

# LERGP Crop Update May 14, 2015

Crop Updates will be delivered on a weekly basis through the growing season.

Wednesday, May 20, 2015- Coffee Pot Meeting, CLEREL, 6592 West Main Rd. Potland NY 14769

Friday, June 26 & Saturday, June 27, 2015- Hops Conference at CLEREL *(see flyer and registration form)* 





Sunday, July 26, 2015- ISHS Shaulis Symposium at SUNY Fredonia

Monday, July 27-Wednesday, July 29- ISHS Conference at SUNY Fredonia

Use the included forms, go to our web-site or stop in the office to register.

\*\*Check the web-site for more upcoming events and meetings.





Cornell University

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.



# 2015 Coffee Pot Meeting Schedule

- May 6- 10:00am-Dan Sprague- 12435 Versailles Rd. Irving NY 14081
- May 13- 10:00am- Phillip Baideme- 7935 Route 5, Westfield NY 14787
- May 20- 10:00am- CLEREL, 6592 West Main Rd. Portland NY 14769
- May 27- 10:00am-Nick Mobilia- Arrowhead Winery 12073 East Main Rd. North East PA 3:00pm-Evan Schiedel/Roy Orton- 10646 West Main Rd. Ripley NY 14775
- June 3- 10:00am- Bob & Dawn Betts- 7365 East Route 20, Westfield NY 14787 3:00pm- North East Lab-662 N Cemetery Rd. North East PA 16428
- June 10- 10:00am- Peter Loretto-10854 Versailles Plank Rd. North Collins NY 14111 3:00pm- Dave Nichols-1906 Ridge Rd. Lewiston NY 14092
- June 17- 10:00am-Tom Tower 759 Lockport Rd. Youngstown NY 14174 3:00pm-Leo Hans-10929 West Perrysburg Rd. Perrysburg NY 14129
- June 24- 10:00am- Kirk Hutchinson-4720 West Main Rd. Fredonia NY 14063 3:00pm- Brant Town Hall- 1294 Brant North Collins Rd. Brant NY 14027
- July 1- 10:00am-Ted Byham 9207 West Lake Rd. Lake City PA 16423 3:00pm-Alicia Munch-761 Bradley Rd. Hanover NY 14136
- July 8- 10:00am- Rosemary & Brenda Hayes- 6151 Route 5 Brocton NY 14716
- July 15- 10:00am-Szklenski Farms- 8601 Slade Rd. Harborcreek PA 16421
- July 22- 10:00am- Paul Bencal-2645 Albright Rd. Ransomville NY 14131

# Business Management

Kevin Martin Penn State University, LERGP, Business Management Educator

#### Investing Available Capital in Multi-Row Technology

Periodically growers inquire about the use of multi-row sprayers. The economics of making a larger capital investment, maintaining that capital investment and increasing profitability can be a complicated question to answer.

The following image illustrates a situation that involves a specific set of assumptions for a multi-row sprayer. Given the assumptions I have made, it does make sense for a grower to purchase a multi-row sprayer. Comparing the two systems in this assumption yield relatively close results. The application costs for a grower are reduced from \$13 per acre to \$10 per acre.

Significant variations amongst individual growers will change these results. The most important factor, which is not considered here, is a reduction in the number of tractors. This hypothetical grower would be replacing three single row sprayers with a one four-row sprayer. The four-row sprayer will be mounted on an existing harvester. If the grower was able to reduce the number of tractors on his farm, the savings would be substantially greater.

Another important element of this analysis is the right sizing of capital equipment. The amount of acreage growers attempt to cover with a single sprayer varies significantly. I assumed the upper level limit of a single row sprayer was approximately 100 acres. That will vary from farm to farm based on the supply of labor, proximity of blocks, the efficiency of the sprayer and the farmer's strategy.

Equipment costs also vary widely. There is no standard when it comes to sprayers and one should make sure to compare the quality of the sprayer in addition to the pure cost of the equipment. The least expensive single-row sprayer does not provide adequate coverage. It cannot fairly be compared to any multi-row unit without considering additional costs for more applications, higher chemical usage and potential lost crop. Higher end single-row sprayers may eliminate some of these concerns.

# Pesticide Application Costs: Spray Program 1

	Multi-Row	Single Row
Assumptions		
Fuel Use (Gal/Hr)	4.10	1.90
Fuel Cost (\$/Gal)	2.10	2.10
Acres per Hour	16.64	4.40
Labor Cost (per Hr)	18.00	18.00
Equiptment Cost (\$)	349,000	80,000
Bearing Acres	400.00	100.00
3-5inch:Total Cost/Acre	10.04	13.19
Hours	0.18	0.34
Tractor Depreciation	2.63	1.67
Labor Cost	3.50	6.81
Fuel Cost	1.52	1.37
Sprayer Overhead	2.21	3.00
Materials		-
10-12inch:Total Cost/Acre	10.04	13.19
Hours	0.18	0.34
Tractor Depreciation	2.63	1.67
Labor Cost	3.50	6.81
Fuel Cost	1.52	1.37
Sprayer Overhead	2.21	3.00
Materials		-
Pre-Bloom:Total Cost/Acre	10.04	13.19
Hours	0.18	0.34
Tractor	2.63	1.67
Labor	3.50	6.81
Fuel	1.52	1.37
Sprayer Overhead	2.21	3.00

