

## The Lake Erie Regional Grape Program

### Crop Update May 11, 2017

PENNSTATE



#### 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, May 17- Coffee Pot- 10:00am- Brant Town Hall, 1272 Brant Rd. Brant NY 14027 \*\*see the full schedule located in this Crop Update.\*\*



Wednesday, May 24- Respirator Medical Evaluation - Militello Farm Supply -beginning at 3:00pm Thursday, June 1- Respirator Medical Evaluation- Militello Farm Supply, beginning at 3:00pm \*\*You must make an appt. by calling Militello's at 716-679-1240 or John's cell at 969-7511.

Cost of the evaluation is \$100.00. They also have respirators for sale. \*\* See flyer at end of this Crop Update\*\*

Monday, July 10- Grape Market Order Public Hearing, CLEREL, 6:00pm-8:00pm

Tuesday, July 11- Grape Market Order Public Hearing, CLEREL, 10:00am-12:00pm



**Friday, August 11-** *LERGP Summer Grower Conference- come join us in celebrating 25 years of service!* 



**Saturday, August 12-** *LERGP Open House- We would like to invite our neighbors to see what it is that we do here at CLEREL.* 



Saturday, August 19- LERGP Hops Conference

# **Business Management**

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

### **Prebloom Management Decisions Continue**

The right business decisions continue to face weather related challenges. This year appears to highlight the benefits of keeping inoculum levels low as our spring weather can inhibit the ability of growers to make timely spray applications, despite their best intentions.

While there are still plenty of unknowns, all signs point to an average or above average crop. Frost events, so far, have largely been missed and future lows do not appear to be threatening. Given the rainfall, there is the potential for economic losses related to phomopsis. The forecast indicates similar potential for other diseases.

Ideally, growers have already made an EBDC application and may be looking at a second application next week. These growers are on pace to spend between \$60 and \$70 on their pre-bloom materials. Even with moderate levels of inoculum and low grape prices it should be easy to recoup those costs in the form of additional crop and a relatively inexpensive post-bloom spray program.

At this point, you might be rolling your eyes. Sure that was your plan but standing water and downpours have gotten in the way. The good news is, the economic impacts of these diseases are fairly modest when inoculum levels are very low. In the short term, growers should be as vigilant as possible. Spraying in periods between rainfall should be a top priority.

If you're not on the verge of retirement, you might want to take note of these weather events. This is at least then 2<sup>nd</sup> or 3<sup>rd</sup> time in my tenure that waterlogged soil has impeded pre-bloom spraying. Future investments in sites, such as ditching, drainage and spray technology may all increase your resistance to this risk. In the mid-term, since we don't buy sprayers annually, cover crops may provide some benefit. You've probably heard bare row middles are recommended at around 6"-12" of shoot growth in a dry year on gravel. In a wet year on heavy clay, cover crop programs may improve the ability of the soil to drain water and provide additional traction for equipment. There are some disadvantages related to frost when cover crops over-winter. Those disadvantages can be managed with the right seed selection and perhaps mowing if necessary. A grain rye, for instance, is terminated by mowing. Even a frost blend will improve soil health and structure. While it will not provide additional spring cover, it may improve spring soil conditions over the long-run.

Overall, a cover crop investment would be in the range of \$15 to \$30 per acre, with an additional \$18 in seeding costs. Total cost would range from \$32 to \$48 per acre. While ancillary benefits like vineyard access are important, we often justify the cost by measuring improvements in vine size related to water status. Last year, for instance, cover cropped vineyards on heavy soil were less stressed. Improvements in vine health were likely related to cover crops that improved moisture availability.

# IPM

#### Tim Weigle, NYSIPM, Cornell University, LERGP Team Leader

### No Real Change...

The weather pattern we seem to be stuck in is conducive to Phomopsis infection to occur. If you have not been out in the vineyard to get your 3- to 5-inch Phomopsis spray on there is good news and bad news. Good news is the shoots have not really grown all that much in the past week so you can still get that spray on. The bad news is that we have had some monster infection periods for Phomopsis over that time frame

so the chance for Phomopsis infections in unprotected vineyards is high.

We are currently finding Phomopsis infections on the new shoots in a number of vineyards across the belt, even in vineyards without a major problem in the past year or so. Phomopsis cane infections can produce inoculum for several years and requires continued preventative sprays. This is particularly true in vineyards with top wire cordon training where canes and new growth occur below existing infections. Hopefully we will break out of this pattern of cold and rainy weather creating numerous infection periods for Phomopsis and the other major



Phomopsis on new shoot

diseases (although we do not need to worry about the others right except for

in the most susceptible varieties or in vineyards with major problems last year). However, you should be planning for an increased number of sprays before if this type of weather continues as spray intervals should be reduced.

