Crop Update November 16, 2017

Building Strong and Vibrant New York Communities
Diversity and Inclusion are a part of Cornell University’s heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.
Labor Market

Initial reports indicate that the migrant labor market pool remains stable in size. Just a reminder, this stability is not adequate to provide most hand-labor throughout the dormant season. Low prices and reduced acreage will continue to decrease the demand on labor and likely right-size the market for labor unless immigration policies lead to further declines.

Hand pruning continues to remain somewhat competitive to mechanization with hand follow-up. That competitiveness continues to decline as the labor market continues to slowly tighten. Again, it is my view that over the long-term a reliance on hand pruning is not sustainable. While immigration policy has not yet radically changed, the direction it is moving could rapidly accelerate the decline in labor at any moment.

Now equally concerning for larger growers, may be the available pool of labor for other vineyard activities. Wage growth is now on an upward trajectory. This began about two years ago in the region and about 18 months ago nationwide. Given the long pause in wage growth (10+ years), there is the potential for significant wage growth and inflation over the next five years. At the moment, the bulk juice and wine market is not at all prepared to deal with such challenges.

Particularly concerning for many growers will relate directly to the cost of mechanically harvesting low priced bulk juice grapes. While unpaid labor can help shield the market from rising labor prices, the more intensive operation of harvest almost always requires a varying amount of paid labor. Long-term sustainability will require increasing harvest efficiency. The region will need less harvesters operating across more acres. Increasing labor costs will also accelerate the adoption of bulk harvesting technologies, which substantially lowers the cost of labor.

In general surviving higher labor prices may require operational changes over the next five years. For some growers, one viable strategy, rather than change, may be exiting the industry. The long history of some family farms and the integration these businesses have with local culture make these transitions emotionally challenging. Unfortunately, current market conditions may lead to another 1,000 or more acres transitioning.
Why Did My Vineyard Have So Much Powdery?

I have had a number of requests this fall for assistance in determining why a vineyard ended up with more powdery mildew than has been experienced in recent years. Of course, the first thing we do is examine the spray records for the block. Some of the things we look for is whether the correct materials were applied, at the correct timing, with appropriate spray intervals and with a sprayer set up that ensured adequate coverage. The step I take is to access the weather and pest model information found on NEWA for the station, or stations, nearest the vineyard in question. A quick click on the Grape Diseases found in the Station’s Page Pest Forecast Box (Figure 1) provides access to not only the grape infection events log, but also the leaf wetness events log (Figure 2).

If we are looking at powdery mildew, we must calculate the infection events by ourselves, which is relatively painless. (Figure 3). The environmental conditions necessary for primary infection events are one-tenth inch of rainfall and temperatures of 50 F or higher. The primary infection period for Concord will run through the bloom period. An important thing to remember is that once primary infections occur, no rainfall is needed for secondary infections to occur, just high relative humidity. Therefore, an error early in season will cause you to play catch up the remainder of the year.

By lining up sprays, spray intervals and infection periods, you can see whether or not there were gaps in your spray program, or if the number of infection events that occurred overwhelmed the materials you used. The same can be accomplished for grape berry moth using the model information found on NEWA, but that is another article.

If you would like assistance in investigating the effectiveness of your spray program, please feel free to get in contact with me at thw4@cornell.edu or 716.792.2800 x203
**Grape Disease Infection Events for Portland**

**Phenological stage:** [Dormant]

Choose the phenology stage for the grape variety of interest to display management messages. Concord grape phenology is estimated by the model from historical records for this variety.

<table>
<thead>
<tr>
<th>Disease</th>
<th>Disease Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phomopsis</td>
<td>Dead and diseased canes, arms, and pruning stubs should be pruned out to reduce inoculum. Dead canes and stubs can produce extremely high levels of Phomopsis spores over several years. In particular, growers seeking to minimize fungicide use should pay strict attention to the removal of infected wood from within the canopy.</td>
</tr>
<tr>
<td>Powdery Mildew</td>
<td>Powdery mildew overwinters as tiny fruiting bodies (cleistothecia) that form during late summer and autumn. The ascospores (primary inoculum) are discharged between bud break and bloom to initiate the disease. Therefore, disease pressure will be higher where powdery mildew control lapsed the previous summer, particularly if autumn weather was warm and frost-free. Sprays during the first few weeks of shoot growth in the following year are thus very important in controlling primary infections from the increased amount of overwintering inoculum.</td>
</tr>
<tr>
<td>Black Rot</td>
<td>Removal of the black, raisin-like mummies from the canopy during pruning is a critical component of black rot management programs. It significantly reduces overwintering inoculum and disease pressure for the coming season. Drop mummies to the ground and bury them by cultivation or cover them with mulch.</td>
</tr>
</tbody>
</table>

