



Illinois Extension

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

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 618-695-2441, baly@illinois.edu. The ***Illinois Fruit and Vegetable News*** is available on the web at: <https://extension.illinois.edu/specialty-crops/ifvn>. To receive or be removed from email notification of new postings of this newsletter, contact Nathan Johannang or Bronwyn Aly at the phone numbers or email addresses above.

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Upcoming Programs

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

<https://extension.illinois.edu/lfssf>

- **Protected Culture Field Day**, Friday, September 8, 2023, 4:30 - 6:30 pm. Growing Home Urban Farm, 5814 S Wood, Chicago, IL. Extension Educator Zack Grant and Growing Home Farm Manager Ezra Lee will discuss high tunnel management, vendors and equipment, structures like High tunnels, caterpillar tunnels, planting dates for season extension DIY solutions Pre-registration required. For more information and to register visit <https://go.illinois.edu/protectedculture>.
- **Legal Training for Illinois Small Farms Webinar Series** | This is a quarterly webinar series for Illinois small farmers including new, beginning, and urban farmers brought to you by Illinois Extension's Local Food Systems and Small Farms team and presented by [Farm Commons](#).

Sessions will be held quarterly on Mondays from 7 – 8 pm CST, via Zoom. Please register at the links below for each session of the series:

- [5 Steps to Protect Your Farm](#), September 18, 2023
- [Land Leasing Basics](#) December 18, 2023
- [Forming an LLC](#), March 18, 2024
- **From Food To Flowers: Everything Local** | Save the date! January 17-19, 2024 Crowne Plaza, Springfield, IL. Look for more details in future issues.
- **2024 Southwestern Illinois Commercial Tree Fruit School** | Save the Date! February 6, 2024 at Knights of Columbus Hall, Hardin, IL. Look for more information in future issues.
- **2024 Southern Illinois Fruit and Vegetable School** | Save the Date! February 7, 2024 at DoubleTree, Mt. Vernon, IL. Look for more information in future issues.

News & Announcements

A vertical poster with a dark green background. At the top left, the title "Mite Symptoms survey" is written in yellow. Below it, white text explains the survey's purpose: "If you work with specialty crops or have experience with twospotted spider mites, we are reaching out for your help to complete a survey designed to determine the limit of detection of spider mite damage." A QR code is centered below this text. To the right, there is a circular inset image of a green leaf with yellow stippling damage and a two-spotted spider mite. At the bottom left, there is a logo for "NORTH CENTRAL SARE Sustainable Agriculture Research & Education" and the hashtag "#LNC20-438". At the bottom center, there is contact information for Leslie Alejandra Aviles Lopez and Laura Ingwell, along with the IRB number "IRB-2023-850".

Mite Symptoms survey

If you work with specialty crops or have experience with twospotted spider mites, we are reaching out for your help to complete a survey designed to determine the limit of detection of spider mite damage.

You can access the survey by scanning QR code below. All responses are anonymous



Please email us if you have any question.
Leslie Alejandra Aviles Lopez (PhD, student; lavilesl@purdue.edu)
Laura Ingwell (Principal Investigator; lingwell@purdue.edu)

IRB NUMBER: IRB-2023-850



NORTH CENTRAL
SARE
Sustainable Agriculture
Research & Education

#LNC20-438

Midwest Mechanical Weed Control Field Day

Midwest Mechanical Weed Control Field Day returns Wednesday, September 27, 2023 to The Ohio State University CFAES Wooster campus in Wooster, Ohio.

The field day connects farmers, machinery manufacturers, and the allied trades for a single day event that draws farmers from all over the US and Canada – because it is THE PLACE to see weeding tools.

Morning schedule:

- Tradeshow
- One-on-one with farmers
- Educational sessions

Afternoon schedule:

- Field demonstrations in vegetables and row crops

What to expect...

- ▶ In-field demonstrations of cultivation tools for vegetables and row crops
- ▶ Demonstrations of implements on both four-wheel and two-wheel tractors
- ▶ Expo featuring industry-leading cultivation companies and cutting edge tools
- ▶ Conversations with international cultivation experts
- ▶ ...and more!

When: Wednesday, September 27, 2023

Where: OSU Wooster Campus, 1680 Madison Ave, Wooster, OH 44691

How Much: \$50 (includes lunch)

Register online at: <https://www.thelandconnection.org/event/2023-mmwcf/>

For more info on the event or to register by phone, contact Crystal at crystal@thelandconnection.org or (217) 840-2128.

Legal Training for Illinois Small Farms Webinar Series

This is a quarterly webinar series for Illinois small farmers including new, beginning, and urban farmers brought to you by Illinois Extension's Local Food Systems and Small Farms team and presented by [Farm Commons](#).

Date and Time: Sessions will be held quarterly on Mondays from 7 – 8 pm CST, via Zoom.

