



Extension

COLLEGE OF AGRICULTURAL, CONSUMER
& ENVIRONMENTAL SCIENCES

Illinois Fruit and Vegetable News

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Editors: Nathan Johannang & 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 Johannang, 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 Johannang 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://illinoissare.org/> and <http://illinoissare.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>.

- **Great Lakes EXPO, December 4-6, 2018, DeVos Place Convention Center, Grand Rapids, MI.** This conference cover, fruit, vegetable and farm markets along with the Michigan Greenhouse Growers Expo. To register or for more details visit, www.glexpo.com
- **2019 Illinois Specialty Crops Agritourism & Organics Conference, Wednesday-Friday, January 9-11, 2019.** Crowne Plaza, Springfield, IL. Save the date! More conference details and registration information coming soon.
- **2019 Southwestern Illinois Tree Fruit School, Thursday, February 7, 2019, Knights of Columbus Hall, Hardin, IL.** Save the date; more details to follow!
- **2019 Southern Illinois Fruit & Vegetable School, Friday, February 8, 2019, Doubletree (formerly Holiday Inn) Mt. Vernon, IL.** *NOTE: this program represents the merging of the Gateway Small Fruit and Vegetable School and the Southern Illinois Tree Fruit School covering, tree fruit, small fruit & vegetables.* Save the date; more details to follow!

News and Announcements

Produce Safety Alliance Grower Training Offered at Local & Regional Food Conference in November

Do you have concerns about safety in your produce operation? Are you concerned about compliance with Food Safety Modernization Act (FSMA)? Do you want to know more about the difference between FSMA and Good Agricultural Practices (GAPs)? Then, the Produce Safety Alliance Grower Training might be for you! On Nov. 5 from 8 a.m. to 5 p.m., University of Illinois Extension will be holding a Produce Safety Alliance (PSA) Grower Training workshop at the DoubleTree Hilton, 10 Brickyard Dr., Bloomington, Illinois, 61701.

The PSA training is being offered as part of the Local & Regional Food Conference taking place Nov. 5-7 at the DoubleTree in Bloomington. The conference, hosted by Illinois Farm Bureau, is aimed at helping farmers learn how to increase their profits, develop a sustainable business and grow market demand to build long-lasting family farms. Usually, the PSA Grower Training costs \$115. However, for those attending the Local & Regional Food Conference, this cost is included with conference registration, including the Association of Food and Drug Officials (AFDO) certificate fee. This special opportunity is offered due to sponsorship from Illinois Farm Bureau and the National Farmers Union. To learn more or to register for the Local & Regional Food Conference, visit www.ilfb.org/livelocal.

The PSA Grower Training course will satisfy the FSMA Produce Safety Rule requirement that states, “*At least one supervisor or responsible party for your farm must have successfully completed food safety training at least equivalent to that received under standardized curriculum recognized as adequate by the Food and Drug Administration.*”

At the PSA training, you can expect trainers to spend about seven hours of instruction time covering content contained in these seven modules:

- Introduction to Produce Safety
- Worker Health, Hygiene, and Training
- Soil Amendments
- Wildlife, Domesticated Animals, and Land Use
- Agricultural Water (Part I: Production Water; Part II: Postharvest Water)
- Postharvest Handling and Sanitation
- How to Develop a Farm Food Safety Plan

In addition to learning about produce safety best practices, key parts of the FSMA Produce Safety Rule requirements are outlined within each module. There will be time for questions and discussion, so participants should come prepared to share their experiences and produce safety questions.

The course will provide a foundation of GAPs and co-management information, FSMA Produce Safety Rule requirements, and details on how to develop a farm food safety plan. Individuals who participate in this course should gain a basic understanding of:

- Microorganisms relevant to produce safety and where they may be found on the farm
- How to identify microbial risks, practices that reduce risks, and how to begin implementing produce safety practices on the farm
- Parts of a farm food safety plan and how to begin writing one
- Requirements in the FSMA Produce Safety Rule and how to meet them.

