VEGETABLE FIELD DAY

SUSTAINABLE AND ORGANIC VEGETABLE PEST MANAGEMENT Wednesday, August 31, 2016 | 3:00 PM – 9:00 PM

Steak dinner included with pre-registration

Cornell Vegetable Program's Fresh Market Research Site Cornell Lake Erie Research and Extension Laboratory 6592 West Main Road, Portland, NY 14769

The Cornell Vegetable Program is hosting a Sustainable and Organic Vegetable Pest Management Field Day on August 31, 2016 at the Cornell Lake Erie Research and Extension Laboratory in Portland, NY. Extension Vegetable Specialists, Darcy Telenko, Judson Reid, and Robert Hadad along with Abby Seaman, Vegetable IPM Coordinator, and Cornell faculty Prof. Christine Smart and Prof. Stephen Reiners will be leading research site tours and answering questions on sustainable and organic pest management options for fresh market vegetable growers. Information will be provided for both conventional and organic growers at all levels of expertise. Industry representatives will have the opportunity to meet with growers to comment on their products. *DEC and CCA credits have been applied for to be available for this field day.*

Topics:

- Weed Management in Sweet Corn, Pumpkin, Winter Squash and Root Crops
- Disease Management in Organic Cucumber and Tomato Production
- Vegetable Disease Control Update
- Insect management and Specialty Crop Vegetable Variety Demonstration
- Improving Fertility Management in Vegetable Crops
- Updates on Ongoing Research Projects in the Region

Research trials comparing conventional and zone-tillage weed management options in pumpkin and winter squash will be on display. The peculiarities in regards to weed management for each tillage system will be discussed including the practice of a stale-seed bed technique using a herbicide or flame-weeder burn-down treatment as effective weed management tools. In addition, the stale-seed bed technique will be presented for use in beet and parsnip. Growers will be able to view the different weed management tools, look at the economics of utilizing each system, and ask questions. This

Helping You Put Knowledge to Work



session will also include a viewing of sweet corn herbicide programs plots to evaluate their effectiveness in controlling weeds. Judson Reid and Abby Seaman will discuss the major tomato and cucumber diseases in New York in high tunnels and field, what symptoms we are looking for, and organic management tools available including resistant varieties and organic pesticides. Research trials will be showcasing varieties with host resistance and organic programs using disease forecasting. Dr. Christine Smart will discuss the best crop production practices for managing and controlling disease caused by bacteria, oomycetes, fungi, and viruses. New management options including host resistance, products, or techniques that are available will also be discussed. Robert Hadad, will give a hands-on demonstration of how to identify insect the pests; check for management issues that may improve or decrease insect control; and control options. In addition, a number of varieties of a diverse assortment of vegetable crops will be on display for growers to view. Dr. Steve Reiners will discuss the importance of correct crop fertility and how fertility has wide reaching impacts on yield, and more is often not better. Excessive fertility can promote weed growth and insect pressure, while insufficient nutrition leaves crops more susceptible to stresses like disease.

Pre-registration \$25 CVP enrollees/\$35 all others, includes steak dinner and handouts. Pre-registration required by **August 25, 2016**. Call 716-652-5400 or online at http://cvp.cce.cornell.edu/event.php?id=565

Walk-ins welcome to join the program \$35 at the door, but will not receive dinner ticket unless preregistered by Aug 25, 2016.

Growers will also be able to view research projects at CLEREL and are encouraged to attend a Cover Crop Workshop and Field Day the next day September 1. http://lergp.cce.cornell.edu/event.php?id=268

A key component of this event is the support provided by industry organizations. Contributing organizations will be recognized as an integral part of this dynamic event. Sponsorships are available for both the Vegetable Field Day and Cover Crop Field contact Darcy Telenko at 716-697-4965 or dep10@cornell.edu for more details.

