

CROP UPDATE - JUNE 14, 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, June 20, 2018- Coffee Pot Meetings (2 per dav)

10:00am- Schultz Farm. 3692 Wilson Cambria Rd., Wilson NY 14172

3:00pm- Brant Town Hall, 1272 Brant Rd. Brant NY 14027

CALENDAR

6

18 19 20 21 22 23 24 25 26 27 28 29 30 31

7 8 9 10 11 12 13 14 15 16 17

Wednesday, June 27, 2018- Coffee Pot meetings (2 per day)

10:00am- Betts' Farm, 7366 E. Route 20, Westfield NY 14787

3:00pm-Beckman Farms, 2386 Avis Dr. Harborcreek PA 16421

Tuesday, August 7, 2018- LERGP Hopyard Tour-6:00pm-7:30pm at CLEREL, light refreshments

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

Mosier-Maille Ag Consulting Soil and Crops

Jared Mosier Consultant (814) 923-1372



7472 Buffalo Rd. Harborcreek, PA 16421

mmagconsulting@gmail.com

Dave Maille

(814) 572-5781

Consultant





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Business Management

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

Urease Economics

At the last couple of coffee pot meetings there was discussion on the use of urease. This urea additive helps to reduce atmospheric losses of nitrogen or volatilization. One important issue is the cost of the additive. At the coffee pot meetings, I had to plead ignorance. These additives increase the cost of urea fertilizer by \$80 - \$120 per ton. Most of that cost is in the additive. There may be an additional cost, as the low cost seller of urea may not offer urease. When evaluating the economics of these products, such as agrotain, it is important to keep in mind that many conditions that impact the risk of volatilization vary from farm to farm. Primary factors are weather related, so conditions for significant volatilization may occur, even if such conditions are unusual or unpredictable.

Large losses of urea are typically rare. With .2" rain 3-4 days after application, losses will likely be near zero. Maximum losses occur on soil that is bare, high PH, low clay, low organic matter, and initially wet soil that dries after application. While losses have been observed as 40%, high risk areas will see typical losses in the range of 20% - 25%.

Many blocks will have higher levels of loss than 0, because some risk factors are present. However, because of a high propensity of rain to occur within 10 days, there is a significant chance that our losses will be less than 20%. Treatments and additives add significant costs to urea fertilizers. As urea prices rise, urease may become slightly more affordable. At current prices we would need to see urea losses above 30% to justify additives. If you're concerned with urea losses, there are other management options available to you. Refine your fertilizer application process so you own the equipment required to make an application. Consider making an application 3 weeks prior to bloom. When soil is dry and rain is in the forecast make a urea application sometime between 3 weeks prior to bloom and shortly after bloom. If organic matter in soil is low, make a split application with the first application 2 weeks prior to bloom. Low organic matter will increase the probability of volatilization.

Soil temperature is another important component of volatilization. Bare unshaded soil can exceed 100 degrees in our climate. Weed cover and vine shading dramatically reduce soil temperature. Sod will easily reduce soil surface temperature by 20 degrees. Taller cover crops, such as springtime grain rye, will reduce soil temperature by as much as 45 degrees.

Soil pH above 7.0 also contributes to greater volatilization. pH that high is a bit of an anomaly in our region. It might be a factor to consider when applying lime to soil. Lime can be added at, basically, anytime. By adding lime between July 30th and February 1st, the risk of unusually high surface pH can likely be mitigated. Ground cover does present water management risks in sandy soils with low organic matter. I would limit the use of urease to areas that have a significant number of risk factors. A second, post-bloom, application of urea to a sandy soil might be an area to consider urease. If soil moisture is high and no rain is in the forecast, it might provide an economic benefit. Without the presence of multiple risk factors, given the cost, the probability of significant volatilization is too low to justify the cost.

IPM

Tim Weigle, NYSIPM, Cornell University, LERGP Team Leader

Grape Rootworm

If you have blocks with a history of grape rootworm, or blocks where you just feel the vine vigor has decreased for an unexplained reason, I would encourage you to get out and scout for leaf feeding from grape rootworm adults. Leaf feeding by the adult rootworm does little damage, it is the larvae feeding on the grape roots that leads to vine decline, but it is the most noticeable damage and the adults are the stage most susceptible to control measures.

Scouting for grape rootworm was traditionally done during the first week of July. If the chain-like feeding pattern of the adult was found on suckers or the leaves of the lower canopy, then an insecticide was required.



Adult GRW



(scouting method) 2 x 2 catchframe under wire to catch GRW while top wire is being shaken vigorously

A project funded by the LERGREP Inc. and NYW&GF showed that the first week in July was actually too late to start scouting for grape rootworm feeding. Feeding was found as early as June 10 with peak emergence found as early as June 17. So now is the time to get out and scout. If you want to catch the population early before leaf feeding becomes conspicuous, you could try our scouting technique. We have used a 2 X 2 catching frame placed under the middle vine of a post length. The top wire is then shaken vigorously to dislodge the grape rootworm adults which then fall on the catching frame where they can be easily counted. There is no economic threshold for grape rootworm at this time. However, due to their ability to reduce vine size through their root feeding, it is recommended that once grape rootworm adults are found, or evidence of their feeding on leaves, an insecticide application should be applied to reduce the population.

