In the Vineyard

**Hans Walter-Peterson**

Veraison continues to march on in the Finger Lakes. At the Teaching Vineyard, Marquette and Jupiter (a seedless table grape) reached 50% veraison last week, and our other table grape, Marquis, hit that milestone this week. Cayuga White and Lemberger have started to change, and we have seen early signs of it in Pinot noir as well.

While the recent rains have provided some relief from the borderline drought conditions we were in earlier, vineyards on soils with limited water-holding capacity are still showing signs of the effect of that stress. Vines in these areas have lighter colored leaves and clusters have fewer and smaller berries than those that have been able to tap into larger water reserves in the soil.

**IPM**

With the presence of some more rain and more humid air, it is not terribly surprising to see a few more infections of various sorts popping up. At the Teaching Vineyard, we are seeing signs of small infections of botrytis starting to appear in a few Riesling clusters. The dry weather we had after bloom and during fruit set should have helped to keep early infections from getting to widely established, but at this point, it is almost never really surprising to notice a few infections of botrytis just before veraison hits, regardless of the weather earlier in the year.

*Impacts of water stress can be seen in vines on more restrictive soils (left) compared to those access to more water (right). Leaf color, canopy fill, cluster fill and berry size are significantly impacted, even between vines within the same block, as these two are.*
We have also been seeing some powdery mildew infections showing up recently, although as has been mentioned before, berries are resistant to new infections at this point in the season, so these infections happened earlier in the season and are now beginning to appear as conditions have been favorable for their spread.

**Grape Berry Moth**

The GBM model on the NEWA network indicates that most of our vineyard sites are at or approaching 1500 degree days (DD). This is the time to be scouting for GBM damage caused by the previous generation of larvae. If 15% or more of the clusters examined show evidence of berry moth damage, it is recommended that an insecticide application be made beginning when the model reaches 1620 DD. Based on the weather forecasts used in the model, most areas in the
The most visible evidence of pest activity in most vineyards right now is feeding damage from Japanese beetles (JB). After relatively low levels of the insect in 2017, higher numbers have been appearing in vineyards this year. While the damage from Japanese beetles is often mostly cosmetic, sufficient predation of the canopy by the pest can cause problems with vine productivity and health.

Japanese beetles go through only one generation per year, so this year’s population is dependent on how many eggs were laid by females last year, and how many larvae were able to survive underground as they developed before emerging from the soil as adults. The eggs and early larvae are vulnerable to dry soil conditions during the summer, which can reduce the number of larvae that survive and emerge as adults the following year (Pfeiffer and Schultz). This is probably at least part of the reason that we are seeing higher populations this year, and why numbers were so low in 2017 following the previous year’s drought.

Adults emerge from the soil in mid-summer and begin feeding and then mating and egg-laying. The big question, as always, is “How much feeding is too much?” In many cases, the amount of feeding that takes place is inconsequential to the overall health of the vine and its ability to ripen the fruit. The actual impact of feeding on leaves will depend on a few factors, including how much functional leaf area remains, the amount of crop hanging in the vines, and the cultivar.

Rufus Isaacs (Michigan State University) looked at the impact of 30% leaf area loss on non-bearing Niagara vines (see photo) and found that there was little effect on the amount of vine growth and the following year’s crop. Higher value cultivars, however, should probably be considered to have lower thresholds of damage before taking action. Greg Loeb says that 15-20% foliar damage seems to have little to no impact on most vines, but factors like those mentioned above should be considered when deciding whether or not to apply an insecticide for JB. Young vines, of course, are especially vulnerable to damage from JB feeding as they have relatively little leaf area and vine reserves to compensate for any damage that is caused, so action thresholds in new plantings should be even lower.

There are a number of insecticides that can be used for JB control if it is warranted. Most of them have some activity against other insect pests as well, but also are toxic to natural enemies to various extents. Some of the most widely used insecticides that affect JB, including Danitol, Sevin, Brigade and Mustang Max, are toxic to predatory insects in the vineyard as well. Table 4.2.2 in the NY/PA Pest Management Guidelines for Grapes summarizes this information in one place.

