Finger Lakes Vineyard Update

In the Vineyard

I will be on vacation next week, so we will be skipping next week’s Vineyard Update and the Tailgate Meeting scheduled for Tuesday, August 4. I’ll be back on Monday, August 10. - Hans

Veraison Still Approaching

We’re seeing a few more early varieties starting to show a little color in their berries, but as of Wednesday morning, we still haven’t had anything cross the official ‘veraison’ threshold of 50% of berries changing color. Marquette will probably be there by the end of the week, and I suspect we’ll see a few more in the first part of next week as well.

Rain trending up lately

Ever since early May, the Finger Lakes has been on a consistent trend of drier than normal weather. In both May and June this year, less than 1.5” of rain fell at Geneva, and the early part of July seemed to be continuing that trend as well.

Things have turned around since then, as we’ve actually had more rain that usual over the past few weeks, since about July 10. A big part of that jump up, of course, happened in one day on July 11, when many parts of the region picked up anywhere from 1 – 3+” of rain in just a few hours. Even so, it seems we’ve entered a wetter weather pattern lately, and with the onset of veraison approaching, reducing any potential for water stress that could reduce photosynthesis isn’t the worst thing in the world. Let’s just hope the pendulum isn’t in the process of swinging hard in the other direction and we start getting more frequent rains and high humidity. Nobody wants to see that…

Departure of 2020 rainfall from average at Geneva. Our deficit ‘bottomed out’ on July 10 when we were about 5” below normal, but we have started to trend in the other direction over the past few weeks.
Vine Balance

A couple of years ago, I had stopped at a vineyard on Cayuga Lake and was having a discussion with the managers there about their Sauvignon blanc vines, which were growing out of control. The vines had been planted 6’ apart, and the vines were crowding and shading each other out. Fruit quality wasn’t what they were hoping for and disease pressure was a challenge as well. We discussed a few options of what they could do – converting to a divided canopy system like Scott-Henry, root pruning, or even pulling out every other vine and seeing if the vigor of the remaining vines would result in that trellis space being filled.

I returned to the vineyard on Monday to see what had happened, and the picture below illustrates what I saw. The managers removed every other vine in a couple of rows, and established long canes into cordons. They mentioned that the vines didn’t do so hot last year, but they seem to doing much better now. They are still doing leaf pulling, but as you can see, these vines are perfectly capable of filling 12’ of trellis, and producing a less crowded canopy, allowing for greater leaf exposure and whole vine photosynthesis compared to neighboring vines which were still crowded into 6’ spacing (which I forgot to take a picture of – duh). The same effect would be accomplished by converting the training system to a divided canopy system, which has the same effect as the vine removal – increasing the number of leaves that are intercepting sunlight, rather than being shaded and therefore unproductive.

This example is exactly what we mean when we discuss ‘vine balance’ with growers. Every site and every vine will have a certain capacity for growth based on a bunch of factors, but many of which are endemic to the site itself – soil fertility, depth, texture, water and nutrient holding capacity, etc. That capacity for vine growth is not significantly reduced by planting more vines closer together. By providing more space for the leaves from a single vine to occupy, we improve the overall productivity of the vineyard while still maintaining or even improving fruit quality. I’ll be interested to return to this vineyard around harvest to see how the fruit has matured compared to where the vines are more tightly spaced.
Pest Management

Japanese Beetles

The easiest pest issue to find in vineyards right now is the greater-than-average amount of feeding activity by Japanese beetles this year. While it is often not necessary to spray for them as we usually have ample leaf area to make up for their feeding damage, the damage that they are doing in some blocks has gotten some growers to the point of including an insecticide in one of their recent (or upcoming) sprays.

There are a number materials labeled for control of Japanese beetles in NY. The following table is based on information contained in Tables 4.2.1. and 4.2.2 in the IPM Grape Guidelines, and contains only those materials that are rated as ‘moderately’ or ‘highly’ effective against Japanese beetles in 4.2.1.

