

# LERGP Crop Update June 11, 2015

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



Wednesday, June 17, 2015- Coffee Pot Meeting 10:00am- Tom Tower 759 Lockport Rd. Youngstown NY 14174 3:00pm- Leo Hans 10929 West Perrysburg Rd. Perrysburg NY 14129

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.



The Lake Erie Regional Grape Program



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.

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## 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

## Meet our summer intern:

My name is Nate Watson, and I'm a rising junior at Cornell University, majoring in environmental science and sustainability. This summer I'm interning with the Lake Erie Regional Grape Program to assist in research on IPM targeting Grape Rootworm and the Two Spotted Spider Mite. Throughout the following weeks, I will be visiting local vineyards to sample for rootworm and learn more about the grape industry, as well as working with hop plants at the Research and Extension lab in Portland. This project aligns nicely to my commitment to sustainability and love of the outdoors.

This internship is through Cornell's Cooperative Extension, which has engaged student interns in fulfilling its land grant missions since 2007. While Cornell is sponsoring several internships involving agriculture and invasive species, the Lake Erie region is the only one to utilize IPM research and application. Be proud.



# **Business Management**

Kevin Martin Penn State University, LERGP, Business Management Educator

#### **Post Bloom Spray Cost**

There will be some significant differences in post-bloom spray material costs this year. Many growers with average crop loads should be spending between \$28 and \$35 per acre in materials. Others are going to be able to get by on \$18 per acre in the immediate post-bloom spray.

As in the past three years, excellent powdery mildew materials have come in to fill the hole some growers have seen develop in Abound. Of course, those materials result in significant cost. The narrow mode of action offered by Quintec and Vivando, despite their cost (\$12-\$25 per acre), necessitates tank mixes to cover other diseases. I expect low prices to cause some growers to avoid expensive materials. For some, with frost/freeze-damaged vineyards, it makes a lot of sense. Even if lower quality materials do not provide total control, options exist when crops are very small or missing altogether.

Insect pressure seems to be necessitating additional applications and material costs for a number of growers. With grape rootworm starting to emerge, an immediate post bloom spray application may include an insecticide for some growers. With emergence spotty thus far, there may be some variability in timing. With 2EE labels available, Admire Pro is an inexpensive option. At less than \$1.50 per acre it is a good fit for an immediate post bloom material, if one is required. If you do not see any emergence and timing for GRW is delayed, Admire Pro has its drawbacks. Later sprays may necessitate a material for Grape Berry Moth as well. For the second post bloom spray, depending on timing, many growers will need to switch to a more expensive material that provides berry moth control. A couple of materials will provide control of both pests fairly inexpensively.

For growers with very little crop, as frustrating as that process can be, spray material choices do offer options to save on total cost in the post bloom period. With a high quality pre-bloom program, and an adequate immediate post bloom application, the total cost of all material beyond that immediate post bloom spray could be as low as \$20 per acre.

From the perspective of cost, grape berry moth pressure usually represents the biggest threat to undermining an inexpensive spray program. Extremely high-pressure sites, regardless of crop load, cannot be managed for less than \$50 per acre on the edge. Failure to manage the edge can result in the growth of that edge across an entire block. We have some examples where losses continue to exceed economic thresholds despite \$50 GBM spray programs. Avoiding that type of pressure requires a proactive management strategy, regardless of crop size, in some sites.

# **Cultural Practices**

Luke Haggerty Viticulture Extension Associate Lake Erie Regional Grape Program

#### **Grape Bloom and Fruit Set**

Research aide Kelly Link, declared bloom on check vines at the Fredonia lab and Portland lab on Wednesday June 10<sup>th</sup>. The warm weather and moisture has helped move bloom along ahead of early predictions. However, cooler sites and areas along route 5 are further behind and I would expect to see them going into bloom over the next few days.

Fruit set: Pollen tubes respond to temperature. Florets will fertilize within 12 hours when temperatures are between 77°F and 86°F and 24 hours with temperatures at 68°F and 48 hours with temperatures at 59°F. When temperatures fall below 59°F fertilization will not occur. The forecast is calling for mid-70B and lower 80B for the coming week and should be favorable for fruit set throughout the area.



#### **Causes for poor fruit set:**

- Weather: Cool, wet, and overcast conditions.
- Weather Events: Basically any event that damages the vine or the canopy can result in poor fruit set, for example winter damage, hail, and early fall frosts.
- Vine Nutrition: Healthy vines have the best potential for vine fruitfulness. C:N ratio plays a large role in fruit set (needs to be balanced), and micronutrients boron and zinc are important for early season shoot growth.
- Vine Balance and C:N ratio: Vines with high vigor have high N and a low C:N ratio, small or weak vines tend to have low N and a high C:N ratio; both cases can lead to poor flower development and fruit set.

