Important dates:

July 13, 2016- Coffee Pot Meeting
10:00am- Beckman Bros. 2386 Avis Drive Harborcreek PA 16421
every Wednesday following: Coffee Pot meetings- see enclosed schedule

August 2, 2016- Wine Quality Workshop (rescheduled from April 13, 2016) at CLEREL
August 11, 2016 Craft Beverage Summit at CLEREL- more information to come soon.
August 31, 2016- Cornell Vegetable Program Field Day at CLEREL
September 1, 2016- Cover Crop Conference at CLEREL
Cover Crop Workshop and Field Day

September 1, 2016 @ CLEREL
9:00am-4:00pm
6592 West Main Rd.
Portland, NY 14769

Join the Lake Erie Regional Grape Program for a full day of education surrounding cover crops in Concord vineyards.

- Current research
- Leading scientists in cover crop research
- Tour demonstration plots
- Hear local growers sharing their experience

Fee: $10; includes morning refreshments and lunch

Register by August 25, 2016 at the LERGP web-site Registration or call Kate at 716-792-2800, e-mail: kjr45@cornell.edu
2016
LERGP Coffee Pot Schedule

May 4- 10:00am Betts 7365 East Route 20, Westfield NY 14787
May 11-10:00am Ann & Martin Schulze-2030 Old Commer Rd. Burt NY 14028
May 18-10:00am John Mason 8603 W Lake Rd. Lake City PA 16423
May 25-10:00am Dan Sprague- 12435 Versailles Plank Rd. Irving NY 14081
3:00pm Peter Loretto-10854 Versailles Plank Rd. North Collins NY 14111
June 1-10:00am Phillip Baideme- 7935 Route 5, Westfield NY 14787
3:00pm Tom Meehl Cloverhill Farm 10401 Sidehill Rd North East PA 16428
June 8-10:00am Earl & Eileen Blakely 183 Versailles Rd. Irving NY 14081
3:00pm- Paul Bencal 2645 Albright Rd Ransomville NY 14131
June 15- 10:00am Leo Hans-10929 West Perrysburg Rd. Perrysburg NY 14129
3:00pm -Evan Schiedel/Roy Orton- 10646 West Main Rd. Ripley NY 14775
June 22-10:00am Archer Pratz 9210 Lake Rd North East PA 16428
3:00pm-Alicia Munch-761 Bradley Rd. Hanover NY 14136
June 29-10:00am Kirk Hutchinson-4720 West Main Rd. Fredonia NY 14063
3:00pm Fred Luke 1755 Cemetery Rd. North East PA 16428
July 6- 10:00am David C. Nichols Farm 1906 Ridge Rd. Lewiston NY 14092
July 13-10:00am Beckman Bros. 2386 Avis Dr. Harborcreek PA 16421
July 20- 10:00am Brant Town Hall- 1294 Brant North Collins Rd. Brant NY 14027
July 27-10:00am Tom Tower 759 Lockport Rd. Youngstown NY 14174
Kevin is on vacation this week.
Crop Estimation

Crop size seems to be variable around the region with some high early estimations. Having an accurate crop estimation can help you make many cultural practice decisions throughout the rest of the season. For most of the ‘Grape Belt’ 30 days after bloom (DAB) will occur next week (July 10<sup>th</sup>-14<sup>th</sup>) making this weekend or early next week a great time to do crop estimations. I’ve received a few questions on crop estimation and wanted to break down the process.

1. **Clean pick** (harvester or by hand) 1/100 of an acre. Length of sampled area is determined by row spacing.

   Length of rope cut to row spacing (Ex. Row spacing at 9” this rope is 48.4”)

2. **Weigh** 1/100 acre sample (Ex. Sampled weighed 68.5 lbs)

3. **Use Dr. Bates: Crop Estimation and Thinning Table** (Ex. Sample weighed 68.5 lbs 30 days after bloom estimation table show 6.85 tons/acre at final berry weight)

