

Photo-Kim Knappenberger



## CROP UPDATE - JULY 26, 2018

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.

## Dates of interest:

Wednesday, August 15, 2018- LERGP Summer Conference at CLEREL 9:00am-4:00pm



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### Mosier-Maille Ag Consulting Soil and Crops

Jared Mosier Consultant (814) 923-1372



Dave Maille Consultant (814) 572-5781

7472 Buffalo Rd. Harborcreek, PA 16421

mmagconsulting@gmail.com

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## 2018 LERGP Summer Conference

The LERGP summer Conference is just around the corner on Wednesday, August 15th. We have a very interesting day planned with the morning session consisting of inside talks, while the afternoon will be outside on hay wagons with a more demonstrative approach. Take a look at the agenda below to see who our special guest speakers will be and topic content.

Also, the talks will earn you 1 pesticide applicator point for NY or 3 for PA. Register by printing the form included in this Crop Update and mailing it in or online at:

https://lergp.cce.cornell.edu/event\_preregistration.php?event=378

7:30 AM Tradeshow set up begins

8:30 AM Registration and Tradeshow open

8:50 AM Welcome – Tim Weigle

9:00 - 9:30 AM Changes to Crop Insurance and Impacts for Lake Erie Grape Growers Kevin Martin, LERGP, Penn State

9:30 – 10:00 AM CMU Update on Efficient Vineyard Project

Dr. Abhisesh Silwal, Carnegie Melon University

10:00 – 10:30 AM Break

10:30 – 11:00 AM Managing glyphosate resistance horseweed and cover cropping for weed

control

Dr. John Wallace, SIPS, Horticulture, Cornell University

11:00 – 11:30 AM Managing perennial weeds in a vineyard setting Dr. Bryan Brown, NYS IPM Program, Cornell University

11:30 – Noon Spotted Laternfly – The New Invasive Species Penn State University

Noon – 1:30 PM Lunch and Visit Tradeshow

1:30 – 2:00 PM Precision Vineyard Imaging

Dr. Abhisesh Silwal, Carnegie Melon University

2:00 – 2:30PM Practical Applications of Soil and NDVI sensors in a Vineyard Operation

Jackie Dresser, Lake Erie Regional Grape Program



2:30 – 3:00 PM Mapping Vineyards by Drone

Jim Meyers, Eastern NY Commercial Hort Team, CCE, Cornell University

3:00 – 3:30 PM Variable rate applications from the "Efficient Vineyard" SCRI project *Terry Bates, LERGP, CLEREL Director* 

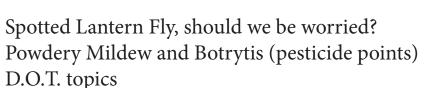








## Topics of the day: 9:00am-3:00pm



Guest speakers!

Crop Insurance

Efficient Vineyard topics including demonstrations in the field Carnegie Melon's vineyard robot , our variable rate thinner, NDVI sensors, and much more.

We will spend the morning inside, then after lunch head outside for more interactive talks around the farm.

\$10.00 per person, includes refreshments and lunch



## LAKE ERIE REGIONAL GRAPE PROGRAM 2018 SUMMER GRAPE GROWERS' CONFERENCE REGISTRATION FORM

Wednesday, August 15, 2018

Deadline for registration is Friday, August 10, 2018.

Name (1st attendee)	<u> </u>	10.00	
Farm Name			
Address, City, State, Zip Code			
Phone	E-mail	<del>_</del>	
Are you enrolled in Lake Erie Regional Grape P			
Additional attendees:			\$10.00
			\$10.00
			\$10.00
			<u>Total:</u>
Please make check payable to <b>LERGP (Lake Erie Regional Grape Program)</b> and mail to: Kate Robins (US funds only)  6592 W Ma Portland NY		ain Rd	
Name	_NY DEC/PA PDA NUMBER		
Name	NY DEC/PA PDA NUMBER		
Name	NY DEC/PA PDA NUMBER		
Date Ck. Rec'd Amount	Call Kate at 716-792-2800 ext 20	01 with any questio	ons.

