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Go to http://lergp.cce.cornell.edu/EventsCalendar.htm for a detailed calendar of events including maps via Google calendar! Scroll to the bottom of the page for Google calendar and click on the event. Please remember to RSVP for those events that require one! UPCOMING EVENTS are also listed toward the bottom of this Electronic Update.

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Please email Edith at: emb35@cornell.edu.

WEATHER FACTS: 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 JANUARY GDDS</th>
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</thead>
<tbody>
<tr>
<td>Week 7/26/12</td>
<td>80</td>
<td>70</td>
<td>1.27</td>
<td>25</td>
<td>1596.5</td>
<td>1727</td>
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<tr>
<td>Week 8/1/12</td>
<td>76</td>
<td>66</td>
<td>0</td>
<td>21</td>
<td>1729</td>
<td>1859.5</td>
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<tr>
<td>Last Week 8/8/12</td>
<td>83</td>
<td>66</td>
<td>0</td>
<td>24.5</td>
<td>1892</td>
<td>2022.5</td>
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<tr>
<td>August 14, 2012</td>
<td>77</td>
<td>64</td>
<td>0.35</td>
<td>20.5</td>
<td>2002</td>
<td>2132.5</td>
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<tr>
<td>August 14, 2011</td>
<td>80</td>
<td>65</td>
<td>0.24</td>
<td>22.5</td>
<td>2070</td>
<td>2061.5</td>
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<tr>
<td>August 14, 2010</td>
<td>88</td>
<td>67</td>
<td>0.00</td>
<td>27.5</td>
<td>2141.5</td>
<td>2138</td>
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<tr>
<td>AVERAGE</td>
<td>79.2</td>
<td>61.1</td>
<td>0.13</td>
<td>20.15</td>
<td>1817.08</td>
<td>1835.75</td>
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</table>

This year compared to AVERAGE: JAN. GDD: Ahead 14.73 / APR. GDD: Ahead 9.18
August 2012 Pcp = 2.15" / July 2012 Pcp = 4.46" / 2012 Total Precipitation through 8/1 = 21.44"

PRECIPITATION LAST WEEK: 1.06" / GDDs ACCUMULATED LAST WEEK = 110.0

<table>
<thead>
<tr>
<th>GDDs accumulated August 2012 = 294</th>
<th>GDDs accumulated July 2012 = 725.5</th>
<th>GDDs accumulated June 2012 = 456.5</th>
<th>GDDs accumulated May 2012 = 393</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>2011</td>
<td>2012</td>
<td>2012</td>
</tr>
<tr>
<td>Average High 8/1 – 8/14</td>
<td>77.86</td>
<td>77.50</td>
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<tr>
<td>Average Low 8/1 – 8/14</td>
<td>64.14</td>
<td>65.64</td>
<td></td>
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<tr>
<td>Average High July</td>
<td>81.35</td>
<td>80.97</td>
<td></td>
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<tr>
<td>Average Low July</td>
<td>65.54</td>
<td>66.00</td>
<td></td>
</tr>
<tr>
<td>Average High June</td>
<td>75.23</td>
<td>73.87</td>
<td></td>
</tr>
<tr>
<td>Average Low June</td>
<td>60.27</td>
<td>58.30</td>
<td></td>
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Graph above: Actual 2012 and Average HIGHS July 1 – August 14

Graph above: Actual 2012 and Average LOWS July 1 – August 14
Here is a brief update from North East PA.

**Weather:** We have accumulated 2171 growing degree days (gdds) from March 1 through August 15 (will we break 3,000 gdds this year?). We have recorded about 1.68 inches of rain during August at our location, most of it within the past week. As one would suspect, this has generated infection periods for downy mildew on leaves and some disease development has been observed recently on varieties like Delaware (keep scouting your Niagara acreage, especially along rows bordering woods). The short term Skybit forecast for North East PA (Thursday through Saturday) calls for dry conditions today (Aug 16) with some light rain during the wee morning hours on Friday, followed by cooler temperatures (low to mid70s for the high) over the weekend. The longer term Accuweather forecast calls for generally dry conditions over the next week (with the exception of Friday Aug 17) and slightly below average, but very pleasant, high temperatures in the 70s.

**Phenology and disease:** We have declared veraison on Concord on August 13 (50% of berries showing color), about 69-70 days after 50% bloom. With infection periods for downy mildew over the past week, growers of susceptible varieties, including Niagara, need to keep scouting their vineyards for this disease. As fruit are resistant, our focus should shift to keeping leaves clean, especially where there is potential for a large crop and/or late harvested Niagara. Powdery mildew should only be a concern for wine grape growers at this point (avoid the use of sulfur this late in the season, especially on wine varieties to be harvested within 4 weeks), and juice grape vineyards with large crops.

Tight clustered wine varieties here at the lab (Riesling, Chardonnay, Vignoles, Pinot Noir and Gris) are beginning to develop cluster rots, mainly Botrytis, as berries try to expand and split in overcrowded clusters. It is impossible to penetrate tight clusters at this point and Botrytis sprays at this time are designed to protect clusters from invasion of Botrytis from the outside of the cluster. Hopefully growers of these varieties have already applied a bloom, preclose, and veraison spray and will be applying a pre-harvest spray 2-3 weeks from that last application. Be aware of pre harvest intervals with these materials as they range from 0 days (Elevate) to 14 days (Endura) before harvest. We have a great variety of chemistries to choose from for Botrytis control, and so rotation of materials with different modes of action is a no brainer for managing the development of resistance to these materials; no one chemistry need be applied more than once per season.
Included in this week’s Crop Update are some berry curve graphs of representative varieties for the Lake Erie Region. A quick look at the graph above will give you an idea of where Concord is on the curve at 73 days after bloom (08/14/2012). In general, berries are larger this year – likely a function of the smaller number of berries/cluster – compared to last year and 2010. Average Brix from the CLEREL samples is 10.6, which about the same as last year at the same time.

