

## ***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](mailto: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.

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### ***Crop and Regional Reports***

**In the south and southwest**, October has been a rainy month. In the first three weeks of October, the Edwardsville area received over 5 inches of rain, and another 2.5 inches fell on October 26. Harvest is winding down if not finished for vegetable and fruit growers. One report from the Calhoun area reported apple harvest finished as of October 7. In visiting markets, I have seen beautiful displays of apples, pumpkins, cider, and all the trimmings to put customers in mind of the Fall season – and hopefully in a buying mood.

A couple of reminders and follow-ups to topics brought up in issue 17 ... As requested in the last newsletter, I have begun to receive observations from growers concerning cork spot in apples. I would still like to hear from more growers about which apple varieties are most susceptible to cork spot. One grower reported a higher incidence of bitter pit this year in Firmgold coming out of the cooler, so if you have bitter pit to report, that information is requested as well. For those who receive the newsletter in print by US Mail, please check issue 17 for the form or call me or email me for another copy. For those reading this issue on the web, click on the link below for a PDF file of the form.

[Survey of Apple Varieties' Susceptibility to Cork Spot in Illinois](#)

If you are an apple grower in Illinois (or even near Illinois), please take a few minutes to complete it, then mail it to me at the address provided. If you prefer, you are welcome to contact me via phone or email to report your observations.

The Illinois Cider and Hard Cider Contest will again be held at the Illinois Specialty Crops Conference in Springfield, January 20-22, 2005, and will be hosted by the Illinois State Horticulture Society. One gallon of sweet cider and/or 1 quart of hard cider will be required for the judging contests. Registration for all cider contests will be on January 21, from 8:00-9:45 a.m., with a registration fee of \$10.00 per entry. Judging will commence at 10:00 a.m. As information concerning the Specialty Growers Crops Conference becomes available, it will be posted on the Illinois Specialty Growers Association website: <http://www.specialtygrowers.org/>. Follow the conference links to view the cider contest press release and registration form.

In addition to the Illinois Specialty Crops Conference, several other fruit and vegetable programs for the southern region have been scheduled ... see the list that follows later in this newsletter. As more detailed information becomes available, I will post them to my website: <http://web.extension.uiuc.edu/regions/hort/>.

*Elizabeth Wahle (618-692-9434; [wahle@uiuc.edu](mailto:wahle@uiuc.edu))*

**In northern Illinois**, rainfall totals ranged from 1 to 2 inches throughout the region during the first 3 weeks of October, and most of the northern counties recorded freezing temperatures on October 4 or 5. Picking of fall apple varieties (Rome Beauty, Braeburn, Enterprise, and Gold Rush) is still going on in most orchards. However, a few pick-your-own orchards have already closed as the apple varieties grown in those orchards have been sold out. The apple crop this year is as good as last year for most growers, although a few orchards that were affected by late spring frost did not have a bumper crop. Leafy greens were doing great through early October, with cool night temperatures and warm day temperatures, few insect pests, and very little disease pressure. The region's pumpkin crop is much better than last year's, and pumpkin sales are going great as we approach the Halloween holiday.

*Maurice Ogutu (708-352-0109; [ogutu@uiuc.edu](mailto:ogutu@uiuc.edu))*

## ***Upcoming Meetings***

Details on registration and program contents for the southern Illinois meetings listed toward the end of this section will be presented in later newsletter issues, but this early notice should let you mark the dates on your calendar.

### ***Illinois-Iowa Fruit and Vegetable Growers Conference, December 2, 2004***

The Illinois-Iowa Fruit and Vegetable Growers Conference is scheduled for 1:00 to 5:00 p.m. on December 2, 2004, at the Quad City Botanical Center, 2525 4<sup>th</sup> Avenue, Rock Island, IL. General session topics include using honey bees for pollination (Skip Pronger) and responding to weather events (Ray Wolf). Breakout sessions will focus on grapes, tree fruits, and vegetables, with topics including disease control in grapes and vegetables, nutrition and leaf analysis, micronutrient effects, orchard management, apple rootstocks, tomato and pepper varieties, gourmet muskmelons, and the use of colored plastic mulches. Speakers include Paul Domoto, Bill Shoemaker, Mohammad Babadoost, Jim Nickell, Mosbah Kushad, Maury Wills, Vince Lawson, and Maurice Ogutu. Registration is \$25 per person for the first member of each farm enterprise, \$20 for the second person from the same enterprise, and \$15 for additional members. Registration is being handled by the Johnson County (IA) Extension Office – 319-337-2145. For more information, contact Martha Smith at the University of Illinois Extension Center in Macomb (309-836-2363; [smithma@uiuc.edu](mailto:smithma@uiuc.edu)) or Maurice Ogutu at the University of Illinois Extension Center in Countryside (708-352-0109; [ogutu@uiuc.edu](mailto:ogutu@uiuc.edu)).

