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Eastern NY Commercial Horticulture Program

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Grapes News

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Phenology Updates

Hudson Valley
Veraison, Approaching harvest

Champlain Valley
Veraison, Approaching harvest

Veraison

Photos from Vineyard IPM Scouting Report, week of 5/3/10, University of Wisconsin

Pest Alerts

Champlain Valley
Powdery mildew (exacerbated by hot dry weather), birds

Powdery mildew on upper leaf surface. Photo credit: W. Wilcox

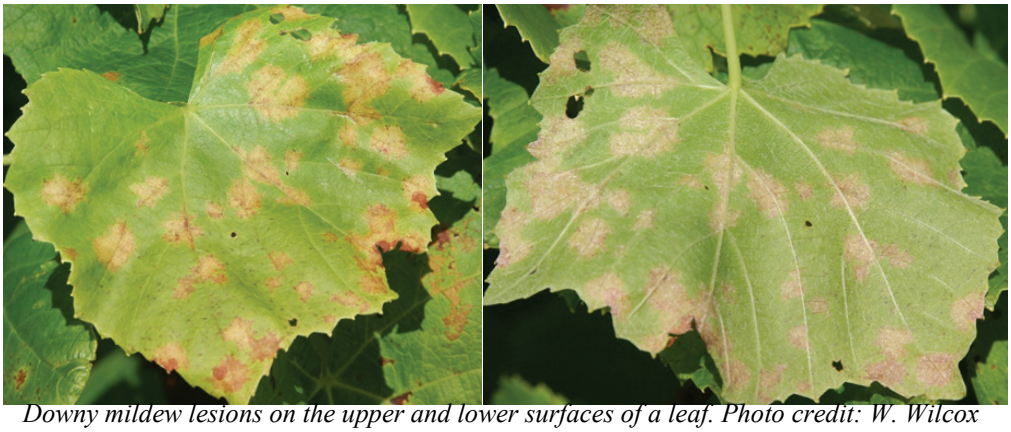
Powdery mildew on a fruit cluster. Photo credit W. Wilcox.

Continued on next page

Pest Alerts, continued from previous page

Hudson Valley

Downy mildew, birds, 2° fruit rot (related to bird injury)



Downy mildew lesions on the upper and lower surfaces of a leaf. Photo credit: W. Wilcox

Weather Update

Rainfall 2015 (inches)

Weather Station	May	June	July	August	Cumulative
Chazy	2.7	7.4	3.7	3.0	16.8
Peru	1.7	8.3	3.9	1.4	15.3
Willsboro	3.4	9.2	5.5	1.0	19.2
Clifton Park	2.3	6.5	1.0	3.0	12.9
Hudson	1.8	6.9	1.6	2.8	13.0
Red Hook	1.9	6.6	2.8	2.5	13.8
Highland HVL	2.6	7.3	1.2	3.3	14.4

Temperature 2015 (F)

	June		July		August	
Weather Station	High	Low	High	Low	High	Low
Chazy	81.6	38.4	89.1	49.8	88.3	51.7
Peru	80.7	38.2	88.1	48.5	89.0	53.1
Willsboro	82.1	39.8	89.1	48.8	87.4	52.3
Clifton Park	87.4	40.4	96.9	49.9	94.0	53.0
Hudson	87.9	41.3	94.9	50.9	94.9	52.4
Red Hook	87.1	38.3	93.2	48.8	93.4	49.7
Highland HVL	87.6	47.2	93.2	53.6	91.1	54.4

Growing Degree Days (Base 43F)

	Cumulative DD as of Aug 31	
Weather Station	2015	2014
Chazy	2967.4	2787.5
Peru	3000.2	2853.5
Willsboro	2947.2	2790.3
Clifton Park	3381.5	2986.9
Hudson	3486.4	3262.3
Red Hook	3364.9	3216.3
Highland HVL	3510.5	3107.9

Veraison to Harvest

With harvest approaching, the publication *Veraison to Harvest* is now available. This is a weekly update of the vineyard crop statewide, produced by CCE. We will continue to contribute to this publication on a weekly basis through anecdotal information about our Eastern NY. The publication also includes maturity data (brix, TA, pH, etc.) on samples taken from the Hudson Valley Research Lab and the Willsboro Research Farm. *Veraison to Harvest* Update #1 is available here:
https://grapesandwine.cals.cornell.edu/sites/grapesandwine.cals.cornell.edu/files/shared/Veraison-To-Harvest-2015-Issue-1.pdf

Appellation Cornell

The latest issue of *Appellation Cornell* is now available. This is a quarterly publication including news from Cornell's Enology and Viticulture program. The August 31, 2015 issue can be found on the Cornell Viticulture and Enology Website: http://grapesandwine.cals.cornell.edu/newsletters/appellation-cornell