<table>
<thead>
<tr>
<th>Product</th>
<th>Efficacy*</th>
<th>IRAC #</th>
<th>Toxicity to beneficial insects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altacore (chlorantraniliprole)</td>
<td>+++</td>
<td>28</td>
<td>Moderate</td>
</tr>
<tr>
<td>Verdepryn (cyclaniliprole)</td>
<td>+++</td>
<td>28</td>
<td>Moderate</td>
</tr>
<tr>
<td>Imidan (phosmet)</td>
<td>+++</td>
<td>1B</td>
<td>Moderate</td>
</tr>
<tr>
<td>Avaunt (indoxacarb)</td>
<td>++</td>
<td>22A</td>
<td>Moderate</td>
</tr>
<tr>
<td>Voliam Flexi (thiamethoxam, chlorantraniliprole)</td>
<td>++</td>
<td>28 + 4A</td>
<td>Moderate</td>
</tr>
<tr>
<td>Assail (acetamiprid)</td>
<td>++</td>
<td>4A</td>
<td>Moderate</td>
</tr>
<tr>
<td>Sevin (carbaryl)</td>
<td>+++</td>
<td>1A</td>
<td>Toxic</td>
</tr>
<tr>
<td>Brigade (bifenthrin)</td>
<td>+++</td>
<td>3A</td>
<td>Toxic</td>
</tr>
<tr>
<td>Baythroid (beta-cyfluthrin)</td>
<td>+++</td>
<td>3A</td>
<td>Toxic</td>
</tr>
<tr>
<td>Danitol (fenpropathrin)</td>
<td>+++</td>
<td>3A</td>
<td>Toxic</td>
</tr>
<tr>
<td>Mustang Maxx</td>
<td>+++</td>
<td>3A</td>
<td>Toxic</td>
</tr>
</tbody>
</table>

* ++ = moderately effective; +++ = highly effective

If possible, consider using one of the materials that has lower impacts on beneficial insects. In a recent report from Cornell scientists on the impacts of neonicotinoids in NY, it was found that acetamiprid (‘Assail’) had a lower risk to pollinating insects (i.e., bees) than a number of other neonicotinoids in certain types of crops.

Downy and Powdery Mildew

Both of these are starting to become a bit more evident in some scattered blocks here and there, but for the most part vineyard that I have seen over the past week have appeared to be pretty clean. We have entered a period where rainfall is becoming a bit more common that it was earlier in the year, so while it may be tempting to stretch spray intervals from here on out, I would only do that if regular scouting trips were scheduled on a relatively frequent basis to keep an eye out for new infections, especially for DM, in case they begin to spread.
GBM Model

In warmer sites in the Finger Lakes, it’s about time to begin scouting for grape berry moth damage. Scouting should begin somewhere in the range of 1470-1600 GDDs for damage to determine if a spray will be needed between 1620 – 1700 GDDs. The suggested threshold for spraying is 15% of scouted clusters, but growers should consider the value of the crop (and buyer’s tolerance for damage) when determining if it’s necessary to spray. Higher value varieties with lower yields may very well want to do an insecticide application at a threshold lower than 15%, for example.

GBM model output for July 29 at the Teaching Vineyard near Dresden.
Visual Symptoms of Phytoplasma diseases

As part of our project that is monitoring for potential invasive species in the region’s vineyards, we are being asked to conduct visual assessments of any vineyard blocks for the following diseases:

- Australian Grapevine Yellows
- Stolbur Disease (a.k.a., ‘bois noir’)
- Flavescence doree

These diseases are caused by organisms called phytoplasmas, which are different from bacteria and viruses, but can cause some similar types of symptoms. I don’t expect anybody to know what the symptoms of these look like in grapes (I had to get reacquainted with them myself), but I am asking that if you notice any symptoms similar to those shown below (there aren’t big differences between them because they are caused by similar organisms), please let me or Ellen Coyne (ec858@cornell.edu) know so that we can come take a look at them for ourselves. Thanks!

**Australian Grapevine Yellows**

Symptoms of the grapevine yellows disease can be observed in leaves, tendrils, and fruiting clusters. Leaves of white grape varieties tend to become yellowed and may have veinal necrosis, as well as downward curling of the leaf margins. Unlike some other grapevine diseases, the grapevine yellows diseases are characterized by shriveling/abortion/necrosis of fruiting clusters.
Pest Management  (continued from page 5)

**Stolbur Disease**

Typical symptoms comprise discoloration of leaves including the veins, often associated with downcurling of the leaf blade, lack of or incomplete lignification of shoots that later turn black, abortion of fruit clusters or shriveling of the ripening fruit.