Further resources:
The following announcement was sent out to stakeholders of the New York State Agricultural Experiment Station announcing that the station will now be named Cornell AgriTech. You’ll be hearing this name from now on when we refer to “the Experiment Station” (although I’m sure that phrase will slip out of my mouth from time to time), so I wanted to give the industry a heads-up about just what we’re talking about when we refer to Cornell AgriTech moving forward. You can read more about the name change in the announcement below and in an article from the Cornell Chronicle, “Cornell AgriTech reflects influence in food, ag innovation”. - Hans

Today the New York State Agricultural Experiment Station is embarking on an exciting journey under the new name, Cornell AgriTech. Agriculture and food are multi-billion-dollar industries for the New York state economy, underscoring the value of clarifying to our stakeholders our identity, purpose and collaboration potential. Cornell AgriTech’s expertise, research, education and extension efforts contribute to the growth of agriculture and food industries in New York state.

The name Cornell AgriTech solidifies the vital connection we have with Cornell University, the Cornell College of Agriculture and Life Sciences and our purpose driven connection to food and agricultural science. Through our new name, we are committed to furthering over one hundred and thirty years of scientific discovery and innovation that deliver practical solutions for farmers and businesses.

New techniques and new technologies are critical to the advancement of food and agriculture industries and Cornell AgriTech is at the forefront of these innovations. Cornell AgriTech is reimagining the future of food and agriculture systems through interdisciplinary collaborations and by educating the best up-and-coming minds in our fields, so that they can lead the next wave of breakthroughs.

We are propelling our new name and identity to continue growing a healthier population, economy and environment for New York state and the world. I invite you to grow with us.

Sincerely,

Jan P. Nyrop
Associate Dean, College of Agriculture and Life Sciences
Goichman Family Director, Cornell AgriTech
119 Jordan Hall
Upcoming Events

Don’t forget to check out the calendar on our website (http://flgp.cce.cornell.edu/events.php) for more information about these and other events relevant to the Finger Lakes grape industry.

Tailgate Meeting #7
Tuesday, August 7, 2018  4:30 – 6:00 PM
Hobbs-Selbach Vineyard
Lollis Drive, Burdett NY  14818 (click here for a map of the location)

Our seventh Tailgate Meeting of the season will be held at the Hobbs-Selbach Vineyard in Burdett. Pesticide credits have been approved for each Tailgate Meeting this season. No registration required – just bring a chair and your questions and observations about what’s going on in the vineyard.

Tailgate Meeting #8 – Final Tailgate Meeting of 2018!!
Tuesday, August 21, 2018  4:30 – 6:00 PM
Hosmer Winery
7020 Route 89, Ovid NY  14521

Lake Erie Regional Grape Program Summer Growers’ Conference
Wednesday, August 15, 2018  9:00 AM – 3:30 PM
Cornell Lake Erie Research & Extension Laboratory
6952 West Main Road, Portland NY  14769

For information about the conference agenda, registration costs and more, visit https://lergp.cce.cornell.edu/event.php?id=378 or contact Kate Robinson at 716-792-2800 x201 with any questions.
# 2018 GDD & Precipitation

