



UNIVERSITY OF ILLINOIS EXTENSION

College of Agricultural, Consumer, and Environmental Sciences

Illinois Fruit and Vegetable News

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Editors: Nathan Johannig & 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 Johannig, 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 Johannig at the phone number or email address above.

In this issue...

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Upcoming Programs

Check the **Illinois SARE calendar** for a full list of programs and links for registration.

<http://illinoissare.org/> and <http://illinoissare.org/calendar.php>

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>.

- **Summertime Lunch and Learn Webinar Series.** Illinois Farmers Market Association will be offering a series of free midday Monday webinars (12-1 PM) for market managers, producers and others. These brownbag learning opportunities will cover a variety of topics pertinent to the 2016 market season. Pre-registration is required. Sign up now at: <https://web.extension.illinois.edu/registration/?RegistrationID=14799>.
 - **Aug 8** – Creating a Market Cookbook
- **Southern Illinois Summer Twilight Series, 4 Monthly On-Farm Meetings on Mondays, May through August, 6:00 p.m.** For more information or details, contact Bronwyn Aly at 618-382-2662; baly@illinois.edu or Nathan Johannig at 618-687-1727; njohann@illinois.edu Save the dates, more details to follow:
 - **Aug 8** – Grant's Orchard – 6 PM – 15655 Orient Mine Rd., Marion, IL 62959
Grant's Orchard, located just outside of Johnston City in Williamson County, grows almost four acres of peaches. The orchard was established in 2001 as a "Retirement Hobby" for Richard, and they harvested the first peach crop in 2004. With 10 different peach varieties in the orchard, they are steadily marketing peaches for 6-7 weeks during the summer. Over the course of the evening, Richard and Kathy will share their experiences of producing and marketing peaches. Those attending will have the opportunity to tour the orchard, look at equipment, and learn what marketing strategy has worked best on Grant's Orchard. Grant's Orchard is an excellent example of a successful southern Illinois farming enterprise. We encourage anyone interested in fruit or vegetable production to capitalize on this on-farm learning and networking opportunity.

DIRECTIONS: From Interstate 57, take exit 59 into Johnston City. Continue east through Johnston City on Broadway/Corinth Rd. Turn south on Old Frankfort Rd. Turn east onto Orient Mine Rd. Grant's Orchard is about ½ mile down Orient Mine Rd on the south side of the road.

- **Twilight Tunnel Walk. Thursday, August 25, 2016, 7 p.m. to 9 p.m.** Tour two high tunnels with Extension experts and farmers at Winter Production Education Center, 1213 Route U, Rocky Comfort, MO. No registration. Call 417-881-8909 for more information.
- **Chainsaw and Herbicide Sprayer Maintenance Workshop, Saturday, August 27, 2016, 9 a.m. to 1 p.m.** Dixon Springs Ag Center 354 State Highway 145 N, Simpson, IL 62985. This program will cover the basic processes of cleaning and maintaining a chainsaw, sharpening a chain, proper adjustment of chainsaw settings, herbicide sprayer cleaning and rinsing protocols, calibrating a small sprayer, and herbicide mixing and storage. Participants will get the opportunity for hands-on practice and are encouraged to bring their own saw or small sprayer. The Program is free and open to the public; pre-registration is not required but requested. For questions or to RSVP, please contact the Dixon Springs Ag Center office at 618-695-2441.
- **Illinois Pumpkin Field Day, Wednesday, August 31, 2016, 10 a.m.** Ewing Demonstration Center, 16132 N. Ewing Rd; Ewing, IL 62836. Field trials on varieties, weed management and disease management along with an ornamental corn variety trial. The Program is FREE and lunch is included, but pre-registration is required. To register visit <http://go.illinois.edu/pumpkinfieldday2016> or call 618-687-1727. For more information about the field day, contact Nathan Johanning at 618-687-1727 or njohann@illinois.edu.
- **Master Urban Farmer Training Program, Wednesdays, September 14 to November 16, 2016 6 – 9 pm.** Prairie State College, Matteson Area Center, 4821 Southwick Drive, Matteson, IL 60443. The Master Urban Farmer Training Program is designed to provide new urban farmers in Cook County the introductory knowledge and skills to start an urban farm. The program fee is \$150 and registration is opened until August 12. To register visit <https://web.extension.illinois.edu/registration/?RegistrationID=14878>. For more information contact Zack Grant, 708-679-6889, zgrant2@illinois.edu
- **7th National Small Farm Conference - Creating and Sustaining Small Farmers and Ranchers, September 20-22, 2016.** Virginia Beach Convention Center, Virginia Beach, VA. For more information, call 804-524-5626 or email NSFC2016@vsu.edu
- **Meet the Farmers, Meet the Buyer. Monday, October 10, 2016 10:00 AM to 5:00 PM (Doors open at 9:30 AM).** St. Louis University campus in the II Monastero Building, 3050 Olive Street, St. Louis, Missouri This event is an opportunity for farmers to meet with buyers and learn what it takes to do business with the grocery and foodservice industries. To register visit <http://www.ilfb.org/ifb-news-and-events/conferences-events/october-10,-2016-meet-the-buyer-event.aspx>. For more information contact Cynthia Haskins, 309-557-2155; CHaskins@ilfb.org.
- **Organic Soil-borne Disease Management Webinar.** October 13, 2016 from Noon – 1pm. Contact Laurie George (ljgeorge@illinois.edu) or James Theuri (jtheu50@illinois.edu). Preregistration required: <https://web.extension.illinois.edu/registration/?RegistrationID=14944>
- **Ohio State University 2016 Direct Marketing Webinar Series. Noon (Eastern time).** Take this opportunity to learn more about marketing issues. Recordings of all webinars can be found at www.go.osu.edu/DirectMarketingWebinars. Links below are for recording for previous webinars and connection links for future sessions.
 - Feb. 18 [Marketing Trends Learned from the Super Bowl](#) Eric Barrett & Rob Leeds
 - Mar. 2 [Using All Your Senses in Branding Your Business](#) Eric Barrett & Rob Leeds
 - Apr. 21 [Enhancing Your Web Presence](#) Melissa Carter
 - May 26 [Product Recall & Traceability](#) Eric Pawlowski
 - June 16 [Product Labeling](#) Emily Adams
 - July 21 [Celebrate Ohio Local Foods Week](#) Heather Neikirk & Patricia Barker
 - Aug. 18 Produce Auctions Brad Bergefurd
<http://carmenconnect.osu.edu/auctionsforproduce/>
 - Sept. 15 Pricing Your Products Megan Leffew
<http://carmenconnect.osu.edu/pricingproducts/>
 - Oct. 20 Cooperatively Marketing Your Products Hannah Scott
<http://carmenconnect.osu.edu/marketingyourproducts/>
 - Nov. 17 Using Facebook for Your Business Duane Rigsby
<http://carmenconnect.osu.edu/facebookforyourbusiness/>
 - Dec. 15 Survey Results for Ohio Produce Marketers Direct Marketing Team
<http://carmenconnect.osu.edu/surveyresultsformarketers/>

