

## Crop Update for June 26, 2014



## **Upcoming Event Dates to put on your calendar:** *Please note the deadline for registration for each event.*

July 2, 2014- COFFEE POT MEETINGS: 10:00am- Peter Loretto, 10854 Versailles Plank Rd. North Collins NY 14111



PENNSTATE

August 20, 2014- Thompson Ag Pig Roast- more info to come-

Information and registration forms for all of the listed events are available in this update. Registration is also available on-line for most programs at our web-site: lergp.cce.cornell.edu

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.



There is a star amongst us! Just this week, Dr. Terry Bates was honored at the ASEV National Conference in Austin, Texas with the Inaugural Extension Distinction Award! The full article is below.

# **ASEV to Honor Dr. Terry Bates With ASEV's Inaugural Extension Distinction Award at the National Conference in Austin**

Dr. Terry Bates, director of the Cornell Lake Erie Research and Extension Laboratory (CLEREL) and senior research associate at Cornell University, will be the first recipient of the American Society for Enology and Viticulture's (ASEV) Extension Distinction Award. This honor recognizes a current extension educator for outstanding contribution to an extension program or the advanced translation of novel research findings into commercially applicable tools for enologists or viticulturists. Dr. Bates, who has also served as president of ASEV's Eastern Section chapter, will receive the 2014 Extension Distinction Award following his presentation, "Concord Fruit Thinning: Using Vine Biology and Mechanized Management to Address Market Demands in New York," on June 25, 2014, at the 65th ASEV National Conference\_in Austin, Texas.



Dr. Bates is a leader in the field of vineyard mechanization and is widely recognized for his work on Concord grapes in the Lake Erie region. Based on his research trials, growers now have a new, proven tool – mechanical crop estimation and thinning – to adjust cropping levels to seasonal conditions. Additionally, Dr. Bates directs CLEREL, which since opening in 2009 has provided a revolutionary model for integrating research and extension for the industry. His ongoing research efforts involve educating the industry on economic impacts, demonstrating how the tool can work in commercial vineyards and sharing his findings through field meetings, annual conventions and newsletter articles.

Dr. Bates has authored or co-authored over 20 technical articles in various trade and extension publications. His collaborations have had a nationwide impact as well as a direct economic impact on the Lake Erie region and its grape producers. In 2008, the New York Wine and Grape Foundation recognized him for his contributions to research and education.

"Terry exemplifies the Society's vision for the Extension Distinction Award," said Lyndie Boulton, ASEV executive director. "His significant contributions in viticulture have made an indelible impact on the industry. We believe his work will serve as foundation for other extension research endeavors."

# **Congratulations Terry!**

# Business Management

Kevin Martin Penn State University, LERGP, Business Management Educator

## NDVI Sensors In Commercial Vineyards

Please contact LERGP if you're interested in having NDVI sensors pass through your vineyard. Long-term benefits include more accurate crop load management. You can let us know you're interested by phone or web.

http://lergp.cce.cornell.edu/event.php?id=152

716-792-2800

We'll begin entering commercial vineyards approximately 30 days post-bloom. We are able to gather data up until mid-August. While we will continue to work in research vineyards, given the bloom date, we would like to be in your vineyards between July 12<sup>th</sup> and August 24<sup>th</sup>.

A significant number of vineyards also have an average vine size below 2.5. Without sub-block data or oversized vines it becomes very difficult to increase vine size above 2.5lbs without managing data within blocks.

We would like to hear from you. With your input, this project has the potential to improve your bottom line substantially. Just how substantial an improvement can we see?

Interpreting NDVI maps

NDVI is a normalized or relative response. The sensor output will be very dependent on how the canopy (vine) is presented to the sensor. As stated above, if the top wire is imaged late in the season, then the sensor will always see a filled canopy and will interpret all vines to be of high vigor

Management will affect the relative sensor response.

The patterns in the NDVI maps should only be interpreted within a single block or between blocks that have the same management!!

Comparing the NDVI response between blocks with a different variety, different pruning regime or different management is very difficult and can lead to misinterpretation. It should not be done. The main interest is to look for patterns within a block or within uniform management areas that indicate where vine vigor (size) is relatively small or large. If desired, the canopy sensor data can then be calibrated to an actual vine size by taking pruning weight measurements within the block. Otherwise, the patterns in the NDVI can be used to target sampling (soil, petiole etc) to identify production-limiting factors in the low vigor areas and (hopefully) remedy these factors.