Crop estimating at 30 DAB for ‘Concords’ is common for most growers. When the berries are at 50% of the final berry weight (like the example shown above) all you needed to do for final estimation was shift the decimal point over one place. However, the estimation table will work throughout the season. One thing to keep in mind when using the chart is to double check that you are using time of season (DAB) in the shaded area to match up the column below. Growers that have already done their estimations reported some higher than expected numbers.
<table>
<thead>
<tr>
<th>Row Spacing</th>
<th>Time of Season</th>
<th>% of Final Berry Weight</th>
<th>Pounds of Fruit Removed in 1/100th of an Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10.0 feet</td>
<td>10.0</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>9.5 feet</td>
<td>9.5</td>
<td>0.9</td>
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<tr>
<td></td>
<td>9.0 feet</td>
<td>9.0</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>8.5 feet</td>
<td>8.5</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>8.0 feet</td>
<td>8.0</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>7.5 feet</td>
<td>7.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Example:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| A grower has 9 foot row spacing and clean picks 48.4 feet at 25 days after bloom. The fruit weighs 60 pounds and the grower estimates that the berries are between 35% and 40% of final berry weight. According to the table, the crop estimate is between 10.0 and 11.4 tons per acre.
Weather Update

The lack of rain has been a topic in conversation for a few weeks now. Over the past week NOAA has changed most of the region’s ‘Drought Monitor’ status from “Abnormally Dry” to “Moderate Drought” status. Based off of our long term weather information, the region is 6 – 8 inches of precipitation below average.

Once again, we have rain in the forecast, let’s just hope that it hits us this time.

<table>
<thead>
<tr>
<th>Location</th>
<th>Precip. Past 7 days (in)</th>
<th>Precip. June total</th>
<th>Precip. May total</th>
<th>Total March GDD</th>
</tr>
</thead>
<tbody>
<tr>
<td>North East Lab, PA</td>
<td>0.38</td>
<td>1.92</td>
<td>2.13</td>
<td>934</td>
</tr>
<tr>
<td>Harborcreek, PA</td>
<td>0.32</td>
<td>1.74</td>
<td>1.68</td>
<td>975</td>
</tr>
<tr>
<td>North East Escarpment</td>
<td>0.39</td>
<td>2.37</td>
<td>1.52</td>
<td>904</td>
</tr>
<tr>
<td>Ripley</td>
<td>0.27</td>
<td>3.86</td>
<td>1.50</td>
<td>979</td>
</tr>
<tr>
<td>Portland CLEREL</td>
<td>0.08</td>
<td>1.44</td>
<td>1.48</td>
<td>957</td>
</tr>
<tr>
<td>Portland Escarpment</td>
<td>0.08</td>
<td>1.24</td>
<td>1.56</td>
<td>1019</td>
</tr>
<tr>
<td>Dunkirk</td>
<td>0.01</td>
<td>2.16</td>
<td>1.13</td>
<td>884</td>
</tr>
<tr>
<td>Silver Creek</td>
<td>0.06</td>
<td>NA</td>
<td>1.78</td>
<td>904</td>
</tr>
<tr>
<td>Sheridan</td>
<td>0.03</td>
<td>2.23</td>
<td>1.85</td>
<td>961</td>
</tr>
<tr>
<td>Versailles</td>
<td>0.01</td>
<td>1.47</td>
<td>1.72</td>
<td>899</td>
</tr>
<tr>
<td>Appleton North</td>
<td>0.03</td>
<td>1.41</td>
<td>0.71</td>
<td>816</td>
</tr>
<tr>
<td>Somerset</td>
<td>2.01</td>
<td>1.53</td>
<td>0.94</td>
<td>913</td>
</tr>
<tr>
<td>Ransomville</td>
<td>0.03</td>
<td>0.93</td>
<td>0.92</td>
<td>995</td>
</tr>
</tbody>
</table>