Here are the links to live individual registration pages for each session of the series:

- [5 Steps to Protect Your Farm](#), September 18, 2023
- [Land Leasing Basics](#) December 18, 2023
- [Forming an LLC](#), March 18, 2024

Session Descriptions

Sept 18, 2023: 5 Steps to Protect Your Farm, Legally Speaking presented by Eva Moss Education Program Director, Farm Commons. Are there a few, key steps that provide a big impact when it comes to the farm or ranch's protection from legal risks? We're so glad you asked! Yes, there are and every farm or ranch no matter its size, location, or longevity is in a great position to build resilience. Join Farm Commons for a webinar that will build knowledge and confidence around essential farm law issues.

Dec 18, 2023: Land Leasing Basics presented by Chloe Forkner Johnson, Staff Attorney, Farm Commons. Leasing farmland is so commonplace that landowners, farmers, and ranchers may not think twice about the lease itself... until things go wrong. Prevent problems with a strong lease while building a path to a resilient future. This online workshop will help you understand what a lease should include and how to put it in writing. Get started with the tools, knowledge, and skills you need to create a strong document that works for your needs, whether you are a landowner, rancher, or farmer.

March 18, 2024: Forming an LLC presented by Rachel Armstrong, Executive Director Farm Commons. If you or your producers are curious about the details of an LLC, you're not alone! Most farmers choose the LLC as their preferred business structure. The good news is that forming one is quite simple. But at the same time, farmers and ranchers need to know a few keys to ensure they get the benefits they're expecting from this entity. We'll do a quick recap of why an LLC is a good risk management tool before going into how to form one, which best practices to implement after it's formed, and regular obligations to keep the LLC in top legal shape. Even farmers who have had an LLC for years will learn some things about how to preserve their resilience.

Webinar helps specialty crop growers with organic production

University of Missouri Extension is offering a nine-part webinar series on organic production of specialty crops.

The series, which runs Sept. 26 to Nov. 28, begins with an overview of the organic certification process. Other topics include soil and fertility and management of weeds, insects and diseases in organic systems. There also will be individual classes on organic production of tomatoes, leafy greens and berries.

"MU Extension horticulturists work with many fruit and vegetable growers who have an interest in organic production," says MU Extension horticulturist Justin Keay. "Some want to work towards USDA organic certification, while others are interested in implementing organic practices but not seeking certification."

Because organic growers have fewer effective crop sprays to deal with insects, diseases and weeds, raising crops organically requires an increased emphasis on integrated pest management (IPM) practices. "IPM involves thorough planning to prevent the problems that may come, rather than a reactive 'see and spray' approach," Keay says.

"Adopting and integrating IPM practices into crop production systems is a keystone of successful organic producers," he adds. "It is a systems approach that involves an understanding of the life cycle of pests

and the farm as an ecosystem, rather than a ‘do-nothing’ approach that some may associate with organic production.”

Attendees will walk away with a deeper understanding of what is required to successfully produce organic crops, Keay says.

This series will be held 6:30-8 p.m. Tuesdays via Zoom. To register, go to [http://muext.us/OPSC23\(opens in new window\)](http://muext.us/OPSC23(opens in new window)) or call the MU Extension Center in Jefferson County at 636-797-5391 by Sept. 24.

There is a fee, but scholarships are available to Missouri Beginning Farmers to cover a portion of the registration cost. Scholarships can be redeemed at registration. Call Keay at 573-324-5464 for more information.

Regional Reports

From the St. Louis Metro East...



Knocked down but not out. This uncontrolled palmer amaranth can produce up to 250,000 seeds. (USDA-NRCS, Palmer Amaranth, Online fact sheet, April, 2017). Photo credit: Elizabeth Wahle

With recent rains, soil moisture has improved significantly for much of the St Louis Metro East. The newest [U.S. Drought Monitor](#) map for Illinois shows large areas of the St Louis Metro East with no drought, shrinking the areas of abnormally dry and moderate drought. Temperatures are still in the upper 80s and 90s, combined with humidity levels high enough to make you sweat just standing still. Dew remains on plant surfaces well into the morning hours, creating conditions conducive to powdery mildew. Benefitting from the rains are weeds. This is the busy time of harvest and weeds can rapidly grow to a seed producing size if not controlled with mowing, hoeing, cultivation, or post-emergent chemical control. At the very least make sure weeds don’t go to seed because that just increases your weed pressure in future production years.

With recent rains, the pumpkin crop is looking good. Spring planted cucumbers, tomatoes, peppers, eggplant are still in full harvest and the fall planting of crops like collards and other greens has begun.

Sweet corn harvest will be winding down in the next week or two. Most fall-planted plasticulture strawberry beds have been pulled, covered, and prepared for planting. Fall-apple harvest began for those growing ‘Sweet Maia’, but for most the season will begin within the week with ‘Gala’. Harvest of ‘Cresthaven’ peaches is finishing up, with late season cultivars like

'Encore', 'PF 35-007 Fat Lady', and 'Autumnstar' starting soon. The blackberry season is in the final two weeks with 'Chester.' The horseradish crop looks on target for fall and winter harvest. Scout reports show beet leafhoppers in some fields above threshold, warranting control measures to prevent the transmissible brittle root disease from spreading further.