[Show grape infection events log] [Show leaf wetness events log]

**Disclaimer:** These are theoretical predictions and forecasts. The theoretical models predicting pest development or disease risk use the weather data collected (or forecasted) from the weather station location. These results should not be substituted for actual observations of plant growth stage, pest presence, and disease occurrence determined through scouting or insect pheromone traps.
# Grape Infection Events Log

When calculating combined wetting periods we use the following rules: 1) an infection event must start with precipitation, 2) successive wetting periods are combined into a single infection event until a dry period of over 24 hours or a wetting period with no precipitation is encountered.

<table>
<thead>
<tr>
<th>Starting Date/Time</th>
<th>Ending Date/Time</th>
<th>Hours LW</th>
<th>Avg Temp</th>
<th>Total Rain</th>
<th>Phomopsis</th>
<th>Black Rot</th>
<th>Combined Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov 4 22:01</td>
<td>Nov 6 9:00</td>
<td>27</td>
<td>54.3</td>
<td>2.66</td>
<td>Infection</td>
<td>Infection</td>
<td>Yes</td>
</tr>
<tr>
<td>Oct 23 15:01</td>
<td>Oct 24 13:00</td>
<td>8</td>
<td>61.2</td>
<td>0.26</td>
<td>Infection</td>
<td>No infection</td>
<td>Yes</td>
</tr>
<tr>
<td>Oct 11 8:01</td>
<td>Oct 11 20:00</td>
<td>12</td>
<td>54.5</td>
<td>0.62</td>
<td>Infection</td>
<td>Infection</td>
<td>No</td>
</tr>
<tr>
<td>Oct 6 7:01</td>
<td>Oct 10 23:00</td>
<td>51</td>
<td>64.2</td>
<td>1.15</td>
<td>Infection</td>
<td>Infection</td>
<td>Yes</td>
</tr>
<tr>
<td>Oct 4 14:01</td>
<td>Oct 5 4:00</td>
<td>12</td>
<td>67.0</td>
<td>0.23</td>
<td>Infection</td>
<td>Infection</td>
<td>Yes</td>
</tr>
<tr>
<td>Sep 7 8:01</td>
<td>Sep 9 0:00</td>
<td>18</td>
<td>53.9</td>
<td>1.24</td>
<td>Infection</td>
<td>Infection</td>
<td>Yes</td>
</tr>
<tr>
<td>Sep 4 22:01</td>
<td>Sep 5 9:00</td>
<td>11</td>
<td>62.3</td>
<td>0.74</td>
<td>Infection</td>
<td>Infection</td>
<td>No</td>
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<td>Sep 2 14:01</td>
<td>Sep 3 9:00</td>
<td>12</td>
<td>57.3</td>
<td>0.42</td>
<td>Infection</td>
<td>Infection</td>
<td>Yes</td>
</tr>
<tr>
<td>Aug 24 21:01</td>
<td>Aug 25 9:00</td>
<td>11</td>
<td>58.2</td>
<td>0.08</td>
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<td>Infection</td>
<td>Yes</td>
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<tr>
<td>Aug 22 11:01</td>
<td>Aug 23 20:00</td>
<td>6</td>
<td>69.6</td>
<td>1.30</td>
<td>Infection</td>
<td>No infection</td>
<td>Yes</td>
</tr>
<tr>
<td>Aug 3 13:01</td>
<td>Aug 5 20:00</td>
<td>21</td>
<td>66.7</td>
<td>1.27</td>
<td>Infection</td>
<td>Infection</td>
<td>Yes</td>
</tr>
<tr>
<td>Jul 12 6:01</td>
<td>Jul 14 1:00</td>
<td>8</td>
<td>72.3</td>
<td>0.23</td>
<td>Infection</td>
<td>Infection</td>
<td>Yes</td>
</tr>
<tr>
<td>Jul 12 6:01</td>
<td>Jul 14 1:00</td>
<td>8</td>
<td>72.3</td>
<td>0.23</td>
<td>Infection</td>
<td>Infection</td>
<td>Yes</td>
</tr>
<tr>
<td>Jun 29 21:01</td>
<td>Jul 1 12:00</td>
<td>19</td>
<td>68.9</td>
<td>0.99</td>
<td>Infection</td>
<td>Infection</td>
<td>Yes</td>
</tr>
<tr>
<td>Jun 29 21:01</td>
<td>Jul 1 12:00</td>
<td>19</td>
<td>68.9</td>
<td>0.99</td>
<td>Infection</td>
<td>Infection</td>
<td>Yes</td>
</tr>
<tr>
<td>Jun 25 14:01</td>
<td>Jun 27 9:00</td>
<td>10</td>
<td>56.6</td>
<td>0.32</td>
<td>Infection</td>
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<td>Yes</td>
</tr>
<tr>
<td>Jun 22 12:01</td>
<td>Jun 25 3:00</td>
<td>21</td>
<td>60.4</td>
<td>0.57</td>
<td>Infection</td>
<td>Infection</td>
<td>Yes</td>
</tr>
<tr>
<td>Jun 18 14:01</td>
<td>Jun 21 0:00</td>
<td>16</td>
<td>67.5</td>
<td>1.69</td>
<td>Infection</td>
<td>Infection</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Download Time: 11/17/2017 13:00