Regional Reports

From northern Illinois... we're in the middle of sweet corn, tomatoes, and other summer staples ripening in the last couple of weeks. Weather has been on both extremes with very hot days followed by numerous storms in the evening/afternoon. There is still a lot of tomato diseases present with mostly Septoria and others. We will be having Late Summer Field Days again this summer with the first one coming up on Tuesday, August 16 from 4:30-6:00PM in Freeport at Freeport High School's Vegetable Farm with a focus on summer harvest. This event is free but registration is asked by visiting our website.

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

From north-central Illinois... In July we settled into a nice pattern for rainfall. Potatoes that ceased growing sprang back with new life. The best way to describe the shape of potatoes dug since the rain returned is 'snowman'. The intermittent rains played havoc for a few growers harvesting onions. One such grower I visited is trying to move as many onions as possible because unfavorable harvesting conditions left them with a significant amount of onions that cannot be stored long-term.

Japanese beetles are on their way out (at least I hope). Their damage from this season is evident in many places. Growers have had to delay bean harvest due to spray harvest intervals on rows of beans overcome with Japanese beetles. The Japanese beetle population is incredibly variable in the area. Other growers have hardly seen any this year. Peach growers have been reporting swarms of Japanese beetles on peach fruit. It seems the typical controls such as carbaryl (Sevin) works well on foliage but not on fruit. According to Extension entomologist Phil Nixon "the beetles cover the fruit, making it look black with their bodies. When they leave, all that is left is part of the skin and the pit." Both Phil and former Extension entomologist Rick Weinzierl recommend the use of a kaolin clay product (Surround) to protect the fruit. Phil states, "The only problem is that the clay makes [the peaches] whitish and slimy, and it doesn't wash off of the skin very well." The best course of action may be to test on a few trees before applying to the entire orchard.

When creating physical barriers for deer consider placing vertical elements like trellising or fence posts in the fenced area. The added obstacles can confuse deer, making it difficult for them to gauge landing in an enclosure. For more information on controlling wildlife damage visit the [Internet Center for Wildlife Damage Management](#) or University of Illinois Extension's [Living with White-tailed Deer](#).

