



## In The Vineyard

*Hans Walter-Peterson*

The hot, dry weather we experienced last week had a noticeable effect on maturity in most varieties, as seen in [last week's Veraison to Harvest newsletter](#). It has been especially interesting to see just how much total acidity (TA) has dropped recently, which can be attributed to high temperatures driving respiration in the berries (the respiration process relies on malic acid as the primary source of carbon after veraison). With another several days forecast in the 80s this week, it is possible that acidity may get lower than some winemakers may want in certain varieties, particularly whites. We are generally about one week ahead of where we were last year with regard to fruit maturity, but in some cases, it won't surprise me to see some fruit that normally would be picked in October start coming off the vines before the end of the month.

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Growers love an early harvest, but I don't think anybody enjoys a compressed harvest. Hopefully, conditions over the next few weeks will allow harvest to continue at a manageable pace.

## IPM

*Hans Walter-Peterson*

### *Potential for high populations of MALB in vineyards*



***Large numbers of lady beetle pupae are being found in soybean fields, thanks to high levels of soybean aphids this summer.***

*Photo: Mike Stanyard*

At this point in the season, *Harmonia axyridis*, otherwise known as the Multicolored Asian Lady Beetle (MALB), are starting to make their presence known in vineyards. Soybean fields in the Finger Lakes are starting to turn yellow, and that usually means that any MALB that were feeding on soybean aphids in those fields are looking for a source of sugar to feed on before they overwinter. My colleague, Mike Stanyard, who works with field crops in the region and discussed soybean aphids and MALB at our IPM Meeting this spring, told me that soybean aphid populations have been very high recently and is seeing large numbers of lady beetle pupae in fields (see photo).

While MALB can certainly cause some crop loss due to feeding on injured fruit, the primary concern with them is the highly-aromatic defensive chemical - 2-isopropyl-3-methoxypyrazine (IPMP) - that they emit

## IPM (continued from page 1)

when disturbed, which can have a negative impact on juice and wine flavor and aroma. Numbers as low as 5 beetles per 25 clusters in wine varieties may cause off-flavors and aromas. Another threshold suggests approximately 15-18 beetles per 30 pound lug.

For management options, I'll quote from [Greg Loeb's Insect Management newsletter from 2014](#):

“There are a few chemical approaches to managing MALB in New York: Danitol [fenprothrin], 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) harvest 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, again based on trials by Roger. 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 a 1 day to harvest 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.”

One question that comes up with regard to using insecticides for MALB control is how long dead beetles within clusters can have an impact on the juice. A study done at Brock University found that beetles that were dead for 6.5 days inside clusters did not affect the concentration of IPMP in wines (Pickering et al. 2008). The treatments that included beetles that were dead for 1 day or 3 days prior to being added to juice did have less IPMP introduced than treatments using live beetles.



Here's the basic conclusion I draw from this – if there are enough live beetles in the vineyard prior to harvest, using an insecticide a few days ahead of picking should at least reduce the amount of IPMP that is released into the juice and wine. However, growers should be sure to discuss this with buyers for their fruit before making a chemical application so close to harvest.

### Reference:

Pickering, G., M. Spink, Y. Kosteridis, I. D. Brindle, M. Sears, D. Ingils. 2008. The influence of *Harmonia axyridis* morbidity on 2-isopropyl-3-methoxypyrazine in 'Cabernet Sauvignon' wine. *Vitis* 47(4): 227-230.

## New Staff With the Finger Lakes Grape Program

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*Hans Walter-Peterson*

I am very pleased to announce that we will have two new people working with the Finger Lakes Grape Program starting over the next couple of weeks.