Understanding Ripening of Cold Climate Cultivars

There are many differences between cold climate cultivars and *V. vinifera* cultivars. Some are more obvious, such as cold hardiness, and growth habit; others less visible, such as ripening patterns. Understanding how these grapes ripen, and the best way to predict ripeness can help you track the progress of your crop and ultimately determine harvest date.
Fruit Ripening Profiles of Cold Climate Wine Grape Cultivars, a report published through the Northern Grapes Project, explains how several of the cold climate cultivars ripen in comparison to four *V. vinifera* cultivars. The report was based on research done in MN in 2010-2012. Some of the main takeaways of the article include:

- Growing Degree Days (GDDs) are a good predictor of ripening and can explain a significant amount of the difference in sugars and acidity from year to year.
- Soluble Solids (°Brix) starts higher for cold climate cultivars, but accumulates more gradually.
- Titratable Acidity (TA) starts lower for cold climate cultivars, and decreases steadily. *V. vinifera* in contrast, drops off close to harvest.
- Tartaric and Malic acid ratio stays fairly constant during ripening for some cold climate cultivars. For *V. vinifera* cultivars and Marquette see an increase in tartaric to malic acid ratio.

For the full report, you can visit the NGP website or follow the link: http://northerngrapesproject.org/wp-content/uploads/2014/02/FruitRipeningProfiles.pdf

How does this year compare?

Willsboro

The following data is available from harvests at Willsboro for the past few years. We are considerably more advanced with regard to sugar levels this year as compared to 2014. If the hot weather keeps up, we can expect an early harvest.

Sugar Levels 1st week of September

Variety	2014	2015
Frontenac	15.0	19.0
Frontenac gris	14.0	19.0
LaCrescent	15.0	19.6
Marquette	15.0	16.8

Past Harvest Dates and °Brix

Variety	2008	Brix	2009	Brix	2010	Brix	2011	Brix	2012	Brix	2013	Brix	2014	Brix
Frontenac	2-Oct	21.0	10-Oct	20.5	18-Sep	22.0	24-Sep	21.4	14-Sep	23.0	27-Sep	23.5	24-Sep	.
Frontenac Gris	2-Oct	20.0	10-Oct	19.8	18-Sep	23.2	24-Sep	21.3	14-Sep	23.6	28-Sep	23.4	27-Sep	.
La Crescent	26-Sep	23.0	2-Oct	22.5	11-Sep	23.6	17-Sep	19.6	7-Sep	24.0	28-Sep	21.3	27-Sep	.
Marquette	4-Oct	22.0	10-Oct	21.8	11-Sep	23.0	24-Sep	23.7	14-Sep	25.8	28-Sep	24.6	24-Sep	.

Hudson Valley Research Lab

The hot weather, along with a lack of rain has advanced the brix levels of the grapes on average 1-2 degrees. Foch and Leon Millot are ready for harvest, while Pinot noir has another week or two at least.

Sugar Levels 1st Week of September

Variety	2014	2015
Foch	21.8	22.8
Leon Millot	20.4	23.3
Pinot noir	17.4	19.3

HVRL Grapes Available

Leon Millot and Foch are ready to harvest. If interested in these grapes, contact Jim O'Connell at 845-691-7717 or Peter Jentsch at 845-691-7151 for more information.

On August 19, 2015, growers came together in the Capital Region to learn about limiting bird damage in commercial fruit crops. In the morning, researchers from Cornell, Michigan State, and USDA presented on current research in mitigating bird damage. Presentations also included common species of birds known to cause damage, as well as regulations and permitting relating to bird management. The afternoon session consisted of a field event where those in attendance were able to see live demonstrations of bird deterrence. One common method, as seen in the picture right, is the use of inflatable "air dancers," whose flailing movements scare birds away from the crop. Another method, pictured left, is to employ a falconer, who will come to the fruit farm and fly the falcon. Falcons are predators of many of the bird species that damage fruit crops and as a result, scare away these birds.

Tours of the USDA-ARS Germ Plasm collection in Geneva, NY.

The Plant Genetic Resources Unit of USDA-ARS at Geneva, NY is excited to announce two public germplasm tours of the USDA-ARS clonal Apple and Grape collections on Wednesday, September 23, 2015, and Saturday, September 26, 2015. Tours will be conducted at the McCarthy Farm, located on 2865 County Road 6 (Pre-emption road) in the town of Geneva (across from the St. Mary Cemetery). Both tours will start at 9:00 am. Please park your car on the gravel parking area near the equipment barn once you enter the McCarthy Farm.

The Wednesday tour (September 23rd, 2015) will feature the world renowned apple (*Malus* spp.) collection. The total tour is expected to take up to 2.5 hours and will be conducted as a walking tour through the orchard grounds. This year will be the last chance to see the wild *Malus sieversii* seedling block from Kazakhstan, also known as the "Botany of Desire Wild Apple" block from Kazakhstan. While these trees are important to the USDA's mission to preserve important apple germplasm, this block of seedlings must be removed by the end of 2015 to make room for future evaluation and selection of wild collected material from North America and elsewhere.

