Illinois Fruit and Vegetable News
Vol. 24, No. 1, January 19, 2018
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, 618-687-1727, 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 Johanning at the phone number or email address above.

In this issue …

• Upcoming programs (listings for beginning and established growers)
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• Regional Reports (west central, southern Illinois)
• Fruit & Vegetable Production & Pest Management (Midwest Vegetable Variety Trial Reports available, Dual Magnum 24(c) Label Renewed for Preemergence Broadcast Use in Pumpkin)
• University of Illinois Extension Educators and Specialists in Fruit and Vegetable Production and Pest Management

Upcoming Programs


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.

• Iowa Fruit and Vegetable Growers Association annual conference, January 25-26, 2018 in Ankeny, IA. The conference will be held at the FFA Enrichment Center on the DMACC Campus, 1055 SW Prairie Trail Parkway, Ankeny, IA 50023. Visit http://www.ifvga.org/en/2018_annual_conference/ for more information or to register

• Small Farms Winter Webinar Series, Thursdays, Starting January 25 through April 5, 2018, Noon to 1 p.m. Visit http://go.aces.illinois.edu/WinterWebinars to register or see the topics for this program. Also see the “News & Announcements” below for more details in the newsletter. For more information contact Zack Grant at 708-679-6889 or zgrant2@illinois.edu.

• Produce Safety Alliance Grower Training Course, Wednesday, January 31, 2018 8:00am – 5:00pm Agronomy Research Center, 3268 W. Pleasant Hill Road, Carbondale, IL 62903 hosted by University of Illinois Extension and Southern Illinois University. For more information or to register visit http://go.illinois.edu/PSACarbondale2018 or contact Laurie George at 618-242-0780 or lgeorge@illinois.edu.

• Stateline Fruit and Vegetable Growers Conference Monday, February 5, 2018 from 9 a.m. to 2 p.m. at Midway Village Museum, Rockford, Illinois. The registration fee is $40 per person, $30 for additional
employees of the same farm. This includes a keynote, choice of three breakouts, lunch, and handouts. For more information or to register, please visit go.illinois.edu/StatelineGrowers2018 or call 815-986-4357.

- **2018 Gateway Small Fruit & Vegetable Conference, Wednesday, February 7, 2018.** Regency Conference Center, O’Fallon, IL. Save the date; more details closer to the event. For more information contact Elizabeth Wahle at wahle@illinois.edu or 618-344-4230.

- **2018 Southern & Southwestern Illinois Commercial Tree Fruit Schools, Tuesday & Wednesday, February 13 & 14, 2018, Mt. Vernon & Hardin, IL.** Participants will have the opportunity to learn about insect management techniques, identification and control of apple and peach diseases, and identifying post-harvest food safety issues. Industry representatives will also be on hand to talk about their latest products and services.
  - **MT. VERNON SCHOOL (2/13/2018):** Cost for the school is $40.00 per farm. Registration at the door will be $50.00 per farm. The registration fee includes one (1) copy of the 2018 Midwest Spray Guide per farm. Lunch is on your own.
  - **HARDIN SCHOOL (2/14/2018):** Cost for the school is $40.00 per person. Orchards sending more than one employee will pay $40.00 for the first person and $30.00 for each additional person. Registration at the door will be $50.00 per person. One (1) copy of the 2018 Midwest Spray Guide will be given per orchard. Additional spray guides will be available for purchase. Lunch will be provided.

  **Advance registration is required before February 5, 2018 at** [http://go.illinois.edu/2018treefruit](http://go.illinois.edu/2018treefruit) **or contact Laurie George, University of Illinois Extension Educator, at 618-242-0780 or ljgeorge@illinois.edu.**


- **Winter High Tunnel Workshop, Saturday, February 24, 2018, 10 a.m.** Jackson County Extension Office High Tunnel, 402 Ava Rd., Murphysboro, IL 62966. This in tunnel program will discuss current research and techniques for overwintering crops and year round production. To register or for more details visit: [https://web.extension.illinois.edu/registration/?RegistrationID=17891](https://web.extension.illinois.edu/registration/?RegistrationID=17891) or call 618-687-1727.

