



Illinois Extension

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

Illinois Fruit and Vegetable News

Vol. 29, No. 5, May 22, 2023

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.

In this issue...

- **Upcoming programs** (listings for beginning and established growers)
- **News & Announcements** (Summer Horticulture Field Day 2023, Legal Training for Illinois Small Farms Webinar Series)
- **Regional Reports** (northern Illinois, St. Louis Metro East, southwestern Illinois (Waterloo), Dixon Springs)
- **Fruit & Vegetable Production & Pest Management** (Cooler and Drier as We Move into May, Peach Winter Injury Observations, Pumpkin Weed Management)
- **Less Seriously**
- **University of Illinois Extension Educators and Specialists in Fruit and Vegetable Production and Pest Management**

Upcoming Programs

See the **University of Illinois Extension Local Food Systems and Small Farms Team's website** at: <https://extension.illinois.edu/lfssf>

- **ISHS Summer Hort Field Day (Champaign, IL)** | Thursday June 8, 2023 at Curtis Orchard, Champaign, IL. Save the date and look for more information in future newsletter issues.
- **Southern Illinois Summer Twilight Series** | 3rd Monday Evening in May-August across southern Illinois. To register for any or all of these meetings, go to go.illinois.edu/2023twilightseries or contact Bronwyn Aly baly@illinois.edu or 618-695-2441 for more information.
 - **Burnt Hill** in June 12, Dahlgren, IL pasture raised beef, lamb, chicken, & pork
 - **Higginson Farm Market** in July 17, Elizabethtown, IL farm market sourcing from local producers/vendors
 - **The Patch** in August 21, Marion, IL cover cropped pumpkin patch & fall agritourism

- **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:
 - [Exploring H2A](#), June 26, 2023
 - [5 Steps to Protect Your Farm](#), September 18, 2023
 - [Land Leasing Basics](#) December 18, 2023
 - [Forming an LLC](#), March 18, 2024

News & Announcements

ILLINOIS STATE HORTICULTURAL SOCIETY PRESENTS SUMMER HORTICULTURE FIELD DAY 2023 - June 8, 2023

Curtis Orchard & Pumpkin Patch · 3902 S. Duncan Road, Champaign, IL

The Curtis Orchard Family is proud to invite friends & members of the ISHS to tour & visit their farm operation for Summer Hort Field Day on Thursday, June 8th, 2023. In 1977 Paul and Joyce Curtis planted their first apple trees on their 80 acre farm, that had been passed down from generations of Paul's family that settled in Champaign in 1873. Their first crop was in 1980, & they hired their daughter Debbie's boyfriend Randy Graham part-time, so Paul could continue teaching to finance the business. Over the years, the family diversified the offerings on the farm to include cider, pumpkins, a bakery, restaurant, gift shop, and agritainment activities. The orchard now has 10,000 trees and about 30 different varieties of apples. The Grahams raised five children on the family farm, and their oldest daughter Rachel and her husband Jeremy Coventry now co-own the farm with Paul Curtis, Randy and Debbie Graham.

TENTATIVE AGENDA

- 8:00AM Registration
- 8:30AM Welcome & Introduction from the Curtis Orchard family, General Overview of Farm
- 9-11:30AM Morning Breakout Sessions (See Below)

SESSION A Outdoor Field Tour (Wagon Rides)

Curtis Orchard Fruit & Vegetable Production - Randy Graham
Apples transitioning to high density. (They also have a few peach trees) Pumpkin planting & growing practices
Specialty Equipment Showcase and Demonstration (weather permitting) Tour of sheds with discussion of organization - Jeremy Coventry Beekeeping for Pollination & Honey Production - Rachel Coventry

Featured Speakers:

- Plant Pathology - Dr. Mohammad Babadoost, University of Illinois
- Entomology - Dr. Kacie Athey, University of Illinois
- Weed & Pest Management - Dr. Elizabeth Wahle & Nathan Johanning, U of I Extension

