



UNIVERSITY OF ILLINOIS EXTENSION

College of Agricultural, Consumer, and Environmental Sciences

Illinois Fruit and Vegetable News

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Editors: Nathan Johanning & Bronwyn Aly

A newsletter to provide timely, research-based information that commercial fruit & vegetable growers can apply to benefit their farming operations.

Address any questions or comments regarding this newsletter to the individual authors listed after each article or to its editors, Nathan Johanning, 618-687-1727, njohann@illinois.edu or Bronwyn Aly 618-382-2662, baly@illinois.edu. The *Illinois Fruit and Vegetable News* is available on the web at: <http://ipm.illinois.edu/ifvn/>. To receive email notification of new postings of this newsletter, contact Nathan Johanning at the phone number or email address above.

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Upcoming Programs

Check the **Illinois SARE calendar** for a full list of programs and links for registration.

<http://illinoisare.org/> and <http://illinoisare.org/calendar.php>

Also see the **University of Illinois Extension Local Food Systems and Small Farms Team's website** at:

<http://web.extension.illinois.edu/smallfarm/> and the calendar of events at

<http://web.extension.illinois.edu/units/calendar.cfm?UnitID=629>.

- **Southwestern Illinois Commercial Tree Fruit Twilight Meeting, Wednesday, April 20, 2016, 5:30 p.m.** Tom Ringhausen Orchard, Batchtown, IL. For more information and to register visit <https://web.extension.illinois.edu/registration/?RegistrationID=14272> or contact Ken Johnson at kjohnso@illinois.edu or 217-243-7424.
- **USDA –AMS Webinar: “Standards for the Growing, Harvesting, Packing and Holding of Produce for Human consumption, ie the Produce Safety Regulation,” Thursday, April, 21, 2015, 2-3 p.m.** To register visit: <https://amsfv.webex.com/amsfv/onstage/g.php?MTID=eeb487e80d56a3c58d4b6f4a242bd75ae>
- **High Tunnel Tour, Monday May 9, 2016, 3 – 5 p.m. EST.** Southwest Purdue Ag Center (SWPAC) 4369 N. Purdue Rd. Vincennes, IN 47591. Tour state-of-the-art high tunnels, learn about season extension of strawberry production under high tunnels and early season frost protection by using row covers, and discuss the potential of grafted tomatoes and cucumbers grown in high tunnels. The tour is FREE and call 812-886-0198 to register. For more information contact Wenjing Guan at guan40@purdue.edu.
- **Southern Illinois Summer Twilight Series, 4 Monthly On-Farm Meetings on Mondays, May through August, 6:00 p.m.** For more information or details, contact Bronwyn Aly at 618-382-2662; baly@illinois.edu or Nathan Johanning at 618-687-1727; njohann@illinois.edu Save the dates, more details to follow:
 - **May 16** – All Seasons Farm, Cobden, IL
 - **June 20** – G & C Meyer Farm, near Steeleville, IL
 - **July 18** – Spring Valley Farm, Pulaski, IL
 - **Aug 8** – Grant's Orchard, near Johnston City, IL
- **2016 Illinois Commercial Tree Fruit Twilight Meeting, Thursday, May 19, 2016, 5:30 p.m.** Joe Ringhausen Apple Orchard & Apple House Market, 19770 US Hwy 67, Jerseyville, IL 62052. For more

information and to register visit <https://web.extension.illinois.edu/registration/?RegistrationID=14319> or contact Andrew Holsinger at 217-532-3941 or aholsing@illinois.edu.

- **Strawberry Field Night, Wednesday May 25, 2016 5:30 – 8:30 p.m. (Eastern Time).** OSU South Centers, 1864 Shyville Rd. Piketon, OH. Topics to be covered will include: winter protection techniques, israeli drip irrigation demonstration and management, fertigation and nitrogen management, row cover management, June bearing, day-neutral, ever-bearing cultivar evaluations, pest and disease control, Integrated Pest Management (IPM) techniques, petiole sap analysis demonstration. Cost \$20 and pre-registration is required. To Register Contact Charissa Gardner at Gardner.1148@osu.edu or 740-289-2071 ext.132
- **ISHS Summer Horticulture Day, Thursday, June 9, 8:00 a.m.** Hosted by Raoul & Jodie Bergersen, Valley Orchard, 811 E State St, Cherry Valley, IL 61016. To register online visit <https://www.picatic.com/ilhortday> or contact Rachel Graham Coventry at 217-853-6048 or ilsthortsoc@gmail.com
- **Illinois Pumpkin Field Day, Wednesday, August 31.** Ewing Demonstration Center, 16132 N. Ewing Rd; Ewing, IL 62836. For more information, contact Nathan Johannig at 618-687-1727 or njohann@illinois.edu

Regional Reports

From East-Central Illinois ... Over the past two weeks, local farmers have had to use frost protection on their early plantings due to temperatures in the low to middle 20 deg. F range on April 5 and 9. Fruit growers are still evaluating whether their orchards suffered any damage from these same low temperatures. Currently, farmers are focused on getting beds prepared for planting sensitive crops and tendering to their transplants.