## Business Management

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

### **Thinning and Drought: Business Considerations**

Overall crop size in the region appears to be above average. Only a few growers have reported crop sizes high enough to concern them. Anecdotally it appears more acreage in PA will be thinned than NY. Particularly when things are close (we aren't seeing 20 ton estimates this year) the market the grower is delivering to influences thinning decisions. A different marketing contract can help move the line up and down, justifying the economics of crop thinning sooner or later.

Simply having a marketing contract will justify crop thinning at some theoretical point, in all cases. That is not to say Concords die when you don't thin. In certain cases, it will make sense to thin, even when Concords live and eventually reach something close to 15 brix. In other words, I'm not saying you have to take 16 tons down to 12 tons. I'm just saying, in most cases you'll make more money if you do.

With low prices, there is a temptation to be overly aggressive. At some point overly aggressive crop sizes will hit at least a few growers twice. Not only will potential crop be very small, when prices do recover growers will miss out on a year of higher prices. The grape market is a fickle thing and we actually are seeing some prices rise as others continue to fall. These mixed messages make it hard to predict 2019 but the pattern is at least interesting. Not only are prices low but crop levels and vine productivity are highly variable. A crop size that is a problem in one area might not be a problem in another. This year is a great reminder why disease management is only the second best investment a grower can make, but row middle management is usually the best investment a grower can make. To maximize the efficiencies of those investments, we can let experts discuss the specific recommendations that vary based on weather conditions and other factors. This year, growers should be relying on any strategy that reduces (eliminates) competition. Growers that have implemented practices to preserve water will see those investments pay dividends this year. Cover crops, organic matter, and mulch all require time to see a payoff.

Recent rainfall in the driest areas may confound crop estimations. Growers that took berry weights should have significantly more confidence in their crop estimation. At the coffee pot growers shared average berry weights 30 DAB that ranged from 1.1 grams to 1.55 grams. With predicted final berry weight of 2.2 - 3.2, there is certainly a reason to go scout smaller berry weights and see if rainfall has shifted the 2018 berry curve on those dry sites.

Larger crop sizes have motivated growers to apply an additional spray to protect and/or eradicate powdery mildew. Growers that had average to below average crop estimates due to small berry weights may want to revisit their vineyards and see what things look like. While the intent may have been to avoid an additional powdery mildew spray, weather conditions and economic factors may shift that decision-making toward a more conservative approach. It would be realistic to see a 7-ton estimate actually yield over 9 tons per acre.

The economic recommendations for crop thinning remain the same this year as every year. The optimal production of concord grapes is having an average of 14.5 - 15.0 brix by the third week of September. Site variability or variable vineyard management should have 25% of the vineyard between 14.9 - 15.5 brix on the first day of harvest. The variability of that recommendation is dependent on the terms of your marketing contract. Obviously, that kind of precision is entirely impossible. Growers will miss the mark on both sides of that target. Crop load management that maximizes your chances of getting close to that target will allow you to improve long-term revenue, while operating in a lower risk environment.

Not to overstate the obvious, but as always knowledge is power. Taking the time to do crop estimation is always a valuable investment.



Tim Weigle, NYSIPM, Cornell University, LERGP Team Leader

## **Grape Berry Moth Update**

According to the grape berry moth model on NEWA <a href="http://newa.cornell.edu">http://newa.cornell.edu</a>, all areas are at the point where second generation larvae are protected within berries and completing their development. However, in the next week or so, you should be out scouting vineyards for clusters damaged by grape berry moth feeding to determine the need for insecticide applications. The threshold at this scouting time is 15% damaged clusters (a damaged cluster is defined as a cluster with one or more berries with GBM feeding). Be sure to scout both the edges and interiors of vineyards to avoid surprises later in the season.

A number of growers have been asking when the next timing for grape berry moth sprays will be so I tried my hand at forecasting out a bit further than the GBM model. I used an average of 25 DD per day so the forecasted date of when an area will hit 1610 DD is approximate and can vary greatly if we run into a stretch of extremely hot and/or cooler temperatures. This should only be used a guideline. The best way to determine the timing for the next GBM spray is to visit your favorite station page(s) on NEWA and check out the GBM model results.