- **2018 Illinois Summer Horticulture Field Day, Thursday, June 7, 2018.** Annual Illinois State Horticulture Society annual summer field day will by hosted by Flamm’s Orchard in Alto Pass, IL. Save the date; more details closer to event.

- **2018 Pumpkin Field Day, Thursday, September 6, 2018, 10 a.m.** Ewing Demonstration Center (located about 20 minutes south of Mt. Vernon, IL) 16132 N. Ewing Rd. Ewing, IL 62836. Pumpkin Variety & Pest Management trials, No-till Production and more! Save the date; more details to come! For additional information contact Nathan Johanning at 618-687-1727 or njohann@illinois.edu.

### News & Announcements

**Rejuvenation of Horticulture Research & Outreach at the Dixon Springs Ag Center**

After visiting the Pope-Hardin Extension office located at the University of Illinois Dixon Springs Agricultural Center (DSAC) in June 2017, University of Illinois College of ACES Dean Kim Kidwell requested a proposal be put together to revive the greenhouse, three high tunnel structures, and field research plots. The proposal was accepted, with funding to not only rejuvenate the site, but also fill the Ag Gardener position. These facilities will greatly enhance Extension programming and outreach to fruit and vegetable growers within the region, throughout Illinois, and surrounding areas.

Demonstration and research plots will be established based on results collected from the Fruit and Vegetable Research Priorities Survey. Not only is each high tunnel structurally different, but the production systems within each tunnel will be different as well, ranging from hydroponic to bag production to in ground production. Major focus will be given to tomato, cucumber, and greens production, with demonstrations and workshops on training, trellising, etc.

Julie Zakes has filled the Ag Gardener position, the same position she had prior to the closing of the facility in April 2016. She is a tremendous resource, having worked with Jeff Kindhart on similar projects in these same high tunnels. Julie brings a wealth of knowledge, a strong work ethic, and a super amount of enthusiasm to this endeavor.
Dean Kidwell saw the underutilized potential at DSAC, and found a way to revitalize this resource for specialty growers and the surrounding community. Everyone is welcome to attend the open house scheduled for May 21, 2018. Save the date!

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

2018 Small Farms Winter Webinar Series

Don’t let the dropping temperatures get you down. Have you ever wanted to expand your small business to include Christmas Trees, goji berries, or ginger? Winter is also the perfect time to acquaint yourself with updates related to high tunnel production. Your fields and gardens may be snowed over, but it is the perfect time to develop your skills in small farming and local food production. University of Illinois Extension will once again be hosting the Small Farms Winter Webinar Series – featuring practical lunch-hour presentations on small farm enterprises and strategies you can use. Tune in right from your desk or laptop every Thursday at noon from January 25, 2018, through April 5, 2018. **Due to an unforeseen family emergency, please note that the start date for this webinar series has been moved back one week to January 25, 2018. The first webinar “Less Common Fruit Bearing Plants” is tentatively scheduled to be given at the end of the series on April 5, 2018.**

The Small Farms Winter Webinar Series has been around since 2011. Starting in 2015 the webinars are now archived on the team’s state You-Tube page: [http://bit.ly/ILLocalFoodsYouTube](http://bit.ly/ILLocalFoodsYouTube) where they can be accessed indefinitely. Here, along with other webinars; lectures; vlogs; and the archived winter webinar series, the You Tube page has received over 60,000 views along with over 12,000 hours of view time. In 2017 the Local Foods and Small Farm team won a team excellence award for the production of the series.

In addition to the topics mentioned already, the Small Farms Winter Webinar Series will include presentations on heavy metal soil contamination, organic certification, creating community food systems, and native pollinators on your farm (See the list below for the full webinar schedule.) An Extension Educator or campus faculty member will present each webinar, timed to fit within your lunch hour, and recorded for future viewing if you have to miss the live session on the team’s You-Tube channel mentioned above.

It’s easy (and FREE!) to register for the Small Farms Winter Webinars. Sign up for as many as you want at [http://go.aces.illinois.edu/WinterWebinars](http://go.aces.illinois.edu/WinterWebinars). We’ll send you a webinar reminder, log-on instructions, and how to access the archived recording. If you do not have broadband internet capable of streaming video, call your local Extension office to see if they offer live viewing.

