

# Ohio Fruit ICM News

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## Calendar - Newly added in *Bold*

**October 11, High Tunnel Field Day** Lexington, KY. For more information contact Mark Williams 859-257-2638 or Bob Anderson 859-257-4721.

November 8, Ohio Ag and Hort Human Resource Managers' Forum Franklin County Farm Bureau Hilliard, 10:00 - 2:30. Participation in the Forum is limited to the first 40 registrants and reservations are requested by November 1. Contact MAAHS at 614-246-8286 or by email at [maahs@ofbf.org](mailto:maahs@ofbf.org).

November 9-11, Southeast Strawberry Expo, Sunset Beach, NC (near Wilmington). For more information, contact the NC Strawberry Association, 919-542-3687 or [ncstrawberry@mindspring.com](mailto:ncstrawberry@mindspring.com)

December 5-7, Great Lakes Fruit, Vegetable and Farm Market EXPO. DeVos Place, Grand Rapids, Mich, [www.glexpo.com](http://www.glexpo.com).

December 5-8, Cider Makers Short Course Geneva NY. For more information contact Ian Merwin at 607-255-1777 or by email at [im13@postoffice8.mail.cornell.edu](mailto:im13@postoffice8.mail.cornell.edu).

## 2007

January 7-9, Wisconsin Fresh Fruit and Vegetable Conference, Olympia Resort and Conference Center, Oconomowoc, [www.wisconsinfreshproduce.org](http://www.wisconsinfreshproduce.org)

January 8-9, Kentucky Fruit and Vegetable Conference and Trade Show, Holiday Inn North, Lexington, KY. Contact John Strang 859-257-5685; e-mail [jstrang@uky.edu](mailto:jstrang@uky.edu)

January 11-13, Illinois Specialty Crop and Agritourism Conference Crown Plaza Hotel, Springfield IL. For more information contact Rick Weinzierl, 217-244-2126

January 15-17, Ohio Fruit and Vegetable Growers Congress, Ohio Direct Agricultural Marketing Conference, Mid American Human Resource Conference and National Bramble Conference, Greater Columbus Convention Center.

January 25-28, Southern Sustainable Agriculture Conference. The Galt House Hotel and Suites, Louisville, Ky. For more information (678) 494-0696.

January 29, Beginning Commercial Apple Production Workshop. Indianapolis. Covering all aspects of starting an apple orchard such as planning, site preparation, varieties, rootstocks, pest and disease control, harvesting and marketing. Attendees must register for the Horticultural Congress, but there is no additional fee for the workshop. For more information, <http://www.hort.purdue.edu/hort/ext/hortcongress/ihc2007.html> or contact Peter Hirst, 765-494-1323 or [hirst@purdue.edu](mailto:hirst@purdue.edu)

January 29-31, Indiana Horticultural Congress and Trade Show, Indianapolis.

January 30-February 1, Mid-Atlantic Fruit & Vegetable Convention. Hershey Lodge & Convention Center, Hershey PA

February 6, Southern Illinois Tree Fruit School, Holiday Inn, Mt. Vernon, Illinois. For more information contact Elizabeth Wahle, 618-692-9434.

February 9-12, North American Strawberry Growers Association Strawberry Symposium. Ventura, California. For more information <http://www.nasga.org/>.

February 12-13, Ohio Grape-Wine Short Course, Shisler Conference Center at OARDC in Wooster, OH.

February 14-15, Empire State Fruit and Vegetable Expo Syracuse, N.Y. For more information <http://www.nysaes.cornell.edu/hort/expo/>

February 16-17, North American Farmers' Direct Marketing Conference and Trade Show. Hyatt Regency Hotel, Calgary, Alberta, Canada. For more information [www.nafdma.com](http://www.nafdma.com).

February 27-28, Illinois Small Fruit and Strawberry Schools Holiday Inn, Mt. Vernon, Illinois. For more information contact Bronwyn Aly, 618-695-2444

## Comments from the Editor

In my last newsletter I included information on first freeze dates for locations in southern Ohio. To those of you who felt slighted, I didn't mean to imply that it doesn't freeze further north. I just found the data for southern Ohio easier to locate than for the rest of Ohio. As time allows I will track down the information for other locations. The National Weather Service site is not one of the easiest to navigate through quickly.

