



UNIVERSITY OF ILLINOIS EXTENSION

College of Agricultural, Consumer, and Environmental Sciences

Illinois Fruit and Vegetable News

Vol. 14, No. 13, September 10, 2008

a newsletter for commercial growers of fruit and vegetable crops

"We are what we repeatedly do. Excellence, then, is not an act, but a habit." Aristotle

Address any questions or comments regarding this newsletter to the individual authors listed after each article or to its editor, Rick Weinzierl, 217-244-2126, weinzierl@illinois.edu. The *Illinois Fruit and Vegetable News* is available on the web at: <http://www.ipm.illinois.edu/ifvn/index.html>. To receive email notification of new postings of this newsletter, call or write Rick Weinzierl at the number or email address above.

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University of Illinois Extension Specialists in Fruit & Vegetable Production & Pest Management

Upcoming Programs

October 3 SARE Tour, Mill Creek Farm (www.millcreekfarmquincy.com/), Quincy. Mill Creek Farm is best known in the area for its strawberries, sweet corn and pumpkin patch. The pumpkin patch hosts several thousand kids each October during the school week and families on the weekends. For more information and to register - http://web.extension.uiuc.edu/smallfarm/ag_tours.cfm

NCR-SARE Announces 2008 Farmer-Rancher Grant Call for Proposals

The 2008 North Central Region Sustainable Agriculture Research and Education Program (NCR-SARE) Farmer-Rancher Grant Call for Proposals is now available online at <http://www.sare.org/NCRSARE/prod.htm>.

Farmers and ranchers in the North Central Region may submit proposals for grants to support sustainable agriculture project ideas initiated by farmers and ranchers. Projects should emphasize research or education/demonstration. Grants can range from \$6,000 for individual farmers and up to \$18,000 for groups of 3 or more farmers. NCR-SARE expects to fund about 50 projects in the twelve-state North Central Region with this call. With this call, the Farmer Rancher Grant Program will now accept project proposals by email. NCR-SARE is now asking applicants to complete a brief budget narrative in their project proposal. Also, beginning farmers and/or youth may apply. The deadline for proposals is Monday, December 1, 2008 at 4:30 p.m. The NCR has funded more than 650 farmer-rancher grants worth more than \$4,300,000 since the inception of this program. Potential applicants with questions can contact Joan Benjamin, NCR-SARE Farmer Rancher Grant Program Coordinator, at jbenjamin2@unl.edu or 402-472-0809 or Deborah Cavanaugh-Grant, Illinois SARE Coordinator, cvnghgrn@illinois.edu, 217-968-5512.

Regional Updates

From southwestern Illinois ...

Apples in Southern Illinois are beautiful this year; cool nights have really brought out the red color. One of the occasional problems with growing red apples or red blushed apples in the warmer climates of southern Illinois is poor color development of the red pigment. The red pigmentation just does not develop as strongly in high temperatures. Though we have had some really hot days this summer, the temperatures at night dropped perfectly to coincide with apple ripening, resulting in good color development. Southern Illinois has always produced a good finish on yellow apples, but this year the reds are just as good. Size is good for the most part,

except where thinning wasn't adequate. The recent much needed rain has resulted in reports of some rain cracking on varieties that seem susceptible, including 'Honeycrisp.' Peaches are still in harvest with cultivars such as 'Parade' just coming ready in the northwest portion of the region. Blackberries are winding down as well.

I thought I might share pictures of fruit blotch (*Phyllosticta solitaria*); a disease now considered rare, although this year I have seen it twice so far. According to the *Compendium of Apple and Pear Diseases*, APS Press, the most critical period for chemical control is 2-4 weeks after petal fall. It goes on to say that most fungicides have not been specifically tested for blotch control since approximately 1960. This sort of tells you why the disease is referred to as the "Old Man's Disease." 'Rome Beauty' and 'McIntosh' are considered susceptible, and I can add 'Cox's Orange Pippin,' 'Cortland' and 'GingerGold' from sightings this year. 'Delicious' and 'Jonathan' are thought to be more resistant.



Phyllosticta fruit blotch on Cox Orange Pippin (upper left), Cortland (upper right), and GingerGold (bottom).

