



Illinois Extension

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

Illinois Fruit and Vegetable News

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Editors: Nathan Johanning & Bronwyn Aly

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

Address any questions or comments regarding this newsletter to the individual authors listed after each article or to its editors, Nathan Johanning, 618-939-3434, 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 Johanning 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>

- **Missouri Tomato School** | May 16-18, St. Louis, MO. Visit their website for full [registration](#) and program details. For more information contact: Eli Isele, elihusele@missouri.edu, 314-400-2115
- **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.
 - **Bass Farms** in May 15, Cobden, IL hydroponic tomatoes & strawberry plasticulture
 - **Burnt Hill** in June 12, Dahlgren, IL pasture raised beef, lamb, chicken, & pork
 - **Higginson Farm Market** in July 17, Carmi, IL farm market sourcing from local producers/vendors

- **The Patch** in August 21, Marion, IL cover cropped pumpkin patch & fall agritourism

News & Announcements

Missouri Tomato School

The annual “Missouri Tomato School” returns May 16-18 to give tomato growers tried and true methods to improve their tomato crop.

The hybrid class kicks off on May 16 with a lecture via zoom or in-person in St. Louis. May 17th features farm visits in St. Louis, May 18th features 2 choices for regional farm visits in Southwest or Central MO.

The Missouri Tomato School brings together national and regional experts, and tomato farmers to share the latest best practices, and time-honored methods for successful tomato production.

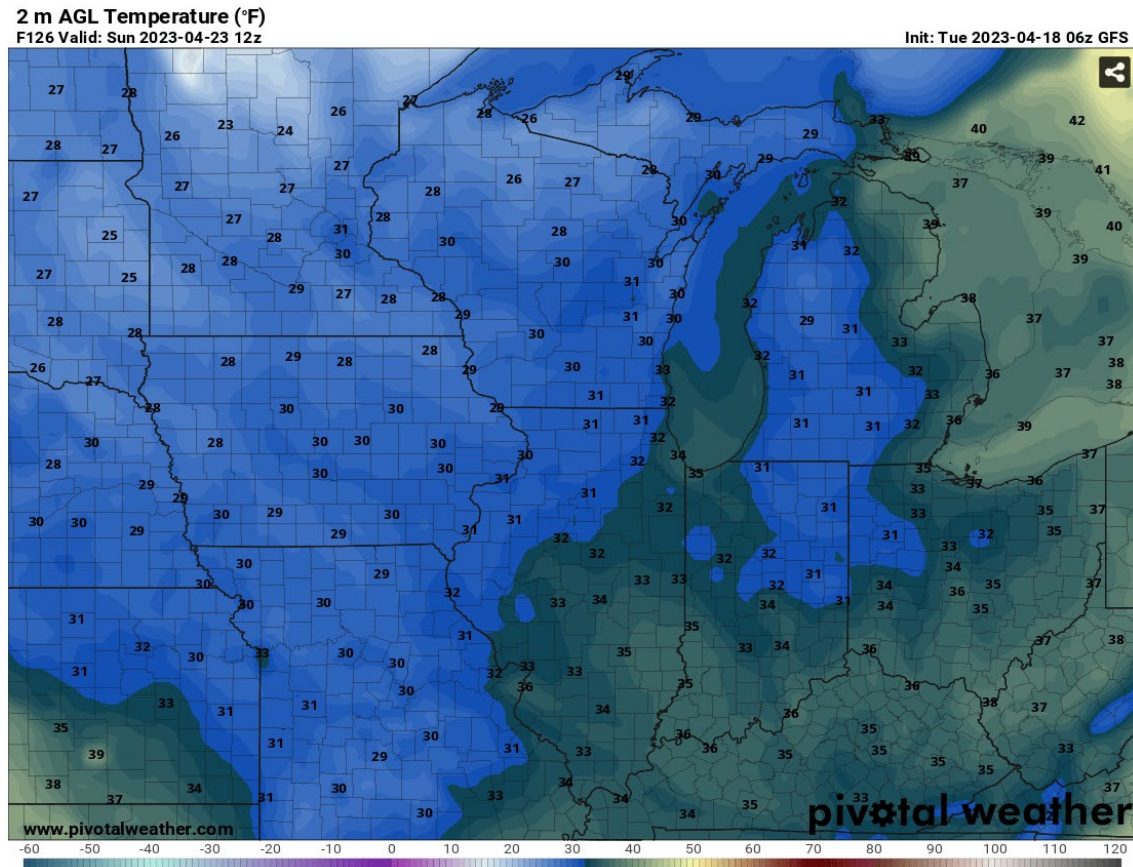


Visit their website for full [registration](#) and program details. For more information or ADA accommodations contact: Eli Isele, elihuissele@missouri.edu, 314-400-2115

Register Today!

