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

Wednesday, June 10, 2015 - Coffee Pot Meeting
10:00am - Peter Loretto, 10854 Versailles Plank Rd. North Collins NY 14111
3:00pm - Dave Nichols, 1906 Ridge Rd. Lewsition NY 14092

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 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-Szklenkski Farms- 8601 Slade Rd. Harborcreek PA 16421

July 22-   10:00am- Paul Bencal-2645 Albright Rd. Ransomville NY 14131
The American Society for Enology and Viticulture-Eastern Section (ASEV-ES) is proud to announce Dr. Wayne Wilcox as the 2015 recipient of the ASEV-ES Outstanding Achievement Award.

Disease management is a critical component of viticulture east of the Rockies, and over his career Dr. Wilcox has delivered science-based guidelines that have allowed growers across the region to manage diseases more efficiently and sustainably. His in-depth knowledge of the biology of fungal pathogens has been key to improving the timing of management interventions over the course of the growing season.

A northern California native, Dr. Wilcox received his B.S. in Horticulture and M.S. and Ph.D. degrees in Plant Pathology, all from the University of California at Davis. Since 1984, he has been a professor at Cornell's New York State Agricultural Experiment Station in Geneva (Finger Lakes region), where he has led the grape pathology program for the past 21 years.

His programmatic focus is on the applied biology and practical, integrated management of the major fungal diseases of grapes, utilizing both viticultural and fungicidal tools. He has published nearly 100 research articles in scientific journals, in addition to numerous technical reports and popular articles in grower newsletters and trade magazines, and is the senior editor of the forthcoming 2nd Edition of the Compendium of Grape Diseases, Disorders, and Pests, an international publication of the American Phytopathological Society. He is also a co-author of the New York/Pennsylvania Pest Management Guidelines for Grapes, and his yearly "Grape Disease Control" newsletter provides grape growers throughout eastern North America with current, practical guidance for the growing season. He also organized and co-teaches a course in Grape Pest Management, in support of Cornell's undergraduate major in viticulture and enology. His extension activities have focused on educational programs for grape growers, vineyard managers, winery owners, and private and public sector agricultural advisers on the identification, biology, and management of infectious diseases. Dr. Wilcox’s research program is integrated with his extension program, providing data for educational programs and opportunities to demonstrate specific concepts in the field.

His work is valued by the grape industry and colleagues alike for its impact, as demonstrated by his ASEV Best Viticulture Paper Award in 2012 for research that correlated powdery mildew severity with canopy density. In 2015, he received the award again for seminal work on the persistence of sulfur spray residues during ripening and wine making. In 2013, he received the Australian Journal of Grape and Wine Research Best Viticulture Paper Award for the optimization of a new technique to detect pathogens on grape berries before disease symptoms are visible.

Dr. Wilcox will receive his award at the 40th Annual ASEV-ES Conference in Dunkirk, NY July 23-25, 2015, where he will give a presentation on "Mold & Mildews, Spots & Rots: Grape Pathology in the East". For more information about the conference, visit http://www.asev-es.org/.
Nitrogen Requirements & Costs Explained

Hate math? Check out the Nitrogen Worksheet on our webpage: http://lergp.cce.cornell.edu/submission.php?id=89&crumb=business%20management|business_management

It is Nitrogen season and just as a reminder LERGP developed a Nitrogen worksheet a number of years ago. While, there is a small amount of variance based on conditions the assumptions in the nitrogen worksheet will give you a fairly accurate estimate of nitrogen requirements for vines that did not suffer significant winter injury. Nitrogen applications should be avoided where vines sustained significant winter injury. For the rest of the acreage, one simply needs to fill out the worksheet.

Soil organic matter can provide much of the nitrogen required by the vine. Uptake of available N through organic matter is slow and steady. Organic matter can provide as much as 95% - 100% of the N required by the vine. Each percentage of organic matter represents 20 pounds of N per acre. Conords require 50 pounds of actual N per year. Theoretically, just 2.5% organic matter represents 50 pounds per acre. However, Concord nitrogen needs are not always slow and steady. To help satisfy sporadic needs, organic matter should be between 3% and 5%.

Needs intensify around bloom. With 4% - 6% organic matter, along with healthy balanced soils, often no nitrogen application is necessary. Without an accurate picture of overall soil health, a small maintenance dose around bloom is recommended. The worksheet shows this recommendation.

To determine the amount of fertilizer, it is necessary to determine the percent of actual N in the fertilizer. Urea is the most commonly used fertilizer; it contains 46% nitrogen.

Uptake efficiency is a critical way to control nitrogen application costs. Ineffective timing of nitrogen applications results in nearly a doubling in cost. Overall uptake efficiency is rather inefficient. Building up organic matter is a much more efficient method of supplying the vine with the majority of nitrogen needs. Uptake efficiency peaks around 17% of applied N. Early spring applications, depending on weather conditions, can drop below 10%.