Materials

		Multi-Row	Single Row
Post Bloom:T	otal Cost/Acre	10.04	13.19
	Hours	0.18	0.34
	Tractor Depreciation	2.63	1.67
	Labor Cost	3.50	6.81
	Fuel Cost	1.52	1.37
	Sprayer Overhead	2.21	3.00
	Materials		

Mid Summer	:Total Cost/Acre	
	Hours	
	Tractor Depreciation	
	Labor Cost	
	Fuel Cost	
	Sprayer Overhead	
	Materials	

## Spray Progam 1

	Cost Per Acre	40.15	52.75
	Total Savings		

# **Cultural Practices**

Luke Haggerty Viticulture Extension Associate Lake Erie Regional Grape Program

#### Concord Bud Break, Double Buds and Bleeding Trunks

**Bud Break:** Last Thursday, (May 7<sup>th</sup>) I reported we would be calling bud break soon and we did. The official date for the bud break (50% buds with half or more of leaf edge exposed) was Friday May 8<sup>th</sup> for both the Portland and Fredonia labs. Looking at data going back to 1970 the average date for the Fredonia lab is May 4<sup>th</sup> putting us only 4 days behind average.

**Double Buds:** For lack of a better term, I'm calling 'double buds' the occurrence of both primary and secondary buds pushing at the same time like the picture below. There is no recorded data on how often this occurs, percent's or averages. While trying to continue to assess freeze damage I have made a few observations. Areas that we found had minimal primary (less than 30%) bud damage had very few 'double buds'. Areas that were found to have marginal bud damage (40 to 50%) had a much higher occurrence of 'double buds'. I found that vines with noticeable trunk damage had an increase number of 'double buds'. Take a look and let me know if you are finding similar observations.



**Bleeding Trunks:** Water pressure within vines is the highest at or around bud break making it the best time to look for bleeding trunks. Bleeding trunks occur when vascular tissues rupture and sap flows out of cracks in the trunk. Most often the cause of bleeding trunks is freeze damage. Last week (May 11-14<sup>th</sup>) I began to notice bleeding trunks in multiple vineyards, especially in low wet areas. I recommend training suckers for trunk renewal as these wounds are susceptible to crown gall.

# Weather

Lake Erie Grape Region NEWA Weather Data					
Location	Date	Avg. temp F (May 1-13)	Precip.Past 7 days (in)	Precip. May total	Total Apr GDD
North East Lab, PA	5/14/15	62	1.24	1.59	218
Harborcreek, PA	5/14/15	63	0.74	1.20	236
North East Escarpment	5/14/15	62	1.06	1.41	232
Ripley	5/14/15	63	0.7	1.05	233
Portland Route 5	5/14/15	61	0.66	1.54	209
Portland CLEREL	5/14/15	61	0.6	0.80	201
Portland Escarpment	5/14/15	64	0.45	0.93	236
Dunkirk	5/14/15	61	0.59	0.79	190
Silver Creek	5/14/15	60	0.66	0.89	174
Sheridan	5/14/15	63	NA	NA	233
Versailles	5/14/15	61	NA	NA	194
Appleton	5/14/15	58	0.75	0.78	151
Somerset	5/14/15	61	0.93	0.93	200
Appleton South	5/14/15	62	0.92	0.92	203
Lockport	5/14/15	62	0.38	0.38	194
Note: All Weather data	reported	as of 5/13/20	15. NA=Sensor	Malfuncti	on

**Weather update**: The grape belt had a frost scare the morning of May 14, but looking at the hourly temps on NEWA Versailles received the temps reaching a low 32°F which. Typically frost damage to shoots in the 3 to 5 inch stage does not occur until temps drop below 27°F.

### **IPM** Tim Weigle NYSIPM, LERGP Team Leader

#### Take a Walk in Your Vineyard

It is good to see a number of growers out getting their weed sprays on in the past week or so. I mentioned the importance of an early weed management strategy this year due to the potential need for renewals in some Concord vineyards, but especially in Niagara, Vinifera and some hybrid vineyards. While Luke has talked about the potential for trunk damage it really hits home when you are walking a vineyard and come across a spot with a significant number of trunks that are bleeding. I would echo Luke's comments at the Coffee Pot meetings that it is extremely important to get out and walk (or ride your Gator or ATV) your vineyards with your GIS maps to locate areas of both trunk and bud damage. Get this done early so 1) you are not surprised later and 2) you can point out the bad spots to your crop insurance adjuster when they stop by.

A question about when to spray came up at the Coffee Pot meeting yesterday. While we talk about sprays at 1- to 3-inch and 3- to 5-inch shoot growth the most important thing to remember is that this early EBDC application is aimed at protecting the rachis of the cluster from Phomopsis. So, as soon as shoot growth is at the point where the clusters are exposed, a spray should be applied before Phomopsis infection periods occur. With Concord and Niagara, there is no reason to apply materials for any diseases other than Phomopsis at this point in time.