Regional Reports

From the St. Louis Metro East... The region was running dry, but received much needed rain this past weekend, and with it much cooler temperatures. Mother nature has at least one more cold event in store for the state Sunday, April 23. Trent Ford, the Illinois State Climatologist ran a low temperature prediction map for me, and it appears the northwest corner of the state may see temperatures drop below freezing, but the rest of the state is predicted to stay just above.



In the St Louis Metro East peaches are at shuck split, apples are from full bloom to petal fall, early blackberries have visible flower buds and strawberries have begun bloom. All will be fine if temperatures nearest the fruit and bloom stay above freezing as predicted, but strawberry growers will probably have another long weekend staying prepared with frost irrigation should temperatures start dropping lower than expected.

Signs of winter injury from late December are becoming more evident in peaches and blackberries now that plants are beginning to leaf out. Apples appear to have escaped injury. I so far have witnessed blind wood on both peaches and blackberries, i.e., noticeably long stretches of wood with no leaves, or the leaves are greatly reduced in size and/or distorted. When the bark is thinly razored off in those regions, the exposed cambial layer is visibly darkened, suggesting freeze injury. In peaches, the blind wood is most often in the middle of the shoot and on blackberries growth is strongest at the base of the cane and weaker as you progress to the tip.

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

From southwestern Illinois (Waterloo)... We are in the typical spring ups and downs for our weather. We had a very nice dry stretch from prior to Easter until Saturday, 4/15. This coupled with warm temperatures and extremely dry air made for probably the best soil conditions for tillage and field activity we have had in many years for the first half of April. This came to an end with the front and storm system that hit the region late afternoon on 4/15. This brought significant severe weather across the area and there were two confirmed tornadoes that passed through Monroe County. One was only a short distance near Valmeyer, but the other spanned a path from Maestown through to Hecker across the county. Both were fairly weak as tornadoes go (Valmeyer EF-0 and Hecker EF-1), but for those in their path there was significant damage, but thankfully no fatalities. Lot of trees and powerlines in the path, but also a few of our small farms sustained damage to high tunnels and sheds as well. It could have been worse, but we certainly are thinking of those that have extra work and cleanup at a time that is already busy on most farms. After the storms and 0.6" of rain, came a cool down, but we have again rebounded to about 80° by mid-week, before the next front. Temperatures are predicted to be a little cooler for the next week with low getting close to freezing a few nights, but so far not below.

Out in the field crops are really starting to take off. Blueberries are in full bloom and my bushes have a very heavy bloom. Tart cherries are just about a week past bloom. They also had a very heavy bloom, almost too much. While most apples in the region look pretty good, I have a very light bloom on my trees. The best I can attribute it to is biennial bearing due to a bumper crop in 2022 and not quite enough thinning last year. Flowers are sparse and scattered.

The dry soil conditions made a great opportunity to get early crops planted. We have potatoes and some early sweet corn planted aside from other cool season crops. I have some overwintered greens that are in full harvest and early spring plantings of greens, peas, and radishes starting to take off. I haven't ventured to planting any other summer vegetables quite yet in the field. The predictions of some cool weather yet to come have me holding back, personally. However, for those that want to hedge their bets on some early crops, we might be approaching the clear for planting soon.



Blueberries in early bloom (left) and tart cherries in full bloom (right) Photos: N. Johanning

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

From Dixon Springs Ag Center...

The wind finally calmed down enough for us to reskin the plastic and install the permanent polycarbonate endwalls on one of our high tunnels. We had been pretty anxious that these tasks would not be completed in a timely manner for our tomato transplants due to the multiple weeks of sustained high winds.