About Cornell Cooperative Extension Cornell Vegetable Program

The Cornell Vegetable Program is one of the premier regional agricultural Cornell Cooperative Extension programs in New York, serving a large multi-county region in the Western part of the state. The team's Vegetable Specialists work together with Cornell faculty and extension educators statewide to address the issues that impact the industry. The Cornell Vegetable Program provides educational programs and information to growers, processors and agri-business professionals, arming them with the knowledge to profitably produce and market safe and healthful vegetable crops, contributing to the viability of farms and the economic wellbeing of New York State. Specifically, our program focuses on food safety, variety evaluation, market development, pest management, and cultural practices.



The Cornell Vegetable Program is supported, in part, by twelve county Cornell Cooperative Extensions of Western New York: Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Monroe, Niagara, Ontario, Orleans, Seneca, Wayne and Yates Counties.



Cucumber and tomato variety trials at Cornell Lake Erie Research and Extension Laboratory. Photo Credit Darcy Telenko, CVP.

Cover Crop Workshop and Field Day

September 1, 2016 @ CLEREL 9:00am-4:00pm 6592 West Main Rd. Portland, NY 14769

Join the Lake Erie Regional Grape Program for a full day of education surrounding cover crops in Concord vineyards.

- Current research
- Leading scientists in cover crop research
- Tour demonstration plots
- Hear local growers sharing their experience

Fee: \$10; includes morning refreshments and lunch





Register by August 25, 2016 at the LERGP web-site Registration or call Kate at 716-792-2800, e-mail: kjr45@cornell.edu







Kevin Martin Penn State University, LERGP, Business Management Educator

Late Season Niagara and Grape Berry Moth

Depending on your location, we are approximately half way between the spray timings for the 2nd and 3rd generations of Grape Berry Moth. Despite that, due to some upcoming hot weather, decision-making and planning for the 3rd generation may begin as soon as late next week.

I would plan to up the amount of scouting and look at more samples in more blocks. We are seeing more variability in Grape Berry Moth damage this year. Some reports and observations indicate unusually low pressure, but those reports are far from universal. Before you decide not to spray the third generation, detailed scouting is a must.

Over a period of three years a late season Niagara trial was conducted at the North East lab to evaluate the difference of insect and disease pressure on late harvest Niagara for National Grape Cooperative. While the trial is complete, in each of those three years there was an "extra" generation of grape berry moth. As a result, in those three years, grape berry moth was the primary source of economic damage.

Secondary rots were more established at higher brix levels. Also, early season Niagara harvest once missed damage from the fourth generation. In sites with moderate grape berry moth pressure, traditional materials were wholly inadequate for minimizing economic loss. More expensive spray programs that included materials similar to Belt and Leverage 360 were expenses easily justified by a decrease in damage and fruit loss. Even what was considered a "Cadillac" spray program may have been inadequate.

When comparing fruit loss to early harvest Niagara, there was the potential to save enough crop to apply a third berry moth spray. Especially when using inexpensive contact sprays, it is theorized that an attempt to target a generation with two spray applications may be the most effective way to combat damage. A tight spray program around the middle of July or August, with two sprays targeting the second or third generation does not mesh well with fungicide programs. I've included the cost of an additional spray application when considering this type of a program.

The likelihood of a 4th generation will help determine the economics of expensive materials and split applications for a 3rd generation. It appears somewhat unlikely that a 4th generation will occur this year. If it does happen, it will likely be late and perhaps difficult to target before harvest. With such a low likelihood of a 4th generation, split applications targeting the 3rd generation should be limited to only the most severe risk sites. Severe risk sites should be easy to spot in about ten days from now. When you scout and see damage that well exceeds economic thresholds and damaged clusters often include multiple berries (or the entire cluster) it is time to start considering all options. I would expect this kind of damage to be limited to less than 5% of grape acreage.

