



UNIVERSITY OF ILLINOIS EXTENSION

College of Agricultural, Consumer, and Environmental Sciences

Illinois Fruit and Vegetable News

Vol. 15, No. 17, February 11, 2010

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, weinzier@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.

In this issue ...

Upcoming Programs

Regional Updates (Public sessions on the reorganization of University of Illinois Extension)

Notes from Chris Doll (winter temps and fruit bud survival; notes on Steve Hoying's presentations at the southern Illinois fruit schools)

Fruit Production and Pest Management (Illinois Small Fruit and Strawberry Schools, March 2-3, Movento registration cancelled; changes in Altacor's label on fruit crops; Delegate for codling moth control)

Vegetable Production and Pest Management (Coragen labeled for use on sweet corn)

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

Upcoming Programs

- **Illinois/Wisconsin (Stateline) Fruit and Vegetable Conference. February 15, 2010.** Donley's, Union, IL. For more information, contact Larry Wilson at lwwilson@illinois.edu or 708.352.0109.
- **Western Illinois Fruit and Vegetable School.** February 16, 2010. Adams County Farm Bureau Office, Quincy, IL. For more information, contact Mike Roegge at roeggem@illinois.edu or 217-223-8380.
- **Kankakee Vegetable Growers School, February 24, 2010.** Kankakee County Extension Office, Bourbonnais, IL. For details contact James Theuri, jtheu50@illinois.edu, 815-987-7379
- **Illinois Grape Growers and Vintners Association Annual Conference, February 25-27, 2010.** Springfield, IL. See <http://www.illinoiswine.org/>.
- **Organic Farming Conference, February 25-27, 2010.** La Crosse, WI. See <http://www.mosesorganic.org/conference.html>.
- **Illinois Small Fruit and Strawberry Schools. March 2-3, 2010.** Mt Vernon Holiday Inn, Mt Vernon, IL. For more details, check the *Fruit Production and Pest Management* section of this issue or contact Bronwyn Aly (618-695-2444; baly@illinois.edu).
- **20th Annual Greenhouse Tomato Short Course. March 9-10, 2010.** Eagle Ridge Conference Center, Raymond, Mississippi. For more information, see <http://greenhousetomatosc.com> or contact Rick Snyder of Mississippi State University at 601-892-3731 or RickS@ra.msstate.edu.
- **International Herb Association Annual Meeting. July 11-15, 2010.** Collinsville, IL. (More details in future issues of this newsletter.)

Regional Updates

U of I Extension seeks public input on its future

Several days ago University of Illinois Extension sent out the following press release about upcoming meetings on the restructuring of Extension staffing and offices. If you have an interest in extension programming in fruit and vegetable production and marketing and the programs that Extension offers or might offer in the future on these topics, I urge you attend one of these meetings and make sure your needs are made clear and your opinions are heard.

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

Urbana – State budget constraints have prompted University of Illinois Extension to explore ways to cut costs and still provide high-impact programming, and Extension leaders are now seeking public input on their options. A series of public meetings are scheduled:

- **Monday, February 22:** 5:00-7:00 pm – Champaign Unit Auditorium, 801 N. Country Fair Drive, Champaign, Illinois
- **Tuesday, February 23:** 6:30-8:30 pm – John A. Logan College, Hancock Conference Center, 700 College Road, Carterville, Illinois
- **Thursday, February 25:** 2:00-4:00 pm – DeKalb Unit Office, 1350 W Prairie Drive, Sycamore, Illinois
- **Friday, February 26:** 2:00-4:00 pm – Effingham Unit Office, 1209 Wenthe Drive, Effingham, Illinois
- **Monday, March 1:** 7:00-9:00 pm – Okawville Community Club Building, 511 S. Hanover St., Okawville, Illinois
- **Tuesday, March 2:** 6:00-8:00 pm – Kane Unit Office, 535 S. Randall Rd., St. Charles, Illinois
- **Thursday, March 4:** 1:00-3:00 pm – McDonough Unit Auditorium, 3022 W. Jackson, Macomb, Illinois
- **Thursday, March 4:** 6:00-8:00 pm – Bureau Unit Office, 850 Thompson Street, Princeton, Illinois
- **Tuesday, March 9:** 6:00-8:00 pm – U of I Extension Center Illini Auditorium, Illinois State Fairgrounds, 1101 E. Sangamon Ave., Springfield, Illinois
- **Friday, March 12:** 10:00-Noon – Countryside Center, 6438 Joliet Rd., Countryside, Illinois

