



Finger Lakes Grape Program

October 1, 2104

# Finger Lakes Vineyard Update

## In The Vineyard

*Hans Walter-Peterson*

The Finger Lakes has been experiencing one of the better months of September that we have seen in a while – right up there with last September. In the month of September, the region was well-below average with regard to rainfall. Less than 1” of rain fell in Geneva and Watkins Glen (Lakewood), and other spots like Varick, Lodi and Dundee recorded just over an inch. The average rainfall at Geneva in September is 3.69”, so we were well below what we normally receive from the skies, which has been a very good thing. Disease development has been kept in check pretty well, as we continue to see only a few new downy mildew infections developing on younger leaves, and where there is botrytis activity, most of it appears to be relatively free of sour rot. We are also seeing few signs of drought stress as a result of this dry spell. So all in all, so far so good.

The good weather has been good for ripening, disease development, and making it more pleasant to harvest the fruit that’s ready. Lots of mid-season varieties are being brought in to crush pads around the region this week, including Chardonnay and Pinot noir for still wine, Pinot gris, and Gewürztraminer. Trucks loaded up with bins full of Concord are running to Canandaigua for Constellation Brands also.

The sample results from last week’s Veraison to Harvest issue (samples were taken on September 23, almost 10 days ago) indicate that most varieties in the Finger Lakes are still tracking a little bit behind the fruit chemistry numbers from last year, on average. Riesling looks to be adding sugar each week, but the acidity did not change much from the previous week. The same was true for our Concord samples as well. It will be interesting to see if the warmer temperatures that we have had since that last sample was taken will result in some more significant change in pH and TA this week.

### *Links To*

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### *Upcoming Events*

**Cornell Strategic Marketing Conference 2014**

***November 11 and 12, 2014***

**2014 Agribusiness Economic Outlook Conference**

***December 9, 2014***

**Unified Symposium**

***January 27—29, 2015***

***Save the Dates: B.E.V. NY 2015***

***February 26 thru 28, 2015***

## IPM

Hans Walter-Peterson

### *Multicolored Asian Lady Beetles (MALB)*

As we move into the heart of this year's harvest season, we also are at the point of the year where insects like bees, wasps and MALB are looking to feed on some sugar before the winter. We have found MALB in a few spots in the Teaching Vineyard this year, and have heard from a couple of growers that they are seeing the insect starting to show up in certain spots in vineyard blocks.

I spoke with my CCE colleague, Mike Stanyard, who works in field crops in the region, about the levels of soybean aphids in fields this season – one of the primary food sources for MALB during the summer. He said that there was a surge of soybean aphids in late August, which resulted in higher populations of MALB showing up in those fields as well. With most of the soybeans senescing now, and the daylength and temperatures dropping, the beetles are turning to find sugar sources before winter. We haven't been seeing large numbers of the insect at this point, but it is something to watch for as harvest continues to progress.



Source: <http://www.extension.org/pages/71092/multicolored-asian-lady-beetle>

The concern with having MALB in the fruit is, of course, the very potent pyrazine compound that the beetles use as a defense mechanism. This compound – isopropyl methoxypyrazine (IPMP) – can be detected at very low concentrations in juice and wine, and is not converted to anything else during the winemaking process (unlike the compound emitted by the brown marmorated stink bug, which seems to degrade during fermentation). Because IPMP can be detected at such low levels, the number of insects needed to cause off-flavors and aromas in juice and wine are fairly low. The suggested threshold for MALB in grapes is about 6 beetles per 10 pounds of grapes in Concord (the threshold used by National Grape Cooperative), and about 5 beetles per 25 clusters in winegrapes, which works out to about 5-6 beetles per 10 pounds of grapes as well for most winegrape varieties.