SESSION B Tour of Farm Market, Bakery, and Flying Monkey Cafe

Discussions on Increasing flow of traffic of cafe in busy season - Debbie Graham
Hiring & Employee Management, Store Displays & Retail Items - Rachel Coventry & Staff

12-1:30PM Lunch & Lunchtime Presentations:

Blessing of Meal Curtis, Graham, & Coventry Family
ISHS President's Comments & Updates Jenna Spychal
ISGA Presentation & Updates Randy Graham
State-Wide Crop Reports & Updates
ISHS Members Exhibitor Introductions Jenna Spychal

1:30-3PM Optional Afternoon Tour of Weinzierl Fruit Farm (6 miles west of Curtis Orchard)

ON-LINE REGISTRATION IS AVAILABLE NOW AT: www.tickettailor.com/events/ishs

Registration for Field Day is \$30 per person in advance, \$40 on site, Children 12 & under are free Please also consider donating to the Illinois State Horticultural Society to help us continue to support. Specialty Crop Research in the State of Illinois.

DIRECTIONS:

Curtis Orchard & Pumpkin Patch is located in Southeast Champaign. From I-57, take exit 232. Turn east toward the stoplight, turn right onto Duncan Road, Curtis Orchard will be on the left in a half mile.

Address: 3902 S. Duncan Road Champaign, Illinois

LODGING OPTIONS: A block of rooms has been reserved for the Illinois State Horticultural Society at the following hotel:

Hampton Inn Champaign Southwest 3308 Mission Drive, Champaign, IL 61822
(217)356-0726 located 3 minutes from Curtis Orchard

When booking, mention Illinois State Hort Society or Curtis Orchard

For details & general information on the program or the event, contact:

Jenna Spychal - ISHS Field Day Coordinator (217) 254-5258 jenna@jonamacorchard.com

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:

- [Exploring H2A](#), June 26, 2023
- [5 Steps to Protect Your Farm](#), September 18, 2023

- [Land Leasing Basics](#) December 18, 2023
- [Forming an LLC](#), March 18, 2024

Session Descriptions

June 26, 2023: Exploring H2A presented by Chloe Forkner Johnson, Staff Attorney, Farm Commons. The H-2A visa program makes it possible for farmers to bring in citizens of other countries for agricultural work in the United States. With a tight labor market, the visa program is experiencing a lot of growth – farmers who have never considered it before are taking a closer look. This program will help farmers assess whether H-2A might help address their labor shortage issues. We'll also go over the extensive regulatory obligations that come with participation in this program. With human trafficking also on the rise, we'll address key ways producers can guard against worker vulnerability in this program.

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.

Regional Reports

From northern Illinois...We are at the start of both rhubarb and asparagus season. Some growers are further along than others for both of these crops. Many of our farmers markets have opened in the last two weeks of May.

Last week (May 11), I was at an apple orchard and saw a majority of varieties were in full bloom with some mixture of pink, here and there. We have received some reports of winter damage on some trees that could be related to the temperatures we saw in December 2022. Many of the northern Illinois

growers are still reminded of the winter of 2014 and its impact on fruit that season. Currently, weather looks seasonably warm and sunny this week (May 15-19) after a wet and gray Mother's Day.

I started the 2nd year of my day-neutral strawberry research project. 'Albion', 'Seascape', and 'Mara Des Bois' varieties were planted at the Stephenson location (mixed vegetable operation) on Thursday, April 27. Due to weather and field conditions, the Jo Daviess site (orchard/strawberry u-pick) was planted on Thursday, May 11. The priority these first 6 weeks is root establishment and flower removal. As it is the 2nd year of this study, we will be collecting the same data as last year but now have a better timeline for what to expect when it comes to pest management, labor, harvest, and management. Information about the first year conclusions and the overall research purpose can be found in this 20 minute YouTube [video](#).