Two weeks ago, I visited with a local farmer that made their own floating bed hydroponic system from 2 X 6 in boards, furring strips, waterproof material, Styrofoam and an aquarium air pump. The system is in the photo and it is made up of four – 4 X 8 foot hydroponic beds with all being aerated by the one aquarium air pump and bubbler stones. The farmer was able to supply fresh lettuce to a local caterer and others through most of the winter.



Photo: D. Gucker

Doug Gucker (217-877-6042; dgucker@illinois.edu)

From southern Illinois ... We survived our cold snap of from about 1-2 weeks ago fairly well with lows that did get down the upper 20s to around 30. Overall, I have not heard of any widespread damage to any of our blooming tree fruit. Some slight thinning on stone fruit may have occurred; however, given the number of blooms on most trees the loss of 5-10 percent of blossoms means that many fewer to thin later in the season. Here in Murphysboro we had 1" of rain early last week, and there are rain chances predicted for Wednesday and Thursday of this week. The soil is working fairly well and field activity is high. I can't tell you how many planters and sprayers I have seen on the road.

Out in the field, I have had some reports of the first harvests of plasticulture strawberries as of the end of last week and first of this week. 'Sweet Charlie' was the first to come in and now starting with some 'Camino Real', 'Camarosa' and 'Albion'. Early blueberries have small fruit set while mid to late season varieties are now in full bloom. Blackberries are pushing out new growth. 'Dirksen' is just starting with around 1/2" green, 'Black Satin' had 1-2" of new growth, and 'Kiowa' have buds starting to form and even a stray flower or two starting to open. Apples are in bloom and peaches are around shuck split. At home, my tart cherries were just nearing the end of bloom and as with many tree fruit bloom was over a long period due to the cool weather, lasting close to two weeks. Also, harvest has started on rhubarb as well.

On the vegetable side, growers have actively been working with tomatoes out in the high tunnels and soon out in the field (if not already). There is some early sweet corn out, however, some of the plantings struggled with the cold right after planting and had to be replanted. Asparagus is now in full production and growing rapidly. In our variety trial some of our best plots yielded as much a little over 1 pound in a 20 ft/20 crown plot in this the 3rd year of the planting. We have had our first flush of asparagus beetles (see the article later in this issue on management).

Nathan Johannig (618-687-1727; njohann@illinois.edu)

News and Announcements

USDA Launches First-Ever Local Foods Survey - Study will Provide New Data on Locally Grown and Sold Foods

The U.S. Department of Agriculture (USDA) today (April 7, 2016) announced the 2015 Local Food Marketing Practices Survey as part of its continued support of local and regional food systems. USDA's National Agricultural Statistics Service (NASS) is conducting this first-time survey to produce official benchmark data on the local food sector in the United States.

"USDA launched the Know Your Farmer, Know Your Food Initiative in 2009 to support the growing demand for local and regional food systems, and local food has been part of Federal, state, and local government policy discussions as consumer interest and demand has grown," said Agriculture Secretary Tom Vilsack. "The information NASS collects in this survey is vital to providing data to understand the benefits of local and regional food systems."

The Local Food Marketing Practices Survey will ask producers for information on their production and local marketing of foods during the 2015 calendar year. Information includes the value of food sales by marketing channel (i.e. farmers markets, community supported agriculture (CSA) arrangements, restaurants, roadside stands, food hubs, and more), value of crop and livestock sales, marketing practices, expenses, Federal farm program participation, and more.

"More than 160,000 farms have direct and intermediated sales and industry estimates suggest the value of the local foods market was nearly \$12 billion in 2014," said Vilsack. "This is important information that was used to inform support for local and regional food systems in the Agricultural Act of 2014. Now as communities are using these programs to help grow the local food sector, this new survey will help show where the sector is today and help identify future needs."

Local foods are linked to many USDA priorities – including enhancing the rural economy, the environment, food access and nutrition, and strengthening agricultural producers and markets. USDA stakeholders, including farmers and ranchers, various levels of government, and related businesses and organizations, will all benefit from the new information, which will be published in December 2016. The data will be used for decisions and programs that support local and regional food systems, including:

- USDA Agricultural Marketing Service's Farmers Market Promotion Program, Local Food Promotion Program, Specialty Crop Block Grants Program.
- USDA Farm Service Agency's Microloan Program.
- USDA Food Insecurity Nutrition Incentives Program, a collaboration between USDA's National Institute of Food and Agriculture and USDA's Food and Nutrition Service
- USDA Food and Nutrition Service's efforts to expand EBT availability at farmers markets
- State and local agencies' support and promotion of local food markets
- Farmers' and ag organizations' business and marketing strategies
- Researchers', extension's and university members' local foods research

Producers who receive the 2015 Local Food Marketing Practices Survey from NASS are strongly encouraged to respond. Farmers and ranchers can fill out the survey online via a secure website, www.agcounts.usda.gov, or return their form by mail.