**Flavescence doree**

In general, symptoms resemble those of other grapevine yellows diseases (“leaf rolling, discoloration of lamina and veins, partial or total lack of reserve accumulation (lignification) with flexuous canes, and decline of a part or the entire vine stock”). Shoots of susceptible cultivars fail to ripen and are thin, rubbery, and hang down. The infected shoots become brittle and many small, black pustules develop along their length; buds may become necrotic. In more resistant cultivars, the nodes of infected shoots ripen but some of the internodes do not.
Coronavirus Producer Action Survey

The coronavirus continues to cause disease, market disruptions, and employment turmoil throughout the country. Farms continue to operate as essential businesses, adopting many new management practices intended to slow or halt the spread of the virus. Cornell Agricultural Workforce Development is conducting a survey to measure the extent farmers have taken actions to prevent the spread of the coronavirus and COVID-19, the disease it can cause. The purpose is to provide accurate information for farm managers, educators, and decision-making authorities.

Access the survey here: COVID-19 Producer Action Survey

**Purpose of the Survey**

1. Measure adoption of the coronavirus prevention actions on farms.
2. Gather accurate information for farmers, educators, and decision-makers.

**Benefits for Producers**

1. Receive a copy of the summary results
2. Compare own actions to that of others
3. Survey is straightforward and only takes 10-15 minutes to complete

All information entered will be kept confidential. Only aggregate data, with no way to identify farms or individuals, will be published or shared. No financial compensation is provided to participants, but a summary of the results will be shared if you contribute a usable survey and include a working email address.

For questions, contact: Lucas Smith (ls678@cornell.edu or 315-759-8188) or Richard Stup, Ph.D., Cornell Agricultural Workforce Specialist, (rstup@cornell.edu or 607-255-7890).

Cornell Agricultural Workforce Development’s mission is to help farms and agribusinesses build committed and effective teams who will carry out the important work of feeding the world. We believe that agricultural work can, and should be, engaging and rewarding for everyone involved. Managers can build committed teams by applying the best human resource management practices for the agricultural setting.
NYCAMH/NEC Farmworker Needs Assessment Survey

The New York Center for Agricultural Medicine and Health (NYCAMH) is a private, nonprofit agricultural organization that has been working to provide health and safety services to agricultural workers for nearly forty years. In order to understand the unique challenges that farmworkers are facing in relation to the COVID-19 pandemic, they would like to have farmworkers fill out a brief survey. The information will help them to create materials and programs that are more appropriate and helpful to both farm owners and their workers.

To gather this data, they are asking growers to share the following survey link with your workers:

NYCAMH/NEC Farmworker COVID Survey:

Please click here to take the survey in English - https://redcap.bassett.org/redcap/surveys/?s=NH8CHXX499

Please click here to take the survey in Spanish: https://redcap.bassett.org/redcap/surveys/?s=LND3MR9TPD

You can either email the link directly to your workers or contact NYCAMH to request paper copies that can be distributed to them. You can also contact NYCAMH if you would prefer to have your workers complete the survey over the phone or if they need assistance completing the survey (assistance is available in English or Spanish). [contact: Nicole Blanchard at 607.422.7527 or farmworkercovidsurvey@bassett.org]. The survey is voluntary and responses are confidential (no contact information will be requested in the survey).

You can find more information about NYCAMH and their work at their website, www.nycamh.com or www.necenter.org.
Mysterious package from China? Don’t handle the seeds!