“Winter is the best time to invest in educationally opportunities on the small farm.” says Local Food Systems and Small Farms educator Zack Grant. He adds: “With all the face to face conferences and unpredictable road conditions, the Small Farms Winter Webinar Series creates peace of mind by bringing the educational experience to the comfort of your home or office.”

If you need a reasonable accommodation to participate in this program, please contact your local Extension office.

2018 Small Farms Winter Webinar Schedule

Jan. 25 - **Updated High Tunnel Concepts**, Zack Grant, *University of Illinois Extension Local Food Systems and Small Farms Educator*

Feb. 1 - **Introduction to Certified Organic Production**, Grant McCarty, *University of Illinois Extension Local Food Systems and Small Farms Educator*

Feb. 8 - **Christmas Tree Production and Business Considerations**, Dave Shiley, *University of Illinois Extension Local Food Systems and Small Farms Educator*

Feb. 15 - **An Update on the Grand Prairie Grain Guild: Developing Staple Crop Varieties and Associated Regional Food Grade Markets**, Bill Davison, *University of Illinois Extension Local Food Systems and Small Farms Educator*
Feb. 22 - Creating Community Food Production Systems, Laurie George, University of Illinois Extension Local Food Systems and Small Farms Educator

Mar. 1 - Heavy metals in soils: identifying and acting on contamination, Dr. Andrew Margenot, University of Illinois Department of Crop Sciences, College of ACES

Mar. 8 - Native Pollinators on your Farm, Doug Gucker, University of Illinois Extension Local Food Systems and Small Farms Educator

Mar. 15 – Small Acres Pastured Poultry, James Theuri, University of Illinois Extension Local Food Systems and Small Farms Educator

Mar. 22 - Growing Ginger, Turmeric, and Other Unique Crops, Chris Enroth, University of Illinois Extension Horticulture Educator

Mar. 29 - Tips for Modifying and Building Sprayers for Specialty Crops, Nathan Johanning, University of Illinois Extension Local Food Systems and Small Farms Educator

April 5 - Less Common Fruit Bearing Plants, Elizabeth Wahle, University of Illinois Extension Commercial Ag Educator (Fruits and Vegetables)

New Legal information for Farmer’s Markets

There are some excellent new resources on legal information for farmers' markets available through the Center for Agricultural & Food Systems through the Vermont Law School. It covers business structures, liability risks, and more. Farm Commons contributed extensively to the legal information and it's a useful resource for farmers markets of all sizes and stages of growth. It's applicable to farmers' markets in any state.

Farmers Market Legal Toolkit.

Rachel Armstrong, Executive Director & Attorney, Farm Commons, (608-616-5319 or www.farmcommons.org)

Organic Decision Support Tools Project Seeks Cooperators to Provide On-farm Cover Crop and Soil Samples in Spring 2018

Researchers at the Universities of Illinois and Vermont are collaborating in a study to improve cover crop biomass and nitrogen estimates for farmers in the Midwest and Northeast to improve N credits for nutrient planning. Results will be incorporated into goCrop, the nutrient planning tool developed by University of Vermont Extension. The project is seeking on-farm cover crop measurements (height, % ground cover, maturity) and cover crop and soil samples in the spring of 2018 at the time of cover crop termination.

Cooperators need to be:
• Located in Illinois, Indiana, Iowa, Wisconsin, Ohio, Pennsylvania, New York, Vermont
• Currently growing rye, clover, hairy vetch, alfalfa, alone or in mixes
• Using mechanical termination and organic fertility

Participating farmers will receive:
• $50 stipend
• Personalized report of cover crop biomass and nitrogen content
• Free 10-meter satellite imagery (vegetation index and color images) for any fields in the program

Interested farmers can sign up here.
Regional Reports

From west central Illinois… As I left the Illinois Specialty Crops Conference in Springfield last week, my car thermometer read 61 degrees Fahrenheit. When I arrived in Macomb, just two hours later the temperature was at 20 degrees F. Midwest winter temperatures always fluctuate above and below freezing, but this recent dramatic swing feels almost cruel. The extended forecast shows the cold holding for about a week and then another warm-up.

