Dear Grower,

With the growing season winding down we will go to an every other week schedule for the Electronic Crop Update. The next Crop Update is scheduled for October 10, 2013. You can look for Electronic Crop Updates: Oct. 24; November 7, 21; December 5, 19 to finish out 2013.

Please continue to look for other emails from us such as Veraison to Harvest, Upcoming Events notices, and other information we need to share with you as necessary.

As always, if you have any questions or need help with the website or email, please do not hesitate to contact me at emb35@cornell.edu or 716-792-2800 ext. 209.

GRAPe INTEGRATED PEST MANAGEMENT: Tim Weigle

Scout now to avoid problems at harvest

We continue to see examples of grape berry moth damaging creating secondary problems in vineyards this year. I heard from Jim Joy, National Grape Cooperative, that a vineyard with extensive grape berry moth damage on the edges is also teeming with fruit fly larvae. This should not be totally unexpected as in this particular vineyard the Brix reading is over 17 so the combination of ripe fruit and entry wounds created by GBM allows the complex of fruit flies to become established in the fruit. With the rainfall we experienced over the weekend I suspect that we will also start to see, or see an escalation in, the amount of secondary rots that will be occurring in these clusters.

One concern I have heard is that the infestation of fruit flies is being caused by Spotted Wing Drosophila (SWD). We will be taking samples to see what exactly is going on but if history is any indication, we may find SWD but it will only be a small percentage of the population that makes up the fruit fly complex.

Take Home Message: Scout vineyards now for problem areas to assist in the development of a harvest plan.
NYS IPM FACT SHEETS FOR GRAPES:
- Powdery Mildew: http://nysipm.cornell.edu/factsheets/grapes/diseases/grape_pm.pdf
- Black Rot: http://nysipm.cornell.edu/factsheets/grapes/diseases/grape_br.pdf

GRAPE CULTURAL PRACTICES: Luke Haggerty

This is a great time of year to look for nutrient deficiencies and foliar disorders in the vineyard. Now that harvest is moving into full swing you have a chance to get a good look at your entire vineyard as you harvest. Potassium and magnesium are two of the more noticeable deficiencies found on leaves. Magnesium deficiency show chlorosis or yellowing in leaves while the area close to the main veins stays green (Picture 1). Magnesium deficiency most often occurs in soils that have a pH below 5.5 where potassium becomes more available.

Potassium plays an important role in many regulatory plant biochemical functions including carbohydrate or sugar production. Sever potassium deficiency will show necrotic or dead leaf tissue and have scorched appearance (Picture 2). Potassium deficiency can occur in soils that are high in calcium and magnesium and where potassium is less exchangeable.

Magnesium deficiency in Concors (Photo taken by Dr. Terry Bates)

Potassium deficiency in Concors (Photo taken by Dr. Terry Bates)
Other nutrient deficiencies and or foliar to be on the lookout for are nitrogen deficiency and nitrogen spray burn, acidic soil damage, iron deficiency, crown gall, spray damage, and symptoms of drought. If you see symptoms and would like soil or petiole samples taken, bring samples into the Cornell Lake Erie Research and Extension Laboratory (CLEREL) at 6592 West Main Road Portland, NY 14769. The cost per sample is $30.00 for petiole sample (bring in 50 petioles) and $17.00 for soil samples.

If you have questions about taking petiole and or soil samples or if you would like to set up a site visit where I can assist in taking samples please give me a call at (716) 792-2800 Ext. 204, or email me at llh85@cornell.edu. I look forward to hearing from you!

FROM NORTH EAST, PA.: Bryan Hed

**Weather:** Our current growing degree day total (April 1 to Sep 25) at the North East lab is 2446, which is lagging a little behind the seasonal average. The month of September will likely be finishing up a bit cooler and drier than average. Prior to September 21, our rainfall total for the month was just over half an inch; very dry. With 2.3 inches recorded during last Saturday’s deluge, our September rainfall totals 2.85”. Without another deluge (which is not in the forecast), we will end September with well below average rainfall, which I don’t think anyone will complain about.

