

Illinois Fruit and Vegetable News

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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, 217-333-6651, weinzierl@uiuc.edu. The *Illinois Fruit and Vegetable News* is available on the web at: <http://www.ipm.uiuc.edu/ifvn/index.html>. To receive email notification of new postings of this newsletter, call or write Rick Weinzierl at the number or address above.

This issue's words of wisdom ... which usually means the jokes ... are at the end of newsletter ... check the last page.

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

Crop Reports

From southern and southwestern Illinois ...

I had the opportunity to attend the Second Annual International Plant Management Variety Showcase that was held in Lawrence, Michigan on September 11. On display were collections from Ontario, New York, Michigan, Pennsylvania, and New Jersey. Featured fruits included fresh market freestone and processing peaches, European and Japanese plums, Asian and domestic pears, and early apples. This was a great opportunity to view new and upcoming varieties, and I would encourage growers to attend next year's meeting. It is open to all growers, extension personnel, and their spouses. Just a few highlights: Paul Friday, breeder of the Flamin' Fury series, had several new selections currently under evaluation. PF-24C is a selection he feels has promise due to its cold hardiness, size, and color. He hopes to have trees increased for the coming season for more extensive evaluation. In trials at the SW Michigan Research and Extension Center, several of us were impressed with the white peach 'China Pearl', a selection out of Dennis Werner's breeding program (NC State U). I contacted Bill Shane at SWMREC to get more details, and here's his overall evaluation. "Round/oblate, good size, good bacterial spot resistance, noticeable fuzz, ripens early on blush areas of fruit, fruit softens relatively quickly (like traditional white peach), productive, attractive 50% red/pink on white/slight green background, sweet, moderate acidity. Ripens about 3 to 4 weeks after Red Haven. The apparent rapid softening/softer blush area is the big problem area. Looks like it may be a good local sales peach".

The weather has been good for picking in the southern region. Apple size is large, and for the most part finish is good this year. Codling moth continues to be the most consistent problem for growers. Rick Weinzierl will be discussing his most recent codling moth research at the upcoming Illinois Specialty Crops Conference in January. The conference will have several invited specialists from around the country, and here a few highlights of the fruit program. Curt Rom, University of Arkansas, will discuss peach training systems, and David Ritchie, NC State University, will discuss peach diseases. A panel of Illinois growers will also discuss "Peach and Apple Varieties That Will Bring Customers to Your Farm." Reminder to cider makers: Set aside product for the Illinois State Cider and Hard Cider Contest which is held during the conference. I am looking for judges, and if you or someone you know is interested in volunteering some time, contact me for details. Judging will be conducted on Friday, January 23, 2004.

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

In northern Illinois, day temperatures that were in the 80s and night temperatures that were in 70s and upper 60s in mid-September have dropped to the low 60s (day temperatures) and upper 30s (night temperatures) as the month draws to an end. The region received 1-3 inches of rainfall between September 12 and 26. Most of the apple growers have a good crop this year. Picking of Cortland, Spartan, Jonathan, Golden Delicious, Liberty, Empire, Red Delicious, Honeycrisp, and Fuji is going on in most orchards while fall apple varieties will be ready for picking in early October. Fall-bearing raspberry picking and grape harvesting are ongoing, and pumpkin harvest is underway on most farms.

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

Notes from Chris Doll

Apple harvest is winding down in southern Illinois for growers without the later varieties like Rome and Fuji. As reported earlier, apple size has been above normal, and that has resulted in increased numbers of bushels. The champion unofficial weight reported was 1.5 pounds for a Jonagold by Howard Milleur of Murphysboro, with some Mutsu not far behind. The cool and clear weather in much of September has helped the color situation, and some nice blush is developing on Golden, as is a pink blush on Fuji.

The season has given the usual number of differences between orchards and areas, such as very smooth Golden to a few very rusty Golden; some high colored Red and some dull, paler Red; and wide variation in codling moth numbers between blocks and growers. There were several live codling moths in traps in Union County on the 23rd, but no new entries were seen.

Pest-wise, the last Japanese beetle I saw for the season was in a yellow rose on Sept. 19. Quite a few yellow jackets are present in some wineries and sales sheds. Asian lady beetles were reported to be numerous in Central Illinois, but only a few have been seen in the Back-40.

Fruit varieties attract considerable attention from most growers as they fit into the category of "what is new". At the Rendleman Orchard yesterday, I tasted a sample of Ambrosia apple and thoroughly enjoyed it. I have tasted a few Cameo that are also very good, but the southwestern Illinois crop reminds me of the original Red Delicious in appearance and color. The Laurel peach is coming into production in the Encore season with reportedly better color and hanging ability. Many other peach varieties were viewed by Elizabeth Wahle and myself at the Fruit Variety Showcase in Michigan on Sept. 11. There are some good and attractive selections coming down the pike from the Fruit Acres and Paul Friday breeding programs and also a selection from the MSU breeding program that soon will be named. Some white-fleshed varieties from New Jersey were on display, of which I liked Arctic Gold, Snow King, and Sugar Giant.

