

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 address above.

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

In this issue ...

Crop Reports (from Elizabeth Wahle and Maurice Ogutu)

Fruit Production and Pest Management (Results of regional trials of insecticides for codling moth control)

Vegetable Production and Pest Management (Overwintering stages of common vegetable insect pests)

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

Crop Reports

In southern Illinois, the last week of October saw temperatures hovering near the 80° F mark, but this week has brought a return to traditional fall temperatures. Most apple growers have finished or are very near to completing this year's harvest. Sweet potato harvest continues, and reports on yield and quality are good. Sweet potatoes are being sold washed and unwashed, with the unwashed being purchased for storage and the washed purchased for immediate use. White sweet potatoes are gaining a following as well. A lot of greens, including turnip greens, mustard greens, collards, and kale, are being harvested in the region as well. Post- season reports are coming in, and several tomato growers reported having had yellow shoulders and other heat- and light-related physiological disorders. If you experienced yellow shoulder or white core in tomatoes this year, I would be interested in receiving that information.

Upcoming Events in Southern Illinois

After a successful run last year, the Illinois Cider and Hard Cider Contest will again be held at the Illinois Specialty Crops Conference in Springfield, January 22 -24, 2004, and will be hosted by the Illinois State Horticulture Society. Those making hard cider will want to get started now in order to have the maximum amount of fermentation time. Traditional brews are welcome; that is, without any added sugar or other ingredients, relying on wild rather than cultured yeast strains, and without the use of sulfur dioxide, yeast nutrients, or other additives. Hard cider makers can definitely use these ingredients to make a more predictable product, just make sure your product is hard cider, not hard cider wine. Although there is no definite break or definition where hard cider stops and where wine starts, we are looking for a hard cider product with an alcohol content below 8%. We will be asking for a minimum of one gallon of product for the judging contest. Registration for all cider contests will be on January 23rd, from 8:00 to 9:45 a.m. Judging will commence at 10:00am. Contact Elizabeth Wahle

(wahle@uiuc.edu) for additional information.

For growers interested in putting ground into organic production, an Organic Workshop will be conducted at the Illinois Specialty Crops Conference on January 22, 2004. The program will be held at the Springfield Crown Plaza, and is currently scheduled from 1:00 to 9:00 p.m, with a registration fee of \$50.00. The target audience is farmers with experience in producing fruit and vegetables and considering whether or not to produce fruits and vegetables organically. Also included are those considering fruit and vegetable production and exploring an organic market. Contact John Masiunas (masiunas@uiuc.edu) or Elizabeth Wahle (wahle@uiuc.edu) for additional information.

Winter Programs in the southern region:

- February 3, 2004. South Central and Southern Illinois Tree Fruit School, Mt. Vernon Holiday Inn.
- February 4, 2004. Southwest Illinois Tree Fruit School, Hardin. Location to be announced.
- February 11, 2004. Southern Illinois Vegetable School, Mt Vernon Holiday Inn.
- March 2-3, 2004. Small Fruit and Strawberry School, Mt. Vernon Holiday Inn.

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

In northern Illinois, picking of fall apple varieties (Rome Beauty, Braeburn, Enterprise, and Gold Rush) continued "on schedule" through October in most of northern Illinois, though a few pick-your-own orchards closed around October 20 because they had sold their entire crop by then. There were some reports of late-season apple scab, but the northern Illinois apple crop was bigger and better by far in 2003 than it was last year. Leafy greens continued to thrive through late October when the weather was characterized by cool nights and warm days, and no serious insect or disease problems occurred during this period. And of course, pumpkin sales boomed during the week leading up to Halloween.

The Illinois-Iowa Fruit and Vegetable Growers Conference is scheduled for 1:00 to 5:00 p.m. on November 13 at the Scott County Extension Office, 875 Tanglefoot Lane, Bettendorf, Iowa. For more information on the program and for directions to the Scott County Extension Office, contact me or visit the Johnson County (Iowa) web site at http://www.extension.iastate.edu/johnson.

