



UNIVERSITY OF ILLINOIS EXTENSION

College of Agricultural, Consumer, and Environmental Sciences

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, weinzier@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 email address above.

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

Upcoming Programs

- February 5, Southwest Illinois Commercial Tree Fruit School, First Presbyterian Church, Hardin, IL, <http://web.extension.uiuc.edu/regions/hort/>. Contact Elizabeth Wahle, 618-692-9434, wahle@uiuc.edu.
- February 6, Southern Illinois Commercial Tree Fruit School, Holiday Inn, Mt Vernon, IL, <http://web.extension.uiuc.edu/regions/hort/>. Contact Elizabeth Wahle, 618-692-9434, wahle@uiuc.edu.
- February 13, Southern Illinois Commercial Vegetable Growers School, Holiday Inn, Mt. Vernon, IL, <http://web.extension.uiuc.edu/regions/hort/>. Contact Elizabeth Wahle, 618-692-9434, wahle@uiuc.edu.
- February 15, IL-WI Stateline Fruit and Vegetable Conference, Stratford Banquet Hall 21007 McGuire Road Harvard, IL, <https://webs.extension.uiuc.edu/registration/?RegistrationID=1299>. Contact Don Schellhaass (815-338-4747, schellha@uiuc.edu) or Maurice Ogutu (708-352-0109, ogutu@uiuc.edu).
- February 19, Western Illinois Fruit and Vegetable School, Adams County Extension, Quincy, IL, <http://web.extension.uiuc.edu/adamsbrown/>. Contact Mike Roegge, 217-223-8380, roeggem@uiuc.edu.
- February 20, Kankakee County Vegetable Growers School, Kankakee Community College, 100 College Drive Kankakee, IL, <http://web.extension.uiuc.edu/kankakee/news/news8979.html>. Contact James Theuri (815-933-8337; jtheu50@uiuc.edu) or Maurice Ogutu (708-352-0109; ogutu@uiuc.edu).
- February 21-24, Illinois Grape Growers and Vintners Association Annual Conference, Hilton, Springfield, IL, <http://www.illinoiswine.com/index.html>. Contact Megan Pressnall, 217-782-6515, mpressnall@extension.uiuc.edu.
- March 4-5, Small Fruit and Strawberry Schools, Holiday Inn, Mt. Vernon, IL. Contact Jeff Kindhart (618-695-2444, jkindhar@uiuc.edu) or Bronwyn Aly (618-695-2444, baly@uiuc.edu).

Regional Updates

In the south and southwest, we've been on a temperature roller coaster during the month of January. In the first week we started with a high of 23 degrees F in the St Louis area and ended the week with a high of 73 degrees F (record high). The daily high gradually dropped to 28 degrees F by January 25, but here we are again with a daily high of 60 degrees F on January 28. The weatherman is predicting a dip in the ride just around the corner. Most of the region received much needed rain in excess of 2 inches during the second week of January. Even with significant rainfall, ponds are still well below full following the drought last season.

Pruning in orchards and vineyards is ongoing, as is horseradish harvest. Some peach bud kill has been reported, but it has not been crop-limiting to date. Horseradish harvest has stalled a few times in January due to frozen soil conditions. Still no outward sign of spring approaching—winter is still with us.

Be sure to note the dates and locations listed above for the several fruit and vegetable programs to be held in the south and southwest over the next few weeks.

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

In northern Illinois, the story in January is always pretty much limited to weather ... 6 nights with temperatures below zero; day temps usually in the 20s and 30s, but the upper 40s to 60s January 6-8; 1-4 inches of rainfall, with higher amounts recorded in the Kankakee and flooding around the Kankakee Rive; 3-12 inches of snow, with the greatest amounts in the northern counties bordering Wisconsin. Be sure to note the upcoming meetings listed above – February 15 is the date for the IL-WI Stateline program at Harvard, and the Kankakee program is set for February 19.

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

Fruit Production and Pest Management

New insecticide registrations for apples and peaches

Over the next few weeks at Extension programs from south to north I'll give specific recommendations on insecticides for apples and peaches, but here are few comments on new registrations and how they fit in with existing products.