Local markets that don't have a fruit component are starting to close for the season, but sales appear strong for those still operating well into the fall. Larger quantity purchases are being reported, making me think the economy is bringing back the concept of food storage. Mother Nature has produced many perfect days recently, making a trip to the market or entertainment farm more than an enjoyable venture.

Pumpkins are coming on line for the upcoming fall holidays, as well as a continuing supply of most of the vegetables. Early planted tomatoes had a rough go of it with spring and early summer weather conditions, but later plantings are definitely robust and producing heavily. Many growers reported disease control was somewhat elusive on their early planted tomatoes.

Elizabeth Wahle (618-692-9434; wahle@illinois.edu)

In northern Illinois, day temperatures in the upper 60s to low 90s and night temperatures in the 40s to mid 60s have been the rule from August 24 to September 9. During the same period, 3 to 4 inches of rainfall was recorded in the region, with more than 2 inches recorded on September 4 in much of the region. Many pick-your-own orchards have been open to the public since the beginning of September. Early maturing apple varieties are available for sale as pre-picked in many orchards. Picking of early varieties (Gala, Jonamac, Ozark Gold, McIntosh, Spartan, Honeycrisp, and Golden Supreme) started this week in many orchards. Picking of fall-bearing raspberry and table grapes is also going on at many locations. In grapes, spray programs for controlling Japanese beetles and multicolored Asian lady beetles are going on in many vineyards. Bird control devices, including nets, are still on in vineyards. In orchards, summer spray programs to control diseases such as apple scab, fruit rots, sooty blotch, and flyspeck are ongoing. Control of insect pests such as apple maggot, codling moth, Japanese beetles, leafrollers, leafhoppers, and aphids also continues. Calcium sprays in late-maturing apples are still needed.

Harvesting of sweet corn, tomatoes, watermelons, muskmelons, peppers, cucumbers, and other vegetables is going on in many farms. Heavy rainfall that occurred in the region during the first week of September created a good environment for fungal and bacterial diseases, particularly in pumpkins. Growers need to follow spray schedules in order to control fruit rots and other foliar diseases in pumpkins and other vine crops. Powdery mildew was observed on pumpkins and other vine crops. Early blight, bacterial canker, bacterial spot, and septoria leaf spot have developed on tomatoes. This week I observed some mosaic virus symptoms on new growth in pumpkins. Aphids were also present on pumpkin leaves and fruits. Pumpkins are sizing well, and 50-90% of the fruits are orange in color, and also a flush of new fruit set is coming along very well. There is some bacterial spot and plectosporium blight on pumpkin fruits and phytophthora blight on late-season summer squash.

Maurice Ogutu (708-352-0109; ogutu@illinois.edu)

Notes from Chris Doll

Apple weather has been here early this year. Since a 97-degree high on August 5, there have been only six days with temperatures of 90-94 degrees, and the daily high for the last seven days has not reached 80 degrees. Rainfall in the area has been adequate to good, with a total of 3 inches on the Back-40. It's great weather for plant growth and the new seedlings of sod that I mentioned last time.

Peach harvest is winding down in a hurry, but my Encore will not be ready for harvest for another week or more. Gala harvest should be over, and Honeycrisp is also nearly complete. Red sports of Jonathan look great, and the soluble solids are generally adequate. With the cool temperatures and good soil moisture, dropping has not been a problem except for the "loose" varieties like Jonafree, Golden Supreme, and Macs – which I don't see many of in this area. Elizabeth Wahle asked me which varieties tend to drop, and I told her it is easier to name those that usually hang tight. In this group, I place Sansa, Gala, Cortland, Rome, Fuji, Granny Smith and Goldrush. Fruit size is good this year, and they should be worth holding on the tree with a stop-drop spray when needed. One of the disadvantages of holding apples on the tree is that the fruit might become more susceptible to skin cracking from over-maturity or rain. Some skin cracking on Honeycrisp has already happened this week.

Strawberry plantings are looking better, and plasticulture growers are readying fields for planting. Brambles, both raspberries and blackberries, are growing vigorously, and those that tip-layer are reaching for the ground. If rooted shoots have been a problem in the past, it will help if they are trimmed back before tipping, or else walk through and pull rooted tips out. Heavy pruning of brambles is not recommended at this time – only enough to control the tip rooting or the passage way down the aisle.

