



## Grapes News

### Phenology Updates

Bunch closure

Buckshot, approaching bunch closure

### Pest Updates

Japanese beetles are still around and causing problems for some growers. There are many options available including Sevin (often the material of choice by many) and Assail (a neonicotinoid). Consult the 2014 New York and Pennsylvania Pest Management Guidelines for Grapes for additional materials and proper rates.

Diseases are still a concern, especially with this wet weather. See the article on page 4 for more information on current disease pressure. *-JMO*



Buckshot berries

Bunch closure

*Photos from Vineyard IPM Scouting Report, week of 5/3/10, Univ. of WI Ext. Door Co. and Peninsular Ag. Research Sta., Sturgeon Bay, WI*

We are well into the season and steadily moving along. Before long, it will be time to harvest the grapes. I have visited some of your farms, but have not had a chance yet to visit everyone. If I have missed you, please send me an email or give me a call. I want to get to meet you, see your operation, and discuss grapes. *-JMO*

Laura McDermott  
Cell: 518-791-5038  
Email: lgm4@cornell.edu  
Berries

Dan Donahue  
Phone: 845-691-7117  
Email: djd13@cornell.edu  
Tree Fruit

Vegetables  
Chuck Bornt  
Cell: 518-859-6213  
Email: cdb13@cornell.edu

Amy Ivy  
Phone: 518-561-7450  
Email: adi2@cornell.edu

Teresa Rusinek  
Phone: 845-340-3990 x315  
Email: tr28@cornell.edu

Crystal Stewart  
Cell: 518-775-0018  
Email: cls263@cornell.edu

Maire Ullrich  
Phone: 845-344-1234  
Email: mru2@cornell.edu

Business and Marketing  
Bob Weybright  
Phone: 845-797-8878  
Email: rw74@cornell.edu

*Layout:*  
Carrie Anne Doyle

*Content Editor:*  
James O'Connell

*Stay connected and up to date with our online resources:*

### Eastern NY Commercial Horticulture Website

The Eastern NY Commercial Horticulture team is proud to announce that their updated website is up and running. For on-line class registrations, announcements, older issues of our newsletters, and more, please visit <http://enych.cce.cornell.edu/>. We hope you bookmark it on your computer and begin using it as your 'go to' website for production and marketing information. Email or call any of the educators with questions or comments on the website – we want to make it work for YOU!



### Hudson Valley Grapes Program Blog

For important updates, and access to more grape information (fruit school talks, fact sheet links, etc.), check out Jim's blog: <http://blogs.cornell.edu/hudsonvalleygrapes/>



## Welcome Anna!

Hello! As the most recent addition to the Eastern New York Commercial Horticulture Program, I am thrilled to become a part of this team and of Cornell Cooperative Extension.

As regional fruit specialist, I will be serving primarily the apple and grape growers of the northeast region of the state. I will be working out of the Clinton County CCE office in Plattsburgh, conveniently located near many of the farms I will frequent and the cold-hardy grape planting at the Willsboro farm.

I recently received my Master’s degree from the University of Maryland where I was involved in a number of horticultural projects and taught various plant science classes with my advisor Chris Walsh, Professor of Horticulture and a graduate of Cornell. I am excited to use my eclectic background to sustain and improve the apple and grape production in the area through the development of local programs and a strong collaboration with Cornell scientists.

In my first week, I have already been welcomed by many of you in the Plattsburgh area and in Ithaca. I am absolutely thrilled to be in the beautiful North Country, and part of such a wonderful community of farmers and educators. I look forward to meeting many more of you at upcoming programs and events. Please don’t hesitate to contact me!



Anna Wallis  
 Cell: 443-421-7970  
 Fax: 518-561-0183  
 6064 State Route 22 Suite 5  
 Plattsburgh, NY 12901  
[aew232@cornell.edu](mailto:aew232@cornell.edu)

## Vineyard Floor Management

*By Chrislyn Partick, in July 2014 Northern NY Grape Management Update*

Weeds can compete with grapes for water, nutrients, and sunlight, and new growers often ask for advice in creating an effective weed management program for their vineyards. Competition from weeds can be especially deleterious in the first year or two after planting, so an effective weed control program is important early on.