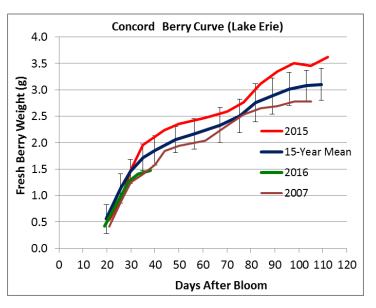
The cost of insecticides for grape berry moth ranged from \$2.5 - \$37 per acre. If scouting damage-exceeded thresholds, I would not hesitate to attempt to find the best material possible for any Niagara that might be harvested late season. The savings easily justify the expense of any material up to and beyond \$37 if it does a better job than a lower priced material.

The best option is to produce a balanced crop on Niagara by maintaining crop size and reaching at least 12 brix for early harvest wherever grape berry moth is an issue. In many sites it will still require an application of expensive materials at least once to keep the risk of load rejection or economic loss minimal from an economic perspective, we know that split applications would likely have been warranted at the North East Lab in 2011 and 2013.

Drought Conditions and Berry Size

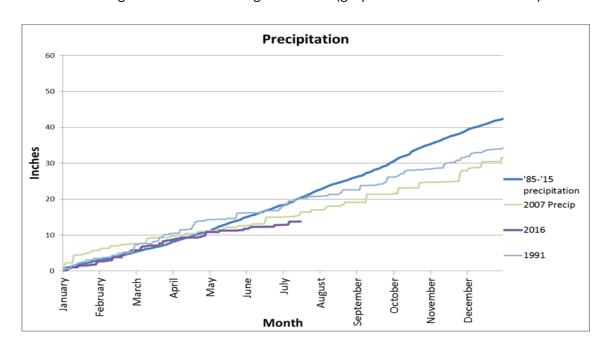
This week I'm combining part of the weather update with the cultural practice portion because of the impact water stress has on berry size this year. Samples this week came in 20% below average.

Vines suffering from water stress have had decreased cell division limiting the cells in the berries and reducing berry size. After veraison cell division stops and berries increase in size through cell expansion.



Comparing the past 30 years of weather data, 1991 and 2007 were driest on record until 2016. Below, I have graphed the precipitation data from 1991, 2007, and 2016. Up to this point in the season we are similar to 2007 precipitation totals. I added 2007 to the berry curve and it matches up very well to the data we have collected in 2016. This gives us an idea of the potential of our current crop. However, we would still need rain to follow this trend. How much rain do we need? This is a loaded question and there are multiple factors (soil type, location, crop load, etc.) that would have to be weighed to answer this. I look at drought stress in two parts; from now to veraison and after verasion. Looking at 2007, from late July to late August we received about 3.5 inches (about an inch a week). After veraison (2007) through havest we received about 5 inches of rain... again about an inch a week.

Currently, here at CLEREL, we are 7 inches below average. However, depending on your location this amount may change. The NOAA 'Drought Monitor', has again upgraded the status for most of the region. The majority of the region (excluding PA) has been upgraded from "Moderate Drought" to "Severe Drought" status. (graph located after this article)

