Electronic Crop Update for June 13, 2013

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Please visit our LERGP Website at: http://lergp.cce.cornell.edu/ for a detailed calendar. Please remember to RSVP for those events that require one! UPCOMING EVENTS are also listed toward the bottom of this Update.

Please remember to let us know if you have changed or are in the process of changing your email address so we can keep the Electronic Crop Update coming to your inbox! Please email Edith at: emb35@cornell.edu.

BUSINESS MANAGEMENT: Kevin Martin

NDVI Sensors in Commercial Vineyards

Please contact LERGP if you’re interested in having NDVI sensors pass through your vineyard. Long-term benefits include more accurate crop load management. You can let us know you’re interested by phone or web.

Please click here to go to the REGISTRATION PAGE. Or please call: 716-792-2800 x205.

We’ll begin entering commercial vineyards approximately 30 days post-bloom. We are able to gather data up until mid-August. While we will continue to work in research vineyards, given the bloom date, we would like to be in your vineyards between July 8th and August 20th.

A significant number of vineyards also have an average vine size below 2.5. Without sub-block data or oversized vines it becomes very difficult to increase vine size above 2.5lbs without managing data within blocks.

We would like to hear from you. With your input, this project has the potential to improve your bottom line substantially. Just how substantial an improvement can we see?

Growers that have their vineyard mapped and follow-up with pruning weight samples during the dormant season will be able to quantify the extent these factors play in their potential yield. While successfully identifying undersized vines and finding a solution to increase vine size, dividends are worth the challenge. Increasing 30% of vines within an acre from 1.8lbs to 3lbs increases potential yields by more than one ton per acre. In addition, these 3lb vines are more resilient. Years that result in stress can reduce pruning weight but larger vines will not lose significant yield potential until weights drop below 2.75lbs.
WEATHER DATA: Edith Byrne

<table>
<thead>
<tr>
<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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<tbody>
<tr>
<td>Week 5/30/13</td>
<td>84</td>
<td>69</td>
<td>0.03</td>
<td>26.5</td>
<td>411.5</td>
<td>488.5</td>
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<tr>
<td>Week 6/5/13</td>
<td>69</td>
<td>47</td>
<td>0.00</td>
<td>8</td>
<td>491.5</td>
<td>568.5</td>
</tr>
<tr>
<td>Week 6/12/13</td>
<td>74</td>
<td>59</td>
<td>0.38</td>
<td>16.5</td>
<td>572</td>
<td>649</td>
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<tr>
<td>Week 6/12/12</td>
<td>76</td>
<td>62</td>
<td>0.06</td>
<td>19</td>
<td>612.5</td>
<td>743</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td>77.1</td>
<td>57.6</td>
<td>0.18</td>
<td>17.35</td>
<td>529.69</td>
<td>555.64</td>
</tr>
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GDDs accumulated June 2013 = 133.50
GDDs accumulated May 2013 = 260.5
Average GDDs accumulated through June12 = 176.71

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average High June</td>
<td>67.67 (last week 68.80)</td>
<td>71.08 (last week 64.60)</td>
</tr>
<tr>
<td>Average Low June</td>
<td>54.58 (last week 52.40)</td>
<td>56.00 (last week 51.80)</td>
</tr>
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</table>

This year compared to AVERAGE: JAN. GDD: Ahead 5.38 / APR. GDD: Ahead 2.44
This year compared to 2012: JAN. GDD: BEHIND 5.41 / APR. GDD: BEHIND 2.33
JUNE Rainfall accumulation = 3.59”
APRIL Rainfall accumulation = 3.44”
MAY Rainfall accumulation = 4.14”
Rainfall accumulation 1/1/13 through 6/12/13 = 16.88”

FROM NORTH EAST, PA: Bryan Hed

**Weather:** Here at the North East PA lab, we have accumulated 132 growing degree days during the first 12 days of June. Our gdd total since April 1 equals 571. Rain is predicted throughout today (June 13) and, according to Skybit, will result in a leaf wetness period of 34 hours that will stretch well into June 14. Saturday looks much better with moderate temperatures and sunshine. Prolonged leaf wetness and cloudiness could spell out severe conditions for disease development at the most critical time for fruit protection; again, don’t cut any corners.

**Phenology:** Trace bloom (first flowers opening) in Concord grape occurred on June 9 here by the lake, two days earlier than our 14 year average, but as always, a few days behind vineyards farther inland. Cooler than predicted temperatures has stalled the bloom process here and through the raindrops we currently appear to be at about 20-50% bloom.