- Assail 30SG is now labeled for use on peaches as well as apples. The primary target for its use in peaches should be oriental fruit moth, but it will also kill Japanese beetle and provide some control of plum curculio, stink bugs/plant bugs, and San Jose scale. (In apples and peaches, the limit is 4 applications, and the PHI is 7 days.)
- Delegate 25WG (spinetoram) is now labeled for use on apples and peaches; its main target pests are codling moth and oriental fruit moth, as well as leafrollers. This compound is most easily described as a synthetic spinosyn and is intended to be more bioactive and a little more stable than the spinosad products SpinTor and Entrust. Despite all the ads in trade magazines, none of the extension entomologists in the lower Midwest (IL, IN, KY, and OH) have had the opportunity to test this product in field trials, so I'm unable to vouch for its effectiveness. (In apples and peaches, the limit is 4 applications and the PHI is 7 days.)
- Altacor 35WG (rynaxypyr) is expected to receive EPA registration for use in apples and peaches by early spring. If it becomes available, its target insects in these crops will be codling moth and oriental fruit moth, as well as leafrollers. It has been very effective against codling moth in small plot trials in Illinois and elsewhere. (For both apples and peaches, the anticipated label will likely allow 3 applications at a middle-range rate, with a PHI of 21 days.)
- Keep in mind that Rimon 0.83EC is also an effective alternative for control codling moth in apples ... limit is 4 applications per season, with a PHI of 14 days.

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

Vegetable Production and Pest Management

Use the off-season to step up your post-harvest practices

While vacations are appealing during the winter off-season (I know I could use one!), it's also a great time to focus in on elements of your operation that may need some improvement or which represent an opportunity to become more successful in your enterprise. You want to be a success, don't you? After all, your specialty crop enterprise is a business and anything short of success is unacceptable. For specialty crop producers in the Midwest, most of whom are direct-marketers, I think we may take post-harvest handling issues too lightly. It could be one reason why you may be worrying about whether or not you will be a success.

Maybe there's justification for not worrying about post-harvest issues. After all, when we harvest, we take it to market and sell it. It's as easy as that, ... isn't it? No, it really isn't. Keep in mind, what we harvest in this industry is perishable. It is an unstable product. Time is not on our side, and if we don't do a good job of preserving the value of our product, the consumer won't be on our side either.

What makes our product so valuable to the consumer? After all, they can pick up all the produce they want in the supermarket, right around the corner. They drive right by the supermarket, find that lousy parking place, walk through the business district to get to the farmers market for one reason only; price. NOT!!! No, they want the *quality* of produce you offer. That is why they love you. That is why they go to all the trouble to drive to your farm, come to a stop on that busy 2-lane highway with a zillion rush-hour vehicles honking horns to make a left turn into your farm stand. They want just-picked, fresh, nutritious, tasty produce at a higher price because it really makes their life better. Besides, all the chefs on Food Network tell them too. We better make sure they get what they want, or they won't be back.

You already grow the best produce that money can buy. Why would you let it fall apart? Why does it fall apart? Because it's alive. The products you harvest don't die when you pick them. They continue to respire, because they are still alive. Respiration is as important to our produce as it is to us. We breathe, they respire. As they respire, they consume sugar. Because we picked them and separated them from the rest of the plant (which is a sugar factory), they cannot replace that sugar. What makes produce taste good? Sugar! That's not just conjecture. Researchers have found that among the many flavor components that are found in fresh produce, the component that has the most profound impact on consumer perception of flavor quality is sugar. So the minute we pick the product, it starts losing its value. How do we stop it? Good post-harvest practices.

What is involved in post-harvest handling practices for produce? It can actually get very complicated, but essentially it is anything that occurs after picking the produce that can impact the market viability of that product. Sometimes it involves components of your post-harvest routine you may have never given thought to. Really, it is everything you do, for better or for worse. You know, this reminds me of something that....no, I won't go there.