Fertilizer costs vary between type. Currently urea prices are a bit out of wack, when compared to their long-term averages. Despite recent increases in Urea prices, it still remains the most cost-effective method of nitrogen application. Additives and blends typically add costs that are not justified by the potential cost savings that may or may not result. Broadcast applications of fertilizer typically cost large growers less than $7 per acre. Multiple applications of different fertilizer types can be more cost effective than blending.
<table>
<thead>
<tr>
<th>Sample (1)</th>
<th>Sample (2)</th>
<th>Sample (3)</th>
<th>Your Vineyard Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.95%</td>
<td>1.47%</td>
<td>1.34%</td>
<td>Units</td>
</tr>
<tr>
<td>1.90%</td>
<td>1.80%</td>
<td>1.00%</td>
<td>OM</td>
</tr>
<tr>
<td>20.0</td>
<td>20.0</td>
<td>20.0</td>
<td>Pounds of N / % soil OM</td>
</tr>
<tr>
<td>7.6</td>
<td>7.6</td>
<td></td>
<td>uptake efficiency of N: % uptake at budbreak</td>
</tr>
<tr>
<td>65.2</td>
<td>65.3</td>
<td>45</td>
<td>Pounds of fertilizer per acre (line 7 / line 8)</td>
</tr>
<tr>
<td>46%</td>
<td>34%</td>
<td>46%</td>
<td>% N content of supplemental fertilizer</td>
</tr>
<tr>
<td>0.0</td>
<td>30.0</td>
<td>12.5</td>
<td>lbs N/acre required from supplemental fertilizers (line 4 - line 3)</td>
</tr>
<tr>
<td>50.0</td>
<td>50.0</td>
<td>50.0</td>
<td>Equivalent lbs N/acre required by Concord (line 5 / line 6)</td>
</tr>
<tr>
<td>20.0</td>
<td>20.0</td>
<td>20.0</td>
<td>Pounds of fertilizer per acre (line 7 / line 8)</td>
</tr>
<tr>
<td>1.00%</td>
<td>1.00%</td>
<td>1.00%</td>
<td>Soil Organic Matter (OM): Values can be obtained from soil test reports</td>
</tr>
</tbody>
</table>
Bloom Prediction Update

Cool weather this past week has slowed vine progression and pushed off some of the bloom predictions mentioned in last week’s crop update. To clarify, here at CLEREL, we declare bloom when 50% of the grape florets have popped their caps and the long term average for bloom at CLEREL is June 14th. With the forecast calling for mid-70’s this coming week (June 4-11) growth should pick up and move things along.

The cool weather delayed bloom and defiantly threw off using bio-indicators like locust bloom to predict bloom. Locust bloom occurred on or around Memorial Day (May 25). Ten days from May 25 would put bloom on June 5th (tomorrow) and it is obvious that will not happen. The 35 year average for April GDD has bloom occurring on 584 GDD +/- 32. As of today (June 4th) we have accrued ~450 GDD at CLEREL. If the weather stays relatively nice we can expect to accrue ~15-20 GDD a day, and at that rate we would expect bloom to occur June 10th or 11th. Dr. Bates uses Lake Erie heat units to make long term predictions and that model shows bloom to occurring on June 15th.

I have heard many reports of trace bloom on suckers in early sites. Meaning we are getting close to seeing trace bloom in the canopy. Immediate pre-bloom sprays should be applied as soon as possible if they are not on already.
<table>
<thead>
<tr>
<th>Location</th>
<th>Date</th>
<th>Avg. temp F (May 1-30)</th>
<th>Precip. Past 7 days (in)</th>
<th>Precip. May total</th>
<th>Total Apr GDD</th>
</tr>
</thead>
<tbody>
<tr>
<td>North East Lab, PA</td>
<td>6/3/15</td>
<td>62</td>
<td>3.08</td>
<td>5.27</td>
<td>465</td>
</tr>
<tr>
<td>Harborcreek, PA</td>
<td>6/3/15</td>
<td>63</td>
<td>2.34</td>
<td>4.31</td>
<td>486</td>
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<tr>
<td>North East Escarpment</td>
<td>6/3/15</td>
<td>62</td>
<td>3.03</td>
<td>5.18</td>
<td>468</td>
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<tr>
<td>Ripley</td>
<td>6/3/15</td>
<td>63</td>
<td>2.69</td>
<td>4.11</td>
<td>481</td>
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<tr>
<td>Portland Route 5</td>
<td>6/3/15</td>
<td>62</td>
<td>2.4</td>
<td>4.28</td>
<td>443</td>
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<tr>
<td>Portland CLEREL</td>
<td>6/3/15</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
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<td>Portland Escarpment</td>
<td>6/3/15</td>
<td>62</td>
<td>2.05</td>
<td>3.10</td>
<td>472</td>
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<tr>
<td>Dunkirk</td>
<td>6/3/15</td>
<td>61</td>
<td>2.19</td>
<td>3.61</td>
<td>416</td>
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<tr>
<td>Silver Creek</td>
<td>6/3/15</td>
<td>61</td>
<td>2.51</td>
<td>3.96</td>
<td>402</td>
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<tr>
<td>Sheridan</td>
<td>6/3/15</td>
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<td>NA</td>
<td>NA</td>
<td>484</td>
</tr>
<tr>
<td>Versailles</td>
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<td>2.51</td>
<td>NA</td>
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<td>Appleton</td>
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<td>1.46</td>
<td>2.27</td>
<td>353</td>
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<tr>
<td>Somerset</td>
<td>6/3/15</td>
<td>62</td>
<td>1.59</td>
<td>2.56</td>
<td>427</td>
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<tr>
<td>Appleton South</td>
<td>6/3/15</td>
<td>61</td>
<td>1.94</td>
<td>2.68</td>
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<td>Lockport</td>
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<td>62</td>
<td>0.81</td>
<td>0.74</td>
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</tr>
</tbody>
</table>