Pest-wise, the last Japanese beetle was found on a yellow rose bud on September 5, the latest ever for this location.

Chris Doll

Fruit Production and Pest Management

When to Harvest Honeycrisp Apples.

Maturity of most apple varieties can be predicted by firmness, soluble solids, and starch breakdown. Firmness of 15 to 20 lb, soluble solids of 12% and higher, and at least 50% of the starch converted into sugars are considered ideal maturity standards for most apple cultivars. However, like Gala, Honeycrisp fruits tend to ripen unevenly on the tree. There is a lot of variability in maturity from fruit to fruit. As you can see from the starch breakdown in the photograph below, some fruits maybe over mature while others are immature. Soluble solids also vary quite a bit from fruit to fruit.



Starch breakdown test: Fruits in the upper left are over-ripe; those in the lower right are under-mature.

So what difference does it make to have different maturity levels among fruits? Well, very little if you plan to sell the fruit soon after harvest. However, if you plan to store apples for more than two months, then problems will show up after storage. Two of the most serious problems are bitter pit and soft scald. Bitter pit is a physiological disorder that most believe is associated with calcium deficiency. It shows mostly on fruits that are immature at harvest. Soft scald, also a physiological disorder, develops in fruits that are harvested over-mature.



Bitter pit (left) and soft scald (right).

To overcome bitter pit, spray fruit with calcium before harvest and do not harvest immature fruits. For soft scald, do not harvest over-mature fruits. Soft scald injury can also be reduced by storing fruits at 36 to 38°F, rather than 30°F, which is the temperature recommended for most other apple varieties. Harvesting over-mature fruits and storing them at the colder temperature can also lead to internal breakdown. Because of the variability in maturity among Honeycrisp fruits, it is recommended that you spot-pick fruits you plan to store for more than two months. Use ground color or the greener side of the fruit to estimate maturity. Pick fruits when the ground color is pale green, but not cream. You can also reduce the internal breakdown and soft scald by conditioning the fruits for a few hours at 50 to 60 °F before you put them into cold storage, especially for fruits harvested on hot days.

Another note about Honeycrisp ... if you plan to order trees this winter, make sure not to order any on Bud-9. Bud-9 is not the best rootstock for this variety because of poor tree growth. I suggest that you consider M.26EMLA or larger rootstocks to get some vigor on this variety.

Mosbah Kushad (217-244-5691; kushad@illinois.edu)

Vegetable Production and Pest Management

Fall armyworm in sweet corn



Elizabeth Wahle sent in the pictures above of fall armyworm and its damage in sweet corn from a field near Collinsville. This insect can destroy corn plants before tasseling and damage and contaminate ears at harvest. Where damage to foliage is common from prior to tasseling through the time ears are developing, control is recommended. Pyrethroids such as Warrior, Capture, Baythroid, and Mustang-Max generally give adequate control; repeated sprays at 2- to 3-day intervals may be required, just as for corn earworm. See the [Midwest Vegetable Production Guide](#) for rates and for other alternatives.

Rick Weinzierl (217-244-2126; weinzier@illinois.edu)

Less seriously ...

As the subject line in the message from the friend who sent these says, "**Puns alert**" ...

- The roundest knight at King Arthur's round table was Sir Cumference. He acquired his size from too much pi.
- I thought I saw an eye doctor on an Alaskan island, but it turned out to be an optical Aleutian.
- She was only a whisky maker, but he loved her still.
- A rubber band pistol was confiscated from algebra class because it was a weapon of math disruption.
- The butcher backed into the meat grinder and got a little behind in his work.
- No matter how much you push the envelope, it'll still be stationery.
- A dog gave birth to puppies near the road and was cited for littering.
- Two silk worms had a race. They ended up in a tie.
- Atheism is a non-prophet organization.
- Two hats were hanging on a hat rack in the hallway. One hat said to the other, 'You stay here, I'll go on a-head.'
- I wondered why the baseball kept getting bigger. Then it hit me.
- A sign on the lawn at a drug rehab center said: 'Keep off the Grass.'

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