For a complete review of spray timings and materials, please consult Wayne Wilcox's latest tome. You should have received an email notice that it is posted on our website. As always, if you have questions about your vineyard IPM strategy, please give me a call.



# 2015 Hops Production in the Lake Erie Region Conference

June 26 - 27, 2015

9 AM - 4 PM Cornell Lake Erie Research and Extension Center Meeting Room and Hop Yards 6592 West Main Road, Portland, NY 14769

#### **Featured Speakers**

Mike Roy - Roy Farms Inc., Moxee Washington\* Mary Gardiner - Ohio State University David Spann - Chautauqua Soil & Water Beth Reed - Small Business Development Center Steve Miller - Hops Educator, Cornell CE Tim Weigle - NYS IPM Program & LERGP and many more to come...

\*Sponsored by Ommegang Brewery

Single Day Registration:	\$75
Two-day registration:	\$125
Beer & BBQ Dinner June 26:	\$50

### To Register:

Contact Kate at (716) 792-2800 x202 or kjr45@cornell.edu For credits cards please our website at: http://lergp.cce.cornell.edu

or use form on back



## Class size is limited to 80 each day, sign up early to reserve your spot







#### Friday June 26 -

**Focus on Getting Into Hops Production** Classroom and in-field opportunities to learn first hand the hows and whys of hops production

#### Saturday June 27 -

**Becoming profitable with Hops Production** Now that they are in the ground and the trellis is up, learn about some of the techniques that will help you to become profitable with your hops production. Classroom and in-field opportunities

# 2015 Hops Production in the Lake Erie Region Conference

#### June 26 - 27, 2015

9 AM - 4 PM Cornell Lake Erie Research and Extension Center 6592 West Main Road, Portland, NY 14769

## **Registration Form**

Farm/Business Name			
Name of Attendee (s) _			
_			
City	State	Zip	
Email	Phone		
Friday registration - \$75 X	number attending		=
Saturday registration - \$75	X number attending		=
Friday and Saturday registr	ation - \$125 X numbe	r attending	=
Beer and BBQ Dinner on F	riday June 26 - \$50 nu	umber attending	=
Total			\$

Please make check payable to: Lake Erie Regional Grape Program To register with a *credit card*, please visit our website http://lergp.cce.cornell.edu Questions? Contact Kate at (716) 792-2800 x202 or email at kjr45@cornell.edu

# THE INTERNATIONAL SOCIETY FOR HORTICULTURAL SCIENCE (ISHS) Presents

#### "<u>II International Workshop on Vineyard Mechanization and</u> <u>Grape and Wine Quality</u>"

July 26- July 29, 2015 Fredonia, New York, USA

Sponsored by the ISHS working group on Vineyard Mechanization and Vine Berry Fruits

In collaboration with Cornell Lake Erie Research & Extension Laboratory Portland, NY and Cornell University New York State Horticultural Society New York State Agricultural Experiment Station, Geneva





II International Workshop on Vineyard Mechanization and Grape and Wine Quality

#### Invitation

On behalf of the ISHS Fruit Section Working Group on Vineyard Mechanization and Vine Berry Fruits, we invite you to an International Workshop on Vineyard Mechanization and Grape and Wine Quality to be held in Fredonia, New York, USA.

The <u>II International Workshop on Vineyard Mechanization and Grape and Wine Quality</u> will be held from Sunday, July 26 to Wednesday, July 29<sup>th</sup> 2015 at SUNY Fredonia. The workshop will kick off on Sunday with a Shaulis Symposium focused on grapevine physiology and mechanized grapevine production. Monday will be a full day technical and winery tour to the Cornell Lake Erie Research and Extension Laboratory and Lake Erie Region wineries. This will be followed by a day and a half of technical presentations and posters on: precision viticulture, sensing technologies, variable rate management, fruit quality, and economics.

#### **Primary Topics of the Symposium**

- Horticulture: Grapevine Physiology and Mechanized Production
- Engineering: Mechanized Tools for Vineyard Operations
- Sensing Technology: Spatial Vineyard Measurement
- Variable Rate Management: Zonal Application for Yield and Quality
- Fruit Quality and Economics: Impact of Mechanized Systems

### Sponsors

## E. & J. Gallo Winery

If you would like to sponsor this event, please call Katie at 716-792-2800 ext 201 for more information.

For detailed information and registration for this event, please use the following link: http://events.cals.cornell.edu/ishs

#### LERGP Website Links of Interest:



Check out our new Facebook page!!

Cornell Lake Erie Research & Extension Laboratory Facebook page https://www.facebook.com/pages/Cornell-Lake-Erie-Research-Extension-Laboratory/146971918664867

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.





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

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> THE LAKE ERIE REGIONAL GRAPE PROGRAM at CLEREL 6592 West Main Road Portland, NY 14769 716-792-2800



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