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

From southern Illinois ... It almost feels as if we have hit monsoon season in southern Illinois. Rainfall totals have been variable. Just Wednesday morning some storms rolled through and in Murphysboro 0.25 in, Franklin Co. at the Ewing Demonstration Center 2.2 in. This pattern (or lack of) has been common and it seems just as soon as it dries out or thinks about drying out..then the rumble of thunder comes. With all of this has come lots of humidity and even on "dry days" the grass never really dries out. Temperatures have been in the upper 80s to 90s. We were predicted to hit the mid or upper 90s, but those predictions have been lowered which is welcomed. This past weekend was actually fairly nice as a front moderated the humidity and brought temps to the upper 80s to 90.

All of this rain has been ideal for diseases. I've seen many root rots and also leaf diseases in a wide varieties of crops especially tomatoes. In addition to struggles of waterlogged soils in fields that have poor drainage. Keeping fungicide coverage can be a challenge with frequent rains, but it has been necessary. Weeds have also loved the moisture and as soon as you turn you head they shoot up and take over. I spent some time in my pumpkin field at home over the weekend. Volunteer wheat and some patches of crabgrass that needed attention so I sprayed a grass herbicide which should take care of that no problem. Also, I sidedressed with around 50 lbs of N using Calcium Nitrate and noticed quite a few cucumber beetles so I also sprayed for them and a protectant fungicide as well.

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

Also from southern Illinois... Southeastern Illinois has been inundated with rain during the past month, with July 2016 being the wettest on record. One farm has received 22 inches of rain in the last 22 days. It has been very difficult for growers to make effective although much needed pesticide applications. I have included a couple of pictures of hail

damage on tomatoes from a storm in mid-July. Surprisingly, the grower has been able to keep disease pressure to a minimum.



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

Vegetable Production & Pest Management

Pumpkin Insect Management

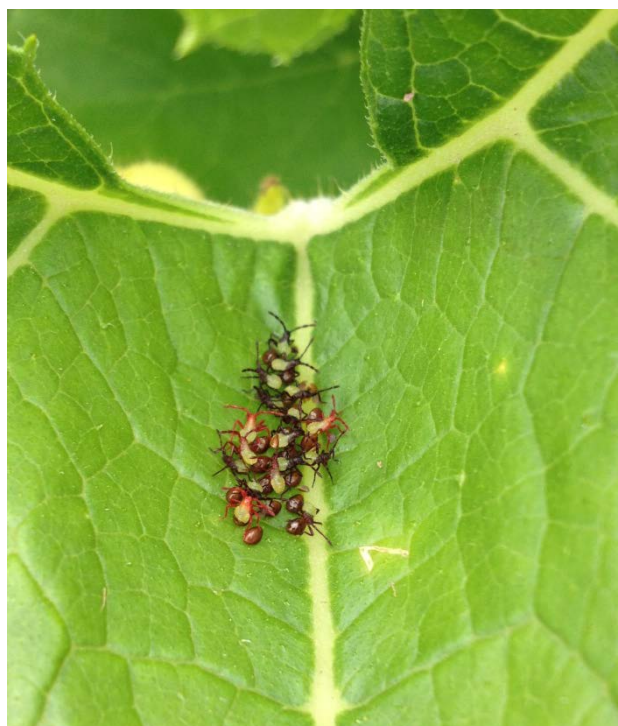
Our favorite pumpkin-loving insects are definitely out and about. Here are a few notes on two of our most common insect pests in pumpkins and their management: squash bugs and cucumber beetles.

Squash bugs feed on vines and directly on pumpkin fruits. Later in the season, as vines die down, nymphs and adults feeding directly on fruits and "handles" can cause shriveling and distortion and produce wounds that allow entry of fruit rotting pathogens. Where fruit-feeding is occurring, squash bugs can be controlled with applications of Brigade, Warrior, or Mustang Max. These products are most effective on nymphs so timing sprays when eggs are hatching is ideal.

Spotted cucumber beetles, striped cucumber beetles, and western corn rootworm beetles also feed directly on fruits, scarring the surface, making the fruit unmarketable. Also, they can harbor and transfer pathogens, such as bacterial wilt. Their feeding sites also provide entry for fruit-rotting pathogens. The pyrethroids listed above (Brigade, Warrior, and Mustang Max), products that contain the pyrethroid permethrin (Pounce and generics), and Sevin XLR Plus are among the most effective insecticides labeled for control of these beetles on pumpkins.

