

VegNet

The Vegetable and Fruit Crops Teams Newsletter

<http://vegnet.osu.edu>

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Strip Tillage and Grafting in Vegetable Production

Results from 2015 and New Study in 2016

*From Zheng Wang, Postdoctoral Researcher,
Department of Horticulture and Crop Science, The
Ohio State University*

In 2015, we compared a “flat-bed” strip tillage approach with different cover crops to a standard “raised-bed” approach with cover crops or plastic in producing tomatoes and peppers at OARDC in Wooster. The study was supported by The Ohio Vegetable & Small Fruit Research & Development Program (OVSFRDP), the OSU Center for Applied Plant Sciences (CAPS), and the USDA-SCRI program. Yield data from each treatment were analyzed and a final report was submitted to the OVSFRDP. Briefly, 1) tomato fruit yield and fruit number were similar between plastic-raised plots and strip-till plots, but total and marketable fruit number and yield were greater in plots with dead compared to living mulch; 2) pepper data were more affected by system, as marketable fruit number and yield values in strip-till plots tended to be 25% of those in plastic-raised plots; and 3) for both crops, the harvest at which yield was greatest occurred later in strip-till than plastic-raised plots.

Cool soils, competition with living mulches (if used), and nutrient deficiencies are associated with strip tillage approaches in vegetable production and are some of the reasons why they are not used as often as standard, plastic-covered raised beds, which have their own limitations (e.g., need for plastic and intense soil disturbance).

Grafting takes advantage of the superior root systems of rootstock varieties. So, in 2016, we will test whether strip tillage systems can be made more productive using grafted plants. With OVSFRDP, CAPS, and USDA support, we will place grafted and ungrafted tomato plants into strip till and no till plots at OARDC in Wooster. The field was sown with winter wheat in Fall-2015. Tomato scion ‘BHN 589’ was grafted onto three different but commonly-used tomato rootstocks (Estamino, SuperNatural, and Maxifort) in mid-April, 2016. The field will be prepared in early May and we expect to transplant grafted and ungrafted tomatoes soon



EPA Revises the Worker Protection Standard (WPS)

From Mary Ann Rose, College of Food, Agriculture, and Environmental Sciences, The Ohio State University

WPS was first released in 1992 and protects agricultural workers and pesticide handlers at farms, forests, nurseries, and greenhouses. A revised rule was signed on September 28 by EPA administrator Barbara McCarthy. This 2015 revision is a comprehensive overhaul of the existing rule and the result of extensive stakeholder input over the past 10 years. The revised rule is expected to significantly reduce pesticide exposure incidents, and is intended to give farm workers a level of protection from pesticides that is directly comparable to industrial worker protection afforded by the Occupational Safety and Health Administration (OSHA) hazardous chemical regulations. The new rule will be published in the federal register later this fall and will take effect 60 days later.

The changes are comprehensive. Pesticide handlers and early-entry workers now must be 18 years of age or older. Training content has been expanded to include new material. The grace period for new employees is eliminated, and workers must now receive training before they enter an area that has been treated with a pesticide with WPS labeling in the last 30 days. Agricultural workers must receive annual training instead of every five years, and a record of training must be kept. Being a pesticide handler no longer qualifies an individual to train workers; worker trainers must be certified applicators, EPA/Federal/Tribal approved applicators, or have completed an EPA-approved train-the-trainer course.

There are new mandatory posting requirements if the pesticide restricted entry interval (REI) exceeds 48 hours for outside applications, or four hours for applications in enclosed spaces. Previously, only greenhouses were required to post signs at treated areas and other growers could choose between oral warnings or posting signs. Also, worker exclusion zones of up to 100 feet away from the application area may be required, depending on the type of application; previously, exclusion zones only applied in greenhouses and nurseries. Required amounts of decontamination supplies per worker or handler are now specified. When respirator use is required by the labeling, training, medical evaluation, fit testing, and record-keeping will be required (same as the OSHA requirement).