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

From southwestern Illinois (Waterloo)... Conditions in the area are overall, good. Temperatures have been mild for May with highs mainly in the 70s and 80s with only a few days now of higher humidity and more summer-like temperatures. The main concern now is soil moisture. Rainfall as in many areas has been extremely variable. Most areas have caught some rainfall over the last few weeks, especially to the north where even a week ago they had multiple inches of rain. Locally, in Monroe County, there is a portion of the central part of the county that has received little or no rainfall in the last month or more. The Baebler Educational Farm south of Waterloo is in the heart of this area. I have some research and demonstration trials there and we have only received 0.3" of rain, which occurred across 4 different days since May 2. Soil conditions were already dry before that. I had a trial with field and sweet corn planted May 3 and the sweet corn is mostly emerged but under water stress. The field corn is only about 10% emerged after 3 weeks. The corn was no-till planted, however, this farm is light colored rolling hills with a long history of continuous cropping, erosion, and only a little over 1% organic matter. The soil is just not extremely forgiving in its current state or able to hold a lot of excess moisture although can be productive. We have started also with cover cropping and more no-till production to build the soil. Neighboring corn and soybean fields look similar with very patchy emergence and in some cases entire lengths of row for dozens of feet with no plants.

Aside dry conditions, crops overall look very good. Cool season crops have had decent weather and limited heat compared with some springs. Asparagus harvest is starting to slow down for many as new spears are starting to get smaller in diameter. I have some 'Yukon Gold' potatoes just starting to show some flower buds. Some of the earliest sweet corn from early April is about the 6-leaf stage now. Young transplants of tomatoes and peppers are starting to take off, but appreciative of irrigation when available.

Tart cherries are just starting to ripen as usual to line up for harvest around Memorial Day. For us, the crop looks good but fruit is a little smaller than sometimes due to a heavy crop and dry conditions. Blueberries are really starting to gain fruit size and have a good crop. I have not seen any color change yet on them but probably by the first week of June the first, early varieties will start to ripen. Raspberries are filling out small, 1/2 inch diameter, green, fruit for June harvest. Don't forget to be aware of [spotted wing drosophila](#) (SWD) in small fruit as we approach the harvest season. I actually observed some SWD in a few cherries with some discoloration, a small hole in the fruit skin and small white larvae inside. It was not widespread, but present. In the past, I observed more SWD in mid-June and cherry harvest would be done by then. Either way have a plan to protect and manage them as harvest of blueberries, blackberries, and raspberries starts over the next month.



Tart cherries ripening for late-May harvest. Photo: N. Johanning

Pumpkin planting is on the mind of many, and I've had some calls in the last week or two. I've shared a few weed management highlights later in this issue. Along those lines, for those that have a cereal rye cover crop many are terminating now that the rye is reaching flowering, or anthesis. At this point in its growth the plant will produce limited re-growth. If you are not familiar with this growth stage, it is when the head sheds pollen and anthers are visible. Many are choosing to roll down rye and this is a great time to do it. The only downside is the shedding pollen can easily clog tractor radiators and for me calls for a dose of my favorite allergy medicine!



Cereal Rye at anthesis, shedding pollen. Photo: N. Johanning

Let's hope for some widespread rain especially for the areas that need it the most across the state!

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

From Dixon Springs Ag Center... Temperatures over the last few weeks have been pleasant to be outside working which means that we haven't had very many really warm days. We did reach 90 degrees on Mother's Day but rain followed and we are back into the 70s again for the next several days. We have been fortunate that our location has not received damage from the strong storms that moved across the southern part of the state over the past few weeks.

Early sweetcorn plantings made in April have been slow to emerge and are currently only 3-4" tall, demonstrating the effects of our cooler spring temperatures on soil temperatures. Plasticulture strawberry harvest is in full swing. The frequent rains can make spray applications challenging but also needed to keep potential disease issues manageable within the plantings.