For more information about the 2015 Local Food Marketing Practices Survey, visit www.agcensus.usda.gov.

The Local Foods Marketing Practices Survey was mailed to a random sample of producers that grow and sell foods locally. Response to the survey is vital as the information gathered will be used to account for all farmers involved in the local and regional food system. NASS is also preparing for the 2017 Census of Agriculture, a complete count once every five years of all U.S. farms and ranches and the people who operate them. If a producer did not receive the last Census of Agriculture in 2012, they are encouraged to sign up at www.nass.usda.gov/Online_Response/Be_Counted/.

Mark Schleusener, Illinois State Statistician, USDA- NASS (217-524-9606; Mark.Schleusener@nass.usda.gov)

2016 Value Added Producer Grant (VAPG) program:

USDA published a Notice in the 4/8/16 Federal Register inviting VAPG applications for fiscal year 2016. Approximately \$44 million is available for this nationally competitive program.

The deadline for submitting VAPG applications is July 1st, 2016 for paper applications or June 24th, 2016 for applications submitted via www.grants.gov. Applications may be mailed, submitted online via www.grants.gov, or delivered to the USDA Rural Development State Office in Champaign by hand. Emailed and faxed applications will not be accepted. Applications and information submitted after the application deadline will not be considered.

To assist you in preparing your application, our National Office has developed application packages for planning and working capital grants that can be downloaded from the main VAPG website shown below. These “application toolkits” have been revised since last year, so please be sure to use the 2016 versions. Please note the use of this application package/template is not required, but is highly recommended. This website also has general VAPG program information sheets available as well as information sheets for specific types of projects.

Below are helpful websites for this program including websites that can be visited to find the Federal Register publication and VAPG Program Regulation. A PDF version of the NOFA is attached for your convenience.

<http://www.rd.usda.gov/programs-services/value-added-producer-grants> - This is the main VAPG website.

<https://www.federalregister.gov/articles/2016/04/08/2016-08028/inviting-applications-for-value-added-producer-grants> - This is a link to the 2016 VAPG Federal Register Publication (PDF version attached to this email also). Please note that while the Federal Register language reference reserved funding several times, there will be no reserved funding for the 2016 funding competition due to the statutory requirement that reserved funds be awarded by June 30th each year (i.e. prior to the paper application deadline of July 1st).

<http://www.rd.usda.gov/files/4284j.pdf> - This is a link to the VAPG program’s regulation – 4284-J

Matthew Harris, Business Programs Specialist, USDA – Rural Development (217-403-6211; matthew.harris@il.usda.gov)

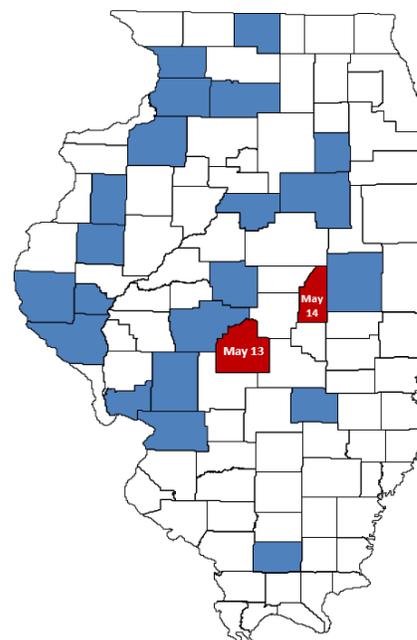
Vegetable Production & Pest Management

Update on Black Cutworm Management

Black cutworms have been observed in traps across the state for the past two weeks. Flights are just now increasing in a few locations and we’ve significant flights (9 or more moths caught in 2 days) in Christian and Piatt counties. We can use the date of the significant flight to predict potential cutting dates based on degree day predictions.

For more complete information about the biology, life cycle, and management of [black cutworms](#), a fact sheets are available from the Department of Crop Sciences, UIUC. Provided below is a brief overview of some key life cycle and management facts concerning black cutworms.

- Black cutworm moths are strong migratory insects with northward flights commonly observed from Gulf States into the Midwest from March through May.
- Moths are attracted to fields heavily infested with weeds such as chickweed, shepherd’s purse, peppergrass, and yellow rocket.
- Late tillage and planting tends to increase the susceptibility of fields to black cutworm infestations.