**Diseases:** We have recorded over 4 inches of rain in June thus far and almost 7 inches of rain over the past two and half weeks. Needless to say, this is off the charts compared to our average. In addition to that, rainfall was recorded on 11 of the past 17 days. Either way you look at it, this is the perfect storm for fungal disease problems to blow out of control; these conditions have generated seven or more infection periods for all the major diseases and our mission NOW is to keep vines protected from...everything. In addition to that, scout your vineyards carefully over the next 3-4 weeks so you can spot disease in its earliest stages and take quick
action to limit the damage. The disease I'm most concerned about now is downy mildew. These are the kinds of conditions when we can see this disease take its toll on Concord. The good news is that this disease was not in abundance last year. But, the lack of downy last year just means that this year’s cycles may be a bit delayed. Considering weather conditions since late May, I can’t think of a better way to jump start a disease like downy mildew. Use your best materials and shoot for best coverage with the shortest intervals you can manage as you dodge the raindrops; fruit of all varieties are super susceptible to disease at the present stage of development. Ziram and mancozeb are great protectants for downy mildew, black rot, and Phomopsis, but they may not be enough when challenged with 3 inches of rain per week! Juice grape growers relying on Ziram post bloom may want to mix in some phos acid product, especially for susceptible varieties like Niagara; a very inexpensive addition to your downy mildew program...at least until we’re through the fruit protection period. In New York, Abound is a great downy material, but for PA growers, don’t rely on Sovran to control downy mildew under these conditions, especially on susceptible varieties. Going the extra mile, especially for wine grapes, there are several excellent relatively new chemistries for downy mildew like Revus, Revus Top (which also contains a great chemistry for powdery mildew and black rot) and Presidio (which must be tank mixed with another chemistry for downy mildew; read the label). All the Strobies and sterol inhibitors will do a bang up job on black rot and are fairly rainfast, but the strobies provide longer protective activity and sterol inhibitors are better post-infection chemistries for black rot. Quintec, Vivando, and Revus Top (not for Concord!) contain excellent materials for powdery mildew and should be very rainfast. Sulfur - while an excellent, inexpensive powdery mildew material for varieties that aren’t sensitive to it - may not last long under these heavy rainfall conditions and shouldn’t be relied on as the sole material for controlling that disease on wine grapes at this time. Remember; of all the stages during the season, this is the most critical time for controlling all diseases!

GRAPE INTEGRATED PEST MANAGEMENT:  Tim Weigle

Tank Mix Incompatibility

When looking at the options for disease management after bloom, Ziram is often among the group of chemicals recommended. I have been surprised by the number of negative comments I have received from growers who have used Ziram in the past as part of a tank mix, and have had problems with it going into suspension in the spray tank. The most often mentioned problem was the creation of thick foam in the tank due to a physical incompatibility of the materials.

During the discussions of these occurrences, I have been reminded that there is a specific order that the various pesticide formulations should be added to the spray tank. Adding materials to the tank in the wrong order, with insufficient water, and/or insufficient agitation can all lead to problems in the spray tank.

To limit problems when tank mixing, fill your spray tank at least a quarter full with water and start agitation prior to the addition of any materials. You should always consult the labels of the pesticides you are using to determine capability issues and to get mixing instructions.

A general rule of thumb for missing materials is;

1) Compatibility or defoaming agents (if needed)
2) Wettable powders (WP)
3) Dry flowable (DF) and Water-dispersible granules (WDG)
4) Flowables (F, FL)
5) Microencapsulated products (ME)
6) Emulsifiable concentrates (EC)
7) Soluble powders (SP) and Solution (S)
8) Crop oils or surfactants (if needed)

It is also helpful to preslurry (hand mixing with a little water in a separate container prior to adding to tank) WP or dry materials that you know have difficulty going into suspension. While this adds a bit more to your fill time it can be well worth it in the long run.

**Pest models on NEWA**

The frequent rainfall and extended wetting periods the belt has experienced recently has given us some severe infection periods for powdery mildew, black rot, downy mildew and Phomopsis. To determine how severe they have been in your area I encourage you to check out the weather station nearest you on the NEWA website [http://newa.cornell.edu/](http://newa.cornell.edu/)

**What to spray**

First I will refer you to the information Bryan Hed included in the Crop Update this week and then I will add a bit about the conversations we had at the Coffee Pot meetings yesterday.

Due to the frequent, heavy, rain events that seem to be staying with us, what to spray has been a common question with many growers worried that the materials they apply are being washed off shortly after application. I would suggest that you look at the use of some of the locally systemic materials available for disease control. Using materials that move into the interior of the leaf will provide protection from much of it being washed off by the next downpour. Look at using a material like Abound or Sovran (if you are in PA or have apple trees nearby).