Note: All weather data reported as of 6/3/2015. NA=Sensor Malfunction

<table>
<thead>
<tr>
<th>DATE/YEAR</th>
<th>HIGH</th>
<th>LOW</th>
<th>DAILY PRECIP</th>
<th>GDDs</th>
<th>TOTAL GDDs</th>
<th>APRIL GDDs</th>
<th>TOTAL JAN GDDs</th>
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<tr>
<td>Week of 5/21/2015</td>
<td>68.7</td>
<td>52.30</td>
<td>0.04</td>
<td>77.5</td>
<td>281.8</td>
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<tr>
<td>Week of 5/28/2015</td>
<td>71.7</td>
<td>54.90</td>
<td>0.00</td>
<td>95</td>
<td>412.5</td>
<td>412.5</td>
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<tr>
<td>Week of 6/4/2015</td>
<td>76.6</td>
<td>53.30</td>
<td>0.19</td>
<td>104.5</td>
<td>517</td>
<td>517</td>
<td></td>
</tr>
<tr>
<td>Average(from 1964)</td>
<td>72.1</td>
<td>53.10</td>
<td>0.14</td>
<td>89.3</td>
<td>357.5</td>
<td>382.5</td>
<td></td>
</tr>
</tbody>
</table>

June Precip- Wk 1=1.32"
Total Precip: May = 3.0"
IPM Update

Grape Rootworm – scouting of vineyards across the belt found no grape rootworm adults this past week. But we expect to see them start their emergence soon.

Rose chafer – reports at the Coffee Pot meeting at the North East Lab were negative for major infestations of rose chafer although there was some talk about low numbers being reported in vineyards around North East.

Banded grape bug – as we move closer to bloom we should see the change over from nymph (the damaging stage) to adult (predaceous on other insects, so the good stage). If you have areas where BGB has been a problem in the past and you have not scouted it yet, it may be to your benefit to give it a look. The threshold for BGB is very low at 1 nymph per 10 shoots.

Grape berry moth – Jody Timer at the North East Lab has reported finding 2 – 3 times as many males in pheromone traps this spring compared to the past couple of years. What does this mean? It means that, despite our extreme winter lows, GBM appears to have overwintered very well. So if you had problem areas last year, make sure you continue to monitor and spray these areas when necessary using the GBM model on NEWA (http://newa.cornell.edu) What it does not mean is that you need to add insecticide to the immediate pre-bloom or post-bloom spray. According to Jody at yesterday’s Coffee Pot meeting, if you are targeting the overwintering generation (the one indicated by early pheromone trap catches) you should have timed your insecticides for the wild grape bloom. And research has shown the immediate post-bloom application to have very little, if any, effect on the amount of grape berry moth damage at harvest.

Diseases – While most vineyards look very clean at the moment, the grape disease models on NEWA shows the area had significant infection periods for Phomopsis, black rot, downy mildew and powdery mildew over the weekend (May 29 – June 1). Even with the cooler temperatures experienced over this timeframe, the 43 – 48 hours of continual leaf wetness we experienced were more than enough to provide conditions for significant infections to occur.

Weeds – hopefully most vineyards have had a good pre-emergent herbicide program applied, especially in vineyards with trunk damage where suckers need to be saved. I have had many questions on what to use in these vineyards to kill the weeds but save the suckers. The best answer I have is to get the suckers tied up and use a shielded sprayer to limit herbicide contact with the sucker. Hitting the bottom foot or so of the sucker with a post-emergent herbicide can damage it enough that it will no longer be useful as a replacement for injured trunks.
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 produc-
tion

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

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 registration - $125 X number attending = 

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

“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=ipmjpm

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.
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Luke Haggerty, (llh85@cornell.edu) Grape Cultural Practices, 716.792.2800 ext. 204

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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.

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6592 West Main Road
Portland, NY 14769
716-792-2800