Several materials are labeled for use to manage MALB in New York vineyards. From Greg Loeb's Insect Management Update in our [May 2014 newsletter](#):

There are a few chemical approaches to managing MALB in New York: Danitol [fenropathrin], Mustang Max, Aza-Direct and Evergreen [natural pyrethrins]. To use Danitol in New York for this purpose, you need to have the 2(ee) label. However, a 21 days-to-harvest (DTH) restriction limits its usefulness. Mustang Max, another pyrethroid, includes MALB on the grape label and only has a 1 DTH restriction. Aza-Direct, which is based on the active ingredient azadirachtin from the neem tree, appears to have a repellent effect on MALB. Based on a trial a few years ago by Tim Weigle, Evergreen appears to have both toxic and repellent effects on MALB. Aza-Direct and Evergreen have no days to harvest restrictions. For Aza-Direct, pH in spray water should be 7 or less (optimum is 5.5 to 6.5). The neonicotinoid insecticide Venom [dinotefuran] has shown good efficacy against MALB (both toxic and repellent) in trials conducted by Rufus Isaacs at Michigan State University. It only has

## IPM (continued from page 2)

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a 1 DTH restriction. Venom is labeled for use in PA but not NY. Recently, a 2(ee) label expansion for Admire Pro has also been approved. Admire Pro has a zero day to harvest interval when applied to foliage. Imidacloprid has both toxic and repellent effects on MALB similar to Venom.

As Greg mentions, some of these materials are able to repel MALB from the grapes for a time, which some growers might prefer to killing the bugs outright out of concern that the dead bugs will be retained in the clusters at harvest, and therefore still cause off-flavors to be present in the wine. Some [research published by Dr. Gary Pickering](#) (from Brock University in Ontario), however, showed that IPMP concentrations in wine are significantly lower when dead beetles are present in the fermenting wine than when live beetles are present.<sup>1</sup> (Note: the beetles were not pressed with the grapes in this experiment, so it's possible that could change the results to some extent).

Just to reiterate, we're not seeing a lot of MALB present in vineyards right now, but we might be seeing some more than usual, especially in blocks that are located near soybean fields. We will be looking for MALB in our vineyard stops over the next couple of weeks, and it would be worth doing some scouting in potential "hot spots" prior to harvest to see if numbers might be high enough to be of concern.

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<sup>1</sup>Pickering, G. J., M. Spink, Y. Kotseridis, I. D. Brindle, M. Sears and D. Inglis. 2008. The influence of *Harmonia axyridis* morbidity on 2-Isopropyl-3-methoxypyrazine in 'Cabernet Sauvignon' wine. *Vitis* 47(4): 227-230.

## Using Volunteer Labor During Harvest (or anytime)

Hans Walter-Peterson

*October 1 - This item appeared in last week's Vineyard Update, but I wanted to include it again in an effort to get the word out about this apparent restriction on using volunteer labor at businesses, including vineyards and wineries. We are still trying to get some clarification about the issue, but for now, it would seem prudent to avoid any problems along these lines and not use volunteers until we have better information on the issue. - Hans*

There was a recent article from the San Jose Mercury News about a winery in the Castro Valley region of California that was assessed a \$115,000 fine by the state of California for using volunteers at their business. These volunteers, according to the article, were helping out with various functions at the winery - some with the idea of learning about the industry by working at a winery. The winery was cited because none of the workers was covered by workers' compensation or paid a wage for their work at the winery, which is against California law (and federal law, as it turns out).

After seeing this article, I called the NY State Department of Labor to ask if for-profit businesses in New York were also prohibited from using volunteer labor, and the answer was yes. In other words, no for-profit business in New York (including agriculture, as far as I know right now) is allowed to use volunteer labor. There are conditions for allowing an "intern" to work at a business who is not paid (see the US DOL fact sheet reference below).

I don't want to try to interpret New York labor law and regulations here, and please don't take this as any kind of legal advice, but I wanted to get the word out about what I was told regarding this subject. I will try to get some other resources and clarification from the state about this and pass it along when I do, but suffice to say, any growers and wineries who are considering using volunteers to help out during harvest should probably think twice before doing so.

A few links with some more information:

### **Castro Valley winery fined \$115,000 for using volunteers**

[http://www.mercurynews.com/my-town/ci\\_26541167/castro-valley-winery-fined-115-000-using-volunteers](http://www.mercurynews.com/my-town/ci_26541167/castro-valley-winery-fined-115-000-using-volunteers)

### **Statement from CA Department of Industrial Relations**

[http://www.mercurynews.com/extra/ci\\_26563532/document-california-agency-fine-winerys-use-volunteer-workers](http://www.mercurynews.com/extra/ci_26563532/document-california-agency-fine-winerys-use-volunteer-workers)

### **Fact Sheet #71: Internship Programs Under The Fair Labor Standards Act (U.S. Department of Labor)**

<http://www.dol.gov/whd/regs/compliance/whdfs71.htm>

## Upcoming Events

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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.