A list of issues you may need to give more serious thought to might include; irrigation practices, harvest timing, harvest tools, mechanization, field bins, field sanitation, field transportation, sorting tables, washing, cooling, post-harvest pest control, packaging materials, package size or type, humidity, exposure to the elements, equipment maintenance. That's a good start! All of these issues can play a role in determining the quality, hence consumer perception of value, of the product you put in the market.

Just what you wanted; something else to manage. But, your business survives, or even better, immensely succeeds, based on how you handle it. And there is nothing that more profoundly affects your business's chance of success than how the consumer responds to your product. In coming issues of the Illinois Fruit and Vegetable News, I'd like to get more information to you on post-harvest handling practices for Illinois specialty crops. I'll see if I can enlist some help with this. But in the meantime, I'd like to make you aware of some other sources of information that could help you become a better post-harvest handler of your product. Following are some resources you may want to take advantage of;

BOOKS

- Knott's Handbook for Vegetable Growers, Maynard and Hochmuth, Wiley Publishing
- Postharvest Technology of Horticultural Crops, AA Kader, UC-Davis Spec Pub #3311
- Small-Scale Postharvest Practices: A Manual for Horticultural Crops, UC-Davis Postharvest Technology Program Publication # 8E

WEBSITES

- <http://attra.ncat.org/attra-pub/postharvest.html>
- <http://postharvest.ucdavis.edu>
- http://www.postharvest.com.au/Produce_Information.htm
- <http://vric.ucdavis.edu/selectnewtopic.fruitveg.htm>
- <http://pubs.caes.uga.edu/caespubs/pubcd/FS-100.htm>
- <http://postharvest.ifas.ufl.edu/Postharvest%20Resources/Government%20Sites.htm>

I hope this helps you get started on exercising your post-harvest practices prowess for the new season.

Bill Shoemaker, Sr Research Specialist, Food Crops

Notes on sweet corn insecticides for corn earworm control

For the last two to three seasons corn earworm resistance to pyrethroids has triggered a lot of concern about how to manage this insect effectively in sweet corn and other crops. This issue will persist into the 2008 season, and as of yet there are no new products registered for sweet corn that will really solve the problem. Here are the general recommendations I offered earlier this winter at Great Lakes EXPO and again at the Illinois Specialty Crops and Agritourism Conference:

- Buy and use a metal Hartstack pheromone trap and lures to monitor flights of corn earworm moths. Bob Poppe of Lexington, IL (309-723-3201), builds and sells the traps, and Great Lakes IPM of Vestaburg, MI (<http://www.greatlakesipm.com/>), is a Midwest supplier of lures – be sure to request Hercon “zealure” lure tapes.
- Continue to use pyrethroid insecticides as needed based on pheromone trap catches. Pyrethroids are still the best available insecticides for corn earworm control in sweet corn. The most effective pyrethroids are Capture, Warrior, Baythroid, and Mustang Max (and generic products that contain the same ingredients).
- If traps are catching moths, getting a first application on at row tassel or first silk may improve control in comparison with starting sprays within 2 days after first silk, especially if adult control over a large area is accomplished.
- Application intervals of 2 to 3 days are especially important right after silking begins. Continue treating at 2- to 4-day intervals as long as silk growth continues.
- Tank mixing (not rotating) full rates of pyrethroids with full rates of Lannate, Larvin, Sevin, or SpinTor/Entrust/Radiant may improve control.
- Bt sweet corn greatly reduces earworm damage and numbers but does not give complete control (and does not control western bean cutworm).

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Less seriously ...

The woman applying for a job in a Florida lemon grove seemed way too qualified for the job. "Look, Miss," said the foreman, "have you any actual experience in picking lemons?" "Well, as a matter of fact, yes," she replied. "I've been divorced three times."

He was in the *express* lane at the store quietly fuming. Completely ignoring the sign, the woman ahead of him had slipped into the check-out line pushing a cart piled high with groceries. Imagine his delight when the cashier beckoned the woman to come forward, looked into the cart, and asked sweetly, "So which six items would you like to buy?"

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