**Diseases:** Botrytis and other bunch rot problems continue to increase in wine varieties with compact clusters. However, the relatively dry weather and infrequent rainfall have kept rots to a minimum, and dispelled worries about the development of a downy mildew epidemic on leaves; all good. With regard to Botrytis bunch rot, we have been monitoring susceptibility of intact Chardonnay fruit to Botrytis infection, by inoculating individual berries in the lab. The data so far have shown that, in loose clusters where compactness is not an issue and berry skins are intact, susceptibility of individual berries appears to jump significantly between 15 and 18 brix regardless of treatment. We have also seen that berries grown in shade (covered with leaves in the cluster zone) were 3-4 times more susceptible to infection by Botrytis than berries exposed to sunlight over the past 3 months (where leaves were removed in the cluster zone at fruit set or earlier). This, of course, is another reason to remove leaves in the cluster zone in varieties that are prone to problems with Botrytis bunch rot. If you’re not already applying cluster zone leaf removal on your rot prone wine varieties, this is certainly something to consider for next year.
National Grape plans to open September 27th, just four days later than average. We will not know exactly how well thinning has worked for growers, until after harvest. Our estimates reflect research-based assumptions and real world results taken from grower samples, National Grape test blocks and research blocks in commercial vineyards.

**Mechanical and Labor Costs**
National Grape estimates 50% of their acreage has been thinned, another 20% of acreage for other processors has also been thinned. With 11,900 acres thinned, approximately 55,000 tons have been removed. The cost of thinning falls in the range of 600,000 – 950,000. With some harvesters operating at a loss, some individual growers may have found their costs to be less than $150 per hour. For those doing thinning themselves, $175 per hour is a typical cost.

**Net Crop Value**
The other potential cost was the potential value of the thinned grapes.
The value of thinned grapes is highly dependent on the brix they would reach. If grapes did not meet minimum standards, given the size of the crop, a salvage value of $100 seems generous. While the gross value of the thinned grapes might be 5.5 million, it would decrease the value of the remaining crop by 16.2 million dollars. Thus, if minimum standards were not met, the value of the thinned grapes is -$195 per ton or -$10.7 million.

On the other extreme, there is the scenario where these high yields reach minimum standards. With brix payment scales varying by processors, an average value is not reflective of the payments an actual grower would see. The value per ton would range from $59 to $203, for processors that have a graduated payment scale. The total value of thinned grapes under acreage contracts is approximately 2.9 million dollars. Tonnage contracts are a bit more problematic. In this situation those additional potential yields have no value.

As you can see the total cost of thinning has quite a range based on some fairly specific assumptions. For most growers, even if the crop would have ripened, the total cost is approximately $270 per acre ($210 for fruit, $60 for thinning).

**Net Present Value of Future Crop**
Justifying the cost of thinning is the net present value (NPV) of future crop. The value of a future crop is dependent on a Grower's individual circumstances. The time value of money ranges between 1.5% and 6%. The probability of frost or a similar disaster ranges from 8% - 35%. The enhanced return crop has a NPV in the range of $846 – $1265 per acre. The typical grower should have a NPV of $1158 per acre. The NPV of next year's crop was increased by at least $10.1 million.

**Economic Benefit**
The economic benefit of fruit thinning practices falls in the range of $326 - $3300 per acre. It seems clear that the overall economic benefit for the region is in the range of $9 - $15 million dollars. A hard freeze in mid-October could increase that estimate by another $3 million dollars. Such an event would decrease the final brix of over-cropped vineyards.
**WEATHER DATA THROUGH SEPT. 25: Edith Byrne**