The Saturday tour (September 26th, 2015) will be a combined tour to see and taste the apple collection and also to tour the USDA-ARS cold hardy grapevine germplasm (*Vitis* spp.) The cold hardy grapevine germplasm is an important resource of wild North American grapevine species. These species play an integral role in the development of many of the hybrid grapevine varieties grown in the Finger Lakes wine region and also across the Midwest and Northeast. As this tour includes both the apple and grape germplasms, it is expected to take up to 4 hours to complete (9-11:30 am for apple and 11:30 am to 12:30 pm for grape).

Because the orchard and vineyard are planted on gently rolling ground, please note that uneven footing is possible and appropriate footwear is recommended. We request that all minors must be accompanied by an adult and all visitors should be responsible for their own safety. It is recommended that all visitors bring along appropriate sunscreen, bug spray, hats, and water bottles in order to enjoy the germplasm fully. Rustic restroom facilities (porta-potties) will be available. We will provide the tours rain or shine, except in the case of severe weather.

If you have any questions regarding the tours, please don't hesitate to contact me through email or phone. Thank you and see you at the germplasm.

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Trac Software v2011—Easy online download

If you have been thinking about getting Trac software for Apple, Pear, Stone Fruit, Cherry, Grape, Berry or a bundle, but weren't sure how, the time is now! Since 2011, the software has been handled through the Center for Technology Licensing (CTL) at Cornell University. **But now you can easily purchase the license and download the software online.** No more sending in paper forms and payment. Find out how to obtain TracFruit Software at the Center for Technology Licensing: TracFruit Software License at www.ctl.cornell.edu/technology/express-licensing/software/trac-software/fruit.php

Keep records up-to-date, generate reports, analyze your pest management strategies and improve IPM practice with Trac software for Fruit. Instead of filling out several forms for different reports, enter the record once in Trac software. Trac creates reports for you from a single SprayData sheet, ***plus*** an EPA Worker Protection Standard (WPS) Central Posting form. Each year you'll save your spray records in a convenient, customizable Trac Software Excel file that you can refer back to.

The license covers a single farm location. For commercial applications such as for private consultants serving multiple farms, contact Carolyn Theodore, CTL, Technology Licensing Officer, cat42@cornell.edu. For questions and tech support, contact Juliet Carroll, Fruit IPM Coordinator, NYS IPM Program, jec3@cornell.edu.

Trac Software v2011 is now longer-lasting. This version of Trac has an open ChemTable (no password). This means the software never goes out-of-date, because you update your own ChemTable, generating your year-to-year inventory and associated purchase costs. Complete instructions on how to do this are included in the Trac Software Manual (nysipm.cornell.edu/trac/tracsoftwaremanual.pdf) and in the software itself, along with a sample 2010 ChemTable.

Trac software runs in Microsoft Excel, so you'll need Excel to run it. With Trac it is easy to create reports and records using the many features of Excel! Those familiar with working on a spreadsheet will find it easy to use Trac software, since it is written in MS Excel. Very simply, you "fill in the blanks" on the data-entry sheets, much like sheets of paper. One sheet asks for basic grower information, such as name and address, another sheet allows the user to enter their spray information, etc.

From the data-entry sheets Trac completes various report forms, including an EPA Worker Protection Standard (WPS) Central Posting form and the NYS DEC Applicator/Technician Pesticide Annual Report. Each version of Trac software has processor & buyer report forms specific to that crop.

Trac software generates drop down lists for pesticide trade names and target pests that you can select from. Using drop down lists saves time and prevents typing errors, improving the accuracy of your records. Join the numerous farmers using Trac and benefitting from its streamlined reports, visit TracFruit Software License at www.ctl.cornell.edu/technology/express-licensing/software/trac-software/fruit.php or Trac Software for Fruit at nysipm.cornell.edu/trac/ to learn more. Get Trac, set up your records and generate all your 2015 spray record reports in less than a day!

Quick Links

Cornell Grapes Website http://www.fruit.cornell.edu/grape/
ENYCHP http://enych.cce.cornell.edu/
Jim's Blog http://blogs.cornell.edu/hudsonvalleygrapes/
Northern Grapes Project http://northerngrapesproject.org/
NEWA Weather and Pest Forecasting http://newa.cornell.edu/
Viticulture and Enology Cornell https://grapesandwine.cals.cornell.edu/
Veraison to Harvest http://grapesandwine.cals.cornell.edu/newsletters/veraison-harvest
Appellation Cornell http://grapesandwine.cals.cornell.edu/newsletters/appellation-cornell