The tomatoes and peppers in our high tunnels at DSAC have been planted for about one month. The tomatoes are ready for their third string and fruit is set and sizing on the first clusters and second and third clusters are currently flowering. The first flowers on the peppers are just starting to open. No disease issues have been spotted and the only insect problems appear to be heavy armyworm pressure in just one of the tunnels. We are spraying a Bt product to gain control as the feeding is causing significant damage on green fruit. This is a good reminder of the importance of thorough and frequent



scouting, as sometimes pests can arrive off schedule. We typically don't see this much worm pressure this early in the season, but they have definitely made their presence known.

Our first Southern Illinois Summer Twilight Series meeting was held on Monday, May 15, 2023 at Bass Farms near Cobden, IL in Union Co. It was great to see so many people interested in learning more about hydroponic greenhouse tomato production and strawberry plasticulture production. It was truly a pleasure to be able to partner with Bill on this program and everyone appreciated his hospitality (and opportunity to pick fresh ripe strawberries)!

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

Fruit & Vegetable Production & Pest Management

Cooler and Drier as we move into May

April began very warm and dry across the state but cooled down around the middle of the month. Average temperatures over the last 30 days have ranged from the high 40s to low 50s, a bit less than 1 degree below normal, and a little more than 1 degree below normal in far southern Illinois.