As I am sure many of you have been unable to sleep waiting to read if, in fact, the crimson clover cover crop in the high tunnel at DSAC had a maroonish hue on March 19th, well the answer would be...no, not quite yet. The hint of crimson color was first noticeable on March 24th and by April 5th there were enough flowers in bloom to go ahead with termination. A weedeater was used to terminate the clover with the intent of keeping as much of the residue as possible on the beds. Weather was very cooperative since termination, providing sunny warm dry days that allowed for quick drying of the residue. Tomato transplants were set the following week on April 12, 2023 and a sharpened bulb planter easily pierced the residue and any remaining clover root mass, allowing for a normal transplant process. The aphid infestation seems to have subsided with the termination of the clover, with little to no activity of live aphids being observed at the time of transplanting.

Pepper transplants were also set out in both in ground raised bed high tunnels on April 13, 2023. These two tunnels are being utilized in our research project looking at strategies for improving biological insect control. For this project, the following tomato varieties are being used: 'BHN 589', 'Mt. Gem', 'Red Deuce', 'Plum Regal', & 'BHN 871'. The tomatoes were set at two feet apart and the peppers were set in offsetting twin rows 12 inches between plants and 12 inches between rows.

Hydroponic strawberry plants in the vertical stack system were set out on March 29, 2023 and include 'Monterey', 'San Andreas', and 'Albion'. Thanks to Indiana Plant and Berry for the donation of the plant material. These three varieties are day neutrals and have been replicated in our vertical stacks in order to collect meaning harvest data to share with growers.



The aphid population on the crimson clover within the high tunnel at DSAC was extremely high. Termination using the weedeater was successful in leaving a fair amount of residue on top of the beds. The residue dried down significantly in a one week period and tomato transplants were easily planted into the beds.



Photos by Bronwyn Aly.

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

Fruit & Vegetable Production & Pest Management

Wild End to March, but a Mild April so Far

Outside of a short but intensely cold period in mid-March, the first month of spring wasn't abnormally cool. March average temperatures ranged from the low 30s in far northern Illinois to the high 40s in southern Illinois, within 1 degree of normal across the state. Since mid-March temperatures have been 1 to 4 degrees above normal statewide (Figure 1). The second week of April was particularly warm, with high temperatures regularly reaching into the low to mid-80s in Illinois, about 10 to 15 degrees above normal.

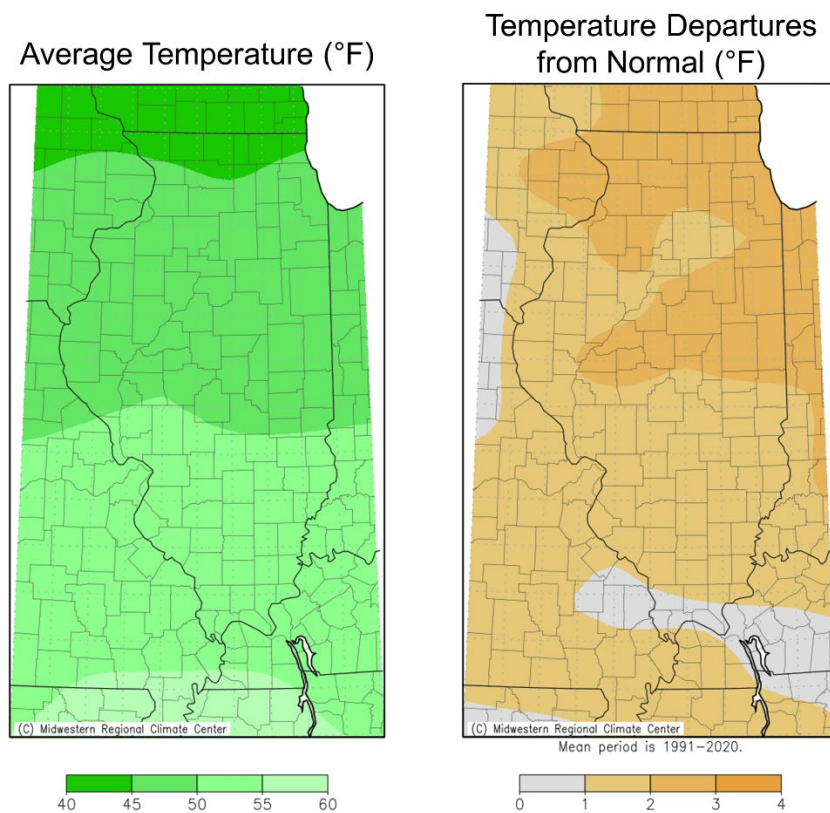


Figure 1. Maps show (left) average temperatures and (right) temperature departures from normal over the last 30 days in Illinois.