<table>
<thead>
<tr>
<th>WEEK</th>
<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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</thead>
<tbody>
<tr>
<td>Week 9/11/13</td>
<td>88</td>
<td>74</td>
<td>0.00</td>
<td>31</td>
<td>2300.5</td>
<td>2326</td>
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<tr>
<td>Week 9/18/13</td>
<td>71</td>
<td>51</td>
<td>0.00</td>
<td>11</td>
<td>2352.5</td>
<td>2378</td>
<td></td>
</tr>
<tr>
<td>Week 9/25/13</td>
<td>68</td>
<td>43</td>
<td>0.00</td>
<td>5.5</td>
<td>2415</td>
<td>2440.5</td>
<td></td>
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<tr>
<td>Week 9/25/12</td>
<td>70</td>
<td>51</td>
<td>0.00</td>
<td>10.5</td>
<td>2654.5</td>
<td>2785</td>
<td></td>
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<tr>
<td>AVERAGE</td>
<td>68.9</td>
<td>50.7</td>
<td>0.11</td>
<td>9.79</td>
<td>2506.91</td>
<td>2531.83</td>
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</table>

**Actual GDDs accumulated**

<table>
<thead>
<tr>
<th>9-1 through 9-25, 2013 = 300</th>
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**Average GDDs accumulated September 1-30 = 411.79**

<table>
<thead>
<tr>
<th>GDDs accumulated Aug 2013 = 568.00</th>
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<tbody>
<tr>
<td>GDDs accumulated July 2013 = 653.5</td>
</tr>
<tr>
<td>GDDs accumulated June 2013 = 455.0</td>
</tr>
<tr>
<td>GDDs accumulated May 2013 = 260.5</td>
</tr>
</tbody>
</table>

**This year compared to AVERAGE:** JAN. GDD: **BEHIND 9.33** / APR. GDD: **BEHIND 9.39**

**This year compared to 2012:** JAN. GDD: **BEHIND 35.19** / APR. GDD: **BEHIND 24.46**

<table>
<thead>
<tr>
<th>Average High Sept 1-25</th>
<th>69.72</th>
<th>71.56</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Low Sept 1-25</td>
<td>54.28</td>
<td>56.08</td>
</tr>
</tbody>
</table>

**Sept Rainfall amount = 3.87”**

**August Rainfall amount = 3.15”**

**JULY Rainfall amount = 3.27”**

**Rainfall accumulation 1/1/13 through 9/25/13 = 31.27” (last year, 2012 = 27.8”)**
LERGP WEBSITE LINKS OF INTEREST –

- PHENOLOGY INFORMATION:  
  http://lergp.cce.cornell.edu/submission.php?id=66&crumb=cultural%20practices|cultural_practices

- WEATHER DATA:  
  http://lergp.cce.cornell.edu/submission.php?id=64&crumb=ipm|ipm

- 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:  

Go to http://lergp.cce.cornell.edu/ for a detailed calendar of events. 
Please remember to RSVP for those events that require one!

NRCS-NY ANNOUNCES APPLICATION CUTOFF DATES FOR NRCS CONSERVATION PROGRAMS

Application Cut-off Date: October 18, 2013

New York Natural Resources Conservation Service (NRCS) announces October 18, 2013 as the application cutoff date for the Environmental Quality Incentives Program (EQIP) and Wildlife Habitat Incentives Program (WHIP) for Fiscal Year (FY)2014. Applications accepted after October 18, 2013 may be considered for funding if additional application rounds are announced or for potential consideration in FY2015. All applications are competitive and are ranked based on national, state and locally identified resource priorities and the overall benefit to the environment. If you are interested in applying for an NRCS conservation program please visit our web site for information on applying at:

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/ny/newsroom/releases/?cid=nrcs144p2_027058

You may apply by visiting your local NRCS field office, which can be located using the web site:


AG YOUTH SCHOLARSHIP

Sponsored by: New York Farm Bureau Promotion and Education Committee

Submission Deadline: November 18, 2013

Do you know a High School Senior who has been involved with agriculture and plans on continuing studies in this field? Encourage them to apply for the New York Farm Bureau Agricultural Youth Scholarship, sponsored by the New York Farm Bureau Promotion and Education Committee. Students applying must have a family Farm Bureau membership or a student Farm Bureau membership (a membership application may be included with scholarship enclosures). Students are required to submit a brief essay answering the question, “If you had the power to change something in your community or on your farm, what would you change and why?”

