



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, 618-939-3434 , njohann@illinois.edu or Bronwyn Aly 618-695-6060, baly@illinois.edu. The *Illinois Fruit and Vegetable News* is available on the web at: <http://ipm.illinois.edu/ipv/>. 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

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>.

- **Illinois Farmers Market Association 2019-2020 Winter Webinars.** If you are looking for great webinars that have a market focus check out this series from ILFMA and University of Illinois Extension. They are hosting one per month, between now and March 2020. Registration for the webinars listed below can be found [here](#): Check it out! For more information, contact Laurie George ljgeorge@illinois.edu
 - **February 10, 2020** "Inside Look at Successful Chef Demos at the Market"
 - **March 16, 2020** "The Future of Farmers Markets – Building Collaborative Practices"
- **2020 Southwest Illinois Commercial Tree Fruit School, Tuesday, February 4, 2020** at the Knights of Columbus Hall just south of Hardin, IL. Register online at <https://go.illinois.edu/TreeFruitSchool>
- **2020 Southern Illinois Fruit and Vegetable School, Wednesday, February 5, 2020, Mt Vernon Doubletree Inn.** This program includes separate tracks for small fruit, tree fruit and vegetable production. Register online at <https://go.illinois.edu/Fruit-VegSchool2020>
- **2020 Small Farms Winter Webinar Series, Thursdays from 12-1pm, from January 30-March 26, 2020.**
 - February 6, 2020 Farm Stress and Impact on Health Dr. Josie Rudolphi
 - February 13, 2020 Updates on Industrial Hemp in Illinois Phillip Alberti
 - February 20, 2020 Soil Organic Matters Grant McCarty
 - February 27, 2020 Saturated Media Extract Zack Grant

- March 5, 2020 Selling through Food Hubs and Co-ops: A Growers Perspective Laurie George
- March 12, 2020 Getting Started in Drip Irrigation Bronwyn Aly
- March 19, 2020 The Basics for Goats and Sheep James Theuri and Doug Gucker
- **Indiana Hort Conference & Expo, February 11-13, 2020. Indianapolis Marriott East Hotel, 7202 East 21st Street, Indianapolis, IN 46219.** For more details visit <https://www.indianahortconference.org/>
- **24th-Annual Stateline Fruit and Vegetable Growers Conference at Midway Village Museum in Rockford, IL, Monday, Feb. 24, 2020.** This conference addresses common issues facing fruit and vegetable growers in Northern Illinois and Southern Wisconsin with the hopes of providing the most up-to-date information to ensure a successful growing season. This year's keynote presentation will be an "Overview of Small Fruit and Orchard Weed Management" by Dr. Jed Colquhoun of the University of Wisconsin. Dr. Colquhoun is an UW Extension Specialist with a focus on weed management in specialty crops production.

Other breakout sessions will include Management of Apple Diseases, Soil Health, Building Your Farm Brand, and Management of Cucurbit and Solanaceous Diseases. In addition, there will be a special session on Hemp Production for Specialty Growers.

Cost for this event is \$40 per person with \$30 for each additional person from the same business/family. A \$5 per person discount will be applied for those who register before February 3, 2020. To register for this conference, please visit our website at <https://extension.illinois.edu/jsw> or call the University of Illinois Extension office at (815) 986-4357.
- **2020 Live Local: Local Food and Farmers Market Annual Conference, Tuesday-Thursday, March 10-12, 2020 Embassy Suites, Peoria, IL.** Specialty crop, small-scale farmers, small food businesses, and farmer's markets face unique challenges and markets. Workshops and training opportunities allow them the chance to gain new skills, expand business, and connect with others facing similar challenges. Our Live Local Conference will help food businesses learn how to increase profits, develop a sustainable business, and grow market demand to build long-lasting family farms and businesses. For more information and to register online, visit <http://www.ilfb.org/livelocal> by March 3, 2020. FSMA produce safety training and certification being offered at this event.
- **Produce Safety Alliance Grower Training, Wednesday, February 26, 2020, University of Illinois Extension Office Hardin, Illinois.** Do you have concerns about safety in your produce operation? Are you concerned about compliance with FSMA? Do you want to know more about the difference between FSMA and GAPs? Then the Produce Safety Alliance Grower Training might be for you!