Participants who attend the full course will be eligible to receive a certificate of completion from AFDO. To receive an AFDO certificate, a participant must be present for the entire training and submit the appropriate paperwork to their trainer at the end of the course.

Registration closes on Oct. 17 or when the course is full. *There are a limited number of seats available for this training. No walk-ins will be accepted.* Cancellation of the registration will forfeit the payment in full. Refunds will not be issued. For questions on the PSA Grower Training, contact Laurie George at (618) 242-0780 or ljgeorge@illinois.edu.

Time to Check Your Pesticide Applicators License for Renewal

Time to check your IL Pesticide ID Card. For those expiring December 31, 2018, you will need to recertify before renewing your license in order to continue purchasing and applying Restricted Use Pesticides (RUP) in Illinois. If you prefer a refresher course prior to re-certifying, the UI Pesticide Safety Education Program Clinic Schedule for the 2018/2019 season (both private and commercial) is now available at <https://web.extension.illinois.edu/psep/index.php>, including online registration for individual clinics. Private Applicator Clinics begin in late November and continue through March. Commercial clinics start similarly but run through mid-May. Training materials are available or can be ordered through your local county UI Extension office and are best studied prior to attending a refresher course and taking the recertification exam. Study materials are also available through the ACES PubsPlus Online Store at <https://pubsplus.illinois.edu/>. Illinois Department of Agriculture regulates and enforces pesticides and their use, including licensing. For more details on certification and licensing, go to <https://www2.illinois.gov/sites/agr/Pesticides/Pages/Certification-and-Licensing.aspx>

Elizabeth Wahle (618-344-4230; wahle@illinois.edu)

2019 Organic Farmer Training Program at Michigan State University

You can now start applying to be part of the **2019 Organic Farmer Training Program at Michigan State University**. The course is held Mondays for 33 weeks from late March through early November (more details below).

The 2019 Organic Farmer Training Program Application is [HERE](#) and the Scholarship Application is [HERE](#). You can find out more about the 2019 OFTP by visiting our updated [website](#).

Please let me know if you have any questions at all about the OFTP or the application process by sending an email to msufarm@msu.edu. Below you will find information about the program that is listed at the top of the application form. You can also visit our website for more information.

Thank you for your interest in the 2019 MSU Organic Farmer Training Program!

Organic Farmer Training Program

The Organic Farmer Training Program (OFTP) teaches organic farming through hands-on activities, farm walks, classroom activities & discussions, video lectures, readings, guest speakers, visits to 20+ Michigan farms and practical assignments, like writing a Farm Business Plan. The OFTP is a vibrant, diverse and positive learning community where students learn from each other and can share their unique skills, experience and goals.

The OFTP can only accept 17 participants per year. Strong applicants meet 3 criteria:

- Hands-on farming experience
- Plans to start or manage a farm or educational farm project in the future
- Ability to contribute to a positive learning community

However, we take into account your full life experience and relevant skills that contribute to success in farming, such as marketing or business experience, mechanical or building skills, relevant education, etc. The program is not appropriate for initial exposure to organic farming, but we may be able to recommend a farm in your area to work or volunteer to strengthen your application.

PROGRAM DETAILS:

- ~March 18th-November 11th (NO CLASS May 27 & September 2)
- ~Mondays 9am-5pm @ the MSU Student Organic Farm in East Lansing, MI
- ~\$3,900 plus required books (scholarships of \$500 to \$3500 available)

TIME COMMITMENT

- Full class day each Monday
- + 3 - 10 hours per week for assignments, video lectures and readings
- + Weekend trip to Traverse City farms (June 22 - 24)
- + Time working or volunteering on a farm

APPLICATION MATERIALS

-[application form](#)

-transcripts

-resume

-2 professional letters of recommendation (not friends or family)

-Farm visit (contact us for other options if you are too far away to visit)

-\$50 application fee (fee waived through September 1st, 2018, checks to Michigan State University).