[Back to Portland Weather Station Page]

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Figure 3
What’s Your Exit Strategy?

“Empowering families to get started on their succession plan.”

How will your family farm business operate in the future when the owner retires or is gone? Are you currently working with another generation who may be questioning their role in the future of the farm business or are you yourself questioning your current role?

More than 80% of farm families hope to pass the family farm on to the next generation, but research shows only 30% of family farms survive to the second generation, and only 12% survive to the third generation. A successful transition to the next generation takes careful planning and preparation.

To help farm families start their succession planning process, Penn State Extension is offering a new interactive program, “What’s your exit strategy?” This program provides many of the tools and resources for producers who want to begin the succession planning process.

Participants will have an opportunity to open the lines of communication with family to create a shared vision for the family business. They will also learn to choose and work with professionals such as attorneys, accountants, lenders, insurance agents and tax experts to construct a plan and documents that put the family’s vision into action.

“The program will prepare you to envision, communicate, plan, write and shape the legacy of your family farm business, as well as save hundreds of dollars by completing these crucial planning steps before visiting with professionals,” said John Berry, Business Management Educator, Penn State Extension.

This program is being offered in six locations across Pennsylvania. Contact John Berry at 610.391.9840 or johnberry@psu.edu for information on a workshop near you or visit our web site at: https://extension.psu.edu/succession-planning-what-s-your-exit-strategy for more information.

Locally, the program is scheduled for January 5 and January 12, 2018 at Burch Farms Country Market & Winery, 9210 Sidehill Rd, North East, PA 16428

Penn State encourages people with disabilities to participate in its programs and activities. If you anticipate needing any type of accommodation or have questions about the physical access provided, call the Lehigh County Extension office at 610-391-9840.
What’s Your Exit Strategy?
Empowering families to get started on their succession plan

What’s Your Exit Strategy?

is a multi-session workshop developed to help families:

♦ Get started on their plan
♦ Open lines of communication
♦ Work with professionals

Who should attend?

Families interested in shaping the future ownership of the family farm whether that is transferring a viable business to the next generation or determining how to divide farm and personal assets.

Registration is required

https://extension.psu.edu/succession-planning-what-s-your-exit-strategy

North East, Erie County
January 5, 2018
and
January 12, 2018

Burch Farms Country Market and Winery
9210 Sidehill Road
North East, PA 16428

For more information, contact:
John Berry
Extension Educator, Business Management
610-391-9840, 610-554-2561
johnberry@psu.edu

Penn State encourages persons with disabilities to participate in its programs and activities. If you anticipate needing any type of accommodation or have questions about the physical access provided, please contact John Berry at 610-391-9840 in advance of your participation or visit. Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.