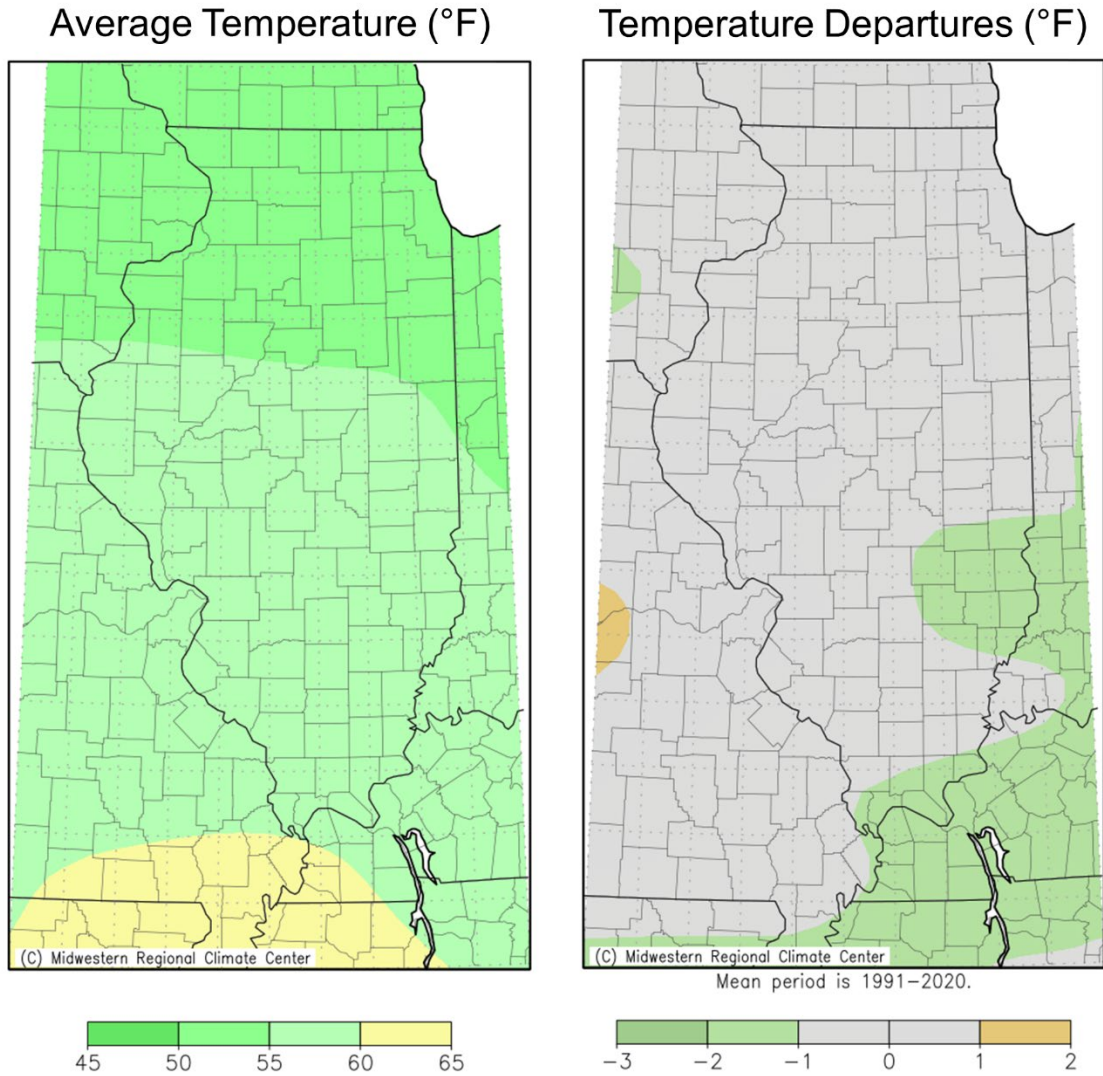


Figure 1. Maps show (left) average temperatures and (right) temperature departures from normal over the last 30 days in Illinois.

Most of southern Illinois has had near normal precipitation over the past 30 days, while central and northern Illinois have been 1 to 4 inches drier than normal since early April. A series of storms produced heavy rain in some parts of central Illinois last week, but only tamped down on dust outside of the bands

of heavier rain. For example, while Chatham in Sangamon County picked up nearly 8 inches of rain in one day last week, Lake Springfield on the other side of the county has had less than 4 inches since early April. Parched topsoil in parts of the state contributed to the May 1st dust storm in south-central Illinois that resulted in 7 deaths and several injuries (<https://www.weather.gov/ilx/01may2023-dust>). The latest US Drought Monitor has expansive abnormally dry conditions across central and western Illinois, with moderate drought in Adams, Pike, and Calhoun Counties.