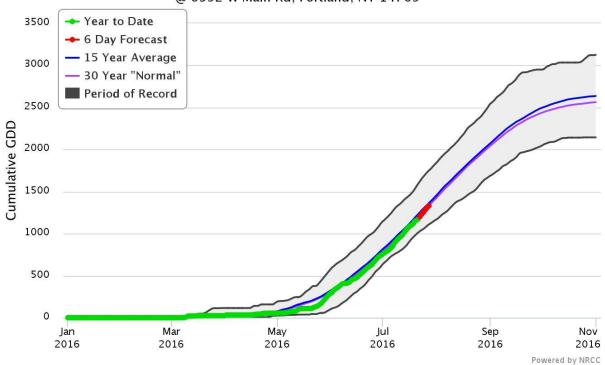


Lake Erie Grape Region NEWA Weather Data						
Location	Precip. July Past20 days	Precip. June total	Precip May total	Total March GDD		
North East Lab, PA	1.01	1.92	2.13	1274		
Harborcreek, PA	0.80	1.74	1.68	1259		
North East Escarpment	1.00	2.37	1.52	1165		
Ripley	0.55	3.86	1.50	1269		
Portland CLEREL	1.07	1.44	1.48	1237		
Portland Escarpment	0.67	1.24	1.56	1301		
Dunkirk	0.17	2.16	1.13	1159		
Silver Creek	1.06	NA	1.78	1179		
Sheridan	0.45	2.23	1.85	1252		
Versailles	0.55	1.47	1.72	1172		
Appleton North	0.08	1.41	0.71	1088		
Somerset	2.09	1.53	0.94	1199		
Ransomville Ransomville	0.27	0.93	0.92	1293		

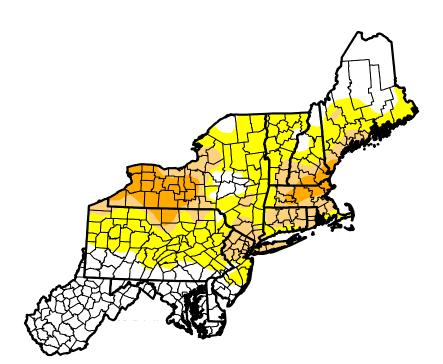
Note: All Weather data reported as of 7/20/2016 NA=Sensor Malfunction

Cumulative Base 50 Growing Degree Days





U.S. Drought Monitor **Northeast**



July 19, 2016 (Released Thursday, Jul. 21, 2016) Valid 8 a.m. EDT

Drought Conditions (Percent Area)

						-
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	37.54	62.46	25.15	8.60	0.00	0.00
Last Week 7/12/2016	35.97	64.03	22.79	5.08	0.00	0.00
3 Months Ago 4/19/2016	73.17	26.83	0.00	0.00	0.00	0.00
Start of Calendar Year 12/29/2015	62.10	37.90	6.60	0.00	0.00	0.00
Start of Water Year 9/29/2015	42.41	57.59	9.00	0.00	0.00	0.00
One Year Ago 7/21/2015	91.18	8.82	2.25	0.00	0.00	0.00

Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Chris Fenimore NCEI/NESDIS/NOAA









http://droughtmonitor.unl.edu/



Should I Just Throw An Insecticide In The Tank When I Spray For Powdery?

We have had a number of growers stopping in who will be making a fungicide application and want to know if they should just throw an insecticide in the tank. The reason they are spraying is they have found powdery mildew on their clusters in vineyards with a larger than average crop. The idea is to keep the foliage clean as Wayne Wilcox found the only time late season powdery mildew foliar infections are a concern in Concords is in an over crop situation. With the additional stress of drought on the vines this year it might be even more important to keep the leaves clean.

	Wild grape	DD Total on			
NEWA Location	bloom date*	July 21, 2016			
Versailles	May 30	1141			
Dunkirk Airport	June 3	1069			
Sheridan	May 31	1179			
Silver Creek	June 3	1073			
Portland Escarp.	May 31	1162			
Portland	June 1	1132			
Ripley	May 31	1175			
North East Escarp	June 2	1044			
Harborcreek	May 31	1168			
North East Lab	June 2	1144			
Erie Airport	May 30	1265			
Ransomville	June 1	1180			
Somerset	June 3	1096			
North Appleton	June 10	927			
* Estimated date provided by NEWA website					

So, back to the adding an insecticide to the tank just because you are going through. The easy answer is no. We are well past the opportunity for managing the second generation of grape berry moth and quite a ways away from timing for the third generation. We have not found grape rootworm in the project vineyards for the past three weeks and unless you are having a major problem with Japanese beetle or grape leafhopper, there is really nothing out there to use an insecticide on (and Concord can take a lot of feeding damage from both of these pests). I would suggest keeping all the tools you have for insect management in the toolbox until you really need them. The reasoning behind this is due to season use restrictions many of the insecticides, and active ingredients many of them share, that are currently in place. Check out my article in the July LERGP Vineyard Notes month's newsletter about resistance management, seasonal use restrictions and how they may affect your decisions on which insecticide to use when.