-OPTIONAL- [Scholarship application](#) & [financial statement](#) if applying for a scholarship

1. Email scans/photos of documents & questions:
msufarm@msu.edu, subject line "OFTP Application"

2. Mail to:

Katie Brandt

MSU Student Organic Farm

Plant & Soil Science Building

1066 Bogue St., Room A288

East Lansing, MI 48824

NOTE: University mail is slow. Emailing scans/photos of documents is recommended if you have internet access.

~Early application deadline: September 1, 2018 (fee waived)

~Rolling Admissions - we accept applications until the cohort is filled!

CONTACT:

msufarm@msu.edu (subject line "OFTP")

517-230-7987 (voice mails checked weekly, email will receive quicker response)

~Please feel free to ask questions to help you decide if this is the right program for you.

Regional Reports

From northern Illinois... We're in the middle of apple season right now with varieties like 'Honeycrisp', 'Jonathan', 'Empire', 'Fuji', 'Crimson Crisp', 'Cortland', and others being offered at area orchards in the last week. The pumpkins are ready to be picked as well at most orchards. As fall arrived last Saturday so did the fall weather in Northern Illinois. For the week of September 25, lows are looking to be in the 40s F and fairly sunny. The summer vegetables have started to slow down as a result. In our demonstration garden in Winnebago County, I planted the 'Bhut jolokia'/ghost chili pepper to see how well it would do and it's performed exceptionally well. I'm still not brave enough to eat these. As most growers in Northern Illinois know, it's time to plant the garlic and decide on varieties if you haven't yet. This means hardneck varieties as the softnecks tend to not perform as well for us up north. Varieties I like are 'Music', 'Carpathian', 'Georgian Crystal', 'German Porcelain', and 'Chrysalis Purple'. Keep in mind that there is a direct correlation in the clove size you plant with the resulting bulb size next summer. So aim for a larger clove to plant if that's what you are after.

Grant McCarty (815-235-4125; gmccarty@illinois.edu)



Photo: G. McCarty

From St. Louis Metro East... Pumpkin harvest is in high gear, including winter squash and gourds. Sweet potato are now in harvest, as are green beans and the last of the squash and zucchini. Greens will be in harvest up until a hard freeze. The quality of tomatoes and peppers is being reported by several growers as being especially good. Okra is

finished for the season, with watermelon close to final harvest as well. For apples, picking is in the Jonathan, Pixie Crunch and Jonagold window. Finished with Honeycrisp and Gala.

Just like chemical companies merging and changing names, the Gateway Small Fruit and Vegetable School is merging with the Southern Illinois Tree Fruit School to form the Southern Illinois Fruit and Vegetable School. It will be held **Friday, February 8th** at the Mt Vernon Doubletree, formerly the Mt Vernon Holiday Inn. The Southwestern Illinois Tree Fruit School remains unchanged and will be held **Thursday, February 7th** at the Knights of Columbus Hall just south of Hardin, IL.

Elizabeth Wahle (618-344-4230; wahle@illinois.edu)

From southern Illinois... It has been a fairly wet start to fall overall. We have had rains almost reminiscent of spring time. Last week, Monday night into Tuesday we got 2.5" here in Murphysboro along with an un-predicted 0.25" on Thursday morning all after it wasn't really that dry to start with prior to all of this with almost an inch the prior weekend. We had some cool weather for most of last week that was more "seasonal" with highs in the 70s and lows in the 50s, but this week we are back to predicted highs in the 80s close to 90.

Out in the field, we are in the peak of pumpkin harvest now in what I have found to be the "peak marketing window for pumpkins" which seems to be the last weekend of September through the first couple weeks of October. The wet weather has been problematic for pumpkins and many crops. The rains have encouraged a lot of bacterial spot on pumpkin fruit, which greatly limits the storage life and marketability fruit. Late tomatoes have had many disease issues along with cracking.