### **Cornell Strategic Marketing Conference 2014**

*November 11 - November 12, 2014*

*The Inn on the Lake*

*770 South Main Street*

*Canandaigua, NY 14424*

Information about the program can be found at:

[http://aem.cornell.edu/outreach/strategic\\_marketing\\_conference.php](http://aem.cornell.edu/outreach/strategic_marketing_conference.php)



### **2014 Agribusiness Economic Outlook Conference**

*Tuesday, December 9*

*Warren Hall*

*Cornell University, Ithaca NY*

Faculty from the Charles H. Dyson School of Applied Economics and Management and other experts will present loads of information about the short and long-term outlook for agriculture and agricultural products at this year's Agribusiness Economic Outlook Conference. The conference will highlight critical issues facing agriculture in New York and the Northeast to agribusiness professionals, policymakers, farm managers and other industry leaders. Breakout sessions in the afternoon will focus on the current status and near-term outlook for major New York agricultural commodities, including grapes and wine ([click here to read the 2013 outlook for grapes, wine and ornamental crops from Dr. Miguel Gomez](#)).

More information can be found at the [conference website](#).



### **Unified Symposium**

January 27-29, 2015

Sacramento Convention Center

Sacramento, CA

The Unified Symposium will once again feature the largest trade show in North America for the grape and wine industry, along with lots of information sessions on emerging issues, trends and breakthroughs in grapegrowing, wine-making, marketing and business.

Program and housing registration will open on October 28. Visit <http://www.unifiedsymposium.org> for more information.

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## 2014 GDD Accumulation

### 2014 GDD & Precipitation

FL Teaching & Demonstration Vineyard – Dresden, NY					
Date	Hi Temp (F)	Lo Temp (F)	Rain (inches)	Daily GDDs	Total GDDs
9/24/14	76.0	50.6	0.00	13.3	2466.4
9/25/14	69.8	51.4	0.00	10.6	2477.0
9/26/14	73.9	50.9	0.00	12.4	2489.4
9/27/14	77.3	52.3	0.00	14.8	2504.2
9/28/14	78.3	55.7	0.00	17.0	2521.2
9/29/14	79.4	56.1	0.00	17.8	2538.9
9/30/14	78.4	57.1	0.09	17.8	2556.7
Weekly Total			0.09"	103.7	
Season Total			22.51"	2556.7	

GDDs as of September 30, 2013: 2768.8

Rainfall as of September 30, 2013: 19.76"

### Seasonal Comparisons (at Geneva)



### Growing Degree Days

	2014 GDD <sup>1</sup>	Long-term Avg GDD <sup>2</sup>	Cumulative days ahead (+)/behind (-) <sup>3</sup>
April	52.1	65.6	-3
May	298.3	247.3	+3
June	516.9	480.6	+4
July	573.3	642.3	+1
August	519.3	590.3	-3
September	352.7	347.5	-8
October		104.6	
TOTAL	2312.4	2478.1	

<sup>1</sup> Accumulated GDDs for the month.

<sup>2</sup> The long-term average (1973-2013) GDD accumulation for that month, or up to the most recent records in the current month.

<sup>3</sup> Numbers at the end of each month represent where this year's GDD accumulation stands relative to the long-term average. For example, at the end of April 2014, we were 3 days behind average accumulation. The most recent number represents the current status.

## 2014 GDD Accumulation (continued from page 6)

### Precipitation

	2014 Rain <sup>4</sup>	Long-term Avg Rain <sup>5</sup>	Monthly deviation from avg <sup>6</sup>
April	2.90"	2.90"	0.00"
May	3.64"	3.11"	+0.53"
June	3.23"	3.60"	-0.37"
July	7.81"	3.31"	+4.50"
August	2.93"	3.18"	-0.25"
September	0.93"	3.69"	-2.76
October		3.26"	
TOTAL	21.43"	23.06"	

<sup>4</sup> Monthly rainfall totals up to current date

<sup>5</sup> Long-term average rainfall for the month (total)

<sup>6</sup> Monthly deviation from average (calculated at the end of the month)



## 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, “The Grape Lakes – Viticulture in the Finger Lakes” at <http://flg.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!

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