Continue to monitor NEWA <u>http://newa.cornell.edu</u> for occurrence of infection periods. If you have questions about implementing a vineyard IPM strategy, please contact me or Andy Muza.

### eNEWA for Grapes

Would you like to see the current weather and grape pest information found on NEWA (Network for Environment and Weather Applications) <u>http://newa.cornell.edu</u> without having to click through the website? Then eNEWA is for you. eNEWA is a daily email that contains current weather and pest model information from a station, or stations, near you. The email will contain; 1) high, low and average temperature, rainfall, wind speed and relative humidity 2) the 5-day forecast for these weather parameters, 3) GDD totals (Base 50F), 4) 5-day GDD (Base 50F) forecast and 5) model results for powdery mildew, black rot, Phomopsis and grape berry moth. The weather information is provided for not only the current day but for the past two days as well.

We will continue eNEWA for Grapes in 2017. You can choose from any number of stations located near you for delivery of this information via email each day at a time specified by you. Please keep in mind that you will receive a separate email (approximately 3 pages in length) for each station you choose. Once during the growing season and again after harvest, you will be asked to complete a short survey to assist us in improving the eNEWA for grapes email system. If you would like to be a part of this project just fill out the form found in this newsletter and return to: <u>thw4@cornell.edu</u> or send to me at Tim Weigle CLEREL 6592 West Main Road Portland, NY 14769.

#### 2017 eNEWA Grape Project Subscription Sign-Up

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Name	
Email address	
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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	Finger Lakes Region	Lodi (Shalestone)
Erie	Aurora	Lodi (Standing Stone)
Harborcreek	Branchport	Penn Yan
North East Escarpment	Dresden (FLGP/FLCC)	Romulus (B. wood Grove)
North East Lab	Dundee (Weimer)	Romulus (Thirsty Owl)
Portland	Fayette 3 Brothers	Varick (Swedish Hill)
Portland Escarpment	Geneva	Watkins Glen
Portland Route 5	Geneva (Bejo)	Watkins Glen (Lakewood)
Ransomville	Hector	
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

# Viticulture

Tim Weigle, NYSIPM, Cornell University, LERGP Team Leader

# Coffee, Donuts and Variable Rate Shoot Thinning - All Part of Efficient Vineyard Project

Dr. Terry Bates of the Lake Erie Regional Grape Program (LERGP) at the Cornell Lake Erie Research and Extension Laboratory (CLEREL) was host to an "on-the-fly" variable rate demonstration at the Wednesday, May 10, 2017 LERGP Coffee Pot Meeting. The extension team holds Coffee Pot meetings every Wednesday during the growing season from early May through the end of July. These meetings are hosted by growers across the Lake Erie Grape Belt, on their farms and in their barns. The LERGP Extension team provides only the coffee and donuts; the agenda is usually set by grower questions. This provides an informal setting for exchange of information and ideas, as well as a means to apply current research results to the issues of the growing season.

The May 10 Coffee Pot meeting was different in that it was held at CLEREL, and was started with a demonstration of a portion of the research being conducted as part of the USDA/NIFA SCRI Efficient Vineyard project. Dr. Bates explained that vineyards can be scanned using NDVI technology (Normalized Difference Vegetative Index) which shows the amount of photosynthetic (green) matter in the vineyard at the time of scanning. During the early season, this accounts for the shoots that are just emerging from the canes and are approximately



Demonstration of variable rate shoot thinner in a vineyard row.

2-3 inches in length. With this map in hand, the grower can go into the vineyard and validate the information in each of the zones (i.e. how many shoots are in a low vigor zone or a high vigor zone) by counting the number of shoots on the vines in each of the zones. The shoot numbers can be applied back to the NDVI map and a shoot count map can be created. With this map, and the right technology, a grower can input the data into a field computer in their tractor which will then control the hydraulics of the shoot thinner. The map provides the computer with vigor zones from low to high causing the shoot thinning head to speed up to remove a higher percentage of shoots in the high vigor zones, and where there are less, the shoot thinner will slow down and remove less shoots. The goal of this on the fly variable rate shoot thinning is to create a uniform vine size across the vineyard block optimizing production.

At this meeting, the 30 growers in attendance were shown how the shoot thinner responds to the maps without operator involvement. Rhiann Jakubowski, GIS technician with LERGP, created a "fake map" of the parking lot so the attendees would be able to see how the thinning heads sped up or slowed down according to the zones from the map. The tractor operator then drove through the vineyard providing growers a firsthand look at variable rate shoot thinning. For growers in the Lake Erie region of New York and Pennsylvania, if you are interested in taking the first step toward variable rate management, please contact a member of the LERGP extension team to set up an NDVI scan of your vineyard. This is the second year that LERGP has been able to perform on the fly variable rate shoot thinning and we are excited to see the results as the season progresses. For more information about the Efficient Vineyard project, please visit our website at <u>efficientvineyard.com</u>. To learn more about the Lake Erie Regional Grape Program you can visit our website at <u>http://lergp.com/</u>.