Joellen Lampman – NYS IPM Program

When I first saw this announcement, I thought it was a story from The Onion or I missed the recent declaration of July Fool’s Day. But this is real. If you or somebody you know receives seeds in the mail that were not requested or ordered, please notify the USDA right away. - Hans

“Our office has received questions from a few New Yorkers who have received unsolicited packages allegedly sent from China that are marked as containing jewelry (or other items) but which actually contain plant seeds. Similar packages have been received in other states and the United States Department of Agriculture is investigating. People who receive seeds should not plant or handle the seeds. They should store them safely in a place children and pets cannot access and email USDA immediately at erich.l.glasgow@usda.gov for instructions. Seeds imported into the United States are rigorously tested to ensure quality and prevent introduction of invasive species, insects and diseases. We will continue to monitor this issue and will pass along guidance as it is received from USDA.” – Statement from Richard A. Ball, New York State Commissioner of Agriculture

The above statement from Commissioner Ball comes as the number of mysterious packages, which have been received by people across the country for a while now, has increased recently.

To date, we don’t know what kind of seeds they are or if they might be carrying some kind of plant pathogen. The recommendation from the USDA’s Animal and Plant Health Inspection Service (APHIS) is to immediately email the USDA and “hold onto the seeds and packaging, including the mailing label, until someone from your State department of agriculture or APHIS contacts you with further instructions. Do not plant seeds from unknown origins.”.

APHIS ends their press release on the subject with “USDA is committed to preventing the unlawful entry of prohibited seeds and protecting U.S. agriculture from invasive pests and noxious weeds. Visit the APHIS website to learn more about USDA’s efforts to stop agricultural smuggling and promote trade compliance.”.
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.

Biology and Management of Post-Veraison Fruit Rots
Part of the Tuesday Timely Topics webinar series
Tuesday, August 11 4:30 PM
Botrytis bunch rot and sour rots are important issues in susceptible varieties starting at veraison. Join us for a discussion about the diseases, the role of climate (particularly warm, humid nights), insects, and vine microclimate (cluster exposure) have on influencing disease incidence and severity. Management that combines risk assessment and cultural practices with appropriate, well-timed insecticides and fungicides will be discussed.

Katie Gold, assistant professor of plant pathology, Cornell AgriTech
Greg Loeb, professor of entomology, Cornell AgriTech

Register at: https://cornell.zoom.us/j/94386583830?pwd=MmtmY1VwZW01VVk4NUhmOGg1TWQxUT09

Click here to submit your questions about Botrytis and Sour rot

FLGP Virtual Tailgate Meeting – Final Tailgate of the 2020 season!
August 18, 2020 4:30 – 6:00 PM
(There will be no Tailgate Meeting on August 4 as Hans will be on vacation)
Guest speaker: Terry Bates, Cornell’s Lake Erie Research and Extension Lab – Portland, NY

Join FLGP viticulturist Hans Walter-Peterson (and the occasional guest speaker) for any or all of this year's Tailgate Meetings, held every other Tuesday afternoon during the 2020 growing season. These meetings feature a free-flow discussion of what's been happening in vineyards, timely reminders about important practices, and updates on some of the applied research being done in grapes this year. Tailgate Meetings have been approved for 0.75 NY pesticide recertification credits.

Register for this year's online Tailgate Meetings at https://cornell.zoom.us/meeting/register/tJwvc-6qpjoiHt5S12AQssfPXzXe_iKnx4f7
2020 GDD & Precipitation

<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>
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</thead>
<tbody>
<tr>
<td>7/22/2020</td>
<td>82.3</td>
<td>65.2</td>
<td>0.06</td>
<td>23.8</td>
<td>1441.7</td>
</tr>
<tr>
<td>7/23/2020</td>
<td>80.9</td>
<td>67.2</td>
<td>0.25</td>
<td>24.1</td>
<td>1465.7</td>
</tr>
<tr>
<td>7/24/2020</td>
<td>83.3</td>
<td>65.7</td>
<td>0.00</td>
<td>24.5</td>
<td>1490.2</td>
</tr>
<tr>
<td>7/25/2020</td>
<td>84.1</td>
<td>66.0</td>
<td>0.00</td>
<td>25.1</td>
<td>1515.3</td>
</tr>
<tr>
<td>7/26/2020</td>
<td>87.0</td>
<td>67.5</td>
<td>0.00</td>
<td>27.3</td>
<td>1542.5</td>
</tr>
<tr>
<td>7/27/2020</td>
<td>91.8</td>
<td>71.7</td>
<td>0.00</td>
<td>31.8</td>
<td>1574.3</td>
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<tr>
<td>7/28/2020</td>
<td>84.4</td>
<td>69.2</td>
<td>0.30</td>
<td>26.8</td>
<td>1601.1</td>
</tr>
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</table>