“To be fiscally responsible, U of I Extension is planning for funding cuts, but we want to make these cuts in such a way as to maintain Extension’s strong tradition of high-impact educational programming, which has had a dramatic effect on the citizens of Illinois over the years,” said Bob Hoeft, interim Extension director. It’s projected that Extension funding will decline between \$2 and \$5 million next year, and a rescission of state funding is expected for the 2009-10 budget year. While a cost-savings plan is not yet finalized, Hoeft says he’s operating on several guiding principles. “First, we want to maintain a system that produces and delivers effective, high-impact educational programming in response to local needs,” he said. He says we are exploring the concept of multi-county units to reduce administrative costs such as facility rental and administrators. At the same time, it’s expected that the number of educators would increase for these multi-county units. “We also want to support youth programming and 4-H at the same high level because it has a major impact on Illinois children. “This will be a priority in the reorganization,” Hoeft said. Hoeft also emphasizes the continued use of new and effective learning technologies to deliver educational programming. After the public meetings, Hoeft expects to finalize reorganization plans in mid-April and start implementing the plans after that. University of Illinois Extension’s FY09 budget totaled \$65 million, supporting 800 employees of all classifications. The budget is made up mostly from federal, state and local funds. As part of the federal land-grant university system, Extension connects Illinois citizens with the University of Illinois and has a 90-year history of providing educational programs to improve the quality of life in the state. U of I Extension offers educational programming in all of Illinois’ 102 counties in response to locally identified needs. It is the home of the popular 4-H program.

Notes from Chris Doll

Five weeks to go before the first calendar day of spring. For this area, the winter has not been too adverse for fruit growing except for wet soil conditions when not frozen and some sub-zero temperatures that might have thinned a few peaches. As for the effect on peaches, Irv Sager from Kell and Tom Ringhausen of Hardin brought forced shoots to the Fruit Schools and there was some bud kill on a few varieties. Their temperatures were -7 and -3 degrees respectively. I cut buds of six varieties in the Back-40 this morning and did not find any kill following a -2.6 degrees on January 10.

There is ample soil moisture following the 2009 total of 52 inches of rain and 2.2 inches so far this year. Cold weather began at the first of the year and lasted through January 14, when the month's high of 52 degrees initiated the January thaw. However, that was the only 50-degree day and only seven days of that month went above 40 degrees. At this time, apples, peaches, grapes and brambles should be OK.

It is time to consider fertilizing orchards. At the present time, the old caution statement about not applying fertilizers (and herbicides too) to frozen soil is relevant as rains could wash it away before being moved into the soil more slowly. A good sod cover reduces the potential for loss.

Some discussion of cryoprotectant products for freeze/frost protection of fruit crops on the "applecrop" news group began recently, with the mention of a new product being touted. Having tried three different products without any success during my career makes me skeptical about their effectiveness. I will admit, a freeze prediction when trees are in bloom makes such a product rather appealing.

After imploring all growers to attend the 2010 Illinois State Horticulture Meetings in Springfield in early January, I let some foul weather conditions coupled with a potential for spreading a cold lead me to missing this meeting for the first time in 45 years. I heard it was a good program with a successful cider contest, and I hope to be there next year.