Kelly Estes, State Survey Coordinator
Illinois Cooperative Agricultural Pest Survey Program

- Cutting of corn plants begins when larvae reach the 4th instar — with a single cutworm cutting an average of 3 to 4 plants during its larval development.
- Cutting tends to occur most often during nights or on dark overcast days.
- Fields at greatest risk to cutting and economic damage are in the 1-to-4 leaf stage of plant development.
- An early warning sign of potential economic damage includes small pinhole feeding injury in leaves (caused by the first 3 instars).
- For sweet corn growers, it is a reminder to scout from seedling emergence through the 6-leaf stage (or at least until the plants are greater than 6” tall). The common decision-making rule is to control infestations if more than 3 to 6 percent of plants are cut ... use the 6 percent threshold if most larvae are large (greater than ½-inch long) and the 3 percent threshold if larvae are small (less than ½-inch long), as they're going to continue feeding longer and damage yet more plants.
- Please check the [Midwest Vegetable Production Guide for Commercial Growers](#) for insecticides labeled for control in sweet corn as well as rates and restrictions.

Kelly Estes, State Survey Coordinator, Illinois Cooperative Agricultural Pest Survey, (217-333-1005; kcook8@illinois.edu)

Asparagus Beetle Management

Asparagus beetles can be very devastating to asparagus fields this time of year. The asparagus beetle overwinters as adults and they emerge in the spring and immediately start feeding. They start laying eggs one week after emergence. The eggs are laid in rows of 3 to 8 eggs on spears. Larva hatch and also feed on spears and ferns before maturing and burrowing into the ground to pupate after around two weeks.

For commercial production the feeding on the spears can cause huge loses in marketable yield. As you can see for the pictures to the right, the eggs (small grayish black, sticking straight out of the fern) and also round surface feeding can quickly render spears unusable.

The economic threshold for insecticide treatment for asparagus beetles during harvest is 2-10% of plants infested or 2% of spears with eggs. Scouting is best done in the afternoon when the beetles are the most active. The thresholds for fields with a history of outbreaks might be even lower.

The following products are labeled for use in asparagus during harvest for asparagus beetle control, all of which have a 1-day PHI.

- Assail 30SG
- Lannate LV
- Lorsban 4E
- Malathion 57EC
- Pounce 25WP
- Sevin XLR Plus 4F or Sevin 5B



Photos: N. Johannig

For organic growers, Entrust can be used **after harvest is done for the season** to reduce populations; however, it has a 60 day PHI so it **cannot** be used during harvest.

Cultural practices such as removing/destroying old ferns and places for beetles to overwinter can be helpful. Also, when harvesting, harvest the field clean as with that you will remove eggs rather than leaving small or cull spears in the field to be a host for eggs. For more details on the products listed above and other management practices refer to the [2016 Midwest Vegetable Production Guide](#).

Nathan Johannig (618-687-1727; njohann@illinois.edu)

Food Safety Updates

Produce Safety Rule: DOMESTIC AND WILD ANIMALS

The final produce rule addresses concerns about the feasibility of compliance for farms that rely on grazing animals (such as livestock) or working animals for various purposes. It establishes the same standards for these animals as it does for intrusion by wild animals (such as deer or feral swine).

Basically, the final produce rule requires farmers to take all measures reasonably necessary to identify and not harvest produce that is likely to be contaminated. At a minimum, this requires:

- All farms to visually inspect the growing area(s) and all covered produce that is harvested, regardless of the harvest method chosen
- Under certain circumstances, the produce rule requires farms to initiate additional assessments during the growing season, such as taking measures reasonably necessary to stop the harvest of contaminated produce. An example of this could be placing flags outlining the affected area(s) in the field prior to harvest.

The Food and Drug Administration encourages farmers to voluntarily consider applying intervals, or waiting periods, between grazing and harvest. This would be as appropriate for the farm's commodities and practices. The agency will consider providing guidance on this practice in the future, as needed.

Farms are not required to exclude animals from outdoor growing areas, destroy animal habitat, or clear borders around growing or drainage areas. Nothing in the rule should be interpreted as requiring or encouraging such actions. It will be important to specify in the farm's safety plan what steps will be taken should fecal matter or other contamination be found in the field.

QUESTIONS/COMMENTS:

The Food and Drug Administration has established a Food Safety Technical Assistance Network to provide a central source of information to support industry understanding and implementation:

<http://www.fda.gov/Food/GuidanceRegulation/FSMA/ucm459719.htm>

Laurie George (618-548-1446; ljgeorge@illinois.edu)

Less seriously...

What do you call a sad strawberry? ... A blueberry.

Why did the baby strawberry cry? ... Because its parents were stuck in a jam!

Why did the elephant paint his toenails red? ... Because he wanted to hide in a strawberry patch... Did you ever see an elephant in a strawberry patch? ... No. See how good they hide.

sources: <http://www.jokebuddha.com/> & <http://www.jokes4us.com/>



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