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

Fruit Production and Pest Management

Regional Trials of Insecticide Efficacy Against Codling Moth

Rick Foster (IN), Ric Bessin (KY), Celeste Welty (OH), Bruce Barrett (MO) and I are the entomologists in the informal group known as the Midwest Fruit Workers Group. Along with plant pathologists and horticulturists in the region, we are authors or contributors to the annually revised commercial tree fruit spray guide and the commercial small fruit and grape spray guide used in our states. The Midwest Fruit Workers Group also produced the Midwest Small Fruit Pest Management Handbook and the Midwest Tree Fruit Pest Management Handbook. We (entomologists, pathologists, and horticulturists) also use the annual meeting of the group every October or November in Indianapolis to plan cooperative research. For the 2003 growing season, the five entomologists all evaluated insecticide and mating disruption products in similar manners at locations in each state. We expected that we would see considerable differences in the performance of individual products at different sites due to differences in susceptibility in local codling moth populations (and because Oriental fruit moth is increasing as a pest of apples at some locations and not others). We presented the results of our 2003 trials in late October at the annual meeting of the Entomological Society of America in Cincinnati. The insecticides we all tested included Assail, Avaunt, Calypso, Danitol, Esteem, Guthion, Intrepid, SpinTor, and Warrior. The abstract (summary) follows:

Reduced-risk, alternative insecticides were evaluated for the control of the codling moth in apple orchards in Illinois, Indiana, Kentucky, Missouri, and Ohio. The Oriental fruit moth also occurred as an internal pest of apples at one location in Indiana and in Missouri. All of the insecticides tested at Columbus, Ohio, reduced first generation codling moth injury, but Avaunt, Esteem, Intrepid, and SpinTor failed to provide effective first generation control at one or more other locations. Assail, Calypso, and Danitol were effective alternatives for second generation control at West Lafayette, Indiana, but Danitol was ineffective for second generation control at a southern Illinois location where Guthion resistance had been observed in 2002. The neonicotinoids Assail and Calypso were effective at this site. Use of Last Call-CM (in IL and OH) or CheckMate CM-F (in IN) for mating disruption led to trap shut-down at all sites; fruit injury in mating disruption blocks ranged from <1 to 7.4 percent.

I'll be carrying detailed copies of our results to all the winter fruit meetings in Illinois over the next few months and discussing how to assemble a codling moth management plan in areas where organophosphate resistance is a problem and in areas where it is not.

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

Vegetable Production and Pest Management

Passing the winter ...

It's cold, and I'm glad that at this time of year my job takes me indoors for the winter. Most vegetable insects don't get the same luxury as vegetable entomologists do ... here's a look at where some key vegetable pests overwinter in Illinois.

Insect	Overwinters in Illinois	
asparagus beetle	as an adult in plant debris.	
bean leaf beetle	as an adult in plant cover.	
cabbage looper	it does not. Adults migrate in from the south each spring and summer.	
diamondback moth	as adults in protected areas; adults also migrate in each spring and summer, and larvae are brought in on transplants.	
imported cabbage worm	as pupae in crop debris.	
onion thrips	in various stages on weeds, small grains, and cull and stored onions.	
beet leafhopper	it does not. Adults migrate in from the southwest each summer.	
imported crucifer weevil	as eggs or adults in unharvested fields or root pieces (of horseradish).	
spotted and striped cucumber beetles	as adults in protected areas / plant cover.	
squash bug	as adults in protected areas / plant cover.	
squash vine borer	as pupae in the soil.	
European corn borer	as mature larvae in corn stalks and other host plants.	
corn earworm	in a few areas as pupae in soil. Adults migrate in from southern states each summer.	
corn flea beetle	as adults in soil cracks and crevices and in plant cover.	
black cutworm	it does not. Adults migrate in from the south early in the spring.	
Colorado potato beetle	as "new" adults in pupal cells in the soil.	
potato leafhopper	it does not. Adults migrate in from the south early in the spring.	
seedcorn maggot	as pupae in the soil.	
soybean aphid	as eggs on buckthorn.	

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This issue's words of wisdom ...

On winter ... Another sign of success is reaching for your suitcase instead of your overcoat when cold weather sets in.

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