	Wild grape	DD Total on	Forecasted DD for	Forecasted
NEWA Location	bloom date*	July 26, 2018	July 31, 2018	1610 DD**
Versailles	May 29, 2018	1339	1450	August 6
Hanover	May 29, 2018	1383	1492	August 5
Sheridan	May 28, 2018	1443	1555	August 2
Silver Creek	May 31, 2018	1298	1408	August 8
Dunkirk Airport	May 30, 2018	1345	1457	August 6
Forestville	May 30, 2018	1353	1464	August 6
East Fredonia	May 29, 2018	1367	1482	August 5
Fredonia	May 30, 2018	1300	1414	August 8
Portland Escarp.	May 29, 2018	1382	1494	August 5
Portland	May 30, 2018	1355	1467	August 6
East Westfield	May 30, 2018	1335	1448	August 6
Westfield	May 30, 2018	1345	1459	August 6
Ripley	May 29, 2018	1413	1529	August 3
North East Escarp	May 29, 2018	1376	1484	August 5
Harborcreek	May 29, 2018	1418	1532	August 3
North East Lab	May 30, 2018	1410	1526	August 3
Erie Airport	May 27, 2018	1563	1678	July 28
Lake City	May 29, 2018	1413	1525	August 3
Ransomville	May 30, 2018	1396	1516	August 4
Burt	June 1, 2018	1233	1351	August 10
Somerset	May 31, 2018	1312	1431	August 7
Corwin	May 31, 2018	1306	1429	August 7
North Appleton	June 3, 2018	1196	1318	August 12
* Estimated date provided by NEWA website				
** Estimated using an average of 25 DD per day				

Pest Status	Pest Management	
Second generation larvae are protected within berries and completing their development.	The most effective time for treatment of second generation grape berry moth is over. Prepare to scout all vineyard blocks for grape berry moth damage when DD accumulation reaches 1470-1620 DD. During scouting, determine if the number of damaged clusters from previous generation exceeds the treatment threshold of 15%. If above threshold, control measures should be applied starting at 1620 DD.	

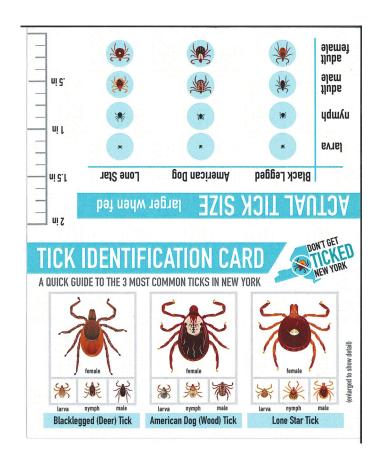
### Farmer Tick Survey, 2018 – From the NYS IPM Program

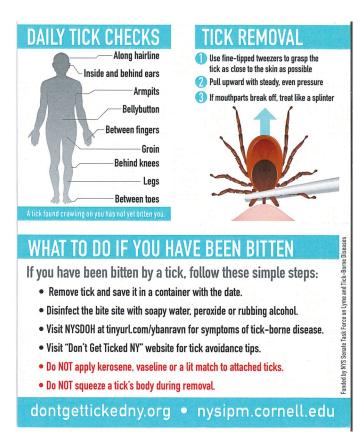
(editor's note: Ticks are becoming a major issue in both agricultural and community settings. Please take a moment to fill out the survey so we can make sure that the impact of ticks in the agricultural setting is well represented in the responses).

The Community IPM Program (part of NYSIPM) was funded by the NY State Senate Task Force on Lyme and Tick Borne Disease to create an educational campaign about the risks of tick exposure and tick awareness for New York. Community IPM addresses non-agricultural pest issues for every New York resident, including farmers. This survey is a research project to help us understand what tick issues and concerns NY farmers are facing on their farms and home properties. By completing this survey you are agreeing to participate in this research. Your answers are completely anonymous and will help us understand how serious the issue is and how to raise awareness with the farming community.

For more information about this survey or about ticks and tick prevention or control, please contact Jody Gangloff-Kaufmann at <a href="mailto:jlg23@cornell.edu">jlg23@cornell.edu</a>.