# **Cultural Practices**

## Scouting and Eutypa

The weather the past week has been great for growing just about everything, especially fungi, insects, and plants. The few wet nights this past week have created ideal conditions for downy mildew. I have seen some downy mildew infections on suckers and expect to start seeing infections in the canopy. We have also started

to see the first generation of 'grape berry moth' (GBM) and reports from the North East lab are that they are finding higher numbers of GBM than normal. We are also starting to find 'grape root worm' beatles in the canopy. With timely rains, the grapes are taking off, as well as the weeds, on the vineyard floor. With the many vineyard pests showing up right now, it's a great time to get out and scout.... It's always a great time to scout.

When you're out scouting, don't forget your pruning shears as eutypa damage is clear and present at this time. Infected arms and trunks should be 12 inches below the canker. Infected



wood will still produce spores so it is best to remove infected vines out of the vineyard and burn them. With the amount of winter injury in the vineyards, make sure you're looking for the correct symptoms. Look for short stunted shoots, yellowed, and cupped leaves. This time of the season the best way to tell the two apart is cupped leaves.

Location	Date	High (F)	Low (F)	Precip.Past 7 days (in)	Total Apr GDD
North East Lab, PA	06/25/14	74	67	1.71	744
Harborcreek, PA	06/25/14	73	68	1.22	792
North East Escarpment	06/25/14	75	66	1.51	777
Ripley	06/25/14	76	67	2.02	778
Portland Route 5	06/25/14	74	68	2.43	726
Portland CLEREL	06/25/14	73	68	2.29	734
Protland Escarpment	06/25/14	73	67	2.52	772
Dunkirk	06/25/14	74	68	1.09	691
Silver Creek	06/25/14	73	68	NA	673
Sheridan	06/25/14	NA	NA	NA	NA
Versailles	06/25/14	74	67	NA	707
Appleton	06/25/14	72	62	0.1	558
Somerset	06/25/14	73	68	0.13	679
Appleton South	06/25/14	73	67	0.38	650

Lake Erie Grape Region NEWA Weather Data

Note: All Weather data reported as of 6/25/2014. NA=Sensor Malfunction

DATE/YEAR	HIGH	LOW	DAILY PRECIP.	GDDs	TOTAL APRIL GDDs	TOTAL JAN GDDs
Week of 6/11/2014	72.4	54.70	0.18	95	548	548
Week of 6/18/2014	80	60.00	0.08	141	843	843
Week of 6/25/2014	80.9	63.10	0.35	179.5	843	843
Average(from 1964)	78.1	59.30	0.10	131.2	709	734
June Precip.Week 1= . Total Precip: March =	.39" Wee = 2.62"	k 2 = 1. Apri	23" Week 1 = 3.66	< 3 = . 5"	57" Week 4 =2. May = 5.5"	47''

## IPM

Grape Rootworm - We have been finding more grape rootworm emerging during our scouting

trips in Lake Erie vineyards. However, we have found very little grape rootworm feeding on either suckers or up in the canopy which indicates that we are still at the early part of this year's population emergence. Grape rootworm spends a majority of its lifecycle underground in the larval stage. The larval stage is the most damaging as they feed on grape roots (as the name would suggest). This feeding reduces the root volume leading to lower vine vigor, vine size and ultimately lower crop size. The adult emerges from the soil starting in mid to late June and can continue for a number of weeks to over a month, depending on environmental conditions. The adult stage represents the best time for management as they are out of the soil, exposed in the canopy of the vine. Traditionally, we have always scouted for Grape Rootworm around the 4<sup>th</sup> of July and, if scouting indicated the necessity, insecticide applications were applied soon after. The 2014 growing season is looking to follow that trend. We will be out scouting again next Monday to see where we stand with Grape Rootworm populations. If you have had Grape Rootworm problems in the past, or have vineyards where you have seen a steady decline in vine



size, you should take the opportunity to get out and look in those blocks for Grape Rootworm feeding. If you would like to use our scouting techniques to get a better handle on the number of adults that are present in the vineyard, all you need is a 2 foot square catching frame (we covered ours in white fabric to make visual identification quicker and easier). While walking through the vineyard stop at regular intervals and place the catching frame under the vine close to the trunk. Grab the top wire and shake up and down several times. If present, the Grape Rootworm will fall from the canopy and some will be captured on the catching frame.