### ***Illinois Organic Production Workshop, January 12-13, 2005***

Providing farmers with practical, science-based information on organic production and certification.

January 12 - 13, 2005

Holiday Inn, Normal, Illinois

January 12, 9:00 a.m. to 6:00 p.m.; January 13, 7:00 a.m. to 12:45 p.m.

Registration: \$75 in advance or \$100 at the door

For details, contact Dan Anderson, 217-333-1588, [aslan@uiuc.edu](mailto:aslan@uiuc.edu)

### ***Southern Illinois Tree Fruit School, February 1, 2005***

Holiday Inn, Mt. Vernon, Illinois

Registration will include the 2005 Commercial Tree Fruit Spray Guide.

### ***Southwestern Illinois Tree Fruit School, February 2, 2005***

First Presbyterian Church, Hardin, Illinois

Registration will include the 2005 Commercial Tree Fruit Spray Guide.

### ***Southern Illinois Vegetable School, February 9, 2005***

Holiday Inn, Mt. Vernon, Illinois

Registration will include the 2005 Midwest Vegetable Production Guide for Commercial Growers.

### ***Illinois Small Fruit and Strawberry Schools, March 1 - 2, 2005***

Holiday Inn, Mt. Vernon, Illinois

Registration will include the 2005 Midwest Commercial Small Fruit and Grape Spray Guide, the Midwest Small Fruit Pest Management Handbook, and the school Proceedings.

## ***Notes from Chris Doll***

The 2004 apple harvest is about complete. The Fuji, Goldrush, Granny Smith and other late maturing varieties should be good eating if left on the tree this long. I picked a few Fujis on the 24th and saw a little stem-end cracking which means that they are due to come off. The flavor sure is much better than it was two weeks ago. There are a couple of early-maturing Fuji sports on the market which look like Fuji, but I am not sure that the flavor and quality match the full-season strains.

Elizabeth Wahle had a request for input on cork spot and bitter pit problems this fall. This physiological problem is usually associated with a shortage of calcium in the fruit and can happen most anytime during the growing season, especially when stress conditions occur – like too much soil moisture and too little soil moisture. Both situations occurred this spring and summer. My Back-40 troubles were mid-way between some commercial orchards in the area in that some corking was present, but not to the extent that showed up elsewhere. More calcium will be recommended and used next year.

Peach trees in the Back-40 and area orchards are in the 50-75 percent defoliated stage. With rainfall of well over three to four inches for the month, soil moisture seems to be fine. Brambles look good, but some matted-row strawberries are showing high levels of leaf spots and powdery mildew. Well-sprayed grapes have retained their foliage while others have defoliated early. An unusual seedling peach in the Back-40 has two nectarine fruits that are now nearly ripe. Will watch it in the future if the buds survive the winter.

Fruit growers in the Midwest should be proud of their fruit, entomology and pathology extension specialists. I watched them at a recent workshop in which they reviewed the Tree Fruit and Small Fruit Spray Guides so that they are correct and up-to-date for 2005. The group is responsible for the Tree Fruit Handbook, and a revised Small Fruit Handbook was presented for acceptance. Their exchange of research and field findings helps everyone, including this old Extension guy.

In the orchards, it is a good time to tag dead limbs and trees for removal later on. Scout and treat for mice/voles if necessary. Protect young trees from rabbits if they are present. Nothing is new in the prevention of tree damage by deer that I know of. Herbicides applied in late fall have the advantage of lasting through the busy spring season, but not through the summer. The advantage is that time and weather can be favorable after harvest.

I mentioned seeing over 100 peach varieties and selections at the Michigan Fruit Showcase last month. Dr. Bill Shane of Michigan State University summarized the 2003 peach variety survey for Michigan in the fall issue of Peach Times. The four top four varieties by acreage are Red Haven, PF17, PF 23 and Harmony. The acreage of Loring, Cresthaven and Redskin have decreased over 50 percent in the last six years.

***Chris Doll***

## ***Fruit Production and Pest Management***

## ***How can you store apples for up to six months without much loss of quality?***

Most apples you find at the grocery stores from December to September have been stored under controlled atmosphere, which consists of high carbon dioxide (about 3%) and low oxygen (about 2%). Big commercial storage outfits in Washington, New York, Virginia and Michigan have huge storage facilities equipped with gas generating units that cost hundreds of thousands of dollars. I am not aware of any controlled atmosphere storage units that meet the needs of the small farmer. But small farmers should not have to compromise the quality of their fruits just because they cannot afford to buy expensive equipment. Here are a few suggestions that should help you keep those apples crisp for a long time.