The last week of March and first week of April brought very active weather across the state, including multiple rounds of heavy precipitation in southern Illinois. Totals over the past 30-days range from just under 3 inches in central Illinois to over 8 inches in southern Illinois. Only parts of western Illinois have been slightly drier than normal since mid-March, while parts of southern and northern Illinois have seen 3 to 4 inches above normal precipitation over that time.

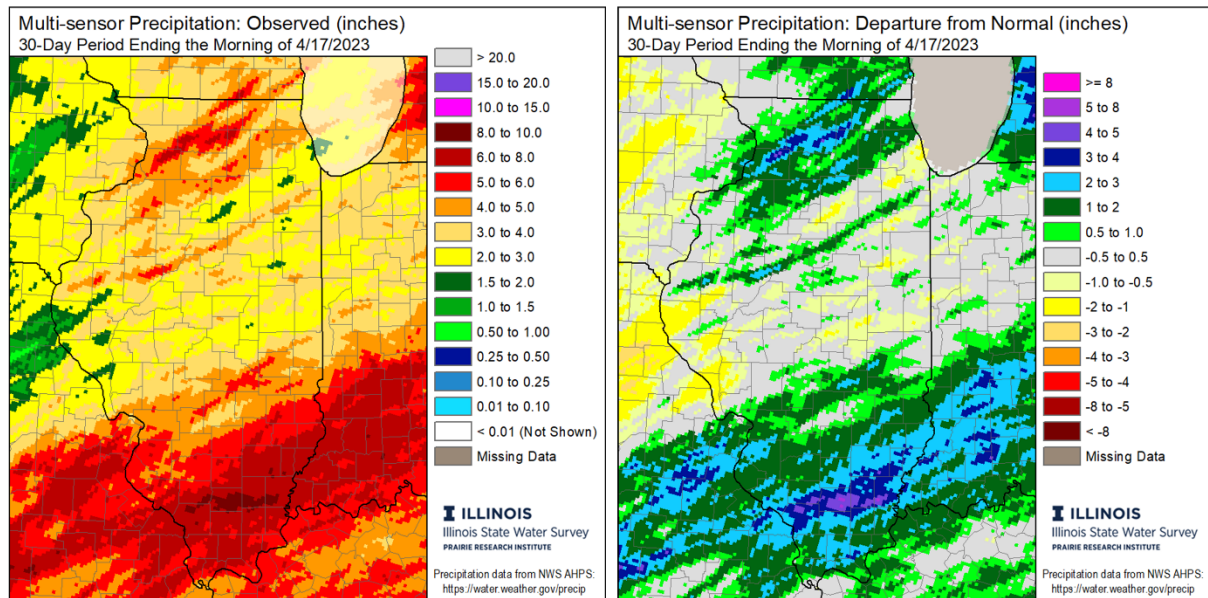


Figure 2. Maps show (left) total precipitation and (right) departures from normal over the last 30 days.

Unfortunately, the frequent precipitation came along with some severe weather. A strong system came through the Midwest on March 31st, and another between April 3rd and 4th, both producing several tornadoes, large hail, and widespread straightline wind gusts exceeding 60 mph. Significant damage occurred in multiple places, including in Robinson in Crawford County. Among several injuries, three fatalities were reported from the initially rated EF-3 tornado in Crawford County, and one fatality from strong winds in Boone County. The National Weather Service has reported at least 25 tornadoes on March 31st alone, making that night the largest single-day March tornado outbreak on record in the state.

Looking ahead, models are showing more confidence in the risk of below freezing temperatures on Saturday and Sunday night across the state. Nighttime lows could dip below freezing as far south as the Ohio River, posing a risk for susceptible plants. While the freeze risk is mostly isolated to this weekend, outlooks show likely below normal temperatures through the end of April across Illinois. So, it looks like we'll need to wait until May to get our next taste of real warm weather. Meanwhile, outlook also show near to slightly below normal precipitation through the end of April.