Grape Berry Moth – according to the NEWA model, with the exception of North Appleton, all the stations indicate we are well past the 810 DD needed to time an insecticide application in vineyards at intermediate and high risk for damage from grape berry moth. The next pest management strategy for grape berry moth will be scouting starting at 1470 DD to determine the need for an application against the third generation. The table below shows the GBM model results from NEWA for sites in the Lake Erie region using the estimated date of wild grape bloom (the biofix that is used to start the grape berry moth model.

According to the long term weather forecast we will continue to pick up anywhere from 20 to 34 growing degree days through the end of July which means, depending on your location, about one and a half to two and one-half weeks before we reach the 1470 DD to initiate scouting.

Continue to access the grape berry moth model for the station(s) nearest you on the NEWA website http://newa.cornell.edu to get a "heads-up" on when you should start scouting for the next generation of grape berry moth. Accessing the GBM model page on NEWA also provides you with information on the pest status and what pest management measures should be taken as shown in the figure above.

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Save the Date! NYS IPM Climate Conference - August 15, 2016

With all the talk about climate change you might be wondering how it will affect food production, pests, and even landscapes - and what you can do about it. The Second Annual NYS Integrated Pest Management conference can help! Climate, Weather, Data: Protecting Our Crops and Landscapes will be held August 15, 2016 at the Cornell Cooperative Extension Office in Voorheesville, NY.

A wide variety of speakers from NYS and the Northeast will provide background information on the current state of knowledge on climate change and changes in our weather patterns, and how collecting climate and weather data can help us predict and manage pests. Mike Hoffmann and Allison Chatrchyan from the Cornell Institute for Climate Change and Agriculture (www.climateinstitute.cals.cornell.edu) will discuss what you can do about climate change, and the Climate Smart Farming Program. Jerry Brotzge will explain the NYS Mesonet (www.nysmesonet.org). Juliet Carroll from NYS Integrated Pest Management will cover the tools for growers in the Network for Environment and Weather Applications system (www.newa.cornell.edu). David Hollinger will present resources from the Northeast Regional Climate Hub (www.climatehubs.oce.usda.gov). Open discussion sessions are included so you can ask your own questions. The final agenda will be available soon, so stay tuned!

We are honored that Richard Ball, the Commissioner of the NYS Department of Agriculture and Markets, will kick off the conference with opening remarks

The program will run from 9:00-4:15 and costs \$45 – which includes lunch, and breaks.

Registration information, a map, and the draft agenda can be found at the <u>Climate, Weather,</u>
Data website

If you have questions, please contact Amanda Grace at arw245@cornell.edu or 315 787-2208.





Save the Date!

When: August 15, 2016, 9:00 – 4:15

Where: Cornell Cooperative Extension Albany

County, Voorheesville, NY

With all the talk about climate change you might be wondering how it will affect food production, pests, and even landscapes - and what you can do about it. The Second Annual NYS Integrated Pest Management conference can help!

A wide variety of speakers from NYS and the Northeast will provide information on the current state of knowledge on climate change, changes in our weather patterns, and how collecting climate and weather data can help us predict and manage pests. Join us to learn and discuss!

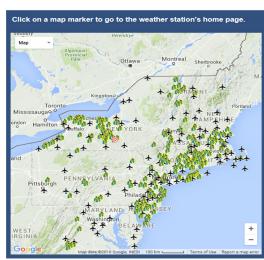
\$45 includes materials, lunch, and breaks.

The draft agenda, registration information, and map can be found at: tinyurl.com/hq8tbm2

If you have questions, please contact Amanda Grace at arw245@cornell.edu or 315-787-2208.