Note: All Weather data reported as of 7/7/2016
NA=Sensor Malfunction
The University of Minnesota released its fifth cold-hardy wine grape, named “Itasca.”
The new grape, which will be used to make dry white wines, is the latest in a series of cold-hardy cultivars released by the university that led to the nascent wine industry in Minnesota and other northern climates around the world. Itasca has lower acidity and high sugar levels, said U of M grape breeder Matt Clark, coupled with high resistance to common grape pests such as downy and powdery mildew and the insect phylloxera. It’s shown cold hardiness as far north as the U. S. Department of Agriculture’s Zone 4.
“We believe these traits will make ‘Itasca’ a preferred variety for vineyard managers, because they will be able to reduce their spray inputs, and for wine makers in making a dry-style wine,” said Clark, an assistant professor of horticultural science. Licensed nurseries will begin selling the new cultivar in 2017.
Itasca produces a wine that is light yellow to straw in color and has aromas of pear, quince, violet, melon, minerals, and subtle honey notes. “This is a very nice grape with lots of potential as a wine maker’s grape,” said Bryan Forbes, the university’s wine maker. “It is clean and pleasant with pear and floral notes and mineral notes with a long finish.”
Itasca joins the grapes known as Frontenac, Frontenac Gris, La Crescent and Marquette, all developed by the U of M. The cold-climate grape-growing and winery industry is estimated to have a $401 million economic impact nationwide, a 2014 university study found. Since Frontenac was released in 1996, producers in 12 states have planted an estimated 5,400 acres of cold-hardy grapes, including 3,260 acres of the U of M varieties.
‘Itasca’ was identified in 2009 as an elite seedling and has been known as MN 1285 since 2009; Clark announced the new name at his annual research update for the Minnesota grape industry at the University of Minnesota’s Landscape Arboretum.

Grape Berry Moth – according to the NEWA model most areas are at, or near, the 810 DD needed to time an insecticide application in vineyards at intermediate and high risk for damage from grape berry. The table below shows the GBM model results from NEWA for sites in the Lake Erie region using the estimated date of wild grape bloom (the biofix that is used to start the grape berry moth model.) There appears to be a wider range of wild grape bloom dates across the region than in previous years, especially going from the lakefront towards the escarpment.

To get the best information, it is recommended that you access the grape berry moth model for the station(s) nearest you on the NEWA website http://newa.cornell.edu and take advantage of the model’s ability to let you enter the actual wild grape bloom date in your area, if different from the estimated date.

Accessing the GBM model page on NEWA also provides you with information on the pest status and what pest management measures should be taken as shown in the figure below.

<table>
<thead>
<tr>
<th>NEWA Location</th>
<th>Wild grape bloom date*</th>
<th>DD Total on July 7, 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Versailles</td>
<td>May 30</td>
<td>794</td>
</tr>
<tr>
<td>Dunkirk Airport</td>
<td>June 3</td>
<td>707</td>
</tr>
<tr>
<td>Sheridan</td>
<td>May 31</td>
<td>809</td>
</tr>
<tr>
<td>Silver Creek</td>
<td>June 3</td>
<td>713</td>
</tr>
<tr>
<td>Portland Escarp.</td>
<td>May 31</td>
<td>802</td>
</tr>
<tr>
<td>Portland</td>
<td>June 1</td>
<td>772</td>
</tr>
<tr>
<td>Ripley</td>
<td>May 31</td>
<td>803</td>
</tr>
<tr>
<td>North East Escarp.</td>
<td>June 2</td>
<td>711</td>
</tr>
<tr>
<td>Harborcreek</td>
<td>May 31</td>
<td>802</td>
</tr>
<tr>
<td>North East Lab</td>
<td>June 2</td>
<td>770</td>
</tr>
<tr>
<td>Erie Airport</td>
<td>May 30</td>
<td>883</td>
</tr>
<tr>
<td>Ransomville</td>
<td>June 1</td>
<td>805</td>
</tr>
<tr>
<td>Somerset</td>
<td>June 3</td>
<td>735</td>
</tr>
<tr>
<td>North Appleton</td>
<td>June 10</td>
<td>582</td>
</tr>
</tbody>
</table>

* Estimated date provided by NEWA website
**Grape Rootworm** – scouting conducted on July 6, 2016 in the eight project vineyard blocks found no grape rootworm adults in vineyards that have received an insecticide (after scouting indicated a need for treatment). In one of three vineyard blocks that have not been treated, grape rootworm adults were found but at lower levels than in previous weeks. Interestingly, in the other two blocks which have not received an insecticide, scouting found no grape rootworm as the populations have appeared to crash. We will continue to scout for grape rootworm to determine if there is continued emergence in any of the blocks.