Despite the cold weather, crops continue to hold in the high and low tunnel. My remaining harvestable greens are spinach and kale. Meanwhile, the carrots and turnips are keeping in the high tunnel. To my surprise, one crop did survive the deep freeze - Salanova lettuce. I was shocked to find the Salanova alive and well after experiencing negative 12 degrees F, while all the other less hardy crops succumbed. Especially, because this plant is labeled hardy only to 20 degree F. What was the thing that kept the lettuce alive? Luck, the smaller stature of the crop, and doubling up on my season extension materials. I had been placing row cover over my lettuce in the high tunnel for some added protection. It turns out that extra layer of row cover holds quite a bit of additional heat in the soil that would otherwise radiate out as infrared energy.

Using row covers in the high tunnel does require a bit of extra daily management. On sunny days, I pull the row cover off the crops to allow as much sunlight as possible to reach the exposed soil. By mid-afternoon, I cover the plants back up. I placed the row cover directly on the plants, but suspending the fabric a foot or two on wire, plastic, or metal low tunnel hoops or a wire rod would be more effective.

Seed catalogs are piling up on my desk. We’ll be working on our crop plan for this year and begin ordering seed soon. We more than doubled our beds in the field. Therefore, the irrigation system needs to be rethought. I have been drawing out some quick sketches of how I want the system laid out next year. I hope to add sections and even more automation to our irrigation system.

Photo by C. Enroth

Kale in the low tunnel. Never harvest crops wilted from the cold. Wait until temperatures have warmed enough for the plant tissue to regain turgidity.
Expanded garden space in the McDonough County GIFT Garden. McDonough County Master Gardeners grow high quality produce for donation to local food pantries. A driveway and house formerly occupied the site, hence the raised beds.

Young Salanova lettuce survived -12F temperatures under row cover in the high tunnel. There is still cold damage on the leaves, but these heads look far better than the other crops that have turned to mush.

Chris Enroth (309-837-3939; cenroth@illinois.edu)
From southern Illinois… There is no question that is has been winter the last few weeks (no matter where you are in the state). Since before Christmas, we have had around average to below average temperatures for the most part. The coldest I have seen here in Murphysboro has been 2°F, but depending on your location, temperatures around 0 or slightly below have been reported. We have had many days in the last few weeks with morning lows in the single digits and highs in the teens or maybe 20s. One thing that I can’t complain about is that for the most part is has not been terribly windy throughout this cold. This has made it more tolerable to be out and also less desiccation from that cold, dry air which can cause further harm to fruit buds, and any overwintering crops. Overall, we have been reasonably dry with little precipitation until the end of last week, where we got about an inch of sleet with some ice and then Monday (1/15) we got about 1.5-2” of snow. Some areas around the I-64 and I-70 corridors did get some snow on Christmas Eve, but we did not get much of anything down this direction.

Things have been fairly slow out in the field of course. The exception would be for our high tunnel growers as winter greens harvest has continued even with the cold weather. However, winter growth certainly has slowed with the colder weather, but we have had quite a bit of sunshine many of the cold days. Even in our small tunnel at my office on Wednesday (1/17) when it was still in the low 20s during the day, with the sun, it topped out in the low 70s in the tunnel. Out in the orchards pruning still continues. So far I don’t know that we have gotten any major damage from the cold. Things were pretty well dormant going into this weather so I think most have adjusted as well as they could. Fortunately, the forecast has a break in the cold with temperatures maybe even in the 50s by the weekend or at least some more of highs in the 30s and 40s, but we all know that winter is not over yet.

It was great getting a chance to see many growers last week at the Illinois Specialty Crops Conference in Springfield, and I’m sure I will see many more at upcoming programs!

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

**Fruit & Vegetable Production & Pest Management**

**Midwest Vegetable Variety Trial Report Available to Help with Grower Variety Selection**

Now is the time for many of us to consider our spring seed needs if we haven’t already. One resource I would recommend would be the Midwest Vegetable Variety Trial Report [https://ag.purdue.edu/hla/fruitveg/Pages/MVVTRB.aspx](https://ag.purdue.edu/hla/fruitveg/Pages/MVVTRB.aspx).