First of all, I am happy to announce that **Gillian Trimber** will be our new viticulture educator. Gillian will be taking over the position previously held by Mike Colizzi with the FLGP. Gillian graduated from Cornell in 2013 with a degree in Viticulture & Enology, and has spent the past two years working in the vineyards at Sheldrake Point. Gillian was a Nelson J. Shaulis Scholar during the summer of 2011 at the NY State Experiment Station in Geneva, working on a number of research projects with various researchers at the Station. She will be wearing a number of different hats in her job with the FLGP, including managing the Teaching & Demonstration Vineyard, helping with various field trials and projects, organizing and planning meetings, and being our lead contact for new and prospective grape growers.

Gillian will begin working with us next Monday, September 21.

We will also be having a new administrative assistant working for us beginning in a couple of weeks. Many of you have met and spoken with Karen Gavette, our current assistant, over the past several years. Karen will be retiring from CCE at the end of September, and we wish her nothing but the best as she enjoys this new phase of her life. I want to thank her publicly for all that she has done for the Grape Program over the past several years. She has helped us in so many ways to keep this Program on track.

Starting September 28, **Brittany Griffin** will be taking over Karen's role as our administrative assistant. Brittany is a life-long resident of the area, and graduated from Finger Lakes Community College this past May with an Associate's Degree in Business Administration. Brittany has been deeply involved with the 4-H program in Yates County for a number of years, and most recently has served as a 4-H program assistant for the past two summers.

I want to thank both Arlene Wilson, executive director of CCE-Yates County, and Cheryl Jaworski-Flynn, administrative team leader at CCE-Yates County, for their help during both of these hiring processes.

# Finger Lakes Vineyard Update

Finger Lakes Grape Program

September 16, 2015

## 2015 GDD & Precipitation

<u>FLX Teaching &amp; Demonstration Vineyard</u> – Dresden, NY					
Date	Hi Temp (F)	Lo Temp (F)	Rain (inches)	Daily GDDs	Total GDDs
9/10/15	72.8	62.5	0.00	17.7	2530.9
9/11/15	75.3	57.5	0.00	16.4	2547.3
9/12/15	62.8	59.4	0.99	11.1	2558.4
9/13/15	62.1	54.0	0.11	8.1	2566.4
9/14/15	70.8	53.7	0.06	12.3	2578.7
9/15/15	80.8	52.1	0.00	16.5	2595.1
Weekly Total			<b>1.16"</b>	<b>81.9</b>	
Season Total			<b>20.17"</b>	<b>2595.1</b>	

GDDs as of September 15, 2014: 2387.0

Rainfall as of September 15, 2014: 21.97"

Seasonal Comparisons (at [Geneva](#))

### Growing Degree Days



	2015 GDD <sup>1</sup>	Long-term Avg GDD <sup>2</sup>	Cumulative days ahead (+)/behind (-) <sup>3</sup>
April	40.8	65.2	-7
May	408.4	248.6	+8
June	444.9	481.5	+5
July	606.8	640.6	+3
August	572.0	588.6	+3
September	297.0	347.6	+15
October		105.5	
TOTAL		2477.6	

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

<sup>2</sup> The long-term average (1973-2014) GDD accumulation for that 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. The most recent number represents the current status.

## 2015 GDD & Precipitation (continued from page 4)

### Precipitation

	2015 Rain <sup>4</sup>	Long-term Avg Rain <sup>5</sup>	Monthly deviation from avg <sup>6</sup>
April	2.54"	2.90	-0.31"
May	2.97"	3.11	-0.14"
June	7.28"	3.60	+3.68"
July	3.27"	3.42	-0.15"
August	2.25"	3.17	-0.92"
September	1.19"	3.63	
October		3.25	
TOTAL		23.08"	

<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

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Got some grapes to sell? Looking to buy some equipment or bulk wine? List your ad on the [NY Grape & Wine Classifieds website](#) today!

Become a fan of the [Finger Lakes Grape Program on Facebook](#), or follow us on [Twitter \(@cceflgp\)](#). Also check out our website, “The Grape Lakes – Viticulture in the Finger Lakes” at <http://flg.cce.cornell.edu>.

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417 Liberty Street, Penn Yan, NY 14527

315.536.5134