On February 26, 2020, from 8:00am to 5:00pm CST, University of Illinois Extension will be holding a Produce Safety Alliance Grower Training workshop at University of Illinois Extension Office, 818 S. Park, Hardin, Illinois 62047

You can register and find more information here: <https://go.illinois.edu/PSAtrainingHardin>

Cost is \$35.00 per person. The PSA Grower Training Manuals, binders, and AFDO Certificate of Course Attendance will be covered by the Illinois Farm Bureau. **Registration will close on February 11, 2020.** *There are a limited number of seats available for this training. Once the course is full, registration will close.*

Cancellation Policy: Cancellation of the registration will forfeit the payment in full. **Refunds will not be issued.** Questions can be directed to Laurie George at (618) 242-0780 or at ljgeorge@illinois.edu.
- **2020 North American Raspberry and Blackberry Conference, Tuesday-Friday, March 3-6, 2020 in St. Louis, MO.** Save the date and watch for conference registration very soon!

<https://www.raspberryblackberry.com/2020-north-american-raspberry-blackberry-conference/>

Hotel accommodations can be made now. Here is the link for hotel information: <https://www.raspberryblackberry.com/conference-accommodations/> Don't miss the opportunity to attend this national conference and learn more about caneberry production!

News & Announcements

Highlights from the 2020 Illinois Specialty Crops Conference

Attendance was up and the weather behaved itself for the 2020 Illinois Specialty Crops Conference, held at the Crowne Plaza in Springfield, January 8-10. Over the three day conference, 597 participants had their choice of 80 speakers in the educational program and 50 vendors in the tradeshow. The Illinois Specialty Growers Association presented Dr. Mohammad Babadoost and Don Ahrens the Award of Excellence at the annual banquet for their lifelong contributions to the specialty crop industry. Garlic Breath Farm took first place in the Illinois Vegetable Growers Association photo contest. Tanner Orchards took home 1st Place in both the National and IL State Cider Contests, and Jonamac Orchards produced the Champion Hard Cider. Keynote speeches included Janice Person of JPlovesCotton, Hugh McPherson of Maize Quest, and Ken Myszka of Epiphany Farms. Special guest speakers Dr. Shelly Nickols-Richardson, Associate Dean and Director of University of Illinois Extension and IL State House Ag Committee Chair Representative Sonya Harper provided introductory comments and updates. Also in attendance was the Lt. Governor's office. Illinois Specialty Growers Association also launched a pilot transactional component to the "Shop Local" directory on the ISGA website through the MarketMaker program and in partnerships with other Illinois organizations. Please let us know about your experience at the 2020 Illinois Specialty Crop Conference by filling out our survey at the following link <https://form.jotform.com/200018135358144>

Raghela Scavuzzo (Illinois Specialty Growers Association Executive Director; RScavuzzo@ilfb.org)

Food Safety Preventative Controls Alliance (FSPCA) Preventive Controls for Human Food Certification Training

Are you a business, or are you associated with a business that needs to ensure safe preparation of food products for human consumption? Are you looking to become a qualified individual who has successfully completed training in the development and application of risk-based preventative controls, or are you currently working with a processing company and want to help them develop a food safety system? This course, "FSPCA Preventative Controls for Human Food Certification Training", will give you the knowledge and understanding in order to meet those expectations. This Food and Drug Administration (FDA) regulation is intended to ensure safe manufacturing/processing, packing and holding of food products for human consumption in the United States. The regulation for Current Good Manufacturing Practices, Hazard Analysis, and Risk Based Preventive Controls for Human Food, requires that certain activities must be completed by a "preventive controls qualified individual" who has "successfully completed training in the development and application of risk-based preventive controls." This course, developed by the FSPCA, is the "standardized curriculum" recognized by FDA.