The fruit schools at Mt. Vernon and Hardin had almost identical programs on fruit production and marketing practices. Attendees had the privilege of hearing two excellent presentations by my old friend Steve Hoying of New York. Here are a few notes from his presentations:

About higher density peach training systems, Steve stressed that goals should be for large fruits from precocious and high quality varieties that are high yielding and have good tree survival. Involved in successful production are the site, the variety (of which there are many to choose from), the rootstock (primarily Lovel, Halford, and Bailey) the pruning system, and grower management. In today's economy, the trend is toward higher density plantings with the goal of a quicker fill of the canopy and high early yields. His studies in New York used an open center with 8 scaffolds, a quad V with 4 scaffolds, a perpendicular V with 2 scaffolds, and two systems of central leaders.

The open center system of training had the advantage of maintaining lower tree height and less need for ladders, but the yields and economics favored the perpendicular V or the Quad V which had greater tree height and more trees per acre. One of his suggestions for better yield and tree life is to delay pruning until early bloom to maximize time of wound healing to prevent canker infection.

Proven practices for apple production in New York are generally the same as in Illinois. For this, he said that the selection of variety determines to some extent the fruit size, color, market acceptance, precocity of bearing fruit, time to first fruiting, and the price that buyers will pay. A few varieties that can fill market niches in New York are Zestar with excellent size, yield, and flavor in the early season, Dandee Red, which has a good flavor with high acid content, Sansa, which has a great flavor for eating and for sauce, Autumn Crisp, a New York introduction for early fall with a good sweet/tart flavor, and the Early Fuji's that are sweet and lead into the regular Fuji market.

Fruit quality begins with crop load management, and this involves pruning annually with no over-pruning and summer pruning when it can improve light penetration for better fruit color. Fruit thinning is also needed for crop management. Since hand thinning is impractical for most commercial growers, chemical thinning is the most effective and efficient way to do it. Their schedule is similar to that in the Midwest Tree Fruit Spray Guide, emphasizing that multiple applications are usually required, but with the best time usually at 10-12 mm in size. In New York, 6BA (Maxcell, Riteway, Excellis Plus) is highly recommended because of the effectiveness when mixed with Sevin and the increase in fruit size that results. It works best when air temperatures are near 70 degrees at application time and for a few days following.

Many other facets of fruit production were discussed, but some New York research showed that apple quality and yields are maximized if the available soil moisture never gets below 25 percent. The effects of low soil moisture availability can occur as early in the season as 20-40 days after full bloom.

Chris Doll

Fruit Production and Pest Management

Illinois Small Fruit and Strawberry Schools, March 2-3, 2010

The 2010 Illinois Small Fruit and Strawberry Schools are coming up soon, and as always, they are designed to provide information to help producers successfully grow and market these crops. Bernard Zandstra, Michigan State University, will be providing information on weed control options for blueberries and brambles as well as outlining what's new in strawberry weed control. Stephanie Rhodes, Bloomin' Communications, will discuss marketing strategies for selling small fruit, and important information on GAP programs also will be presented. The Illinois Small Fruit School will include presentations on insect and weed management, cultural practices, and variety information. Two grower presentations will cover topics ranging from growing and selling blueberries to bramble establishment guidelines. The Illinois Strawberry School will provide information for both matted-row and plasticulture growers. Topics will include pest management, variety selection, and marketing. A grower panel will discuss and review the 2009 season. The pre-registration fee of \$30 per farm family includes admission to the educational sessions and trade show as well as one copy of both the *2010 Midwest Commercial Small Fruit and Grape Spray Guide* and 2010 Proceedings. **Pre-registration cards need to be mailed by February 25, 2010.** The on-site registration fee will be \$35 per farm family. Complete program information and registration forms are available at <http://web.extension.illinois.edu/regions/hort/hort2.htm>. For more information, contact Bronwyn Aly at the University of Illinois Dixon Springs Agricultural Center, Rt. 1, Box 256, Simpson, IL 62985.

Bronwyn Aly (618-695-2444; baly@illinois.edu)

Cancellation of Movento's registration

Movento (active ingredient spirotetramat) was first registered a couple of years ago for use certain fruit crops. Illinois growers have found it very useful for control of woolly apple aphid and San Jose scale in apples and grape phylloxera in grapes. In late January the following notice was circulated by the US EPA ...