We are on our 7th harvest of our tomato variety trial at the office and probably one of our last harvests. The tomatoes are still decent, but the rain has definitely affected them. After the peak harvest, we also stopped any further crop protection sprays for disease management. The sweet snacking peppers in our variety trial are finally lit up like Christmas trees with fruit. These always seem to be slow to start harvest, but it seems like as week approach frost we will have more peppers than we know what to do with and with nice size and quality as well, extremely sweet.

We have made it through the first harvest/data collection on all of our pumpkin variety plots from pumpkin field day. Thanks to Elizabeth Wahle, Marc Lamczyk, Talon Becker, Maggie Rose, Julie Zakes and Chris Lueking for their help harvesting and collecting that first round of data especially our first harvest when it was 95°!! In a week or two we will probably come back through and do a "clean up harvest" on some varieties that had a second set of fruit. We have seen some bacterial spot there, but not widespread.

At home on the farm, I picked my first small (but delicious!) crop of Pixie Crunch apples. I still have some GoldRush apples on the tree and will probably leave them another week or two to sweeten up a little more. My pumpkins have been doing well. Earlier I had seen some signs of virus, but the plants have grown out of that and for the most part have bounced back. I have noted a lot of green specs and uneven ripening on Jack-be-little types that I am suspecting to be from virus but I am not sure. Knock on wood ☺ I have not had much bacterial spot issues. I have been diligent with copper sprays (with my last & final spray on 9/16), but probably more importantly the patch is on a high ridge, which on a wet year like this has been great. I am just now in the last 1-2 weeks seeing powdery mildew on some of the susceptible varieties, but at this point in the season it won't progress far enough to do much harm before frost. This year I used Sandea, along with the 24(c) labeled Dual Magnum and Reflex preemergence. I have been happy with the weed control for as wet of a year as we had. Morningglories, nutsedge, copperleaf and horsenettle were still problematic late in the season in certain areas, but more an annoyance now than competitive against pumpkin yield. The nutsedge was not widespread enough to warrant a POST Sandea spray, and also it came in later than the label allows application. Overall, I only had a handful of waterhemp and most were in the transplanter row. I can't complain.

As fields open up now is the time to seed plant a cover crop to protect the soil over winter. It is getting a little too late for radish and oat cover crops which will winter-kill, but in this area you can still plant most clovers, vetch, and rapeseed. Cereal rye and other cereal grains can be planted through early November, but earlier planting will yield more residue and biomass. Keep your soils covered this winter!

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

From Dixon Springs Ag Center... Rain, with cooler, cloudy days helped usher in the fall season. Sweet corn harvest has come to an end for the majority of growers, and pumpkin harvest is in full swing. Plasticulture strawberry transplants should be off to a good start, especially with the soaking rains and cooler temperatures. Annual rye grass seed spread between the plasticulture strawberry beds should have established and will make it easier to scout and work in the field this fall, pulling runners and making timely pesticide applications when needed. Tomatoes and peppers in the high tunnels at DSAC are still yielding nice-sized, excellent quality fruit. Preparations are being made to finish the end wall construction on the oldest high tunnel, allowing for late fall, winter production.

Just as a reminder, clearing out plant debris from fields and sanitizing tomato stakes, tools, harvest containers, etc. are important cultural practices when managing disease pressure. By reducing the disease pathogen load that can overwinter in fields on plant debris, disease pressure in the following season can be reduced, making management practices in season more effective.

Bronwyn Aly (618-382-2662; baly@illinois.edu)