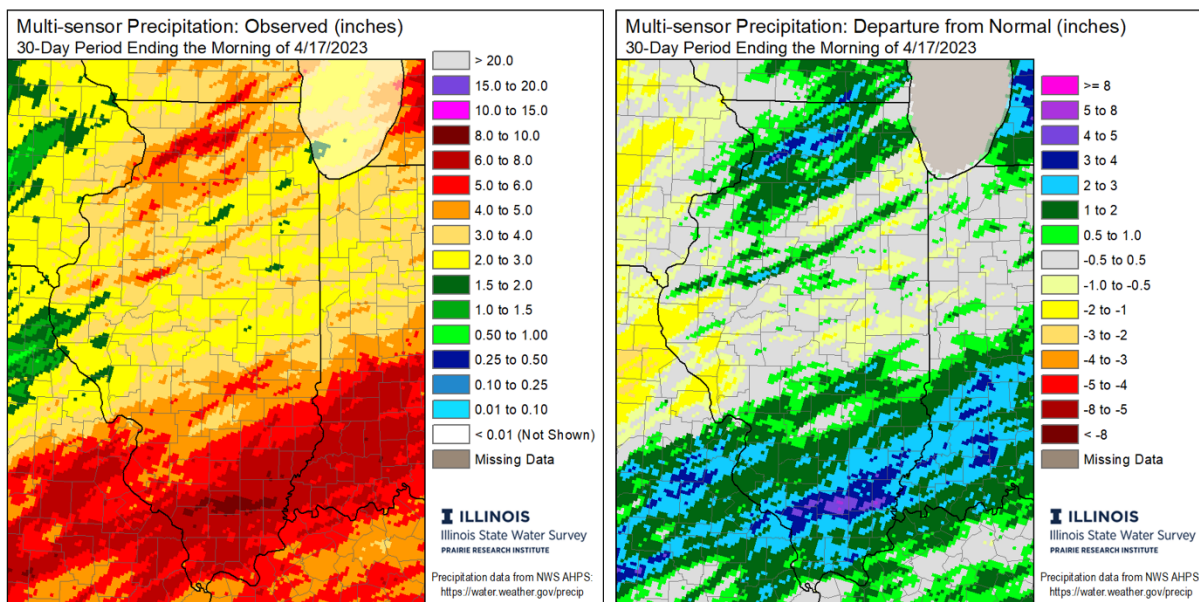


Figure 2. Maps show (left) total precipitation and (right) departures from normal over the last 30 days. April’s dryness was beneficial for farmwork progress, but more widespread rain would be welcome – especially in western Illinois – to continue a good start to the season. Looking ahead, outlooks show higher odds of cooler and drier than normal conditions persisting through the latter half of May and the first few days of June.

Trent Ford, Illinois State Climatologist (217-244-1330; twford@illinois.edu)

Peach Winter Injury Observations

Peach growers in Illinois suffered significant winter injury to flower and leaf buds as a result of a sudden drop in temperatures from the mid-40s and higher to minus 6 to minus 11 degrees F around the 20th to 23rd of December, 2022. Subsequent crop loss is variable among varieties and locations, ranging from minor to total yield loss, but this was pretty much expected. What was not so expected was widespread dieback of last year’s shoot tips and unusual patterns of leaf emergence on those twigs/branches this year. It is common to see one to a few leaves/shoots emerged at the base of last year’s growth, then a few to several inches of blank twig, with a cluster or two of new leaves near the tip. Slicing into the blank portions of twigs reveals dead leaf buds but not a complete loss of vascular tissue. In the majority

of blocks where this kind of damage is widespread, the dead leaf buds simply dry up and the twig remains viable. In some blocks, however, most of the leaf buds are infected with (presumably) Phomopsis, and the infection girdles the twig, causing it to die back from that point outward.

For additional reading on constrictor cankers.

<https://njaes.rutgers.edu/peach/pest-management/pdf/Constriction-Canker-Management.pdf>

<https://plant-pest-advisory.rutgers.edu/constriction-canker-of-peach-orchard-rehabilitation/>

<https://www.greatplainsgrowersconference.org/uploads/2/9/1/4/29140369/shane.peachdiseasemanagement.missouri.2019.pdf>



Peach trees showing winter injury to leaf buds. Subsequent infection, girdling and die back have been observed in some blocks. Photos by Rick Weinzierl.

Rick Weinzierl, Weinzierl Fruit and Consulting

Pumpkin Weed Management

Herbicide Management

In pumpkins we rely predominantly on preemergence (PRE) herbicides especially for broadleaf weed control. Three common PRE herbicides are:

- Strategy
- Sandea (PRE or POST)
- Dual Magnum (row middles or broadcast*)
- Reflex*

**Broadcast use of these product requires signing a waiver and downloading the indemnified 24c Label which is a supplement to the Federal label (on the jug). Please visit www.syngenta-us.com, click "Crop Protection", "Indemnified Labels" and log in or create a log in to have access to these label supplements. Then search under "Illinois" and the product(s) you wish to use. Print or save a copy with your other farm pesticide records.*

If waterhemp (pigweeds, etc) are an issue the combination of Reflex and Dual Magnum after planting, but before emergence or prior to transplanting is a very effective PRE option. Also, remember there are economical **grass herbicides** (Select Max or Poast, and generics) that can be sprayed over the top of pumpkins and manage grass weeds later in the season. There are very limited postemergence options for broadleaves. Sandea is the only broadcast herbicide that controls any broadleaves. However, its strengths are mainly POST control of cocklebur, nutsedge and has some effectiveness on velevetleaf and smartweed along with others. Generally, it is poor on morningglory and pigweed species. Most pigweeds species have developed resistance to this site of action (ALS) over the last few decades.