Curriculum developed by:
NDSU Extension Service
Crop insurance is a safety net for farmers that helps you manage risk. If you have a crop failure, crop insurance can help you farm again next year.

**Important Insurance Deadlines**

- **Aug. 15, 2017:** Premium Billing Date
- **Nov. 20, 2017:** Sales Closing, Policy Change, Cancellation, Termination Date
- **Nov. 20, 2017:** End of Insurance Period
- **Jan. 15, 2018:** Acreage / Production Report Date

Over 40 grape varieties are insurable in these counties:

- Cattaraugus
- Chautauqua
- Erie
- Niagara
- Ontario
- Schuyler
- Seneca
- Steuben
- Suffolk
- Ulster
- Wayne
- Yates

Grapes in other counties may be insured by written agreement from RMA

NYS Grape Crop Insurance Performance

For every $1 grape producers spent on crop insurance premiums from 2012 to 2016, they received $2.07 in losses paid, on average

**Learn more & sign up:**

Explore your personalized crop insurance costs and loss payments under different yield outcomes at ag-analytics.org. To sign up, contact a crop insurance agent. Find an agent using the Agent Locator tool at rma.usda.gov/tools/agent.html
PLEASE PARTICIPATE IN THE ONLINE NEWA SURVEY

EDITORS NOTE: NEWA provides weather and pest model information for a large number of commodities across an ever increasing number of states. It is important for grape growers in New York and Pennsylvania to provide your input into this survey so any improvements to the NEWA website are made with the grape industry in mind. While this is a busy time of year, I encourage you to take the 10 minutes out of your busy day to complete this survey.

The Network for Environment and Weather Applications (NEWA) wants you to take our online survey — it'll only take about 10 minutes of your time.

Take the survey now:
https://cornell.qualtrics.com/jfe/form/SV_0GRlhOIDI5HwbR3

Whether you’ve used NEWA's online pest forecast models for years or have never used NEWA at all, we will benefit from your responses. Why? Because we are building a new website at newa.cornell.edu, one that’ll be as easy to use on your smart phone as on your desktop, and we want to build it the way you want it to be.

NEWA is an online agricultural decision support system that uses real time weather data, streamed over the internet from 573 weather stations throughout the Northeast, Midwest and mid-Atlantic. NEWA provides insect and plant disease pest management tools, degree days, and weather information for growers, consultants, Extension educators, faculty, and others.

NEWA models and resources are available free of charge, and are used to make informed localized crop management decisions. The NEWA website will be upgraded soon and we want to know what users’, new and old, want and need out of the new website.

All responses are anonymous and confidential and will not be shared with any outside group.

Thank you for participating!

For more information:

Dan Olmstead
315.787.2207
dlo6@cornell.edu

NEWA Coordinator, New York State IPM Program
Cornell University, NYSAES
630 West North Street
Geneva, NY 14456

NEWA is a Partnership of the New York State Integrated Pest Management Program and the Northeast Regional Climate Center.
The Only FRAC Group U6 Fungicide
Labeled for Grapes & Cucurbitis
Highly Effective on Powdery Mildew
No Cross-Resistance
Protectant / Preventative Action

FRAC Group 3
Labeled for Grapes
Controls Powdery Mildew & Black Rot
Protectant + Curative Activity
Highly Systemic

Badger SC

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Highly Active at Lower Rates
Enhanced Crop Safety

Nexter

Mite control on Grapes
Knockdown and Residual

Dave Pieczarka
315.447.0560

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716-679-3366
Tractorsales@netsync.net
LERGP Links of Interest:

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.

LERGP Web-site:
http://lergp.com/

Cornell Lake Erie Research & Extension Laboratory Facebook page

Efficient Vineyard Web-site:
https://www.efficientvineyard.com/

Table for: Insecticides for use in NY and PA:
http://lergp.cce.cornell.edu/submission.php?id=69&crumb=ipm|ipm

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

NEWA:
http://newa.cornell.edu/
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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. 202

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.

Cornell University Cooperative Extension provides equal program and employment opportunities. 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.

THE LAKE ERIE REGIONAL GRAPE PROGRAM at CLEREL
6592 West Main Road
Portland, NY 14769
716-792-2800