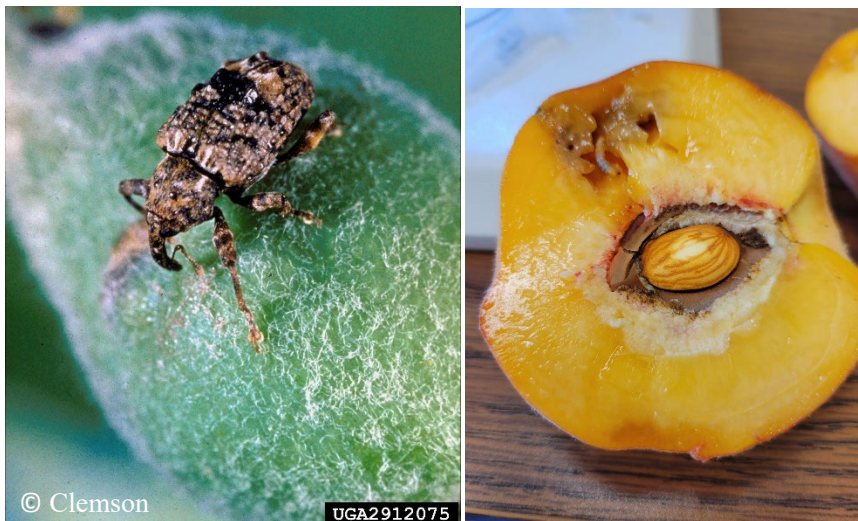
Trent Ford, Illinois State Climatologist (217-244-1330; twford@illinois.edu)

Plum Curculio Trapping and Scouting

Last year a number of peach growers in Illinois had some pretty substantial issues with plum curculio. We are undertaking monitoring and insecticide testing for control of plum curculio this year. Now is the time to start scouting and monitoring for them. There are commercial traps available (small circle trunk traps) and lures specifically for plum curculio (benzaldehyde lures). We recommend that NOW is the time to pay attention to these little weevils. Sprays are only effective on the adults, because the eggs and larvae are inside the fruit and so they are protected.

The very first adults have already been collected in Calhoun County with the first report on April 12th and a few more found in traps this past weekend. The cold weather during the early part of the week slowed the emergence a little, but we will likely find more in traps as it warms up.

Plum curculio are pests of peaches and apples. The adults are ¼ inch long. If you find a “worm” in your peach, it is either plum curculio or oriental fruit moth. These two are very commonly confused for each other. The main thing to pay attention with these two is the existence of legs. Plum curculio larvae do not have legs whereas oriental fruit worm caterpillars do have legs.



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Kacie Athey (217-244-9926; kathay@illinois.edu)

Cover Crop Update: Cereal Rye Varieties

Cover crops are also taking off like everything else. I have seen a few crimson clover flowers start to emerge in places and cereal rye has really taken a jump in growth. Below is a great image of the difference variety can make on cereal rye. The left is a variety not stated (VNS), standard, however, the right side is 'Wintergrazer 70.' This variety has been bred for early growth for grazing and forage with at least 6" more growth as of today compare with the left VNS variety. This earliness usually carries itself through the season with early heading as well.

You can use this to your advantage based on when you want biomass and how you want to manage it. If you want to no-till and early crops and want high biomass for weed suppression, the early variety can play well into those goals. This variety will also head and flower early if you are wanting to mechanically terminate with a roller crimper or mowing. On the flip side, if your goal is to work it up and you want winter protection and some growth, but are concerned about excess biomass to incorporate with tillage, then the VNS variety gives you a little more time to manage it before it gets big and potentially "out of hand" for your goals.



Variety not stated (VNS) standard cereal rye (left) and 'Wintergrazer 70' and early forage cereal rye (right). Note as of mid-April 'Wintergrazer 70' has about 6" more growth than the VNS. Photo: N. Johanning

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

Less Seriously...

...Seriously...we got nothing this month. Hopefully, for your sake, our insanity of the planting season will lead to some humor for you next month. Usually, it doesn't take much and you can't make some of this stuff up!

Have a happy and safe planting season!

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