Most growers aim to have a vegetation-free strip under the vines; however, research by Justine Vanden Heuvel at Cornell University is looking at using under-vine cover crops as a method to reduce excessive vine vigor, which can be a significant problem in cold-hardy hybrids.



Under-vine cover crop treatments.

*Credits: Justine Vanden Heuvel and Lindsay Jordan, Cornell University*



Included in this *News You Can Use* is a link to the February 12, 2013 Vineyard Floor Management webinar (<https://www.youtube.com/watch?v=pSNy08aEs4E&feature=youtu.be>) by Justine and Harlene Hatterman-Valenti of North Dakota State University. Justine discusses the under-vine cover crop work, and Harlene covers more traditional methods of weed control in vineyards, and has a “What herbicide caused this damage?” quiz at the end.

## In The Vineyard

By Hans Walter-Peterson, 7/9/14 Finger Lakes Vineyard Update

The 2014 growing season continues to fly by. Fruit set is wrapped up on primary clusters, but there are still some clusters from secondary shoots on later varieties that are still finishing bloom. This will be one of the challenges of a year like this, where there can be asynchronous ripening of clusters depending on whether they come from primary shoots that survived the winters, or secondary shoots that emerged in place of dead primaries. On vines with lower crops this year due to winter injury, we are encouraging growers to try to maintain as many sinks for water and nutrients on the vines for as long as possible, whether those are suckers near the bottom of the vines or clusters in the canopy, in order to try to hold back shoot growth even a little bit. These secondary clusters can be removed around veraison, and should still be relatively easy to identify due to their lagging development behind primary clusters. Overall, it looks like clusters set fairly well, although we have seen some instances where this wasn't necessarily the case. In a few cases this seemed to be primarily due to some downy mildew infections on flowers before bloom, but in others there was no obvious explanation (as is sometimes the case with fruit set). Concord and Niagara vineyards that we have visited on Keuka Lake this week look to have decent crops for the most part. I suspect that many will be a bit lower than normal after the huge crops that most growers had last year, but we have seen a few blocks where the vines seem to be cranking out another relatively large crop this year.

The combination of lower than normal crops plus adequate soil moisture and heat is resulting in some very dense canopies this year. Several growers have started pulling leaves from the fruit zone in wine varieties this week.

Pulling leaves earlier in the season, shortly after fruit set, has a few advantages, including:

- Reducing potential sunburn compared to pulling leaves later in the year.
- Opening up the canopy for better air circulation and spray penetration to improve disease control.
- Potentially reducing the development of methoxy-pyrazines in certain red vinifera cultivars (e.g., Cabernet Franc).

In most cases, growers are pulling leaves only on the east-facing side of the canopy in order to take advantage of the

morning sun to help dry that side of the canopy. This year, however, due to the large canopies and multiple leaf layers that we're seeing in some cases, it might be prudent to do some removal on both sides of the canopy this year. Yes, it's another pass through the vineyard but we know that heavily covered fruit zones can lead to all sorts of problems, especially if weather conditions turn wet later this season.



Poor fruit set due to downy mildew infection of flowers.

The heavy, rapid canopy growth is also starting to result in shoots starting to fall over and shade the fruiting zone in some vertically shoot positioned blocks. In these cases, be sure that catch wires have been moved up to the top position in order to provide as much support as possible to the shoots. If they are still shading the fruiting zone, then it's time to hedge. When setting up the hedger, be sure to set it to cut as high as possible, in order to retain as much leaf area as possible, and to encourage laterals to develop higher up in the canopy, and not as much in the fruiting zone.



Even in a normal year, crop estimates can feel like a bit of a crap shoot. This year, there is a whole new level of variability within blocks that will be difficult to account for when doing any kind of crop estimates. The higher level of variability in yields will require more samples to be taken

in order to try to account for those differences between different parts of a vineyard block. Given that additional challenge this year, the time that we generally take crop estimates is close at hand. We're at about 30 days after bloom right now for early varieties like Foch, Leon Millot and will hit that milestone in a couple of days for Concord and Niagara. For those growers that use 1200 growing degree days as the time to do estimates, warmer sites will reach that level in the next day or two as well.

