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.**
2015 Coffee Pot Meeting Schedule

May 6-  10:00am-Dan Sprague- 12435 Versailles Rd.  Irving NY 14081
May 13-  10:00am- Phillip Bairdeme- 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.
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.
Grape Bloom and Fruit Set

Research aide Kelly Link, declared bloom on check vines at the Fredonia lab and Portland lab on Wednesday June 10th. 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-70s and lower 80s 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.
Lake Erie Grape Region NEWA Weather Data

<table>
<thead>
<tr>
<th>Location</th>
<th>Date</th>
<th>Avg. temp F (June 1-30)</th>
<th>Precip. Past 7 days (in)</th>
<th>Precip. June total</th>
<th>Total Apr GDD</th>
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<tbody>
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<td>62</td>
<td>1.26</td>
<td>1.29</td>
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Note: All Weather data reported as of 6/10/2015. NA=Sensor Malfunction

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<th>DATE/YEAR</th>
<th>HIGH</th>
<th>LOW</th>
<th>DAILY PRECIP</th>
<th>GDDs</th>
<th>TOTAL APRIL GDDs</th>
<th>TOTAL JAN GDDs</th>
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<td>123.5</td>
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<td>Average (from 1964)</td>
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<td>0.09</td>
<td>105.8</td>
<td>450.7</td>
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June Precip- Wk 1=1.32" WK 2= .78"
Total Precip: May = 3.0"
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: http://lergp.cce.cornell.edu/submission.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 (http://newa.cornell.edu) 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

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

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
# 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

<table>
<thead>
<tr>
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<td>Email                                    Phone</td>
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Friday registration - $75 X number attending  

\[
\text{Number of Attendees} \times 75 = \total \text{Amount}
\]

Saturday registration - $75 X number attending  

\[
\text{Number of Attendees} \times 75 = \total \text{Amount}
\]

Friday and Saturday registration - $125 X number attending  

\[
\text{Number of Attendees} \times 125 = \total \text{Amount}
\]

Beer and BBQ Dinner on Friday June 26 - $50 number attending  

\[
\text{Number of Attendees} \times 50 = \total \text{Amount}
\]

**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](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

“II International Workshop on Vineyard Mechanization and Grape and Wine Quality”

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

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 II International Workshop on Vineyard Mechanization and Grape and Wine Quality will be held from Sunday, July 26 to Wednesday, July 29th 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

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:

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:
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. 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