<table>
<thead>
<tr>
<th>Year</th>
<th>Berry Weight (g)</th>
<th>Berry Diameter (mm)</th>
<th>Brix</th>
</tr>
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<tbody>
<tr>
<td>2010 (73 DAB)</td>
<td>2.3</td>
<td>15.14</td>
<td>9.9</td>
</tr>
<tr>
<td>2011 (73 DAB)</td>
<td>2.3</td>
<td>15.02</td>
<td>10.65</td>
</tr>
<tr>
<td>2012 (73 DAB)</td>
<td>2.68</td>
<td>16.56</td>
<td>10.68</td>
</tr>
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</table>
Noiret and Riesling berries are similar in size as in previous years, possibly because there was less bud damage in the Noiret during the spring freezes, as the buds were not as far along as the Concord. The Riesling blocks used in this study did suffer extensive damage, although berry size does not appear to be affected by the spring freezes.

**Soil and petiole testing.** Should you decide to come to CLEREL to get your vineyard maps from Rhiann, step across the hall to my office, and we’ll get a nutrition management program worked out for your acreage. This would include a soil and petiole testing schedule, as well as nutrient recommendations based on current soil tests.
IN THE VINEYARD: Andy Muza

INSECTS

**Grape Berry Moth** (GBM) – With lower yields expected and an earlier harvest, additional insecticide applications for GBM are a hard sell. However, as mentioned last Crop Update, in a season with high temperatures and high populations of GBM there is a greater overlap of generations (extended egg laying) as the season progresses. This translates into a greater risk of GBM infestations from this point in the season through harvest. Throughout August – early September high risk sites should continue to be scouted (**at least weekly**) to determine if GBM injury levels are increasing. Additional insecticides may be needed at high pressure sites. If you decide to apply additional insecticides then **good coverage is critical**.

The start of egg laying for the fourth generation of GBM (2430 degree days) is **projected** to occur around the first week of September. Continue to check the GBM Degree Day Model at [http://newa.cornell.edu/index.php?page=berry-moth](http://newa.cornell.edu/index.php?page=berry-moth) to determine when the start of egg laying for the fourth generation of GBM will occur at your sites.  

**(Note:** For the most accurate determination of GBM DD calculations for your blocks choose the weather station closest to your vineyard and input the Wild Grape bloom date that you recorded for that site**).

**DISEASES**

**Downy mildew** (DM) – in spite of the extended hot, dry weather this season, DM is starting to appear sporadically in the region. Last week DM was observed on leaves in a Delaware block and this week on leaves of wild grapes. Periodic thunderstorms over the last few weeks have provided the environmental conditions for DM infections and this trend is likely to continue as harvest approaches.

With an early harvest season many growers may ignore late season DM as unimportant. However, severe DM outbreaks can cause premature leaf defoliation. Therefore, varieties with a high susceptibility to DM (e.g., Niagara, Catawba, Delaware, Chancellor, Cabernet sauvignon, etc.) will need to be monitored during the remainder of this season.
Cash Prices Announced

August 15th has come again and the New York cash market has to announce prices. While everybody was guessing that the upward trend in prices would continue, exact numbers were a bit of a mystery. For those with a half of crop or more, these higher prices should allow growers to stomach increasing input costs related to corn. For those with very little crop, one can only hope the upward price trend continues. We are in fact, just a little over 12 months away from another harvest.

Each processor has different incentives and quality requirements that make comparing prices between processors a bit more challenging. Most growers, however, should expect to cross the $300 per ton barrier this year. While announced prices are lower, trucking allowances, brix payments, and spray cost reimbursement will push total price from the larger processors above $300 per ton.

With that news we can update our formulas for harvest costs and in severely damaged blocks it will likely make economic sense to harvest ½ ton per acre.

Looking back at historical production, any of the last three years could have been a bigger year. Higher domestic Concord production anytime between 2009-2011 would not have impacted price. Upward price pressure in the juice market is coming not from consumer demand but from an overall pressure in food related inflation. Corn has become connected to agricultural pricing in general, a pattern that is only somewhat speculative.

With 40% of the corn production being burned in our cars, creating room for other food crops becomes more challenging. Those tighter markets have led to price increases. Rising corn syrup prices make real fruit juices more competitive with drinks. With low cost apple and pear not so low cost anymore, the Concord bulk market has continued to support previously unsustainable prices. Thus far, this has resulted in a period of slowly rising prices in the local Concord market with little to no volatility.

A few economic experts think that the EPA may decide in November to waive the 9% ethanol gas mixture, opting for the old 5% standard. With feed inventories low and the politics of a global food shortage weighing in the politics that created the mandate may also lead to its (temporary) demise. The market then gets a little too complicated for me. Overnight 20% of corn demand will evaporate but markets already know this is a possibility. This change in policy may already be partially priced into current corn prices.

Any decline in corn prices will be good news for nitrogen purchases but, it may impact commodity prices as well.
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PLEASE NOTE: Next Electronic Crop Update will be Thursday, August 23, 2012

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