Fruit & Vegetable Production & Pest Management

Post-Harvest Handling of Pumpkins

Here are a few thoughts to consider about handling pumpkins post-harvest

- Keep them dry. After harvest keeping water off of fruit will lessen the chances of any progression of bacterial spot (if present) or reduce the opportunity for an secondary infections that could cause fruit rot.
- Keep them out of the direct sun. Pumpkins can sunburn easily if they are left out in the sun especially on days with high temperatures. At a farm market this can be hard to avoid but certainly pumpkins that need to be stored for later sales are better kept out of direct sun. Although I don't have an index of this, I feel that certain varieties are more prone to sunburn than other. Also many of the "whites" will tend to fade to a cream color in the sun. Overall, BOTH sun and rain can fade fruit color and leave them not as bright and eye catching to the consumer, as they were at harvest.
- Keep them out of the mud. Keep them in bins, pallets or not directly in touch with the ground. If you do display fruit out on the ground, having a decent sod or straw can be a good compromise. The goals is to keep them 1) clean and 2) from any soil pathogens that could cause rot.
- Plant & Disease management. A pumpkin that comes off a healthy green vine, will keep far longer than one from a dead dying vine. Keeping good nutrient supply to plants and preventing diseases can go a long way to determine the storage of the fruit. Powdery mildew can be especially problematic on the stems, causing them to shrink up after harvest.

Now I know some of these are hard to all accomplish in many of our on-farm fall market displays, but things to consider especially if you have had issues with fruits keeping after harvest in the past. In my experience, a bright colored, healthy fruit is good for marketing and over time can build your base of satisfied repeat customers!

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

On-Line Information Resources

There are many great on-line information resources available for growers to access information on production, marketing, business planning, food safety, etc. The following list does not reflect University of Illinois Extension endorsement or exclusion of any sites, but serves as an example of the range of websites available for fruit and vegetable growers. Also included is a high tunnel specific list of resources that was shared last year during the 2018 Illinois Specialty Crops Agritourism & Organics Conference. There may be a couple of repeats on the two resource lists but the second list contains links directly to the high tunnel portion of the site.

University of Kentucky- Center for Crop Diversification

The Center for Crop Diversification is a **Specialty Crops-focused Cooperative Extension** organization based out of the **University of Kentucky College of Agriculture Food and Environment**. Though we work at UK, our focus and impact extends throughout the region.

<http://www.uky.edu/ccd/>

USDA farmers.gov

Farmers.gov provides farmers, ranchers, private foresters, and agricultural producers with online self-service applications, educational materials, engagement opportunities, and business tools to increase efficiency and productivity while preserving and fostering long-held traditional relationships between local USDA offices and producers.

www.farmers.gov

Farm Answers

Farm Answers is the USDA-NIFA beginning farmer and rancher (BFRDP) clearinghouse, providing resources to help you get started farming, as well as tools to help more seasoned producers succeed.

www.farmanswers.org

Agricultural Marketing Resource Center

A national information resource for value-added agriculture

www.agmrc.org

ATTRA Sustainable Agriculture

ATTRA is a program developed and managed by the [National Center for Appropriate Technology](http://www.nccat.org)(NCAT). Our services are available to farmers, ranchers, market gardeners, Extension agents, researchers, educators, farm organizations, and others involved in agriculture

www.attra.ncat.org

Produce Safety Alliance

Providing fundamental, science-based, on-farm food safety knowledge to fresh fruit and vegetable farmers, packers, regulatory personnel and others interested in the safety of fresh produce.

www.producesafetyalliance.cornell.edu

North Central SARE Sustainable Agriculture Research & Education

Grants and education to advance innovation in sustainable agriculture

www.northcentralsare.org

High Tunnel Specific Resources

HighTunnels.org

For educators and growers. Organic, tomatoes, cut flowers, pests, marketing, soil management, videos, suppliers, etc. You can join the Hightunnels listserv on this site.

hightunnels.org

ATTRA Sustainable Agriculture

Season extension techniques for market gardeners, organic greenhouse tomato production, compost heated greenhouses, root zone heating for greenhouse crops, and solar greenhouses resource list.

attra.ncat.org/index

USDA Cooperative Extension

Many links for constructing high tunnels.

articles.extension.org/pages/18369/construction-of-hightunnels

High Tunnel System Initiative- NRCS

Environmental Quality Incentives Program (EQIP). Link to apply.

www.nrcs.usda.gov/wps/portal/nrcs/detail/national/program

UMassAmherst

Tomatoes, their pests, diseases, disorders, and factsheets.

ag.umass.edu

SARE Sustainable Agriculture Research & Education

Links to Michigan State, Cornell, UC Davis, Iowa State, season extension.

sare.org

Cornell High Tunnels – Cornell Blogs

Vegetables, berries, flowers, structures, siting, economics, Cornell high tunnel team, news.