Welcome to the NEWA Home Page



NEWA stations record temperature, leaf wetness, relative humidity, precipitation, solar radiation, wind speed and direction.

In the Vineyards, PA

Andy Muza
County Extension Educator
Penn State, LERGP

Diseases

Not much to report concerning the disease situation due to the hot, dry weather. Low levels of powdery mildew observed on leaves and low – moderate amounts on pedicals and rachises. No other diseases were found.

Insects

Grape Berry Moth – at Severe Risk sites GBM eggs were still being found (Figure 1). At these sites the percentage of clusters with GBM injury (between rows 1-2 from the woods) ranged from 36% to over 70% (Figure 2). However, at High Risk sites the percentage of clusters with injury ranged from 8% - 28%. (A cluster is considered injured if at least one berry per cluster has GBM feeding injury).



Figure 2. Grape berry moth injured berries on Concord cluster

The amount of area needing an insecticide application will depend on the history of GBM injury at your site and your scouting information.

To determine the timing for the next insecticide application follow the GBM Degree Day Model in NEWA http://newa.cornell.edu/index.php?page=berry-moth.

Japanese beetle – population levels remained about the same as the previous week (low – moderate) in vineyards that I checked. Since population levels are so variable within blocks and between sites the need for treatment can only be determined by scouting your vineyards (Figure 3).



Figure 1. Grape berry moth egg on center berry in Concord cluster

If you have High or Severe Risk sites go out and determine the percentage of clusters with GBM injury then plan a strategy for managing the next generation of GBM.

- 1) Consider using insecticides such as Intrepid (**PA only**) or Altacor for this next generation. Don't strictly base insecticide choice on cost but think about efficacy and longevity of materials.
- 2) Consider applying 2 insecticide applications (7-10) days apart) in problem areas. Remember that GBM injury usually decreases in rows/post lengths the farther they get from the woods. Therefore, an entire block may not need an insecticide application but only areas closer to the woods (e.g., 8-10 rows or 3-4 post lengths).



Figure 3. Japanese beetle and feeding injury on Delaware leaf







Grape Twilight Meeting &

Erie County Horticultural Society's Annual Chicken BBQ

Date: Wednesday, August 3, 2016

Place: Gravel Pit Park

10300 West Main Road. (Route 20)

North East PA 16428

Time: Grape Program- 5:00pm-6:00pm Free Chicken BBQ- 6:00pm



Grape Program:

Insect and Disease Management Updates- 5:00pm-6:00pm

Bryan Hed and Jody Timer, Lake Erie Regional Grape Research & Extension Cneter, North East, PA. Andy Muza, Tim Weigle, Kevin Martin, and Luke Haggerty, Lake Erie Regional Grape Extension Team.

This meeting will be assigned 2 category pesticide re-certification credits pending approval by the Pennsylvania Dept. of Agriculture. Pesticide re-certification credits have also been applied for to the NYSDEC for New York Growers.

Note: The Chicken BBQ is FREE, but registration is mandatory! If you do not register, a meal will not be reserved for you. Register by Friday, July 22, 2016, by callling the Penn State Extension Erie County at (814) 825-0900.

Chautauqua Industrial Development Agency, Chautauqua County Department of Planning and Economic Development, Cornell Lake Erie Regional Grape Program, and Cornell Cooperative Extension of Chautauqua County proudly present the inaugural Chautauqua County Craft Beverage Summit

Malting barley, cooperatives, hops production and the potential for the craft beverage industry in NYS will be discussed with all aspects covered from producing the raw materials, producing a craft beverage, marketing the finished product and working together to bring a craft beverage operation to fruition in Chautauqua County.