I've included an excellent article by Dr. Dami and associates on management of multicolored Asian Lady Beetle. It has a lot of good information on the beetle, but please not the pesticide recommendation are for grapes.

The Cider Maker short course (125-8) at Geneva has 20 registrants already and will most likely be held.

## **SW Michigan Apple Maturity Report October 4, 2006** by MSU Fruit Team (Source Bill Shane)

The samples for these reports are collected in Berrien County—the maturity is only a broad indication of trends for this area. Contact Bill Shane at SWMREC 269-944-1477 x 205 if you would like to have samples from your farm tested for maturity.

Sooty blotch and fly speck are slightly more common this week, but still hard to find in orchards with normal spray programs.

No more reports for: Gala, Honeycrisp, Jonathan, and Jonagold

Golden Delicious (10 samples, 4th week of testing). Firmness is averaging 16.2 down from 16.5 lb for last week, still spread across the acceptable to mid-term CA storage categories. Starch conversion is now averaging 5.9 compared to 4.9 for last week. Brix is now an average of 13.7 compared to 13 for last week. The starch conversion is in the overmature range for most orchards—this combined with the medium range firmness suggests that many orchards are best suited for shorter term CA or other short term storage options.

Red Delicious (7 samples, 3rd week of testing). Firmness is averaging 16.4 lb, about 0.7 lbs less than last week and now in the acceptable quality to shortterm CA categories. Starch conversion index is averaging 5.2, compared to 4.4 for last week. Brix now averages 11.8 compared to 11 for last week. Watercore and some mealiness is showing up in some blocks. Red Delicious are maturing fast and some blocks are too mature for successful longer term CA storage.

IdaRed (3 samples, 2nd week of testing). Firmness is averaging 16.7 compared to last weeks 17.1 lb. Starch conversion of is 3.6 compared to last weeks 3.1 with a brix of 11.7 compared to last weeks 10.6. Idared is on the edge between excellent and acceptable long term CA firmness and are in the mature starch reading zone. IdaRed can be

stored in long term CA successfully. The fruit is sufficiently mature for both fresh and processing uses.

Rome (3 samples, 2nd week of testing). Firmness averaging 20.5 lb (excellent firmness) with starch conversion averaging 5.2, well in the mature range. Brix is averaging 10.6 about the same as last week. Orchards similar to these samples can be harvested successfully for processing or for fresh.

Fuji (5 samples, 2nd week of testing). Firmness is averaging 18 lb, about 0.7 less than last week. Starch conversion is now averaging 3.7, slightly higher than last week with brix of 12.4 compared to last weeks 11.6. Background color for several orchards is changing from green to straw/green. These Fuji are all testing in the mature range for starch with firmness in the excellent to long term CA. These four were all mid season Fuji types. The generally excellent firmness will allow harvest to be delayed to wait for better size and color and sugar development.

Braeburn (2 samples, 1st week of testing). Firmness is averaging 22.3 lb, well into the excellent firmness range with starch conversion index of 3.7 and brix of 11.7. Red strain Braeburns are coloring well. One of the two blocks have starch conversion sufficient for successful longterm CA storage. Excellent firmness will allow harvesting to be delayed. -----

This report and project is made possible by the support of our sponsors which include Gerber Products Company, Valent USA, Michigan Apple Shippers Association, MSU Project GREEN, Michigan Apple Research Committee, Michigan State Horticultural Society, Michigan Agricultural Experiment Station, and Michigan State University Extension. SW growers providing apples include Grandview Orchards, Mammoth Farms, Oak Hill, Bixby Orchards, Willmeng Farms, and Czuba Farms.