Weekly Total: 0.61”
Season Total: 10.39”

GDDs as of July 28, 2019: 1403.9
Rainfall as of July 28, 2019: 12.78”

Seasonal Comparisons (at Geneva)
Growing Degree Days

<table>
<thead>
<tr>
<th>Month</th>
<th>2020 GDD 1</th>
<th>Long-term Avg GDD 2</th>
<th>Cumulative days ahead (+)/behind (-) 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>12</td>
<td>63.8</td>
<td>-23</td>
</tr>
<tr>
<td>May</td>
<td>261.5</td>
<td>254.4</td>
<td>-3</td>
</tr>
<tr>
<td>June</td>
<td>543.1</td>
<td>480.2</td>
<td>+1</td>
</tr>
<tr>
<td>July</td>
<td>714.5</td>
<td>643.6</td>
<td>+8</td>
</tr>
<tr>
<td>August</td>
<td></td>
<td>592.2</td>
<td></td>
</tr>
<tr>
<td>September</td>
<td></td>
<td>358.3</td>
<td></td>
</tr>
<tr>
<td>October</td>
<td></td>
<td>110.0</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>1531.1</td>
<td>2502.6</td>
<td></td>
</tr>
</tbody>
</table>

1 Accumulated GDDs for each month.
2 The long-term average (1973-2019) GDD accumulation for that 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.
Precipitation

<table>
<thead>
<tr>
<th></th>
<th>2020 Rain</th>
<th>Long-term Avg Rain</th>
<th>Monthly deviation from avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr</td>
<td>2.54”</td>
<td>2.83”</td>
<td>-0.29”</td>
</tr>
<tr>
<td>May</td>
<td>1.30”</td>
<td>3.16”</td>
<td>-1.86”</td>
</tr>
<tr>
<td>Jun</td>
<td>1.44”</td>
<td>3.60”</td>
<td>-2.16”</td>
</tr>
<tr>
<td>Jul</td>
<td>3.67”</td>
<td>3.42”</td>
<td></td>
</tr>
<tr>
<td>Aug</td>
<td></td>
<td>3.23”</td>
<td></td>
</tr>
<tr>
<td>Sept</td>
<td></td>
<td>3.53”</td>
<td></td>
</tr>
<tr>
<td>Oct</td>
<td></td>
<td>3.42”</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>8.95”</td>
<td>23.19”</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)

COVID-19 Resources

Need information? View the following Cornell CALS and CCE Resource Pages Updated Regularly

General Questions & Links:
https://eden.cce.cornell.edu/

Food Production, Processing & Safety Questions:
https://instituteforfoodsafety.cornell.edu/coronavirus-covid-19/

Employment & Agricultural Workforce Questions:
http://agworkforce.cals.cornell.edu/

Cornell Small Farms Resiliency Resources:
https://smallfarms.cornell.edu/resources/farm-resilience/

Financial & Mental Health Resources for Farmers:
https://www.nyfarmnet.org/

Cornell Farmworker Program
www.farmworkers.cornell.edu
www.trabajadores.cornell.edu (en espanol)
Finger Lakes Vineyard Update

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
Luke Haggerty- Constellation Brands
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Cameron Hosmer- Hosmer Winery
T.J. Brahm – Randall Standish Vineyards

Harry Humphreys- Overlook Farms
Gregg McConnell- Farm Credit East
Herm Young– Young Sommer Winery
John Santos- Hazlitt 1852 Vineyards
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Justine Vanden Heuvel- Cornell University
Peter Weis – Weis Vineyards
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Cornell Cooperative Extension
Finger Lakes Grape Program

Hans Walter-Peterson—Team Leader
Donald Caldwell—Viticulture Technician

flgp.cce.cornell.edu

The Finger Lakes Grape Program is a Cornell Cooperative Extension partnership between Cornell University and the Cornell Cooperative Extension Associations in Ontario, Seneca, Schuyler, Steuben, Wayne and Yates Counties.

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