It is not too late to scout for grape rootworm in your vineyards. Traditional timing of scouting was the 4th of July weekend so and you may be on the tail end of emergence by going out now (only continued research will tell us if that is true) but controlling the tail end of the population is better than letting them mate and create extra larva to feed on the roots. We have several materials available for use against grape rootworm. In alphabetical order they are; Admire Pro, Danitol, Leverage 360, Sevin, and Sniper (a generic bifenthrin) If you are growing grapes in New York and want to use Admire Pro, Danitol, Leverage 360 or Sniper for grape rootworm you will need a copy of the FIFRA 2ee recommendation for that use. You can find a copy of these recommendations on the LERGP website under IPM at;

http://lergp.cce.cornell.edu/ipm.php?season=summer

Pennsylvania growers do not have this restriction as they can use any of the above mentioned insecticides as they are labeled for use in grapes.
**Weather**: At our site, June rainfall was down by 40% but growing degree day accumulations were very close to average. We have recorded just 0.38” rainfall so far in July. According to Accuweather, there is potential for rain Friday (strong storms), Saturday (passing shower), and Sunday (passing shower). Storms on Friday may bring hail to some areas.

We are currently about 4-5 weeks out from the beginning of bloom and at the end of the Concord fruit susceptibility period to powdery mildew. Niagara fruit will also be resistant to powdery mildew, but clusters will remain susceptible to downy mildew for probably 2-3 weeks longer (cluster stems remain susceptible to downy for about 2 weeks longer than fruit). The continuation of dry weather has kept diseases like black rot and downy mildew from developing in area vineyards. Fruit are still susceptible to black rot at this point, but most (all?) vineyards are probably free of any significant level of infection for this disease to create any serious problems from here on out. We did record infection periods for black rot, Phomopsis, and downy mildew from rainfall over the past couple of days (see NEWA). If this resulted in any infections, downy mildew will be observable within 5-7 days, black rot will be observable in about 2-3 weeks, and Phomopsis will manifest itself as fruit infections much later during the ripening period. All of these infection periods look to be quite minimal in length.

I am hearing reports of powdery mildew on clusters popping up here and there in ‘hot spots’ across the belt. I think in many of these cases, local environmental factors/site factors are very important. For example, we have a row of Concords at our lab that have not been sprayed for at least as long as I’ve been here (17 years). The site is not near any tree lines and has good air flow. That unsprayed row has less mildew than commercial vineyards that have received well timed sprays of good quality materials, but are in areas where rows border woods and vines become shaded at some point during the day. These sites may require extra care for disease control, even in dry years. And, at this time of year, I consider every day a powdery mildew infection period. What to spray at this point? I personally don’t know of any raging cases of powdery mildew at this time (leaves of most vineyards are still very clean), but if you can find infected clusters without really trying, then I would seriously consider not applying any more materials that are at high risk of the development of resistance (Vivando, Quintec, Sovran/Abound, Torino). There is no formula for making this determination, but basically, the more mildew you currently have, the greater the risk of speeding up resistance development to these materials that have a single site mode of action. Fruit will probably not be developing any more mildew at this point and you are now spraying mainly to protect leaves and keep overwintering inoculum levels of powdery mildew to a minimum. If you are applying one of these high risk materials, then add something else to the tank for powdery like Nutrol (with a surfactant) or a similar material. Other options are stylet oil, copper/lime (not with an insecticide though), and sulfur (only on non-sensitive varieties like Niagara/NOT on Concord), but good coverage is a must for maximum effect.
In the Vineyard (7-7-16) – Andy Muza

**Diseases**

**Powdery mildew** – the increase in the incidence of powdery mildew observed on berries (Figure 1) was evident in blocks checked this week. However, the number of infected clusters at these sites was not enough to cause economic concern. If you are finding a lot of infected berries in your blocks then examine your prebloom and postbloom fungicide application records (e.g., fungicides used, intervals between sprays, every row vs. every other row sprayed) to determine possible reasons for high infection rates. At this point, berries should be immune from additional infections but pedicels, rachises and leaves are susceptible to infections. Additional sprays may be beneficial, especially in blocks with heavy crop loads, so continue to scout for powdery mildew buildup.

**Insects**

**Grape Berry Moth** – the majority of vineyard sites across the region should reach the 810 GBM degree days needed to apply an insecticide treatment in High and Severe Risk sites by this Friday or Saturday (see Tim Weigle’s Crop Update article). However, check the GBM Degree Day Model in NEWA [http://newa.cornell.edu/index.php?page=berry-moth](http://newa.cornell.edu/index.php?page=berry-moth) to more accurately determine when an insecticide application should be applied in your High and Severe risk blocks.