More information on the grape rootworm life cycle and photos of leaf feeding can be found in the NYS IPM Program fact sheet at: <u>http://lergp.com/ipm/</u>. At the top of this page you will also find the FIFRA 2(ee) recommendations for Admire Pro, Danitol, Leverage 360 and Sniper. These are materials that have been

added to the arsenal against grape rootworm through a cooperative effort between Greg Loeb, Department of Entomology, Cornell University, myself and the funding partners mentioned above. If you use these materials you will need a copy of the FIFRA 2(ee) recommendation with you during the time of application.

PA Update Andy Muza, Extension Educator, Penn State

In the Vineyard (6-14-18)

<u>**Diseases**</u> – Not much has changed this week concerning the disease situation in Concord & Niagara vineyards. As mentioned in last week's Crop Update, the most common disease symptoms observed in most vineyards are Phomopsis lesions on leaves and shoots and only a very small amount of black rot leaf lesions. This week I did find powdery mildew on a few young clusters in a Niagara vineyard . (Figure 1).



Figure 1. Powdery Mildew on pedicals of young Niagara berries. Photo- Andy Muza, Penn State

Full Bloom has occurred in Concord vineyards across the Lake Erie Region since last week's Crop Update. Growers should now be planning to apply the 1st POSTBLOOM fungicide application. The 1st POSTBLOOM spray should be applied no later than 14 days, or less if the weather is wet, after the Immediate Prebloom spray. DO NOT stretch spray intervals beyond 14 days during this critical period for protection of the clusters. (Check the NEWA station http:// newa.cornell.edu closest to your vineyard blocks for 5-day weather forecasts and for disease models).

Fungicide products which are **highly** <u>effective</u> against all of our major diseases (Phomopsis, Black Rot, Downy Mildew and Powdery Mildew) should be used. One example of a highly effective fungicide tank mix at this time, which many Concord growers are considering, is Ziram (for Phomopsis, Black Rot, and Downy Mildew) and either Quintec or Vivando (for Powdery Mildew).

<u>Rose Chafer</u> – The report in last week's Crop Update indicated that I had not seen any rose chafers in vineyards as of Wednesday evening, 6/6/18. However, the next day (6/7/18) I received a call from a PA grower that he just started seeing rose chafer adults in Concord flower clusters (Figure 2).



Figure 2. Rose Chafer adult in blooming Concord cluster photo- Andy Muza, Penn State

Now that bloom has occurred the greatest threat from rose chafer injury will dramatically decrease since adults prefer feeding on tender flower clusters. However, growers with a history of this pest in their vineyard blocks should continue daily scouting at least for another week. An insecticide should be applied if a threshold of 2 beetles per vine is reached.

<u>Grape Berry Moth</u> – GBM larval webbing was observed in only a few Niagara clusters in a border row next to the woods.

Start checking the GBM Degree Day Model <u>http://newa.cornell.edu/index.php?page=berry-moth</u> at the NEWA site closest to your vineyards to determine when to spray high risk areas or when to begin scouting low and intermediate risk blocks.

Grape leafhopper (GLH) – in Erie County, PA only a minimal amount of GLH feeding has been observed so far. However, at yesterday's Coffee Pot meeting in Cattaraugus County in NY, growers reported large populations of GLH in some of their vineyards. A few growers have already applied an insecticide application for GLH.

North East PA Update

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

Weather: Rainfall over the past 4 days (1.25"), broke a three week stretch of rather dry weather and generated some more disease cycles for black rot, Phomopsis, and powdery mildew. We have now accumulated about 200.5 growing degree days during June, and about 640 gdds as of April 1 (ahead of last year). There is rain in the short term Accuweather forecast for Saturday that may stretch through Tuesday or Wednesday of next week. On the other hand, there is no rain in the short term Skybit forecast for Saturday.

Phenology: We called 50% bloom for Concord on June 13 at our location here by the lake. Of course, vineyards farther inland are two to three days ahead of us. We have gone from bud break to bloom in less than five weeks! No wonder it seems it's been hard to keep up this season; on average, we usually have about another week between these two bench marks.