Safety Data Sheets (SDS) now must be posted with pesticide application information at the central display location, and the specific pesticide application information must be retained for two years after the REI expires. The pesticide application records are to be made available to workers, handlers, designated representatives, or medical personnel upon request. The farm owner exemption has been expanded to include all in-laws, grandparents, grandchildren, aunts, uncles, nieces, nephews, and first cousins.

The EPA's draft compliance schedule indicates that most changes will be required a year after the rule's effective date; the annual training with updated content will be required after two years. The "How to Comply" manual, which is a key reference for owners and managers, is projected to be available soon; the worker training materials (videos, manuals, workbooks, PowerPoints) are not expected to be available until mid-2017. For more information on the 2015 revisions to WPS, see the EPA website www2.epa.gov/pesticide-worker-safety/revisions-worker-protection-standard

EPA Proposes Changes to the Certification and Training of Pesticide Applicators

The Environmental Protection Agency (EPA) has proposed a minimum age (18) and stricter standards for certifying applicators of restricted use pesticides (RUPs). For commercial applicators in Ohio, there is no distinction between RUP and non-RUP users, hence these new proposals potentially affect the certification and recertification of all licensed commercial pesticide applicators in Ohio whether or not they actually use restricted use pesticides. Private applicators are only required to be licensed in Ohio if they use RUPs.

Much of what is proposed for the stricter federal standard is already required by Ohio Law; for example, Ohio pesticide applicators already take closed book exams, must recertify on a three-year schedule, and keep pesticide records. The proposed changes would significantly increase the recertification requirements for Ohio pesticide applicators. The EPA has proposed that all applicators will be required to take six units (50 minutes) of core plus three (private) or six (commercial) units per category every three years. An Ohio commercial applicator licensed in one category who is now required to take five hours of recertification would have to attend twelve 50-minute sessions every three years. An Ohio private applicator licensed in one category who now needs 3 hours of training to recertify would have to attend nine 50-minute sessions every three years. Applicators would be required to present identification at exams and recertification programs. For private applicators, the fumigation category would be split into soil and non-soil fumigation categories. There also would be an annual training requirement and minimum age of 18 for trained servicepersons, who under current Ohio law only require a single, verified training prior to occupational exposure to pesticides.

Learn more about the proposal and certification for pesticide applicators: <http://www2.epa.gov/pesticide-worker-safety/epa-proposes-stronger-standards-people-applying-riskiest-pesticides>

The Ohio Sensitive Crop Registry Mapping Tool

From Jared Shaffer, Plant Health Inspector, Division of Plant Health

In the spring of 2014, the Ohio Department of Agriculture (ODA) launched a new online program: the Ohio Sensitive Crop Registry (OSCR). OSCR is a free, voluntary mapping tool for specialty crop producers, beekeepers, and pesticide applicators to communicate and protect sensitive agricultural areas from pesticide drift or off-target damage.

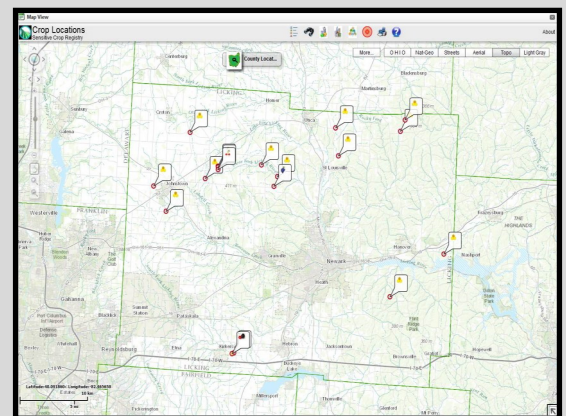
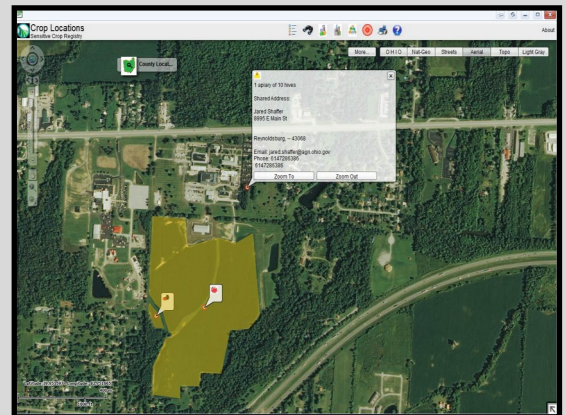
Usage of mapping systems such as OSCR is growing throughout the United States. At least 17 other states have implemented programs similar to OSCR. DriftWatch, for example, is a popular program used in neighboring states. Maps of sensitive areas make it very simple for applicators to find and avoid spraying or creating drift around areas that would damage valuable and vulnerable property.