If scouting indicates that you do need to treat for Grape Rootworm, keep in mind that Sevin 80 Solupak, 4F and XLR are the only insecticides labeled for use against Grape Rootworm in New York State. Growers in Pennsylvania have a few more options as the pest does not need to be specifically mentioned on the label, only the crop, for it to be legal. Greg Loeb, NYSAES, Department of Entomology is leading a project looking at the efficacy of other materials (Admire, Danitol, Brigade and Leverage 360) against grape rootworm. Positive results from this trial will be used to apply for 2ee registration of those materials for Grape Rootworm in New York.

## **Grape Berry Moth**

We are getting questions about webbing in clusters that are being found in a number of Lake Erie vineyards. We have found first generation grape berry moth larvae but not at a level where you should be concerned enough to open your wallet for spray materials. This was a topic at the afternoon Coffee Pot meeting at the Jim Pratz vineyard in North East, PA. Jody Timer, Penn State Dept. of Entomology restated that research conducted over many years by Greg Loeb, Mike Saunders, Rufus Isaacs and a multitude of research and extension staff in New York, Pennsylvania and Michigan has shown that an immediate post bloom application of insecticide does not significantly affect the amount of damage found at harvest.

Jody made this comment even though she also mentioned that it **did not** look like the extreme cold temperatures over the winter seemed to have a negative effect on the overwintering grape berry moth populations. According to Jody, she is getting some of the highest captures of grape berry moth in her black light, pheromone and malaise traps this year as compared to years in the past, giving the indication that 2014 could be a banner year for grape berry moth.

The question was asked, "if we are seeing webbing in the clusters already, why wouldn't you put an insecticide in to take care of the grape berry moth that are there, especially if you can do it for \$3-5 an acre"? Jody responded that by the time you see the webbing it is too late and any damage has been done.

So, since 1) the damage has been done by the time you see the webbing, 2) research has shown that the immediate post bloom insecticide application will not significantly reduce grape berry moth damage at harvest, and 3) the less expensive insecticides also have a very short residual – especially in warm weather, I would suggest that you take the money you would spend for an insecticide at this time of year, and invest it into a new mode of action insecticide that you have not used in the past for grape berry moth when the GBM DD model calls for it.

NEWA Logation	Wild grape	DD Total on June		
INE WA LOCATION	bloom date*	26, 2014		
Versailles	June 5	421		
Sheridan	May 31**	831**		
Silver Creek	June 9	366		
Portland Escarp.	June 4	452		
Portland	June 7	415		
Portland Route 5	June 7	416		
Ripley	June 3	484		
North East Escarp	June 3	472		
Harborcreek	June 3	485		
North East Lab	June 5	434		
Lockport	June 9	377		
Ransomville	June 9	353		
South Appleton	June 9	340		
* Estimated date provided by NEWA website				
** use information with caution. Temperature information is				
suspect.				

According to the GBM DD model on NEWA we are currently between first and second generation egg-laying.

## Northeast Center for Risk Management Education (NECRME) Grant Project Wrapping Up

For the past year, members of the LERGP extension team have been working with area grape growers and processors on the NECRME grant titled "Managing Risk through a System Approach to Concord Grape Productivity and Fruit Quality".

This project addressed the need for new vineyard risk management plans, complete with marketing plans and strategies, created by new quality standards implemented by grape processors in the Lake Erie region of New York and Pennsylvania. The new quality standards have created a teachable moment for Concord grape growers to examine the economics of implementing a "whole system" approach of current research-based inputs into their vineyard management strategies including; 1) GPS-sensor technology, 2) GIS mapping of vineyards, 3) mechanization of vineyard practices, 4) using web-based resources to manage inputs for pests and 5) marketing. While the grant is ending at the end of June, the LERGP extension team will continue to work with growers in developing a Whole System approach to managing risk in their vineyards. If you have not taken the opportunity to get a GIS map developed for your vineyard operation, or would like to implement any of the new researchbased technology in your vineyard management strategy, please stop by our office at CLEREL, send us an email, give us a call, or speak with us at one of our weekly Coffee Pot meetings.