Please fill out the survey (just 10 questions!) here: <a href="https://tinyurl.com/yc7rnd6r">https://tinyurl.com/yc7rnd6r</a>





## PA Update

Andy Muza, Extension Educator, Penn State

## **In the Vineyard** (7-26-18)

**Black Rot** – I continue to hear from growers concerning black rot in Concord clusters (Figure 1). Concord berries can still be infected up to 5 - 6 weeks after bloom and bloom was about 6 weeks ago. Therefore, Concords are close to the stage where berries become resistant, but rainfall events, over this past weekend and into the early part of this week, have resulted in black rot infection periods.

So, if you are finding occasional berry infections/ leaf lesions and the site does not have a history of black rot problems then you can probably avoid another fungicide application for black rot. However, if leaf lesions or berry infections are easy to find then a fungicide application is **immediately** warranted. Effective fungicide options include DMI materials (FRAC Group 3) such as: tebuconazole products; Rally (myclobutanil); Mettle (tetraconazole); or Rhyme (flutriafol). Research indicates that these DMI fungicides have excellent **post-infection** activity (at least 3 days and potentially longer).

**Downy Mildew (DM)** – DM leaf lesions were abundant in a Delaware block checked yesterday (Figure 2). Recent rainfall events may cause DM to flare up around the region. I don't expect Concord vineyards to have problems but Niagara, Catawba, Delaware, *V. vinifera* and other susceptible varieties should be scouted to determine if DM is present. This disease has the potential to explode under favorable weather conditions (e.g., frequent showers and high humidity) causing defoliation if ignored.



Figure 1. Concord cluster with black rot infected berries. Photo- Andy Muza, Penn State



Figure 2. Delaware leaf with numerous downy mildew lesions. Photo, Andy Muza, Penn State

## North East PA Update

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

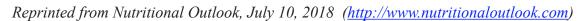
Weather: July rainfall has been well below average this year at our location; 1.74" by the 25th of July. We have accumulated about 625 growing degree days so far during July and we are on track to end up ahead of average. We now have 1604 gdds as of April 1 (also above average). There is a chance of some passing showers for Friday and Saturday, with high temperatures just a little below average over the next few days.

Phenology and Diseases: The relatively dry weather throughout July has made control of diseases like black rot and downy mildew, relatively easy over the past three weeks. Fruit should be resistant to powdery and downy mildew. We are seeing small amounts of black rot in a lot of places on the farm, a result mainly of the favorable weather from late May through June, but we should be nearing the end of the fruit susceptibility period for black rot, at five weeks out from bloom. More recently, rains have picked up again over the past several days, and we have had several more infection periods for black rot. Any fruit infections that took place recently will take several weeks to develop and will not become manifest until veraison or later. If scouting reveals a fair amount of black rot in your vineyard, then an application of a sterol inhibitor, right away, could reduce crop losses that show up 3-4 weeks from now,. If you're not currently seeing much black rot in your vineyard, you're probably not going to see much more develop at this point and can focus mainly on protecting leaves from here on out.

Leaf disease on natives at our location is pretty much confined to powdery mildew and is very minimal at this point; we are just starting to see symptoms over the past week or so. For leaf powdery mildew control, the decision to spray should be based on the size of the crop that you will be working to get ripe.

## Is Grape Juice the Most Affordable Superfruit Juice?

By Jennifer Grebow





When it comes to a superfruit juice that's both affordable as well as high in polyphenol content, Concord grape juice hits the sweet spot, according to new market analysis performed by Concord grape juice company Welch's Global Ingredients (Concord, MA). The company bases its conclusion on market data it said it sourced in June 2018.

Welch's says it did an analysis of current market prices for single-strength juice concentrates and found that Concord grape juice was the cheapest at just \$2.20/U.S. gallon (3.8 liters). The company compared this with the price of acai juice (at \$38.07/gallon, or 1630% more expensive than Concord grape), blueberry juice (at \$4.01, or 82% more), pomegranate juice (\$3.38/gallon, or 54% more), and dark sweet cherry juice (at \$3.33, or 51% more). The company says its analysis reflects the most recent harvest prices for each fruit type. Cranberry juice came in close to Concord grape juice at a price of \$2.26, albeit still 3% more expensive than grape.