**Management of MALB** by Imed Dami, Roger Williams, and Dan Fickle (Source: Ohio Grape-Wine Electronic Newsletter 25 Sept. 2006) - PLEASE NOTE - pesticide recommendations are for GRAPES only)

It's the time of year again that the Multicolored Asian lady beetle (MALB) whose presence is that of a beneficial predator throughout the growing season becomes an unwelcome pest at harvest. For those not familiar with MALB, here is a background on its biology, life cycle, and identification:

Adults & larvae are generalist predators that feed on aphids, scale insects, mites, and other insects (All of the above pests damage agricultural crops, home, garden, and landscape plantings)

- In summer they find food, find a mate, and reproduce. There may be several generations per year with a larger proportion of later generations predisposed to overwintering.
- Aggregation behavior (searching for overwintering sites and fruit crops) is triggered by the start of shorter days and cooler temps - when temperatures drop quickly

followed by a sunny day.

- Adult beetles have been found to vector fungal diseases, and therefore their aggregating nature may be favorable to the dissemination of bunch rot and other diseases from one grapevine to another.
- MALB does not cause direct fruit injury but instead will infest fruit previously damaged by other insects, pathogens, rots, birds, and wasps.
- When disturbed or crushed, MALB respond by "reflex bleeding" which forces hemolymph out of their joints. This alkaloid is highly unpleasant to taste and smell and can irreversibly taint the aroma and flavor of the resulting wine.
- Remember that only a handful (10 to 12 beetles per lug) can be a sufficient number for concern in white grape varieties. If these beetles are present at crush they can taint the juice which in turn may be detectable later in the wine.
- There is a major amount of color variation within the MALB
  - o Red color due to high quality of food eaten as larva (i.e., lots of tasty aphids)
  - o Yellowish color due to fewer aphids consumed but more pollen as a larva
  - o More spots, lower temperature and a longer duration of pupa stage
  - o Fewer spots, higher temperature and a shorter duration of pupa stage
- Many beetles have a straw-colored pronotum (top covering of middle body part) with markings that fuse into a regular- to irregularly-shaped "M" if viewed from the front, or "W" if viewed from behind.

#### Scouting and Management:

- Growers concerned about ladybeetles should be scouting fields regularly for the first signs of the beetle. Monitoring should begin 14 days prior to expected harvest for each cultivar
- Control fruit rots, as these will attract the beetles.
- Mechanical or hand harvesting during the daytime may sufficiently shake the vines to cause the beetles to leave the grape clusters ahead of the harvester.
- Night harvesting may not create this effect as the beetle burrows deep into the cluster and becomes much less active.
- Remember these are lady beetles, which are typically considered VERY DESIRABLE, so labeled control is limited.
- Ladybeetles are efficient predators of pest insects for the majority of the growing season, and most chemical controls for this introduced beetle will also kill native predators thereby allowing other insects and mites to become a problem.
- Since the crop typically becomes infested just prior to harvest, growers' options are restricted by the need for materials with a very short PHI (pre-harvest interval).
- While these insecticides do a good job of knocking down the population, dead beetles often times can remain in or on the cluster. If harvested along with the fruit, the dead beetles can still taint the wine for at least 2 days.
- Products which have shown repellancy and efficacy against this insect are, azadirachtin (Azatrol, Aza-Direct), and imidacloprid (Provado) both of which have a zero day pre-harvest interval (PHI).
- Two newly labeled products this season have demonstrated good efficacy against MALB for up to 4 days post treatment and both have minimal harvest restrictions.

Venom may be applied up to 1 day prior to harvest and Baythroid 3 days prior to harvest.

Venom (dinotefuran), (Valent USA): This is a third generation neonicotinoid which provides excellent control of sucking insects, such as leafhoppers, aphids and mealybugs. It has demonstrated good efficacy for up to 4 days post treatment against the Multicolored Asian lady beetle (MALB). The harvest restriction interval for foliar application is only 1 day so we believe it will be a valuable tool in controlling late season MALB infestations. Take note that this product is listed on page 49 of the 2006 Midwest Commercial Small Fruit and Grape Spray Guide as having a 52 day harvest restriction on grapes. This is a typo and should read 1 day when applied as a foliar application and 28 days if applied as a soil drench.