Cultural Management

Use of no-till, stale seed beds, and cover crops are all very effective tools in weed management. Cover crops are a great alternative for weed control and can be utilized with the PRE herbicides, mentioned above. The residue from a heavy cereal grain like cereal rye, wheat, or barley, can provide a great amount of weed suppression and cover for the soil. Remember that every time you till or work the soil you bring up new weed seeds ready to germinate. Also, if you cultivate between rows where you have a preemergence herbicide applied you will lose almost all remaining effectiveness of that herbicide. If you have some weeds that have broke through the PRE this is a fine balance as to how to manage them, but just understand this when you approach that decision.

Optimizing the nutrients available is also important. A heathy actively growing pumpkin crop will be faster to grow and provide a crop canopy to suppress weeds. I also like to look at ways to band nitrogen fertilizer applications near the rows, especially early in the season, so you are not fertilizing weeds in the row middles.

Most importantly, make sure that your field is clean of weeds (even small weeds) at planting. Most of the preemergence herbicides do not provide adequate control of emerged weeds so scout your fields up close for any newly emerging weeds especially if it has been more than a week since any tillage or burndown herbicide pass. Remember that many weeds like waterhemp and marestalk are resistant to glyphosate, so looking at other options for management to get a clean start if those weeds are present.

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

Less Seriously...

How Extension Educators “Really” Support Each Other



In mid-May I went on a farm call to help a grower figure out what was going on with some tomato plants. The symptoms were not something I had seen before and didn't match up with any of the obvious disease, insect or fertility issues typical on protected culture tomatoes. I took several photos and forwarded to a few colleagues and asked, "Any suggestions or ideas of what might be the problem?"

This is the response I get from Nathan Johanning, "It looks like you need to work harder. Your fingernails are awfully clean compared to the growers."

Not exactly the suggestion I was looking for but thanks! [Edema](#) was ending diagnosis.

Bronwyn Aly

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, & White counties	618-695-2441	baly@illinois.edu
KATIE BELL , Franklin, Jackson, Perry, Randolph, & Williamson counties	618-687-1727	klbell@illinois.edu
SARAH FARLEY , Lake & McHenry counties	847-223-8627	sfarley@illinois.edu
NICK FRILLMAN , Woodford, Livingston, & McLean counties	309-663-8306	frillma2@illinois.edu
ZACHARY GRANT , Cook County	708-679-6889	zgrant2@illinois.edu
DOUG GUCKER , DeWitt, Macon, & Piatt counties	217-877-6042	dgucker@illinois.edu
GRACE MARGHERIO , Jackie Joyner-Kersey Center, St. Clair County	217-244-3547	gracem@illinois.edu
GRANT MCCARTY , Jo Daviess, Stephenson, & Winnebago counties	815-235-4125	gmccarty@illinois.edu
KATHRYN PEREIRA , Cook County	773-233-2900	kpereira@illinois.edu
Extension Educators – Horticulture		
CHRIS ENROTH , Henderson, Knox, McDonough, & Warren counties	309-837-3939	cenroth@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
NATHAN JOHANNING , Madison, Monroe, & St. Clair counties	618-939-3434	njohann@illinois.edu
Campus-based Extension Specialists		
KACIE ATHEY , Entomology	217-244-9916	kathey@illinois.edu
MOHAMMAD BABADOOST , Plant Pathology	217-333-1523	babadoos@illinois.edu

University of Illinois Extension provides equal opportunities in programs and employment.
 University of Illinois College of Agricultural, Consumer and Environmental Sciences -
 United States Department of Agriculture - Local Extension Councils Cooperating



Illinois Extension
 UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

Return Address:

Nathan Johanning
University of Illinois Extension
901 Illinois Avenue; PO Box 117
Waterloo, IL 62298



Illinois Extension
UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

Illinois Fruit and Vegetable News