This is organized through Purdue, but assembles contributions from researchers all across the Midwest on variety trial results. There is a lot of good information available, not only from this past year, but since 2001. Also this includes the 2 year summary of the ornamental corn variety trials Bronwyn and I have conducted down here in southern Illinois [https://ag.purdue.edu/hla/fruitveg/MidWest%20Trial%20Reports/2017/04-01_Aly_OrnamentalCorn.pdf](https://ag.purdue.edu/hla/fruitveg/MidWest%20Trial%20Reports/2017/04-01_Aly_OrnamentalCorn.pdf).

While nothing replaces trialing things on your own farm, most don’t have time to trial everything. Use this great resource to help you find the best varieties to fit your needs!

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

**Dual Magnum 24(c) Label Renewed for Preemergence Broadcast Use in Pumpkin**

As of January 1, 2018, we have available the renewed Indemnified 24(c) Label for Dual Magnum herbicide in Illinois allowing broadcast preemergence application on pumpkins. The label allows 1.0 to 1.33 pt/A to be applied in this manner. Since this label is indemnified, you do need to register with the manufacturer (Syngenta) and accept a waiver, which releases the manufacturer from liability of any potential risk of crop injury, in order to gain access to this label for this supplemental use. This label expires December 31, 2022.

To access this label go to [www.farmassist.com](http://www.farmassist.com). Then click on “Crop Protection”, & go to “Labels” and then click “Indemnified Labels”. At this point it will take you to a state and product search. Once you have found the Illinois Dual Magnum Labels to actually download a pdf of the label you will need to sign in to your account or create one.
This is completely free and is only used to give you access to the label (not for advertisement) with you providing your contact information. You will need to then “agree” to the waiver details listed and then you will have access to the supplemental label. Note that this is the same procedure you would use to get the Reflex 24(c) label on pumpkins as well.

Dual Magnum (s-metolachlor) has been a valuable resource in weed management, especially for small-seeded broadleaf weeds such as waterhemp and pigweed. Overall, most growers have been very happy with its crops safety and probably is one of the “safer” herbicides to use with respect to its chance for crop injury. Note that both Dual Magnum and Dual II Magnum have a federal label allowing use in pumpkins for row middle applications; this supplemental label adds the option of broadcast applications of Dual Magnum.

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

Less seriously... http://www.jokes4us.com/miscellaneousjokes/weatherjokes/snowjokes.html

Short Snow Jokes

Q: What do you get from sitting on the snow too long?
A: Polaroids!

Q: Why did Frosty the snowman want a divorce?
A: Because he thought his wife was a flake

Q: What do snowmen eat for lunch?
A: Icebergers!

Q: What time is it when little white flakes fall past the classroom window?
A: Snow and Tell.

Q: If the sun shines while it's snowing, what should you look for?
A: Snowbows.

Q: If you live in an igloo made of snow, what's the worst thing about global warming?
A: No privacy!

Q: What do you call ten Arctic hares hopping backwards through the snow together?
A: A receding hare line.

Q: How do you keep the snow from giving you cold feet?
A: Don't go around BRRfooted!

Q: What do you call a gangsta snowman?
A: Froze-T

Q: What kind of math do Snowy Owls like?
A: Owlgebra.

Q: How do you know if there's a snowman in your bed?
A: You wake up wet!

Q: What is the difference between a snowboard instructor and a snowboard student?
A: 3 days

Q: What is it called when a snowman has a temper tantrum?
A: A meltdown!
Q: What is a snowman's favorite game?
A: Ice Spy with my little eye...

Q: What do snowmen eat for breakfast?
A: Frosted Flakes.

Q: What do you call a snowman with a six pack?
A: An abdominal snowman.

Q: What do you call an old snowman?
A: Water!

Q: What do you get when you cross a snowman and a vampire?
A: Frostbite.

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

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<td><strong>MOHAMMAD BABADOOST</strong>, Plant Pathology</td>
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<td><strong>MOSBAH KUSHAD</strong>, Fruit &amp; Vegetable Production</td>
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</table>
Return Address:

Nathan Johanning
University of Illinois Extension
402 Ava Rd.
Murphysboro, IL  62966

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