To complete the course, **a participant must be present for the entire workshop and participate in the exercises.** Upon completion of this 20-hour (2.5 days) course, the trainee will become a FDA-recognized **"Preventive Controls Qualified Individual"** (PCQI). The course will cover:

- How to create a Food Safety Plan meeting the FDA requirements as required by the Food Safety Modernization Act (FSMA)
- How to conduct a Hazard Analysis, and differentiate between prerequisite programs and risk based preventive controls
- Guidelines for choosing Critical Limits, setting up monitoring programs, and implementing corrective actions when deviations occur
- Documentation for all aspects of the PCHF-required Food Safety Plan including verification and validation activities, monitoring, corrective actions, and records review

The class will begin on Wednesday, March 25th starting at 8am and will finish on Friday, March 27th at noon. Wednesday and Thursday classes will end at 5:00pm each day. The instructor for this class will be Dr. Ruplal Choudhary, a Lead Instructor trained by the FSPCA. Classes will be held at the Jefferson County Extension Office, 4618 Broadway, Mt. Vernon, Illinois 62864.

Registration for this class can be found at <https://go.illinois.edu/FSPCAtraining>. Cost for the training is \$200.00 per person, which will include the Human Foods Handbook, participant workbook, certificate from the Preventive Controls Alliance, and the Association of Food & Drug Officials. Lunch will be on your own.

For more information, contact Dr. Ruplal Choudhary at (618)203-6473 or choudhry@siu.edu or Dr. Laurie George (618) 242-0780 or ljgeorge@illinois.edu. Register early, as space is limited.

Registration Open for 2020 Small Farms Winter Webinar Series

Small farm producers are invited to register for a free webinar series presented by University of Illinois Extension. The weekly series will provide practical knowledge on emerging topics that advance local food production in Illinois, giving small farm producers a look at how leading practices in production, management, and marketing enable operations to improve profitability and sustainability.

The presentations run January 30th through March 19th every Thursday from noon to 1 PM, and can be accessed online from your personal computer. In case you cannot attend these dates, register anyway to view an archived, recorded version. Information will be provided via email (by the Monday after airing) for viewing at your convenience. Contact your local Extension office for more information about live viewing sites, or view recorded and archived sessions on YouTube at bit.ly/ILLocalFoodsYouTube.

Webinar topics and speakers are included below. All presentations are free and producers are encouraged to attend as many of the sessions as they like. To register and view expanded topic descriptions, visit go.illinois.edu/SmallFarmsWebinar

- February 6, 2020 **Farm Stress and Impact on Health** Dr. Josie Rudolphi
- February 13, 2020 **Updates on Industrial Hemp in Illinois** Phillip Alberti
- February 20, 2020 **Soil Organic Matters** Grant McCarty
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- March 12, 2020 **Getting Started in Drip Irrigation** Bronwyn Aly
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Zack Grant (708-679-6889; zgrant2@illinois.edu)

Call for Growers' Participation of Grafted Cucumber Research

Thanks to the support from NC-SARE, we are going to continue the study of evaluating grafted cucumbers for early season production in greenhouses and high tunnels by collaborating with farmers in 2020. The same as in previous years, we are going to supply grafted and normal cucumber transplants for free. These plants were grown in a conventional greenhouse using untreated rootstock seeds.

What we want from growers is to grow the same number and variety of grafted and normal cucumber plants, and keep track of the performance of the plants and the yields. We will provide a stipend for your efforts in tracking the data.

In addition, we encourage farmers to learn grafting technique and produce grafted plants on your own. We will provide you with technical support and help with the process on-site if it is needed. For more detail about this project, please contact Wenjing Guan at guan40@purdue.edu or (812) 886-0198.

Condolences

John Masiunas

For those of you who knew Dr. John Masiunas, retired Professor and Extension Vegetable Specialist with University of Illinois – Urbana-Champaign, we wanted to let you know of his passing on December 3, 2019. John is survived by his wife, Rosario, and his daughter, Jackie, as well as two sisters and brothers. A visitation was held on Sunday, December 8th at the Morgan Memorial Home, located at 1304 Regency Dr W, Savoy, IL. A Celebration of Life was held on Monday, December 9th at the First Baptist Church, located at 1602 S Prospect Ave, Savoy, IL. John was a very active Extension specialist both nationally and internationally, and he created extensive teaching, research, and research-based extension programs. He focused his efforts on problem-solving for the end users and contributed a lot to what we know today in regards to vegetable weed management. Our thoughts and prayers are with John's family.