An article by Californian viticulturist Cliff Ohmart describes the process in depth. See it here: [http://lodiwine.com/Crop\\_Estimation.pdf](http://lodiwine.com/Crop_Estimation.pdf).

## New York Farm Day -- A Tasteful Tradition

By Dana Alexander, July 14, 2014 post, available online at <http://www.nywine.com/Articles?ArticleID=4293&FromHome=True>

New York Farm Day in Washington is just over two weeks away, on July 29, when Members of Congress and Administration officials get a tasteful reminder that New York is a major farm state, and agriculture is a major part of our economy.

We're honored that one again Senator Kirsten Gillibrand, who is on the Agriculture Committee, will host the event, as well as an export resources workshop and Agriculture Working Group meeting earlier in the day. Since her days in the House of Representatives, and now in the Senate, she has been a tireless and highly effective champion of New York agriculture.

We've organized Farm Day since 2002 (first hosted by former Senator Hillary Clinton), and it quickly became the most popular reception on Capitol Hill. Traditionally, Farm Day is in September or October--harvest season--but this year it will be on July 29, since virtually no one will be in Washington during this fall's midterm election season.

Part of Farm Day's magic is the venue: the Senate Kennedy Caucus Room, the most elegant and historic on Capitol Hill. It has been the scene of major hearings like the Watergate Scandal, the Titanic Investigation, the Teapot Dome Scandal, and confirmation of Supreme Court Justices.

Farm Day's popularity isn't based just on the great food and beverages, but especially the fact that the people who produce them present them--not some local caterer--so there's extra pride and a direct connection from farm to consumer. As always, this year we will feature a fabulous array of fresh fruits and vegetables from apples to zucchini, an array of dairy products (milk, yogurt, cheese), awesome breads, maple and honey, seafood and meats, and all four farm-based craft beverages (wine, beer, spirits, cider). In addition, two fine restaurants--61 Local from Brooklyn and Tom Schaudel's Jewel from Long Island--will offer creative bites using New York ingredients.

Bon Appetit, and Cheers!

## Disease Updates

By Jim O'Connell, ENYCHP, edited by Tim Martinson, Cornell Univ. Dept. of Horticulture

We are now reaching the stage (4 wk after bloom) where grape clusters are transitioning away from susceptibility to new fruit infections from powdery mildew (PM), downy mildew (DM), and black rot (BR). The good news is that if grapes are clean, there are only a few weeks of fruit susceptibility left (on even highly susceptible varieties), and the emphasis will shift to maintaining clean foliage (PM, DM).

If you have maintained tight spray intervals (timely application of prebloom and immediate post-bloom sprays and a 2<sup>nd</sup> postbloom spray at 10-14 d intervals) with good coverage AND your grapes and foliage have no visible disease symptoms, you are in good shape and can start to relax a bit.

Scout your vineyards to stay on top of issues, and be prepared to react if you see something. Highly-susceptible *V. vinifera* and some hybrids will need additional PM, DM, and BR protection, but risk to Concord and some hybrids (consult varietal disease susceptibility table in Cornell PM recommendations) should be lessened.

We have reached the point in the season where fruit are less susceptible to infection by powdery mildew. But

diffuse, invisible PM infections on fruit can provide entry for *botrytis* and fruit rot organisms, and *vinifera* cultivars, in particular, will need another few weeks protection. Foliage remains susceptible to infection throughout the season and it's important to maintain an appropriate level of control throughout the mid-summer period. Poor control of powdery mildew during this time period can lead to poor ripening, premature defoliation, and reduced winter hardiness.