While the other superfruit options were more expensive, Welch's claims that Concord grape juice outperformed the others not only on price but on polyphenolic concentration. The company determined that Concord grape juice has a polyphenolic concentration of 2.6 mg GAE/ml, compared to blueberry juice (2.3 mg), acai and black cherry juice (both at 2.1 mg), and cranberry juice (at 1.7 mg). The company says that only pomegranate juice outperformed Concord grape, at 3.8 mg.

Thus, the company says, when factoring in both polyphenol properties and price, Concord grape provides the biggest bang for the buck, so to speak.

Kevin Kilcoyne, vice president and general manager, Welch's Global Ingredients Group, said in a press release, "A barrier to superfruit juice consumption is the relatively higher cost of the raw materials, which leads to higher price points at retail. Our analysis demonstrates that thanks to the Concord grape, it's possible to formulate a 100% superfruit juice that is not only affordable but also sits at the top end of the scale for positive nutrition. Furthermore, Concord grape juice scores highly on taste—something that can't be said for some superfruit juices, such as açai, cranberry and pomegranate."







## 2018 eNEWA Grape Subscription Sign-Up

### **Subscriber information**

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Email address	
City	
Select Location(s) (circle as many as you like, or write in below)	

Lake Erie	<u>Lake Erie</u>
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East Fredonia	Somerset
East Westfield	Versailles
Erie	Westfield
Fredonia	
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Select eNEWA Delivery Times (write in times below) Delivery requests should be on the hour.



## **NEWS RELEASE**



#### NATIONAL AGRICULTURAL STATISTICS SERVICE

United States Department of Agriculture • Washington, DC 20250 Ag Statistics Hotline: (800) 727-9540 • www.nass.usda.gov

#### FOR IMMEDIATE RELEASE

Contact: Sue King, (202) 690-8122 Teresa White, (202) 690-8123

#### USDA announces one week left to complete the 2017 Census of Agriculture

WASHINGTON – July 24, 2018 – The U.S. Department of Agriculture's (USDA) National Agricultural Statistics Service (NASS) ends all data collection for the 2017 Census of Agriculture on July 31. Anyone who received the Census questionnaire is required by law to respond by that date, and they can complete the form online at www.agcensus.usda.gov or by calling toll-free (888) 424-7828.

"The Census of Agriculture, conducted once every five years, provides the only source of comprehensive agricultural data for every state and county in the nation," said NASS Administrator Hubert Hamer. "Your information helps ensure that future decisions about U.S. agriculture represent you, your industry, and your community."

"Every response matters, even the ones that tell us you are not, or are no longer, a farm," continued Hamer. "If you received a 2017 Census of Agriculture, we need to hear from you by July 31."

The same law that requires response – Federal law, Title 7 USC 2204(g) Public Law 105-113 – also requires NASS to keep all information confidential, to use the data only for statistical purposes, and to only publish data in aggregate form to prevent disclosing the identity of any individual producer or farm operation.

Data from the 2017 Census of Agriculture is planned to be released in February 2019.

###

USDA Secretary Sonny Perdue video PSA – Be counted: Return your 2017 Census of Agriculture Online Today, https://www.youtube.com/watch?v=s4-mnS8z2i4&feature=youtu.be

How to Respond Online, <a href="https://www.youtube.com/watch?v=qOqqJOcsX\_c">https://www.youtube.com/watch?v=qOqqJOcsX\_c</a>

USDA is an equal opportunity provider, employer, and lender. USDA NASS is the federal statistical agency responsible for producing official data about U.S. agriculture and is committed to providing timely, accurate, and useful statistics in service to U.S. agriculture. We invite you to provide feedback on our products and services. Sign up at https://usda.mannlib.cornell.edu/MannUsda/register.do.