Regional Reports

From west central Illinois (Macomb)... Despite being huddled in the house this past weekend as high barely climbed into the teens, this has felt like a mild winter so far. In fact, I have spent a fair amount of time outside in a jacket up until this point of the year. The end of the previous week brought rollercoaster temperature swings, from snow, to rain, back to ice, and then a dusting of snow. In total, we recorded a little over 2.5 -inches of precipitation in the past month. The top 2-inches of soil has been hovering around the freezing mark for the past month as well and with this cold snap, we finally hit the freezing mark at 4 inches below ground. I have seen quite a bit of fieldwork continue into January. This is likely due to the wet field conditions late in the harvest season.

Until this recent round of winter weather, I could still see the tops of green cover crops in the Macomb GIFT Garden. Today they are covered in about a half-inch layer of ice and snow. Growers who utilize high tunnels for cool season crops are pushing those right now indoors under light. Warm season high tunnel crops, such as tomatoes, will be getting started very soon. CSA's are putting the call out for subscribers. It won't be long until the growing season is upon us.

Chris Enroth (309-837-3939; cenroth@illinois.edu)

From west central Illinois (Quincy)... It was good to see everyone at the Specialty Growers Conference in Springfield earlier this month. Everyone is busy figuring out seed orders and getting ready for the upcoming season. I just have a few observations to make, all weather related.

The winters' coldest temperatures arrived MLK weekend, when lows were in the single digits (although we had close to these lows around November 12). But most of the winter was quite mild. In fact, the daikon radish we seeded after sweet corn had not terminated as of Jan. 18. I don't think we've ever had radish that survived this late into winter, and my guess is that the sheet of ice and little bit of snow we had over the soil on Jan. 18 didn't provide much in the way of protection. That storm brought more ice than snow, and there is ice still remaining (as of Jan. 21) on top of our row covers protecting the strawberries. Last year we had ice on the covers when we had a low temperature of negative 13. That ice served to conduct that temperature into the crown of the plant (where the buds were) and as a result we only had about 20% of a crop. Big beautiful plants, but few blooms. I don't think the temperatures we had over the weekend, with a low of 7 degrees, were cold enough to kill the buds, but I guess I'll find out in a few months.

We have been able to pick spinach from our high tunnels nonstop over the winter. The growth has been quite impressive, as we've never been able to pick during any past winter, from about mid-December through early February. I had always assumed this was due to the low amount of sunlight. But apparently this winter has proven it is more temperature related. There have been a number of days when the temperatures inside the tunnel were in the 80's or higher. Sunny days with little wind and above normal temperatures can really create a nice growing environment in a tunnel.

The soils have had abundant moisture levels for quite a while now. I can't remember the last time that most tile lines haven't been running. Granted, during parts of December they weren't running strong, but were still maintaining some water flow. The lack of frozen soils for any length of time and rain/snow/ice events are keeping the soils saturated. It may be another late spring this year.

I noticed last year that our onions were some of the largest we've grown. In talking to a few other growers, they have noted similar findings. It leads me to believe we've not been providing enough water to them, as last years' abundant rainfall more than made up for any lacking irrigation. This year I plan to watch for dry soils and provide more days of drip than I have in the past.



Photo by Mike Roegge. Spinach growing in high tunnel at Mill Creek Farms, Quincy, IL.

Mike Roegge, Retired Extension Educator & Mill Creek Farms (roeggem@illinois.edu)

From the St. Louis Metro East... The entire St Louis Metro East continues to be wet, either from snow melt or higher than average rainfall. The Mississippi River is up, but not to flood stage yet. Temperatures took a dip this past weekend well below freezing, but are expected to work their way back up into the 40's and low 50's, with snow and rain along the way. Soil temperatures at the SIU Belleville Research Station are 33.1°F under bare soil at 2", and 29.1°F under bare ground at 4".