Ohio has a very large industry for specialty crop production; Ohio is ranked in the top 3 for tomato production in the country, and in the top 10 for grape production. In 2015, approximately 3,800 tons of grapes and 156,600 tons of tomatoes were produced for market and processing, valued over \$60 million. The growing wine industry in Ohio was valued over three-quarters of a billion dollars in 2012, and now has over 230 licensed wine manufacturers in the state. Both tomatoes and grapes are specialty crops that are vulnerable to common field herbicides.

While not necessarily vulnerable to herbicides, Ohio's honey bee population is susceptible to many insecticide products used in agriculture. The ODA Apiary Program has over 36,000 honey bee colonies and 4,800 apiaries registered in the state of Ohio. Pollinators in general are responsible for a third of agricultural output in the country, as many fruit and vegetable plants require cross-pollination. Honey bee apiaries can be small, hard to see, and moved from field to field throughout the year. With an increasing national focus on pollinator protection, a mapping system like OSCR is an invaluable tool to locate hives and contact the beekeeper so that they may protect their bees from pesticide exposure.

A pesticide application that damages or contaminates nearby property, including plants and bees, is not only a violation of Ohio regulations, but can be a very costly mistake for all parties. Certified Organic farms can be put out of business for three years or more if their fields are exposed to pesticides. Awareness of where these sensitive areas are is critical to avoid unintended damage and potential liabilities.

The Ohio Sensitive Crop Registry is a completely online system that users can access at any time during the year, 24/7. Applicators, apiarists, and crop producers can simply create a user account through the website, log-in to the system and add to or search the sites on the map. Users can add, remove, or edit their locations at any time as their operations change, and applicators can get the most recent information about these locations and their owner/caretaker.
(continued on page 5)



The Ohio Sensitive Crop Registry Mapping Tool Continued...

Also, verified OSCR users are able to purchase "Do Not Drift" yard signs at cost through the website. These signs are screen-printed on 24" x 18" corrugated plastic and can be placed near apiaries and other sensitive areas to serve as a visual reminder to applicators that your property may be sensitive to the products they are using. For maximum visibility, it is recommended that signs be posted facing the direction of the road, so that road crews and other traffic can see the signs before they reach the vulnerable property. The pdf order form is available on the website.

The intent of the Sensitive Crop Registry is to create an easy, accurate, and secure method for applicators to learn of these sensitive locations, and to communicate with apiarists and producers. Detailed instructions, video tutorials and more are available on the OSCR website. If you think this system would be valuable to you or your business as a pesticide applicator, crop producer, or beekeeper, visit the site at www.agri.ohio.gov/scr to get started.