United States National Institute Department of of Food and Agriculture

Agriculture

## From the North East PA Lab:

## Andy Muza, Extension Educator, Erie County, PA Cooperative Extension

#### In the Vineyard (6-26-14) – Andy Muza

#### **Diseases**

If you have not yet applied a POST BLOOM fungicide application then get this spray on NOW. If you have applied this spray then scout, particularly problem areas, to determine how effective your spray program has been to this point.

**Downy Mildew** – The first sporulating, downy mildew lesion was found, this week, on a sucker in a Concord vineyard. Wild grapes are also exhibiting downy mildew symptoms.

Thunderstorms and warm, cloudy, humid conditions are ideal for development of downy mildew. Check suckers and closely scout border areas near woods and low areas of vineyard blocks.

**Powdery Milde**w – for the first time this season, PM was observed on clusters at 3 of the 10 Concord sites checked. Cloudy conditions, heavy canopies and shading from wood lines will contribute to disease development.

Prevent cluster infections by: not extending POST BLOOM application beyond 14 days; using most effective PM fungicides; and through good spray coverage.

Black Rot - finding scattered black rot leaf lesions at various sites.

#### Insects

**Rose Chafer** – small numbers of rose chafers are still lingering in vineyard blocks that have had a problem in the past. However, the threat from this pest is over as the majority of adults have moved to other food sources. If you have not sprayed in blocks with rose chafers then it would still be a good idea to assess population and damage levels at these sites.

**Grape Berry Moth (GBM)** – webbing in clusters from 1<sup>st</sup> generation GBM larvae were found in border rows at high risk sites in 8 of the 10 sites examined.

This should serve as a warning to growers that scouting and close monitoring of the GBM Degree Day Model in NEWA <u>http://newa.cornell.edu/index.php?page=berry-moth</u> is important as we approach the 810 GBM degree day spray timing for the 2<sup>nd</sup> generation.

## Bryan Hed, Research Support Technologist in Plant Pathology

<u>Weather:</u> Total rainfall during June is currently 4.12", above average. Our growing degree day total (gdd) from April 1 to June 25 is 744. Our gdd accumulation for June so far is 423. With the present forecast, we will likely finish the month a bit ahead of average in terms of gdd accumulation. So far, through May and June, we are slowly making up for lost time.

<u>Phenology:</u> At our location, 50% bloom for Concord and Niagara occurred on June 18 (trace bloom on the 15<sup>th</sup>) which places us about 3-4 days behind our average.

<u>Disease:</u> Although I'm not seeing a lot of disease at this time, in even our unsprayed vines at the lab, we certainly have had favorable weather for fungal diseases to develop. Over the past three days, we have experienced weather conditions that have generated infection periods for all diseases. Scout your vineyards, especially your most disease prone blocks, for signs and symptoms of the major diseases on your leaves and clusters. Many growers are now applying their first post bloom spray for grape disease control. The early post bloom period (NOW) is the most critical time of the season for fruit disease control on all grape varieties!!! Fruit of all varieties are most susceptible to all the major grape pathogens at this time. For juice grape growers, shortcomings in your disease control program will cost you more now than at any other time of the season; don't cut corners at this time. The first post bloom spray should be applied within 10-14 days of your immediate pre-bloom spray. Use best materials at full rates for control of the big four diseases (powdery and downy mildew, black rot, Phomopsis) and enough gallons/acre for best coverage.

For wine grape and Niagara growers that will be renewing vines with severe trunk damage; remember that you still need to protect new sucker growth from powdery and downy mildew. Vigorous new sucker growth is very susceptible to these diseases and is very close to inoculum sources in the vineyard (downy mildew originates from inoculum in the soil, and powdery mildew originates from inoculum in bark on trunks). Normally we remove this growth and may not realize how susceptible these tissues are to infections in spring and summer. Direct sprays to maintain healthy suckers coming from grafts (grafted vines) or the base of trunks (from own-rooted vines), and try to achieve a balance of enough good quality suckers that will inhibit the growth of bull-wood (overly vigorous, poor quality trunk replacements), without allowing for thick bushy growth from the base of vines that can be difficult to adequately penetrate and protect with fungicides. This is a balancing act that may have to be adjusted on a vine to vine basis, but is essential to renewing a vineyard to full production as quickly as possible.