SPIROTETRAMAT NOTICE OF CANCELLATION ORDER ...

EPA intends to issue a cancellation order for the pesticide spirotetramat pursuant to section 6(a)(1) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). ... On December 23, 2010, the U.S. District Court for the Southern District of New York vacated all registrations issued by EPA for pesticide products containing the active ingredient spirotetramat. The basis for the Court's decision was EPA's failure to provide an opportunity for comment on the applications for those registrations before the Agency granted them. The vacatur is currently stayed until February 16, 2010; when the stay is lifted, the spirotetramat registrations will cease to be valid under FIFRA. When that happens, EPA intends to issue a cancellation order that will establish provisions governing the disposition of existing stocks of previously registered spirotetramat pesticide product already in the channels of trade (e.g., in the hands of wholesalers, retailers, and users). For more Information about the Notice of Cancellation Order, please visit <http://www.epa.gov/opprd001/factsheets/spirotetramat-canc-order.pdf>.

It is my understanding that existing stocks may be sold until February 15 (coming up fast) and that growers will be able to use existing supplies. If you have Movento on hand or plan to buy it in the next few days, it might be wise to contact your local Bayer representative for the most up-to-date status of EPA's decisions.

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

Changes in Altacor's label for use on fruit crops

The US EPA has approved expansions in the label for Altacor, a reduced-risk insecticide produced and marketed by Du Pont. Among the changes are removal of restrictions on the use of oils or adjuvants with Altacor applications to pome fruits and stone fruits, a reduction of the preharvest interval (PHI) in pome fruits from 14 to 5 days, and revision of the PHI to 7-10 days in stone fruits where application rates are 2-3 ounces per acre. Altacor is also now labeled for use on brambles. Primary targets for Altacor are Lepidopteran larvae such as codling moth, oriental fruit moth, and leafrollers; effectiveness against other pests remains a topic of field research. The new label is posted on cdms at <http://www.cdms.net/LDat/ld8KE008.pdf>.

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

Delegate for codling moth control, less effective against apple maggot

At the recent fruit schools, a grower pointed out that the 2010 Midwest Tree Fruit Spray Guide lists Delegate in several places but not in the primary list of insecticides for codling moth control on page 14. This omission was an oversight. Applied at 4.5-7 ounces per acre, Delegate is very effective for codling moth control (a 5.2-ounce rate gave very good control at Urbana in 2009). The label and the 2010 Midwest Tree Fruit Spray Guide list a 6- to 7-ounce per acre rate for control of apple maggot. In trials in Urbana in 2009, Delegate applied at 5.2 ounces per acre was not effective for apple maggot control. It may or may not be effective at the slightly higher rate of 6-7 ounces per acre, but growers should be aware that the rate used for effective codling moth control may not control apple maggot.

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

Vegetable Production and Pest Management

Coragen label expanded to include sweet corn and other additional vegetable crops

The US EPA has approved expansions in the label for Coragen, a reduced-risk insecticide produced and marketed by Du Pont. Coragen is now labeled for use on sweet corn for control of corn earworm, European corn borer, and fall armyworm; the labeled rate is 3.5-5.0 fluid ounces per acre ... the re-entry period is 4 hours; the preharvest interval is 1 day; and the maximum number of applications allowed per crop is 4. Coragen's new label also includes additional vegetables and herbs. The revised label is posted on cdms at <http://www.cdms.net/LDat/ld8KF022.pdf>.

The primary targets for Coragen are Lepidopteran larvae (including the pests listed above and cabbage looper, diamondback moth, armyworms, etc.), and it provides an effective alternative to pyrethroids for control of pyrethroid-resistant populations of corn earworm (and other Leps in other vegetable crops). Additional alternatives to pyrethroids for corn earworm control in sweet corn include Radiant and Belt. None of these products control sap beetles or corn rootworm beetles. In addition to typical foliar applications, Coragen may be applied in the seed furrow, in transplant water, or via drip irrigation for systemic uptake and control of target pests above ground.