To nominate someone for the scholarship or to request an application, call 1-800-342-4143. Click on the link (http://www.nyfb.org/resources/Ag_Youth_Scholarship_634_resource.htm) for more information!

PLEASE NOTE: Next Electronic Crop Update will be Thursday October 10, 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.
Lake Erie Regional Grape Program Team Members:
Andy Muza, Extension Educator, Erie County, PA Cooperative Extension, 814.825.0900
Tim Weigle, Grape IPM Extension Associate, NYSIPM, 716.792.2800 ext. 203
Kevin Martin, Business Management Educator, 716.792.2800 ext. 205
Luke Haggerty, Grape Cultural Practices, 716.792.2800 ext. 204

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

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
NRCS-NY Announces Application Cutoff Dates for NRCS Conservation Programs

Jamestown, N. Y., September 20, 2013– New York Natural Resources Conservation Service (NRCS) announces October 18, 2013 as the application cutoff date for the Environmental Quality Incentives Program (EQIP) and Wildlife Habitat Incentives Program (WHIP) for Fiscal Year (FY)2014. Applications accepted after October 18, 2013 may be considered for funding if additional application rounds are announced or for potential consideration in FY2015. All applications are competitive and are ranked based on national, state and locally identified resource priorities and the overall benefit to the environment.

Although a new Farm Bill has yet to be approved, applicants may still apply for funding through the same programs offered through the 2008 Farm Bill. At the time of application, applicants must specify the resource concern(s) that they intend to address. Once further guidance on the 2013 Farm Bill is provided, NRCS will work with applicants to transfer applications to the appropriate conservation program.

“NRCS NY looks forward to helping farmers and rural landowners address priority resource concerns on their land,” said Donald Pettit NRCS State Conservationist. “Each year NRCS offers a variety of programs which help landowners address a wide range of conservation needs in New York.”

- **Environmental Quality Incentives Program (EQIP)**: offers financial assistance for practices which address soil erosion, water quality and habitat degradation. Practices implemented through EQIP include strip cropping, grassed waterways and manure storage facilities. Focus areas within the EQIP program include soil health, livestock waste, habitat, forestry and grazing.
- **Wildlife Habitat Incentives Program (WHIP)**: helps participants restore and protect fish and wildlife habitat in grassland and shrubland areas.

If you are interested in applying for an NRCS conservation program please visit our web site for information on applying at: [http://www.ny.nrcs.usda.gov/programs/general_information/how_to_apply.html](http://www.ny.nrcs.usda.gov/programs/general_information/how_to_apply.html).

You may apply by visiting your local NRCS field office, which can be located using the web site: [http://offices.sc.egov.usda.gov/locator/app?state=NY](http://offices.sc.egov.usda.gov/locator/app?state=NY).

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NRCS is an equal opportunity employer and provider.
2014 AGRICULTURAL YOUTH SCHOLARSHIPS

• Applicant Guidelines
  ♦ 2014 graduating High School Seniors who will continue their education to prepare for a career in some way connected to the diverse agricultural industry.
  ♦ Live or work on a farm or be involved with agriculture via any avenue.
  ♦ Family Farm Bureau membership or Student Farm Bureau membership is required & may accompany application.

• Process and Procedure
  ❖ Applications & information available at www.nyfb.org or request by calling 1-800-342-4143.

  ❖ Completed application packets must be returned to New York Farm Bureau in Albany. November 18, 2013 postmark deadline.

  ❖ A District level competition will be held. Scoring will determine the County winners as well as the District winner. The judging event may necessitate a personal interview and essay presentation or may be based solely upon the application and attachments. The judging will take place prior to January 18, 2014. Each District Winner will receive $100 plus a memento of their selection.

  ❖ State winner selection will be made from District Winners, based solely on the submitted applications; there will be no personal interviews.

A $1500, $1200 and $1000 Scholarship will be awarded
For More Information: www.nyfb.org * 1-800-342-4143