# North East PA Update

Byran Hed, Lake Erie Grape Research and Extension Center North East PA

<u>Weather</u>: We have accumulated 3.6" of rainfall in the first 10 days of May at our site by the lake, which is about our average for the entire month! In addition to being extra wet, May has been unseasonably cold so far, with only 7.8 gdds of accumulated heat (colder than early April!). The short term forecast is rain over the next two to three days with temperatures remaining below average. But, we may finally see a warming up next week that unleashes shoot growth.

<u>Phenology</u>: Here by the lake, we currently have 1-3" of shoot growth on Concord vines and about 1-1.5" of shoot growth on our Niagara....the same as this time last week! Cool temperatures have held growth in check and shoots have remained virtually unchanged since the beginning of the month.

Diseases: The first disease we should be concerned about is Phomopsis, and this year, we may see plenty of it. The first spray for Phomopsis is generally applied at about 3-5" of shoot growth to protect the newly exposed inflorescences, but the timing on this fungicide application should also take into account rainfall patterns and exposure of inflorescences because vines can move into and beyond this stage very quickly. For example, unprotected vines that were at 1-3" of shoot growth on May 1 or during the more extensive wetting period from May 4-7, may show lesion development on the first couple of internodes and even on cluster stems, due to the 16 and 60-70 hour wetting periods that occurred at those times. The only saving grace during the last wetting period was the very low temperatures recorded. But, don't be fooled by the absence of infection displayed by NEWA; conditions for infection by Phomopsis did occur during the first half of the long wetting period of May 4-7, but the model apparently kicked the infection period out (displayed as green instead of red) as the increasingly cooler temperatures during the second half of the 4 day long wetting period eventually brought the overall average temperature during the whole period, below the threshold for infection. This does not erase the infection that occurred during May 4-5, when minimum conditions for a Phomopsis infection period were already met. Some vineyards are already showing symptoms of Phomopsis on early shoot growth; dark spots and streaks, mainly along shoot internode sections. Nothing can undo those infections.

Rainfall over the next 3 days will put vineyards at risk of Phomopsis again, even though we still have not yet reached that more vulnerable 3-6" shoot stage. Fungicides that contain mancozeb, ziram, or captan (if allowable by your processor) are the best choice at this time as all are effective. Captan and Mancozeb products are generally less expensive than ziram and mancozeb has the shortest reentry period (24 hours). And you don't need to apply the full rate at this time either. All are strictly surface protectants, subject to wash off by rainfall; there are no fungicides that will take care of a Phomopsis infection after it's become established. Also, vineyards that have been machine pruned are going to be at higher risk and will likely benefit most from this spray.

## **Respirator Medical Evaluation Notice**

### **OSHA Respirator Medical evaluations are scheduled on:**

### Wednesday, May 24<sup>th</sup> - Starting at 3:00pm and Thursday, June 1<sup>st</sup> - Starting at 3:00pm

### At the FRONT BUILDING [the Berry Barn] at Militello Farm Supply at 2929 Route 39

You <u>MUST</u> set an appointment time with Militello Farm Supply (716) 679-1240. These are OSHA mandated evals and intended to insure the safe use of your respirator by making certain that you are medically suited to this task.

### THE EVALUATION *WILL* CONSIST OF THE FOLLOWING:

- Review of the OSHA Respirator questionnaire
- Lung study or pulmonary function test which is adjusted to:
  - Your age, height, race, and sex. So you are being compared to someone like yourself.
- Blood pressure and heart rate
- Respirator mask fit test done with irritant smoke

### If you have a respirator Bring It – We will have masks on-site to fit test you

### <u>You</u> must be clean-shaven where the mask contacts your face! This is a strict OSHA mandate and not debatable.

### THE EVALUATION *WILL NOT* CONSIST OF:

• Blood testing • Drug or Alcohol Tests • X-rays

The goal of the exam *is not to threaten your working capacity*. If some medical condition is revealed or discovered which needs attention, you will be informed how to follow up with *OCCUSTAR after* you see your Doctor. This is not uncommon and is quick to complete.

*Try to get a good night's sleep and limit your smoking and coffee intake that day.* Feel free to ask questions as you go through the process since you are entitled to be informed of your condition.



## 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 Grower	cs 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	10854 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	10929 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



The Only FRAC Group U6 Fungicide Labeled for Grapes & Cucurbits Highly Effective on Powdery Mildew No Cross-Resistance Protectant / Preventative Action



FRAC Group 3 Labeled for Grapes Controls Powdery Mildew & Black Rot Protectant + Curative Activity Highly Systemic



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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



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