Diseases: As I mentioned above, rain over the past four days broke our dry spell and has resulted in more infection periods for diseases like black rot, Phomopsis, and powdery mildew. Stay on top of your spray program at least through the first or second post bloom spray to keep fruit clean, as this period of time (the first two to three weeks after capfall) is the most critical for fruit protection; your fruit are susceptible to all the major fungal grape pathogens, no matter what variety you are growing. Make sure you're also keeping an eye on downy mildew with the DMCast model in NEWA. The previous dry period has been very timely for keeping downy mildew from jumping into canopies from the vineyard soil, but that could change if wet weather persists. So far, it appears the two most recent wetting periods have not been enough to generate downy mildew infection periods yet at our location (according to DMCast), and the low levels of inoculum have probably played a hand in delaying it in our vineyards here at the lab.



PA VinES

There is a new program available to grape growers in the Lake Erie Watershed. PA VinES (Vested in Environmental Sustainability) is a voluntary program that promotes sustainable viticulture practices through a grower self-assessment workbook. The workbook looks at the economic and environmental impacts of grape production on each operation and serves as an educational resource for the grower. After completing the workbook, the participant is eligible to apply for available Growing Greener grant funds to install best management practices on their operation, such as cover cropping and stabilized access roads. The goal of the program is to reduce the environmental impact of the approximately 10,000 acres of vineyards in the region by limiting the amount of sediments and excess nutrients that enter our waterways. Contact the Erie County Conservation District (814-825-6403) for your free workbook to get started!





Rev 02/17 RP&Ink

2018 Application Period - Erie County Farmland Preservation Program

The County of Erie is a proud participant in Pennsylvania's nationally recognized farmland preservation program. With the support of interested landowners, the program helps to permanently preserve farms for agricultural production. It helps to guarantee a future food supply and contributes to a healthier economy. It also assures that a way of life cherished by many Erie County residents will continue for generations to come.

This program is voluntary. In order to apply for the agricultural land conservation easement program, a landowner must complete and submit an application. Through the program, permanent easements are purchased. Landowners remain in possession of the land, but the easement limits subdivision, nonagricultural development and other uses inconsistent with commercial agriculture.

The Erie County Agricultural Land Preservation Board will be accepting applications from June 1, 2018 through September 30, 2018. Applications may be obtained from the Erie County Department of Planning, or from the department's website, <u>https://www.eriecountypa.gov/county-services/county-offices/planning-department/farmland-preservation/farmland-preservation-overview.aspx</u>

For more information, contact John McGranor at (814) 4517329 or jmcgranor@eriecountypa.gov.

Completed applications should be submitted to:

The Erie County Department of Planning 150 E. Front Street, Suite 300 Erie, PA 16507

Subscriber information

Name_____

Email address _____

City_

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

Lake Erie	Lake Erie
Appleton, North	Ransomville
Burt	Ripley
Corwin	Sheridan
Dunkirk	Silver Creek
East Fredonia	Somerset
East Westfield	Versailles
Erie	Westfield
Fredonia	
Hanover	Other: Please fill in
Harborcreek	
Lake City	
North East Escarpment	
North East Lab	
Portland	
Portland Escarpment	

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



LERGP 2018 COFFEE POT MEETING SCHEDULE

Date	Time	Location	Address
May 2, 2018	10:00am	Clover Hill Farm	10401 Sidehill Rd. North East PA 16428
May 9, 2018	10:00am	Ann & Martin Schulze	e Winery 2090 Coomer Rd. Burt NY 14028
May 16, 2018	3 10:00am	Sprague Farms	12435 Versailles Rd. Irving NY 14081
May 23, 2018	3 10:00am	NE Fruit Growers	2297 Klomp Rd. North East PA 16428
May 30, 2018	3 10:00am	Double A Vineyards	10277 Christy Rd. Fredonia NY 14063
June 6, 2018	10:00am	Fred Luke Farm	1755 Cemetery Rd. North East PA 16428
June 6, 2018	3:00pm	Thompson Ag Cor	mer of Hanover and Dennison, Silver Creek NY 14136
June 13, 201	8 10:00am	Jim Vetter Farm	12566 Versailles Rd. Irving NY 14081
June 13, 201	8 3:00pm	Jerry Chessman Farm	11725 Middle Rd. North East PA 16428
June 20, 201	8 10:00am	n Duane Schultz	3692 Wilson Cambria Rd. Wilson NY 14172
June 20, 201	8 3:00pm	Brant Town Hall	1272 Brant Rd. Brant NY 14027
June 27, 201	8 10:00am	n Betts Farm	7366 East Route 20 Westfield NY 14787
June 27, 201	8 3:00pm	Beckman Farms	2386 Avis Dr. Harborcreek PA 16421
July 11, 2018	10:00ar	m CLEREL	6592 W. Main Rd. Portland NY 14769

- July 18, 2018 10:00am Tom Tower Farm
- July 25, 2018 10:00am Ziesenheim
- 8760 W. Lake Rd. Lake City PA 16423

759 Lockport St. Youngstown NY 14174



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 <u>rma.usda.gov/tools/agent.html</u>

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

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 Jackie Dresser(jd929@cornell.edu) Viticulture Extension Support Specialist 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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