## **NEWS RELEASE**



United States Department of Agriculture
NATIONAL AGRICULTURAL STATISTICS SERVICE
NORTHEASTERN REGIONAL FIELD OFFICE
4050 Crums Mill Rd., Suite 203
Harrisburg, PA 17112

FOR IMMEDIATE RELEASE July 12, 2018

Contact: Charlotte Staver (717) 787-3904 charlotte.staver@nass.usda.gov

#### **USDA to Measure Fruit Production**

**HARRISBURG, PA** – Over the next several weeks, the U.S. Department of Agriculture's National Agricultural Statistics Service (NASS) will survey fruit growers, including more than 1,000 in the Northeast, about their 2018 fruit crops. The survey will collect acreage information on apples, peaches, grapes, and cranberries and provide the first indication of production.

"Different sectors of the agricultural industry rely on NASS to produce timely and accurate fruit estimates," said King Whetstone, director of the National Agricultural Statistics Service, Northeastern Regional Field Office. "Growers can use the survey results when making business plans and marketing decisions.

USDA's Farm Service Agency (FSA) relies on the average yields to administer farm programs. Cooperative Extension uses the data to provide needed outreach and education, and State Departments and Agencies of Agriculture use the information to aid growers."

In these surveys, NASS asks participants to answer a variety of questions about apples, peaches, cranberries, and grapes depending on state and version of the questionnaire. For their convenience, survey participants have the option to respond online. As with all NASS surveys, information provided by respondents is confidential by law. NASS safeguards the confidentiality of all responses and publishes only State and National level data, ensuring that no individual producer or operation can be identified.

NASS will compile, analyze, and publish survey results in the August 10<sup>th</sup>, 2018 *Crop Production* report. All previous publications are available online at <a href="http://www.nass.usda.gov/Publications">http://www.nass.usda.gov/Publications</a>. For more information on NASS surveys and reports, call the NASS Northeastern Regional Field Office at 1-800-498-1518.





## **INSURING GRAPES**

NY, 2018

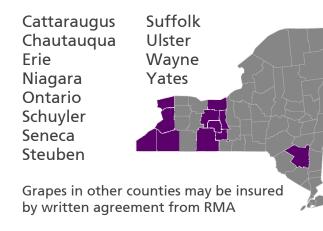
**Crop insurance** is a safety net for farmers that helps you **manage risk**. If you have a crop failure, crop insurance can help you farm again next year.

### **Important Insurance Deadlines**

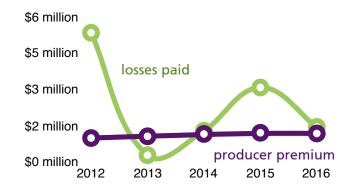
- **Nov. 20, 2017:** Sales Closing, Policy Change, Cancellation, Termination Date
- Jan. 15, 2018: Acreage / Production Report Date
- Aug. 15, 2018: Premium Billing Date
- Nov. 20, 2018: End of Insurance Period



## Over 40 grape varieties are insurable in these counties:



## **NYS Grape Crop Insurance Performance**



## Learn more & sign up:

To sign up, contact a crop insurance agent. Find an agent using the Agent Locator tool at <a href="mailto:rma.usda.gov/tools/agent.html">rma.usda.gov/tools/agent.html</a>

Find crop insurance information at <u>ag-analytics.org/cropinsurance/</u>

Cornell University delivers crop insurance education in New York State in partnership with the USDA Risk Management Agency.

Diversity and Inclusion are a part of Cornell University's heritage. We are an employer and educator recognized for valuing AA/ EEO, Protected Veterans, and Individuals with Disabilities.







#### **LERGP Links of Interest:**

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.

LERGP Web-site:

http://lergp.com/

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

Efficient Vineyard Web-site:

https://www.efficientvineyard.com/

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:

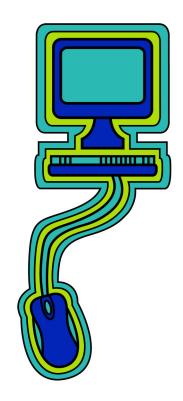
http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cornell/

Veraison to Harvest newsletters:

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

NEWA:

http://newa.cornell.edu/





#### Lake Erie Regional Grape Program Team Members:

Andy Muza, (ajm4@psu.edu)Extension Educator, Erie County, PA 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. 202

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