Thursday, August 11, 2016 8:00 AM - 3:00 PM CLEREL 6592 West Main Road Portland, NY 14769 And 21 Brix Winery

Space is LIMITED for this FREE Event Don't Delay- Register today at: https://lergp.cce.cornell.edu/event.php?id=270

Thursday, August 11

Agenda (may be subject to change)

8:00 am

Registration

8:15 am

Welcome

8:45 am **Climbing Bines**

9:15 am

Star Cider

9:55 am

NY Craft Malt, LLC

10:15 am Liberty Vineyards

10:15 am

Break/CCE Tour

11:00 am

Harvest NY

11:30 am

Cooperatives

12:00 pm

Mazza Winery

12:30 pm Lunch

1:00 pm

Five & 20 Spirits and Brewing

2:00 pm

Olde Chautauqua Farms

2:30 pm

Question & Answers

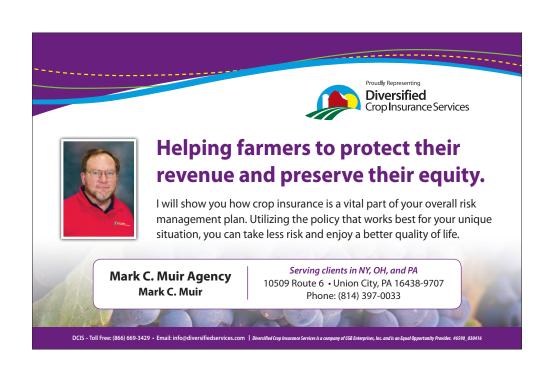












2016 eNEWA Grape Project Subscription Sign-Up

Subscriber information Email address **Select Location(s)** (circle as many as you like, or write in below) **Lake Erie Region** Sheridan Lakemont Appleton, North Silver Creek Lansing Appleton, South Versailles Lodi (Lamoreaux) Dunkirk Lodi (Shalestone) **Finger Lakes Region** Erie **Lodi (Standing Stone)** Aurora Harborcreek Branchport Penn Yan **North East Escarpment** Dresden (FLGP/FLCC) Romulus (B. wood Grove) North East Lab **Dundee (Weimer)** Romulus (Thirsty Owl) **Fayette 3 Brothers Portland** Varick (Swedish Hill) **Portland Escarpment** Geneva **Watkins Glen Portland Route 5** Geneva (Bejo) Watkins Glen (Lakewood) Hector Ransomville **Ripley Interlaken (Airy Acres)**

Select eNEWA Delivery Times (write in times below) Delivery requests should be on the hour.

Mail to: Tim Weigle, CLEREL, 6592 West Main Road, Portland, NY or scan and email to thw4@cornell.edu



Winery Quality Control Workshop

Stabilize your wine - Filtration, Sulfur Dioxide and Potassium Sorbate

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

Sulfur dioxide

- pH and SO₂ relationship - the breakdown of SO₃
- how to add SO, to wine

Potassium sorbate

-what is potassium sorbate?-why is it used in wine?-the pros/cons of sorbate

Filtration

-explanation of filtration and its uses -the difference between nominal and absolute -how to ensure your filtration unit is working -bottle sterility tests.



Please	Register	hv .J	ul	v 22.	. 2016
1 icuse		<i>• • •</i>	***	,	 U_I_U

Name of Winery represented	d:			Phone:	
Email:					
Name(s) of attendees: 1)		2)		3)	
4)	5)		6)		
Total cost @ \$50.00/person	x person/people = \$				

Please make checks payable to LERGP and mail to:

LERGP, 6592 West Main Rd. Portland NY 14769, ATTN: KATE

Contact Kate at kjr45@cornell.edu or 716-792-2800 ext 201 for more information.



***You may also register on-line at http://lergp.cce.cornell.edu/. You can register up to 3 participants and pay with a credit card.



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Dave Pieczarka 315.447.0560



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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:

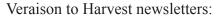
http://lergp.cce.cornell.edu/submission.php?id=69&crumb=ipm|ipm

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-cc____



http://grapes and wine.cals.cornell.edu/cals/grapes and wine/verais on-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:

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