Baythroid (cyfluthrin), (Bayer Crop Science): This is a new pyrethroid similar to Capture and Danitol. It's labeled for control of flea beetle, grape berry moth, leafhoppers, cutworms, grape leaf skeletonizer, and glassy winged sharpshooter. We tested this product over a decade ago and found it to also provide good control of Japanese beetle and foliar phylloxera. Additional studies in the laboratory this winter have demonstrated good efficacy against the MALB. One very important aspect of this new product is that it has only a 3-day harvest restriction. This is the first labeled pyrethroid with a short harvest interval making it a good candidate for late season control of MALB and grape berry moth. This product is not listed in your 2006 spray guide so look to the product label for recommended rates.

Here are some good web sites to check for pictures and fact sheets for more detailed information: The Ohio State University website: <http://ipm.osu.edu/lady/lady.htm>  
Iowa State Insect Notes: <http://www.ent.iastate.edu/ipm/iin/ladybeetles.html>  
Michigan State University web site: <http://www.ipm.msu.edu/beetleFruit.htm>

## **High Tunnel Field Day** by John Strang

There is a field day scheduled for Wednesday October 11 regarding high tunnel greenhouses appropriate for production of vegetables and small fruit. The field day will be at the U.K. Horticultural Research Farm at Man 'O War Blvd. and US 27 on the south side of Lexington at 3:00 p.m. Enter the farm off of Man 'O War Blvd. at the stop light across from Walmart.

Plots demonstrate the performance of tomatoes, melons, peppers and strawberries inside high tunnel greenhouses and those grown outdoors. Representatives of the Haygrove high tunnel company will be present with university faculty to discuss high tunnel greenhouses.

High tunnels are basically inexpensive unheated greenhouses that are used to extend the growing season for many small fruits and vegetables. They can provide high quality out of season production, which provides excellent monetary returns. High tunnels are

particularly advantageous for growers selling through farmers' markets and other farmer to consumer markets.

For more information contact Mark Williams 859-257-2638 or Bob Anderson 859-257-4721

**Preliminary Monthly Climatologic Data for Selected Ohio Locations - September 2006**

	September		Average Temperatures			
	Precip.	Normal	High	Low	Monthly	Normal
<b>Akron-</b>						
<b>Canton</b>	3.35	3.43	68.8	52.1	60.5	63.0
<b>Cincinnati</b>	6.21	2.82	73.1	55.1	64.1	67.4
<b>Cleveland</b>	3.14	3.77	70.1	54.3	62.2	63.3
<b>Columbus</b>	5.35	2.92	72.1	55.2	63.7	66.5
<b>Dayton</b>	5.09	2.65	70.6	53.5	62.1	65.1
<b>Kingsville</b>	6.08	4.73	68.6	53.6	60.8	62.0
<b>Mansfield</b>	2.62	3.44	69.8	51.8	60.8	62.6
<b>Miami Univ.</b>	4.60	2.38	75.5	56.4	65.2	64.5
<b>Piketon</b>	4.81	1.93	74.5	55.4	63.8	65.1
<b>Toledo</b>	2.35	2.84	71.7	52.9	62.3	63.5
<b>Wooster</b>	2.86	3.14	71.4	52.0	61.0	63.4
<b>Youngstown</b>	6.73	3.89	68.4	52.2	60.3	61.5

This data is from several sources including OARDC, NOAA, and local records. Temperature is Fahrenheit and precipitation is in inches.

NOTE: Disclaimer - This publication may contain pesticide recommendations that are subject to change at any time. These recommendations are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. Due to constantly changing labels and product registrations, some of the recommendations given in this writing may no longer be legal by the time you read them. If any information in these recommendations disagrees with the label, the recommendation must be disregarded. No endorsement is intended for products mentioned, nor is criticism meant for products not mentioned. The author and Ohio State University Extension assume no liability resulting from the use of these recommendations.

**Ohio Poison Control Number**

(800) 222-1222  
TDD # is (614) 228-2272