Chris Doll

Fruit Production and Pest Management

Codling moth control trials

I'll have everything in much a more final and detailed format during winter meetings, but it's not too soon to comment on the effectiveness of available alternatives to Guthion and Imidan in orchards where these products have been failing, almost

certainly as the result of resistance. Trials conducted in the far west and published by Dunley and Welter in 2000, along with a few different papers from Europe over the last decade, have indicated that resistance to Guthion can be accompanied in the same codling moth populations by resistance to several of the newer alternatives recently labeled for codling moth control. Among the products for which cross-resistance (or perhaps multiple resistance) is known in Guthion-resistant populations are Imidan, diazinon, Asana, and Danitol, as well as (possibly) Intrepid and Confirm. In trials conducted this year in a southern Illinois orchard where Guthion had failed in 2001 and 2002, alternatives that worked very well included the nicotinoids Assail and Calypso. (Assail was first available to Illinois growers in 2003, and Calypso has just recently been granted tolerances that should lead to a label for use on apples in 2004.) SpinTor, Danitol, and Avaunt were all very ineffective in this trial (damage in these treatments did not differ from levels observed in the nontreated check). Intrepid, Esteem, and Warrior gave some control but were not highly effective. Keep in mind that in orchards where resistance to Guthion has not been a problem, Danitol has been very effective and Intrepid has provided fairly good control as well. Details to come ...

Rick Weinzierl (217-333-6651; weinzier@uiuc.edu)

Vegetable Production and Pest Management

Harvesting and Storage of Halloween Pumpkins

It is important to note that pumpkin fruits can tolerate light frost that kills the vines only, but fruit loss can occur if the frost affects the fruit itself. Slight frost injury on the fruit surface can provide avenues for fungal and bacterial fruit rot pathogens. Remove pumpkins from fields before a hard freeze occurs (when the night temperatures are less than 27 °F), or you risk losing 80-90% of the fruits.

Some guidelines:

- In general, harvest pumpkins when they are uniformly orange and the rind is hard.
- Green, immature fruits may ripen during the curing process but not after a killing frost.
- Vines need to be dry by this time.
- Handle the fruit with care to avoid cuts and bruises.
- Harvest the fruit by cutting it off the vine with a sharp knife or a pair of looping shears, leaving 3-6 inches of the stem attached to the fruit. This makes the fruit look more attractive; it is also less likely to rot.
- Do not carry the pumpkin fruit using the fruit stems because the fruit is very heavy and may lead to detachment of the fruit stem.
- Wash the fruit with soapy water containing one part of chlorine bleach to ten parts of water to kill the pathogens on the surface of the fruit.
- Ensure the fruits are well dried and set in a shed to cure.

Pumpkin fruits are cured at 80-85 °F and 80% relative humidity for 10 days. This is done to prolong the post harvest life of the pumpkin fruit because during this process the fruit skin hardens, wounds heal and immature fruit ripens. After curing, fruits can be sold to customers or stored.

Store pumpkins in a cool dry place. Put the fruits on a single layer on wooden pallets with space in between the fruits (the fruits should not touch each other); do not place them on a concrete floor. Improve air circulation within the storage area by letting in cool air at night and use fans to circulate air during the day. Do not let in warm air from outside during the daytime. The optimal storage condition is 50-55 °F, with a relative humidity of 50-70%. Under these conditions you can keep the fruits for about 2-3 months. Store the fruits away from apples because apples produce ethylene gas as they ripen, and ethylene speeds the ripening process in pumpkins and decreases their shelf life. Keeping relative humidity within the 50 to 70 percent range is important, because very high humidity leads to settling of moisture on fruit surfaces, which increases decay of the fruit. Low relative humidity may cause dehydration of the fruit. Check stored pumpkins regularly and remove the ones that show signs of rot, because if not removed, pathogens will spread within the storage area.

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

This issue's words of wisdom ...

Signs ...

- Over a gynecologist's office: "Dr. Jones, at your cervix."
- On a plumber's truck: "We repair what your husband fixed."
- On the trucks of a local plumbing company: "Don't sleep with a drip. Call your plumber."
- Pizza shop slogan: "7 days without pizza makes one weak."
- Outside a muffler shop: "No appointment necessary. We hear you coming."
- In a veterinarian's waiting room: "Be back in 5 minutes. Sit! Stay!"
- Door of a plastic surgeon's office: "We can help you pick your nose!"
- In a non-smoking area: "If we see smoke, we will assume you are on fire and take appropriate action."
- At an optometrist's office: "If you don't see what you're looking for, you've come to the right place."
- In the front yard of a funeral home: "Drive carefully. We'll wait."

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