# Weather

	Lake Erie Gra	pe Region NEWA	Weather Data		
Location	Date	Avg. temp F (June 1-30)	Precip.Past 7 days (in)	Precip. June total	Total Apr GDD
North East Lab, PA	6/10/15	62	1.26	1.29	569
Harborcreek, PA	6/10/15	63	0.88	0.96	600
North East Escarpment	6/10/15	62	0.82	0.92	577
Ripley	6/10/15	63	1.28	1.41	594
Portland Route 5	6/10/15	63	1	1.04	554
Portland CLEREL	6/10/15	NA	NA	NA	538
Portland Escarpment	6/10/15	63	0.75	0.78	582
Dunkirk	6/10/15	62	0.8	0.81	521
Silver Creek	6/10/15	62	1.03	1.06	505
Sheridan	6/10/15	63	NA	NA	591
Versailles	6/10/15	63	NA	NA	592
Appleton	6/10/15	58	1.45	1.61	430
Somerset	6/10/15	60	1.48	1.87	522
Appleton South	6/10/15	59	1.07	1.27	501
Lockport	6/10/15	61	0.42	0.98	509

Note: All Weather data reported as of 6/10/2015. NA=Sensor Malfunction

DATE/YEAR	HIGH	LOW	DAILY PRECIP	GDDs	TOTAL APRIL GDDs	TOTAL JAN GDDs
Week of 5/28/2015	71.7	54.90	0.00	95	412.5	412.5
Week of 6/4/2015	76.6	53.30	0.19	104.5	517	517
Week of 6/11/2015	78.3	57.00	0.11	123.5	640.5	640.5
Average(from 1964)	74.6	55.50	0.09	105.8	450.7	475
June Precip- Wk 1=1.32" WK 2= .78" Total Precip: May = 3.0"						

#### Tim Weigle NYSIPM, LERGP Team Leader

#### **IPM Highlights**

Scouting of 7 vineyard blocks in Chautauqua County shows that Grape Rootworm is just now starting to emerge. Scouting found only 3 adult grape rootworm total for the 7 blocks, so it is too early to start spraying, but the perfect time to start scouting.



FIFRA 2(ee) recommendations are available for Admire Pro, Danitol 2.4 EC, Leverage 360 and Sniper for use against grape rootworm.

The FIFRA 2(ee) recommendation allows the use of a product against a pest that is not currently on its label. The FIFRA 2(ee) must be in the possession of the user at the time of application. The FIFRA 2(ee) recommendations can be found on our web site at: <u>http://lergp.cce.cornell.edu/submission.</u> php?id=87&crumb=ipm\_ipm

We had some interesting conversation at our Coffee Pot meetings yesterday and the take home messages were;

- The keys to a good disease management program are to select the correct materials, apply them at the correct timing and apply them in a manner which ensures the proper coverage.
- Rotate active ingredients against a pest throughout the season, and between seasons, for resistance management. This is true whether it is a disease, insect or weed.
- Growers who use the newer materials in their spray programs appear to have less pest problems at the end of the year.
- According to research by Wayne Wilcox, late season fungicide applications for powdery mildew are only necessary in Concord vineyards in an over crop situation. While your neighbor's leaves may look cleaner later in the season, the extra fungicide application may not be cost effective.
- It's a double edged sword. Crop estimation will be very important this year and even more so in vineyards where minimal pruning after the winter freeze was followed up by higher than expected bud survivability. Don't get caught wishing you had applied another powdery mildew spray when you find that a vineyard is in an over crop situation, is having a hard time making minimum Brix standards and we do not get the benefit of a warm sunny fall or a long harvest season.
- If you have a problem with grape berry moth, there is no best timing for a single insecticide application against them. An insecticide at 810 DD (using the GBM model) will not hold to keep late season damage from occurring and waiting until 1620 DD is too late to get good coverage against a higher GBM population. Bottom line: implement the model on NEWA (<u>http://newa.cornell.edu</u>) for GBM management, using the wild grape bloom from your area, to time scouting and insecticide applications against grape berry moth.
- Using a wild bloom date of May 25 (an average for most of the lower grape belt) the GBM model on NEWA shows we have accumulated in the mid 300 DD since wild grape bloom, well below the 810 DD where the first sprays are called for.
- Keep checking the GBM model on NEWA to assist in determining the best time to scout low risk vineyards.



# 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

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#### June 26 - 27, 2015

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## **Registration Form**

Farm/Business Name			
Name of Attendee (s) _			
_			
Street			
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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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



College of Agricultural Sciences