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

Less seriously ...

A rancher was overseeing his herd in a remote mountainous pasture in Wyoming when suddenly a brand-new BMW advanced toward him out of a cloud of dust. The driver, a young man in a Brioni suit, Gucci shoes, RayBan sunglasses, and YSL tie, leaned out the window and asked the cowboy, "If I tell you exactly how many cows and calves you have in your herd, will you give me a calf?"

The rancher looked at the man, then looked at his peacefully grazing herd and calmly answered, "Sure, Why not?" The young man parked his car, whipped out his Dell notebook computer, connected it to his Cingular RAZR V3 cell phone, and surfed to a NASA page on the Internet, where he called up a GPS satellite to get an exact fix on his location which he then fed to another NASA satellite that scanned the area in an ultra-high-resolution photo. The young man then opened the digital photo in Adobe Photoshop and exported it to an image processing facility in Hamburg, Germany. Within seconds, he received an email on his Palm Pilot that the image had been processed and the data stored. He then accessed an MS-SQL database through an ODBC-connected Excel spreadsheet with email on his Blackberry, and after a few minutes, received a response. Finally, he printed out a full-color report on his hi-tech, miniaturized HP LaserJet printer, turned to the rancher and said, "You have exactly 1,586 cows and calves."

"That number is right. Well, I guess you can take one," said the rancher. He then watched the young man select one of the animals and looked on with amusement as he struggled to get control of it and get it into the trunk of his car.

Then the rancher said to the young man, "Hey, if I can tell you exactly what your business is, will you give me back my animal?" The young man thought about it for a second and then said, "Okay, why not?"

"You're my new Congressman," said the rancher. "Wow! That's correct," said the young man, "but how did you guess that?" "No guessing required," answered the rancher. "You showed up here even though nobody called you; you want to get paid for an answer I already knew, to a question I never asked. You used millions of dollars worth of equipment trying to show me how much smarter than me you are; and you don't know a thing about how working people make a living – or about cows, for that matter. This is a herd of sheep ... Now give me back my dog."

University of Illinois Extension Specialists in Fruit Production and Pest Management

Extension Educators in Food Crop Horticulture		
Bill Shoemaker, St. Charles Res. Center	630/584-7254	wshoemak@illinois.edu
Maurice Ogutu, Countryside Extension Center	708-352-0109	ogutu@illinois.edu
Elizabeth Wahle, Edwardsville Extension Center	618-692-9434	wahle@illinois.edu
Bronwyn Aly, Dixon Springs Agricultural Center	618-695-2444	baly@illinois.edu
Jeff Kindhart, Dixon Springs Agricultural Center	618-695-2444 618-638-7799 (cell)	jkindhar@illinois.edu
Peter Chege, Quad Cities Extension Center	309-792-2500	pchege@illinois.edu
Extension Educators in IPM		
Suzanne Bissonnette, Champaign Extension Center	217-333-4901	sbisson@illinois.edu
George Czapar, Springfield Extension Center	217-782-6515	gfc@illinois.edu
Doug Jones, Mt. Vernon Extension Center	618-242-9310	jonesd@illinois.edu
Russell Higgins, Matteson Extension Center	708-720-7520	rahiggin@illinois.edu
Campus-based Specialists		
Mohammad Babadoost, Plant Pathology	217-333-1523	babadoos@illinois.edu
Mosbah Kushad, Fruit & Vegetable Production	217-244-5691	kushad@illinois.edu
John Masiunas, Weed Science	217-244-4469	masiunas@illinois.edu
Chuck Voigt, Vegetable Production (& herbs)	217-333-1969	cevoigt@illinois.edu
Rick Weinzierl, Entomology	217-244-2126	weinzier@illinois.edu

Return Address:

Rick Weinzierl
Department of Crop Sciences
University of Illinois
1102 South Goodwin Ave.
Urbana, IL 61801