One caution I would had is that if you have used either of these materials in the past, and felt that you were seeing the powdery mildew control slipping, add a material like Quintec specifically for powdery mildew. Speaking with Kevin Martin and growers who have priced an Abound/Quintec combination, it is within the ball park of other combinations that are being recommended.

Keep in mind that Sovran has the disadvantage of being weak on downy mildew. Given the weather we are experiencing this year Sovran should not be relied on as an option for Niagara and other varieties that are susceptible to downy mildew without the addition of a separate downy mildew material. And, as Bryan mentioned, with the extended infection periods we are experiencing for downy mildew this year, it may not hold up to that pressure in Concord vineyards and less susceptible varieties.
We reached 50% Bloom at both the Portland and Fredonia Farms on Monday afternoon, June 10\textsuperscript{th} (see photograph). The 49 year average for 50% Bloom in the Fredonia Historical Vines (pruned Balanced 30+10) is June 14\textsuperscript{th}. The five year average for 50% Bloom on the Portland farm is June 9\textsuperscript{th}.

My next Phenology Report will be late June/early July when I calculate Percent Berry Set. Remember, the portion of florets that will develop into berries is inversely related to the number of florets per cluster (high floret count = low % Berry Set). The cool, wet, overcast weather we have been experiencing during Bloom will also have a negative effect on Percent Berry Set. Stay tuned for further developments.
Go to [http://lergp.cce.cornell.edu/](http://lergp.cce.cornell.edu/) for a detailed calendar of events. Please remember to RSVP for those events that require one!

**COFFEE POT MEETINGS:** All Coffee Pot Meetings are held on Wednesdays.  
**PLEASE NOTE** - STARTING IN JULY: One Coffee Pot Meeting per week!

1 DEC credit available

Coffee Pot Meetings are free. Come find out what is happening in our local vineyards and talk with the Team. Look for notices in Electronic Crop Updates, Upcoming Events Notices, and on the Website and mark your calendars! We look forward to seeing you at several of our Wednesday meetings this year!

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<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>June 19, 2013</td>
<td>10:00 am - 12:00 pm</td>
<td>Jeff Schultz Farm/Vineyard, 2707 Albright Road, Ransomville, NY 14131</td>
<td>James Taylor, Ph.D.</td>
</tr>
<tr>
<td>June 19, 2013</td>
<td>2:00 pm - 4:00 pm</td>
<td>Mark Martin Farm/Vineyard, 12037 Angell Road, Silver Creek, NY 14136</td>
<td>James Taylor, Ph.D.</td>
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<tr>
<td>June 26, 2013</td>
<td>10:00 am - 12:00 pm</td>
<td>Szklenski Farms Inc., 8601 Slade Road, Harborcreek, PA 16421</td>
<td>Jodi Timer</td>
</tr>
<tr>
<td>June 26, 2013</td>
<td>2:00 pm - 4:00 pm</td>
<td>North Collins Senior Center, 11065 Gowanda State Road, North Collins, NY 14111</td>
<td>Jodi Timer</td>
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The June 26th 2pm meeting is sponsored by: Crop Growers LLP is an independent agency that sells and services only crop insurance, enabling us to specialize on the 28 different crops we insure.

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<th>Location</th>
<th>Speaker</th>
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<tr>
<td>July 3, 2013</td>
<td>10:00 am - 12:00 pm</td>
<td>Earl Blakely Farm/Vineyard, 183 Versailles Road, Irving, NY 14081</td>
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**WINEMAKER’S ROUNDTABLE:** Red Hybrids  
**DATE:** Monday June 17, 2013  
**TIME:** 4:00 – 6:00  
**LOCATION:** South Shore Wine Company, 1120 Freeport Road, North East, PA 16428  
**TOPIC:** Red Hybrids

These are informal meetings designed to provide a venue for sharing information, getting to know each other and increasing our collective knowledge and winemaking skills to raise the quality and visibility of wines from our regions.

Please bring wines that you wish to discuss, whether problem wines or wines with merit. All provide an opportunity for learning! This meeting is open to all commercial winemakers in the region and beyond, so encourage your colleagues to attend. Lake Erie and Niagara regions share commonalities that do not exist between our regions and other regions in NY, PA or OH; exploring these similarities will help us all understand the potential of our own region. Please make the effort to attend as many of the meetings as you can as each of us has something to contribute to the greater good. No RSVP is required, and there is no charge.
PLEASE NOTE: Next Electronic Crop Update will be Thursday June 20, 2013

Lake Erie Regional Grape Program Crop Update is an e-mail newsletter produced by the Lake Erie Regional Grape Program and sent out by subscription only. For subscription information, please call us at 716.792.2800 ext. 201. For any questions or comments on the format of this update please contact Tim Weigle at: thw4@cornell.edu.

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