There are many choices available for managing powdery mildew infections. For mid-summer and beyond, sulfur remains the inexpensive, effective material for foliar PM control, either alone or in tank mixes with other more specific PM fungicides. Some winemakers become concerned about sulfur residues on grapes after veraison, although recent research in NY has shown that this is often overblown (To quote Wayne Wilcox: "*Regardless of rate and formulation, a cutoff of 5 weeks before harvest always yielded residue levels below the consistent danger threshold [for impacting wine fermentation] .*")

Resistance management is an ongoing concern with PM fungicides, many of which limit the number of applications per season. Labels now include the 'Fungicide Resistance Group' number that groups fungicides with similar chemical modes of action, and make it easier for growers to switch to other materials with a different mode of action and thereby avoid selection of resistant strains.

*continued on next page*

*Disease Updates, continued from previous page*

Vines at the Hudson Valley Lab in Highland are four weeks post bloom. Black Rot susceptibility starts to decline, with Concords moving out of their highly-susceptible period (3-4 wk postbloom) and becoming highly resistant in another 1-2 weeks. Susceptibility of vinifera and some hybrids stretches out another week or two (4-5 wk plus 1-2 wk to become highly resistant)

At this point in the season, initial overwintering BR inoculum is spent, and new secondary infections are only produced by spread from existing lesions. So if your vineyard is clean, chances are that it will stay clean. Spray trials that incorporate prebloom and two postbloom sprays have generally provided excellent Black rot control. On the other hand, if there are existing lesions and wet weather, you will need a few more weeks protection to avoid losses due to black rot.

Best results in blocks with existing infections have come from tank mixes combining DMI or SI fungicides (e.g. Mettle, Rally, Inspire Super, Revus Top), which have some 'reach back' activity against existing lesions, and strobilurins (e.g. Pristine, Flint, Sovran) for forward protection and anti-sporulant activity. Captan, Ziram or Mancozeb (66d PHI) are strictly protectants, and won't impact pre-existing infections, but combined with strobilurins can reduce sporulation and spread of existing infections.

Conditions lately have been ideal for downy mildew infections. There has been plenty of moisture, along with warm and humid nights, allowing for the buildup of inoculum. In fact, foliar infections are already present in many vineyards and the current weather conditions will make it easy for downy mildew to spread to new tissue. These infections will continue to increase and remain a threat for the remainder of the season. Clusters are still susceptible and should be protected, especially in the presence of foliar infections. It's important to do your best

to reduce present infections and to prevent new infections from getting started.

Protectants, such as copper, captan, ziram and mancozeb (keep in mind 66 DTH) provide coverage to prevent new infections, but have no significant post infection or anti-sporulant activity. Some of the strobilurin fungicides (Abound, Pristine) offer strong protection and others (Sovran, Flint) provide poor control. Post infection activity is limited, but spore production is reduced.

Post-infection materials: Ridomil, though expensive and only effective against DM, is still the most effective DM material. Phosphorous acid products (also called phosphite and phosphonate) provide 3-5 d post-infection activity and severely limit sporulation, and are translocated within shoots. They are also relatively inexpensive, and thus an attractive option for dealing with existing infections.

Research has shown that few, if any phomopsis spores are released after early July. Early season sprays are the most effective in reducing phomopsis infections to rachises and fruit.

This article has highlighted some fungicide options for disease management, but canopy management and cultural practices are equally important – particularly with susceptible cultivars. Maintain canopies with appropriate shoot densities, sunlight exposure to the grape clusters, and open canopies that allow flecks of light to pass through. This helps reduce disease in two ways: 1) sunlight exposure and air movement dry off the fruit faster, reducing conditions favorable to infections; 2) open canopies allow for better spray penetration and coverage.

For rates and further information about the above mentioned fungicides, consult the 2014 New York and Pennsylvania Pest Management Guidelines for Grapes. For a more comprehensive discussion of disease management programs, see Wayne Wilcox's annual update on disease control: <http://www.fruit.cornell.edu/grape/pdfs/Wilcox-Grape%20Disease%20Control%202013.pdf>.

## Cornell Grapes Pest Management Guidelines

The 2014 Cornell Pest Management Guidelines for Commercial Grapes Production is available only as a hard copy this year. Guidelines can be purchased with enrollment in the CCE Eastern NY Commercial Horticulture Program –

(contact Marcie 518-272-4210) –or order directly from the Cornell Store, online at <http://store.cornell.edu/c-875-guidelines.aspx>.