## FLX Teaching & Demonstration Vineyard – Dresden, NY

<table>
<thead>
<tr>
<th>Date</th>
<th>Hi Temp (F)</th>
<th>Lo Temp (F)</th>
<th>Rain (inches)</th>
<th>Daily GDDs</th>
<th>Total GDDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/25/2018</td>
<td>76.1</td>
<td>68.6</td>
<td>0.47</td>
<td>22.4</td>
<td>1558.6</td>
</tr>
<tr>
<td>7/26/2018</td>
<td>88.0</td>
<td>65.3</td>
<td>0.01</td>
<td>26.7</td>
<td>1585.3</td>
</tr>
<tr>
<td>7/27/2018</td>
<td>81.4</td>
<td>66.0</td>
<td>0.04</td>
<td>23.7</td>
<td>1609.0</td>
</tr>
<tr>
<td>7/28/2018</td>
<td>77.5</td>
<td>64.2</td>
<td>0.00</td>
<td>20.9</td>
<td>1629.8</td>
</tr>
<tr>
<td>7/29/2018</td>
<td>80.4</td>
<td>61.1</td>
<td>0.00</td>
<td>20.8</td>
<td>1650.6</td>
</tr>
<tr>
<td>7/30/2018</td>
<td>77.6</td>
<td>60.8</td>
<td>0.72</td>
<td>19.2</td>
<td>1669.8</td>
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<tr>
<td>7/31/2018</td>
<td>80.3</td>
<td>63.8</td>
<td>0.00</td>
<td>22.1</td>
<td>1691.8</td>
</tr>
<tr>
<td>Weekly Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.24”</td>
</tr>
<tr>
<td>Season Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10.97”</td>
</tr>
</tbody>
</table>

GDDs as of July 31, 2017: 1623.7

Rainfall as of July 31, 2017: 18.13”

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**Seasonal Comparisons (at Geneva) as of July 31**

### Growing Degree Day

<table>
<thead>
<tr>
<th>Month</th>
<th>2018 GDD ¹</th>
<th>Long-term Avg GDD ²</th>
<th>Cumulative days ahead (+)/behind (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>8.2</td>
<td>65.4</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>416.3</td>
<td>251.9</td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>472.3</td>
<td>481.1</td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>704.5</td>
<td>640.7</td>
<td></td>
</tr>
<tr>
<td>August</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>September</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>1601.3</td>
<td>1439.1</td>
<td>+8</td>
</tr>
</tbody>
</table>

¹ Accumulated GDDs for each month.

² The long-term average (1973-2017) GDD accumulation as of that date in the month.

³ Numbers at the end of each month represent where this year’s GDD accumulation stands relative to the long-term average. The most recent number represents the current status.
2018 GDD & Precipitation  
(continued from page 10)

Precipitation

<table>
<thead>
<tr>
<th></th>
<th>2018 Rain 4</th>
<th>Long-term Avg Rain 5</th>
<th>Monthly deviation from avg 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>1.92”</td>
<td>2.87”</td>
<td>-0.93”</td>
</tr>
<tr>
<td>May</td>
<td>3.15”</td>
<td>3.13”</td>
<td>+0.02”</td>
</tr>
<tr>
<td>June</td>
<td>2.50”</td>
<td>3.62”</td>
<td>-1.12”</td>
</tr>
<tr>
<td>July</td>
<td>2.98”</td>
<td>3.45”</td>
<td>-0.47”</td>
</tr>
<tr>
<td>August</td>
<td></td>
<td>3.14”</td>
<td></td>
</tr>
<tr>
<td>September</td>
<td></td>
<td>3.57”</td>
<td></td>
</tr>
<tr>
<td>October</td>
<td></td>
<td>3.37”</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>10.55”</td>
<td>23.16”</td>
<td></td>
</tr>
</tbody>
</table>

4 Monthly rainfall totals up to current date  
5 Long-term average rainfall for the month (total)  
6 Monthly deviation from average (calculated at the end of the month)
Additional Information

Become a fan of the Finger Lakes Grape Program on Facebook, or follow us on Twitter (@cceflgp) as well as YouTube. Also check out our website at http://flgp.cce.cornell.edu.

Got some grapes to sell? Looking to buy some equipment or bulk wine? List your ad on the NY Grape & Wine Classifieds website today!

Finger Lakes Grape Program Advisory Committee

Eric Amberg- Grafted Grapevine Nursery  
Bill Dalrymple- Dalrymple Farm  
Matt Doyle- Doyle Vineyard Management  
Eileen Farnan- Barrington Cellars  
Chris Gerling- Cornell University Extension  
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