First, make sure your cold storage temperature can reach as low as 30 °F and stay there for a long time (4 to 6 months) without needing major defrost or repair. The closer you maintain the fruit core temperature to 30 °F, the longer the fruit will store. What I mean by core temperature is the temperature of the fruit, not the room. There are thermometers that you can buy and insert into the apple to give you an accurate reading. We have kept Golden and Red stored at 30 °F for up to eight months without much loss in quality. I remember an experiment I did when I was at Virginia Tech where we compared apples that we kept in a walk-in cooler set at exactly 30 F for six months to those that we stored at a commercial controlled-atmosphere storage facility in Winchester. To our surprise, the apples that we stored at regular storage had much better quality than those that we kept in controlled atmosphere storage. What the data taught us is that temperature is very critical for apple storage. The closer the fruits to 30 °F, the longer they will keep.

There are only a few varieties that cannot tolerate 30 °F temperature, among them are McIntosh type apples. McIntosh type apples are chilling-sensitive, so they should be stored at 36 °F. Symptoms of chilling injury on these fruit include mealy texture and soft scald. Soft scald is a browning of the fruit skin that looks like someone rolled the apples on a hot surface. If the fruit are going to be stored in bins, you can place a tarp or a large plastic bag on the top and sides (not the bottom) of the bin, but do not seal the bag, otherwise the fruit will ferment. The slow respiration from the fruit will generate a controlled atmosphere and that will contribute to keeping the fruits fresh longer. I would also recommend that you spray the inside of the room with water to keep the humidity high or install a cold mist humidifier. To keep the water in the humidifier from freezing, have it outside the room and pipe the mist into the room.

*Mosbah Kushad (217-244-5691; [kushad@uiuc.edu](mailto:kushad@uiuc.edu))*

## ***Vegetable Production and Pest Management***

### ***New insecticide registrations for 2005***

A couple of new products (if not completely new active ingredients) will be available to vegetable growers in 2005. Here's a quick summary ...

- Bifenthrin is the active ingredient in Capture 2E. It is also the active ingredient in **Discipline 2EC**, a new product now available from Amvac. Its registrations, use rates, and restrictions are virtually identical to those for Capture. Like Capture 2E, Discipline 2EC is a restricted-use pesticide.
- The active ingredient in the insecticide Warrior is lambda-cyhalothrin. The new insecticide **Proaxis** contains gamma-cyhalothrin, a more active isomer of the same chemical formula. It is labeled for use on the same crops as Warrior – snap beans, broccoli, Brussels sprouts, cabbage, cauliflower, eggplant, garlic, lettuce, bulb onions, peas, peppers, sweet corn, and tomatoes – and against the same pests. The label calls for application of one-half the amount of active ingredient called for on the Warrior label. Like Warrior, Proaxis is a restricted-use pesticide.

*Rick Weinzierl (217-333-6651; [weinzier@uiuc.edu](mailto:weinzier@uiuc.edu))*

***This week's words of wisdom ...***

- A vulture boards an airplane, carrying two dead raccoons. The stewardess looks at him and says, "I'm sorry, sir, only one carrion allowed per passenger."
- Two fish swim into a concrete wall. The one turns to the other and says "DAM!".
- Two Eskimos sitting in a kayak were chilly, so they lit a fire in the craft. Unsurprisingly it sank, proving once again that you can't have your kayak and heat it too.
- Two hydrogen atoms meet. One says "I've lost my electron." The other says "Are you sure?" The first replies "Yes, I'm positive."
- Did you hear about the Buddhist who refused Novocain during a root canal? His goal: transcend dental medication.
- A group of chess enthusiasts checked into a hotel and were standing in the lobby discussing! their recent tournament victories. After about an hour, the manager came out of the office and asked them to disperse. "But why?" they asked, as they moved off. "Because", he said, "I can't stand chess-nuts boasting in an open foyer."
- A woman has twins and gives them up for adoption. One of them goes to a family in Egypt and is named "Ahmal." The other goes to a family in Spain; they name him "Juan." Years later, Juan sends a picture of himself to his birth mother. Upon receiving the picture, she tells her husband that she wishes she also had a picture of Ahmal. Her husband responds, "They're twins! If you've seen Juan, you've seen Ahmal."
- These friars were behind on their belfry payments, so they opened up a small florist shop to raise funds. Since everyone liked to buy flowers from the men of God, a rival florist across town thought the competition was unfair. He asked the good fathers to close down, but they would not. He went back and begged the friars to close. They ignored him. So, the rival florist hired Hugh MacTaggart, the roughest and most vicious thug in town to "persuade" them to close. Hugh beat up the friars and trashed their store, saying he'd be back if they didn't close up shop. Terrified, they did so, thereby proving that: only Hugh, can prevent florist friars.
- Mahatma Gandhi, as you know, walked barefoot most of the time, which produced an impressive set of calluses on his feet. He also ate very little, which made him rather frail and with his odd diet, he suffered from bad breath. This made him ...(Oh, man, this is so bad, it's good).... A super calloused fragile mystic hexed by halitosis.
- And finally, there was the person who sent ten different puns to his friends, with the hope that at least one of the puns would make them laugh. No pun in ten did!

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