<http://blogs.cornell.edu/hightunnels/>

High Tunnel Hub

Marketing, CSA, farmers Markets, wholesaling, operations, site, costs.

hightunnelhub.com

Missouri Extension

Site selection, construction, maintenance, soil fertility, mulches, irrigation, beds and plant spacing, crops, IPM, business planning and marketing.

extension.missouri.edu/healthylife/resources/hightunnel.htm

University of Kentucky- Center for Crop Diversification

Berries, tomatoes, greens, herbs, flowers, microgreens

uky.edu/ccd/production/crop-resources/ht-gh

Iowa State University Extension

Mistakes to avoid, tomatoes, cover cropping, soil management, and more. Short course and e-training available.

extension.iastate.edu/vegetablelab/high-tunnel-crop-production

High Tunnels- Purdue University

Season Extension, tunnel construction.

purdue.edu/dffs/beginningfarmers/links/introduction-to-high-tunnels/

Penn State Extension High Tunnels

High tunnel manual with basic information, construction, maintenance, irrigation, pest management, and growing details.

extension.psu.edu/high-tunnel-manual

High Tunnels: Resources - YouTube

youtube.com/watchhightunnels

Bronwyn Aly (618-382-2662; baly@illinois.edu)

Less Seriously...



<https://me.me/i/funny-die-get-your-flu-shot-now-available-in-pumpkin-4616343>



<https://www.cheezburger.com/7844978688/you-can-put-pumpkin-spice-in-everything>

University of Illinois Extension Educators and Specialists in Fruit and Vegetable Production and Pest Management

Extension Educators – Local Food Systems and Small Farms		
BRONWYN ALY , Gallatin, Hamilton, Hardin, Pope, Saline, Wayne, & White counties	618-382-2662	baly@illinois.edu
BILL DAVISON , Livingston, McLean, and Woodford counties	309-663-8306	wdavison@illinois.edu
LAURIE GEORGE , Bond, Clinton, Jefferson, Marion, & Washington counties	618-548-1446	ljgeorge@illinois.edu
ZACHARY GRANT , Cook County	708-679-6889	zgrant2@illinois.edu
DOUG GUCKER , DeWitt, Macon, and Piatt counties	217-877-6042	dgucker@illinois.edu
NATHAN JOHANNING , Franklin, Jackson, Perry, Randolph, & Williamson counties	618-687-1727	njohann@illinois.edu
GRANT MCCARTY , Jo Daviess, Stephenson, and Winnebago counties	815-235-4125	gmccarty@illinois.edu
DAVID SHILEY , Coles, Cumberland, Douglas, Moultrie & Shelby counties	217-543-3755	dshiley@illinois.edu
JAMES THEURI , Grundy, Kankakee & Will counties	815-933-8337	jtheu50@illinois.edu
Extension Educators – Horticulture		
CHRIS ENROTH , Henderson, Knox, McDonough, & Warren counties	309-837-3939	cenroth@illinois.edu
RICHARD HENTSCHEL , DuPage, Kane, & Kendall counties	630-584-6166	hentschel@illinois.edu
ANDREW HOLSINGER , Christian, Jersey, Macoupin, & Montgomery counties	217-532-3941	aholsing@illinois.edu
Extension Educators – Commercial Agriculture		
ELIZABETH WAHLE , Fruit & Vegetable Production	618-344-4230	wahle@illinois.edu
Campus-based Extension Specialists		
MOHAMMAD BABADOOST , Plant Pathology	217-333-1523	babadoos@illinois.edu
MOSBAH KUSHAD , Fruit & Vegetable Production	217-244-5691	kushad@illinois.edu

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