## 2014 LERGP Coffee Pot Locations



and the second se	and the second se	
May 7th	10:00am	Ann & Martin Schulze 2030 Old Coomer Rd. Burt NY 14028
May 14th	10:00am	John Mason 8603 W. Lake Rd. Lake City PA 16428
May 21st	10:00am	Leo Hans 10929 W Perrysburg Rd. Perrysburg NY 14129
May 28th	10:00am	Bob & Dawn Betts 7365 E Rte 20. Westfield, NY 14787
June 4th	10:00am 3:00pm	Clover Hill Farms- 10401 Sidehill Rd. North East, PA 16428 Brant Town Hall- Back entrance 1294 Brant North Collins Rd Brant NY 14027
June 11th	10:00am 3:00pm	The Winery at Marjim Manor, 7171 East Lake Rd.Appleton NY 14008 Chris Ortolano-2053 Lake Rd. Silver Creek NY 14136
June 18th	10:00am 3:00pm	Dan Sprague- 12435 Versailles Plank Rd. Irving NY 14081 Evan Schiedel/Roy Orton -10646 W Main Rd. Ripley NY 14775
June 25th	10:00am 3:00pm ► <u>3:00pm me</u>	Tom Tower 759 Lockport Rd. Youngstown NY 14174 Archer & Pratz Inc 9813 Lake Road, North East 16428 Setting is an updated address-
	afternoon	meeting times have been updated to 3pm
July 2rd	10:00am	Peter Loretto- 10854 Versailles Plank Rd. North Collins NY 14111
July 9th	10:00am	Kirk Hutchinson- 4720 W Main Rd. Fredonia NY 14063
July 16th	10:00am	Earl & Irene Blakely 183 Versailles Rd. Irving NY 14081
July 23rd	10:00am	Fred Luke- 1755 Cemetery Rd. North East PA 16428
July 30 <sup>th</sup>	10:00am	Carl Vilardo- Walker Rd. Westfield NY 14787

## 2014 Lake Erie Regional Grape Program Enrollment

Fees:	**This form	n is for NY Growers ONLY- PA Growers call 814-825-0	900 to register	
\$70.00	\$	<b>GRAPE Program</b> -Chautauqua county landowner (\$45.00 program fee, \$25.00 Chautauqua County Base	e Fee)	
\$65.00	\$	<b>GRAPE Program-</b> Cattaraugus, Erie, NY or Niagara (\$45.00 program fee, \$20.00 County base fee)	Program fees do not include 2014 Cornell Guidelines for	
\$100.00	\$	GRAPE Program -Out of Program Region Resident	Grapes	
\$25.00	\$	2014 Cornell Guidelines for Grapes		
\$25.00	\$	_ Hardcopy mailing of Newsletters***		
Total	\$	(Please make check payable to LERGP)		
I am interest corded enro	ted in the education llee 18 years of ag	onal work of Cornell Cooperative Extension in Niagara, Chautauqua and e and older shall have voting and nominating privileges to hold office in	Cattaraugus County. Any current re- the Association of their local county.	
( ) I am 18 y	ears of age or olde	er and signed		
()New	() Renewal			

Farm Name:		_
Name:	Spouse's Name:	
Address:	City:	
State:	Zip Code	
Home phone:	Cell Phone :	

\*\*\*Due to budget constraints, all correspondence will be conducted through e-mail. Please provide your e-mail address below. If you would like to receive hardcopies, mark the \$25.00 additional fee line above and include with payment.\*\*\*

#### EMAIL ADDRESS

Please return form and payment to:

LERGP

6592 West Main Rd.

Portland NY 14769

Attn: Katie



Feel free to call w/ questions:

716-792-2800 Ext 201





LERGP Website Links of Interest:

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. Please remember to RSVP for those events that require one!



## Lake Erie Regional Grape Program Team Members:

Andy Muza, (ajm4@psu.edu)Extension Educator, Erie County, PA Cooperative 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. 205
Luke Haggerty, (llh85@cornell.edu) Grape Cultural Practices, 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



Cornell University Cooperative Extension