Link to reference if needed:

https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdfiles/FactSheets/archived-fact-sheets/palmer_amaranth_nracs_national_factsheet.pdf

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

From southwestern Illinois (Waterloo)... It just feels like summer in southern Illinois outside. We are preparing for a week of temperatures near 100 degrees and lots of humidity. The past week actually brought a break from the humidity for most of the week and nice temperatures. We are still on the dry side but a few rains over the past few weeks along with the humidity have kept crops fairly happy for now. Forecasts for temperatures near 100 degrees is really going to bring back the stress to the plants with no major chance for rain in the next week, but hopefully the plants can draw from past experience (and root system) on drought survival.

Early apples are starting to show up in markets and starting to wind down on the peaches available. I had some very good 'Cresthaven' peaches from a local farm a couple of weeks ago. Although not a great crop, most growers have been very happy with what peaches they do have after the damage from last winter.

All summer vegetables are still in harvest. Tomatoes and peppers have really hit their peak and plants are still very healthy. I have a fall crop of green beans up pushing out their first trifoliate leaf and fall cauliflower and broccoli transplants hopefully will go in the ground later this week.

The generally dry conditions have been good for limiting some plant diseases but the moisture limitations can also bring other challenges as well. Aphids, spider mites and other pests have been especially problematic. I can even see more feeding from wildlife as especially irrigated crops can be the most green, lush food available in areas.

Pumpkins are doing well. I gave my pumpkins a side dress application of nitrogen the first week of August and they have really taken off we have fruit starting to size nicely. I have not seen any signs of powdery mildew yet but have started spraying preventative fungicides, especially given the high heat and humidity. I have seen a few cucumber beetles and just a couple of squash bug eggs but nothing enough to warrant an insecticide spray. I have noticed quite a few ladybugs so I am hopeful that I can delay any need for insecticide as long as possible. Weed control has been good overall. I sprayed a grass herbicide to clean up a few foxtail and some volunteer wheat. Copperleaf and morning glories are the only other weeds that I have some issues with and fortunately they are not widespread and localized to certain areas. I have tried to spot spray and hoe to clean up those areas as best I can. We lucked out

and caught about the perfect rain after planting to activate the herbicide, in addition to a low weed seed bank from a good weed management in rotational row crops.



Pumpkins are taking advantage of the summer heat with good fruit set (left) and crop canopy (right).

Photos: N. Johannig

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

From Dixon Springs Ag Center... We had a break from the summer heat last week, but this week the heat dome has moved back over our region creating very hot, humid conditions. With 95-100 degree temperatures and heat indexes ranging from 105-120 degrees, much of the field work in our high tunnels is completed before noon with lots of water and fan breaks.

Fortunately for us, the majority of our tomato crop was harvested before this week's oppressive heat. Peppers are still sizing and continue to be harvested every 7-10 days. We will stop collecting research data the end of August on the tomato, pepper and cut flower crops included in our research project, "*Strategies for Improving Biological Control of Insect Pests for Vegetable Growers Utilizing High Tunnels*". This will give us time to get the tunnels cleaned out and prepared for planting of fall cover crops the first week of October.

Hydroponic cucumbers, tomatoes, peppers, strawberries, green beans, specialty melons, and edible flowers/herbs are still producing. The cucumbers and strawberries especially loved the break in temperatures that was felt in the previous couple of weeks. As expected, spider mites and thrips have been our biggest insect pests within the hydroponic tunnel.

Our last 2023 Southern Illinois Summer Twilight Series meeting was held on August 21st at The Patch farm in Williamson County. Samantha and Adam Dahmer hosted about 20 growers interested in their no-till pumpkin production and agritourism/marketing strategies. With over 70 varieties of pumpkins spread across 10 acres, the Dahmer's offer a u-pick pumpkin experience that allows customers to create memories and make a connect to farming activities. With a strong focus on soil health, their pumpkin production benefits from a 14 species cover crop mix and crop rotation. The networking and sharing of information on a diverse range of crops and livestock, production practices and marketing continue to

be of benefit to all types of participants whether they are local foods customers, beginning farmers/ranches or seasoned, experienced growers/producers.



Southern Illinois Summer Twilight Series meeting at The Patch u-pick pumpkin farm in Williamson County. Photos: B. Aly

Bronwyn Aly (618-695-2441; baly@illinois.edu)

Less Seriously

These are the unavoidable laws of the natural universe (from the early years of the IFVN)...

1. Law of Mechanical Repair: After your hands become coated with grease your nose will begin to itch or you'll have to pee.
2. Law of the Workshop: Any tool, when dropped, will roll to the least accessible corner.
3. Law of probability: The probability of being watched is directly proportional to the stupidity of your act.
4. Law of the Telephone: When you dial a wrong number, you never get a busy signal.
5. Law of the Alibi: If you tell the boss you were late for work because you had a flat tire, the very next morning you will have a flat tire.
6. Variation Law: If you change lines (or traffic lanes), the one you were in will start to move faster than the one you are in now. (works every time).
7. Bath Theorem: When the body is fully immersed in water, the telephone rings.
8. Law of Close Encounters: The probability of meeting someone you know increases when you are with someone you don't want to be seen with.

9. Law of the Result: When you try to prove to someone that a machine won't work, it will.
University of Illinois Extension Educators and Specialists in Fruit and Vegetable Production and Pest Management

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