If you are using insecticides that need to be ingested, such as Intrepid (PA only) or Altacor, then these materials should be applied as close to 810 DD as possible. According to Greg Loeb’s article in (LERGP Vineyard Notes, May 18, 2016) insecticides that work mainly through contact (e.g., Brigade/Sniper, Baythroid, Mustang Max) should be applied between 810 – 850 DD.

Do not neglect scouting low and intermediate risk sites to determine if these areas may also need an insecticide application (Figure 2). The GBM model advises that if these sites have more than 6% damaged clusters then an insecticide should be applied.

**Figure 1. Powdery mildew on Concord berries**

**Figure 2. Red discoloration of Concord berry caused by GBM larval feeding**
Japanese beetle – this week population levels started to increase in vineyards and some leaf injury (Figure 3) was observed. Mature Concord vineyards do not routinely require insecticide applications for this pest and levels so far are still below the point of concern. However, scout for further buildup in population levels, especially young vineyards and wine blocks, to determine if treatment is needed as the season progresses.

Grape Leafhopper – leafhopper feeding on leaves (Figure 4) was evident at one site checked and nymphs were observed on the undersides of leaves. This may be a season where GLH flareups are more prevalent so monitor blocks for increases in population levels.

Figure 3. Japanese beetle feeding injury on Concord leaf

Figure 4. White stippling on Concord leaf caused by grape leafhopper feeding
2016 eNEWA Grape Project Subscription Sign-Up

Subscriber information

Name______________________________________________________________________

Email address _________________________________________________________________

City______________________________________________________________________

Select Location(s) (circle as many as you like, or write in below)

<table>
<thead>
<tr>
<th>Lake Erie Region</th>
<th>Sheridan</th>
<th>Finger Lakes Region</th>
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<td>Silver Creek</td>
<td>Lodi (Shalestone)</td>
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<td>Appleton, South</td>
<td>Versailles</td>
<td>Lodi (Standing Stone)</td>
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<td>Erie</td>
<td>Aurora</td>
<td>Lodi (Standing Stone)</td>
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<td>Harborcreek</td>
<td>Branchport</td>
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<td>North East Escarpment</td>
<td>Dresden (FLGP/FLCC)</td>
<td>Romulus (B. wood Grove)</td>
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<td>Dundee (Weimer)</td>
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<td>Fayette 3 Brothers</td>
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<td>Watkins Glen (Lakewood)</td>
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<tr>
<td>Ripley</td>
<td>Interlaken (Airy Acres)</td>
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</table>

Select eNEWA Delivery Times (write in times below) Delivery requests should be on the hour.

Mail to:  Tim Weigle, CLEREL, 6592 West Main Road, Portland, NY or scan and email to thw4@cornell.edu
Winery Quality Control Workshop
Stabilize your wine – Filtration, Sulfur Dioxide and Potassium Sorbate

Registration: 8:30am; Program- 9:00am-4:00pm
Cost:$50.00 per person(includes morning coffee and lunch)
Where: CLEREL, 6592 West Main Rd. Portland NY 14769
716-792-2800 ext-201

Denise Gardner, Enology Extension Associate, Penn State University
Chris Gerling, Enology Extension Associate, Cornell University
Anna Katharine Mansfield, Associate Professor of Enology, Cornell University

Sulfur dioxide
- pH and SO₂ relationship
- the breakdown of SO₂
- how to add SO₂ to wine

Potassium sorbate
-what is potassium sorbate?
-why is it used in wine?
-the pros/cons of sorbate

Filtration
-explanation of filtration and its uses
-the difference between nominal and absolute
-how to ensure your filtration unit is working
-bottle sterility tests.

Please Register by July 22, 2016

Name of Winery represented: ____________________________________________
Phone: ______________________
Email: ____________________________________________________________
Name(s) of attendees: 1)______________________ 2)______________________ 3)______________________
4)______________________ 5)______________________ 6)______________________
Total cost @ $50.00/person x ___person/people = $ ___________

Please make checks payable to LERGP and mail to:
LERGP, 6592 West Main Rd. Portland NY 14769, ATTN: KATE
Contact Kate at kjr45@cornell.edu or 716-792-2800 ext 201 for more information.

***You may also register on-line at http://lergp.cce.cornell.edu/. You can register up to 3 participants and pay with a credit card.
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=ipmljpm

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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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.

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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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Portland, NY 14769
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