Registration is open for the 2020 Southern Illinois Fruit and Vegetable Conference at <https://go.illinois.edu/Fruit-VegSchool2020>. Make sure you register before January 30th to lock in the early bird pricing. This is a 1-day conference, held at the Mt Vernon Doubletree on February 5th. The conference will have three concurrent tracks: small fruit, vegetables and tree fruit. The tree fruit track is the same program presented at the 2020 Commercial Tree fruit School in Hardin the day before (February 4) at the Knights of Columbus Hall. Online registration for this program is available now at <https://go.illinois.edu/TreeFruitSchool> with the same January 30th early bird pricing cutoff. This is a 1-day, single track program focused on tree fruit production.

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

From southern Illinois... So far southern Illinois started with a fairly uneventful 2020 weatherwise. We have had a few cold snaps and warm spells, but for the most part have been mainly in the 40s for highs. Mid-January much of the area received around 2-4" of rain on top of already wet conditions things are starting to "dry out" (aka not as muddy) at least for winter time until the next storm system. There have been a few systems with some light snow/sleet/ice, but down here is hasn't amounted to much so far. We have had our fair share of cloudy days it seems and finally have gotten a few sunny breaks

There isn't a whole lot going on aside from fruit tree pruning, winter maintenance and winter high tunnel crops. Cover crops are making use of a few of the mild days we have had to establish and take hold. Lets hope that February continues to be as nice overall compared with how we started the the year!

Nathan Johannng (618-939-3434; njohann@illinois.edu)

From Dixon Springs Ag Center... This last week has seen cooler, winter-like temperatures for us along with wet soils following several days of rain. We did experience several unseasonably warm days right around and after Christmas, and along with those beautiful sunny, warm days came the aphids. One spray application was made to knock back the population the day after Christmas in the high tunnel with our winter vegetable plots.

Humidity can be an issue in high tunnels, especially in the winter, with the challenge of venting during overcast days and periods of wet weather. During the summer, our tunnels tend to stay open and vented for the majority of the time. Conversely, in the winter, we have them closed up most nights and often many days depending on the temperature. Powdery mildew was observed on several plots of lettuce within the tunnel and received a fungicide application this past month.

Growth has slowed down but did not completely stop in all of our winter vegetable plots (kale, spinach, lettuce, and carrots) over this past month. We do expect to start harvesting more frequently with the daylength increasing and hopefully warmer days in the next few weeks.

On a different note, Extension Forester Chris Evans and his staff have set up multiple commercial scale tree tapping systems for collecting sap from the many maple trees located on site at the Dixon Springs Ag Center. He will be hosting a maple syrup workshop on Saturday, February 1, 2020. As of this morning, they had already processed and bottled 4 gallons of maple syrup. They have boiling and bottling for the past few days and will the amount of sap they are continuing to collect, I expect to see them processing for many days to come. Our temperature patterns the last couple of weeks have been perfect to cause the sap to start flowing.

Julie has been pouring over the seed and supply catalogs as we are gearing up for the 2020 growing season. This is always an exciting time as the possibilities are endless – new varieties, new colors, new crops!



Winter vegetable plots in high tunnel at Dixon Springs Ag Center. Photo by Julie Zakes taken on Christmas Eve 2019. Sand has been put down between rows. Note the drop down side curtains are vented and row covers are off of the plots. Those warm days around Christmas had daytime temperatures inside the tunnel hitting 100 degrees before venting and holding around 70-75 degrees when vented.

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

Less Seriously <https://onlinefun.com/food/5/>

If you enjoy arguing about lunches at 6 AM I can't recommend parenting highly enough.

When I was a boy, I had a disease that required me to eat dirt three times a day in order to survive... It's a good thing my older brother told me about it.

There are approximately 45 seconds between "I'll make us an omelet" and "We're having scrambled eggs."

I eat my tacos over a Tortilla. That way when stuff falls out, BOOM, another taco.

How do you know if someone is hitchhiking or just complimenting your driving?

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

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GRANT MCCARTY , Jo Daviess, Stephenson, and Winnebago counties	815-235-4125	gmccarty@illinois.edu
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