For additional product recommendations and more details refer to the as listed in the [2016 Midwest Vegetable Production Guide](#)

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



Squash bug eggs hatching on a pumpkin leaf. Photo: N. Johannang

Fruit Production & Pest Management

Post-harvest Management of Honeycrisp

Honeycrisp apples continue to be in high demand and consumers remain willing to pay premium prices for this excellent eating apple. While Honeycrisp is a customer favorite, it can be a very challenging apple to grow and difficult to store. The following article, [Pre- and Postharvest Practices to Manage Storage Disorders in Honeycrisp](#), originally published in the *New York Fruit Quarterly* by Dr. Chris Watkins, Professor, Director, Cornell University Extension and most recently posted on July 29, 2016 in the *Penn State Fruit Times* newsletter, provides information on ways to reduce postharvest disorders in Honeycrisp. Information was gathered during from storage trials conducted cooperatively the past three years by Cornell University, Penn State Extension, and Pennsylvania growers and packers. Implications from the study are: 1) If risk of bitter pit is high, fruit should be stored without conditioning and marketed earlier than conditioned fruit. 2) Fruit with low bitter pit risk should be conditioned and stored at 38°F if storage periods are uncertain. This is a very thorough article, providing photos of physiological disorders of Honeycrisp, discussing the pros and cons of conditioning, implications for storage operators and growers, etc.

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

Record-Keeping

Making Use of Veggie Compass

Are you a diversified fresh market vegetable grower who would like to know which crops make you a profit and which ones do not? How about which market channels are the most profitable when you consider labor and marketing costs? Do you already keep impeccable records of sales, expenses, and labor, but want to know how to turn this into actionable information? If you answered yes to these questions, or even if you wished you could answer yes, I want to tell you about a FREE tool that can help you make more profitable decisions.

Last time I mentioned that those of you who are already sticklers for good record-keeping - and have a mastery of spreadsheets - may be interested in a tool called Veggie Compass (<http://www.veggiecompass.com/>). Veggie Compass is a project of the University of Wisconsin's Center for Integrated Agricultural Systems (<http://www.cias.wisc.edu/>), and was created to help farmers do whole-farm profitability analysis through better planning and decision-making.

Veggie Compass is NOT a record-keeping platform. Veggie Compass is an analytical tool that makes use of your *existing* end-of-year records to turn data into *information* that you can use to make better farm decisions. Simply stated, Veggie Compass is a big honkin' financial spreadsheet intended to use farm expenses, farm sales, production space, and labor hours to calculate:

- 1) cost of production for each crop through greenhouse, field, and harvest/pack,
- 2) breakeven price and profitability by crop and by market channel (i.e. farmers market, CSA, wholesale, farm stand, etc.)
- 3) overall profit and loss by market channel

This information can help you look at your business in a new light by taking a comprehensive look at ALL the costs that go into your sales. Does my farm produce broccoli efficiently? Where are the cost centers in my broccoli production? Am I charging enough at farmers market to make a profit on my broccoli? Am I even making a profit at the farmers market? If so, what percentage of my net profit is generated there? If not, which market channel should I be using instead? These are examples of practical questions that can help you focus on your profitable crops and market channels, and shed the ones that are not adequately contributing to your bottom line.

One cautionary note: Veggie Compass may be intimidating upon first glance. It is a complicated, colorful spreadsheet with numerous built-in calculations and multiple tabs that flow well off the end of your monitor. Steel your resolve to make profitable farm decisions, and dive into it. The instructions are clear, and the Veggie Compass folks provide multiple tools for efficient data collection at <http://www.veggiecompass.com/tools/>. Perhaps even better, the Southern Sustainable Agriculture Working Group has put together a series of videos at <http://www.ssawg.org/gfp-veggie-compass/> that act as a wonderful step-by-step tutorial on how to use Veggie Compass correctly, all narrated by an actual farmer and user.

If you need a live human to help you get familiar with Veggie Compass, the Veggie Compass team is awesome (<http://www.veggiecompass.com/the-team/>), and feel free to drop me a line, too. It is an investment of time that should pay dividends to your farm profitability in the not-too-distant future.

Andy Larson (815-732-2191; andylars@illinois.edu)

Less seriously...

Hopefully reading this will give you thoughts of cooler weather if nothing else...

It was a cold winter day. An old man walked out onto a frozen lake, cut a hole in the ice and dropped in his fishing line. He was there for almost an hour, without even a nibble, when a young boy walked out onto the ice, cut a hole in the ice not far from him. The young boy dropped his fishing line and minutes later he hooked a Largemouth Bass.

The old man couldn't believe his eyes but chalked it up to plain luck. But, shortly thereafter, the young boy pulled in another large catch.

The young boy kept catching fish after fish. Finally, the old man couldn't take it any longer.
"Son, I've been here for over an hour without even a nibble. You've been here only a few minutes and have caught a half dozen fish! How do you do it?"

The boy responded,
"Roo raf roo reep ra rums rram."

"What was that?" the old man asked.

Again the boy responded,
"Roo raf roo reep ra rums rram."

"Look," said the old man,
"I can't understand a word you're saying."

The boy spit the bait into his hand and said,
"You have to keep the worms warm!" – *unknown, courtesy of Jack Shea*

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