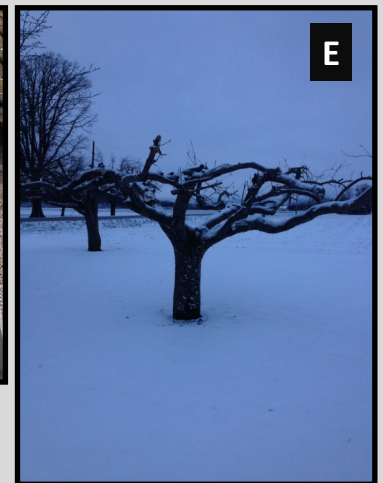
Northwest Ohio and North Central Ag Research Station Update- April 21, 2016

From Allen Gahler, Extension Educator, The Ohio State University

Fieldwork has been slow up to this point, given the cold, wet conditions in early April, but there were a few growers in Sandusky and surrounding counties who were able to get first plantings of sweet corn out prior to the 8-12 inches of snow we received across the county and North Central Ohio on April 8th. The snow was actually welcomed by many growers, as it provided insulation from the temperatures that followed on April 9. Most of the area saw lows in the low 20's, but cloud cover dispersed overnight in the eastern portion of Sandusky county and all areas east of there, which brought in overnight lows as far down as 7°F recorded in southern Huron County. Fruit growers closer to Lake Erie and west of Fremont have reported very little damage, but areas to the east and those more than a few miles from the Lake have suffered significant loss in early apple varieties, and almost 100% losses in peaches and plums. Strawberry growers added a second layer of row covers prior to the cold snap, and so far it appears they have fared well, with an earlier than normal crop expected.

Warm air and sunshine quickly followed the cold snap, and many area growers have been able to spray pre-emergent and resume tillage work as of April 18. We expect the first cabbage transplants to hit the ground this week, along with more sweet corn. At the NCARS near Fremont, significant tillage was done the week of April 18, some beds formed, and greenhouse work continues, including the thinning of breeding tomatoes as seen in the pictures on the following page. **(continued on page 6)**

Northwest Ohio and North Central Ag Research Station Update- April 21, 2016 Continued



Pictures:

- A. NCARS staff sorting breeding tomato seedlings
- B. Thinning tomato seedlings
- C. Breeding tomatoes
- D. Cabbage variety trial plants
- E. Apple trees in Ottawa County early morning April 9 in between snow showers
- F. Flowers emerging outside the building during Sandusky/Ottawa County Master Gardeners Ready, Set, Grow Conference April 9. April Snow makes in Grow!
- G. The grass is green under the snow in Frosty the Feedlot Steer's pen

Southern Ohio Vegetable and Fruit Update

Brad Bergefurd, OSU Extension Educator and Horticulture Specialist, OSU Extension Scioto County and OSU South Centers

Field work resumed in full swing on Friday April 15, 2016 with plowing, bed shaping, plastic laying, fertilizer and compost applications, pre-emergent herbicide applications, burn down herbicides applied to cover crops, apple trees planted, frozen asparagus removed and new asparagus being harvested daily. Apples and peaches continue to be pruned and are in bloom. Hop plantings are being fertigated, bull shoots and freeze damaged bines are being hand-removed, strings are being dropped and new bines are being trained. New planting of hops are being made and new high-trellis systems are being installed. Some freeze damage has been reported on asparagus, strawberries, apples, and peaches from the April 1 to April 10 freeze events. Peach orchards that deployed sprinkler protection report 25 to 75% damage, whereas those who did not freeze protect are reporting 80 to 100% losses. Deer fence continues to be repaired and new fence is being erected on several fruit and vegetable farms. Even though rain is predicted for today (April 21), most areas have only received showers and by 6 p.m., field work, spraying, and planting continues non-stop. Plasticulture strawberries are at 50% bloom and matted row strawberries are at 15 to 20% bloom, bloom fungicides are being applied and weekly Nitrogen fertigations being made. Spring malting barley planting resumed this week

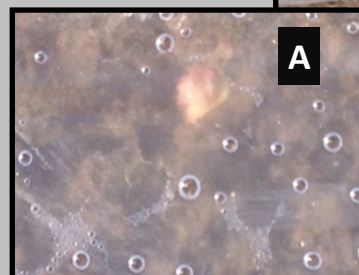
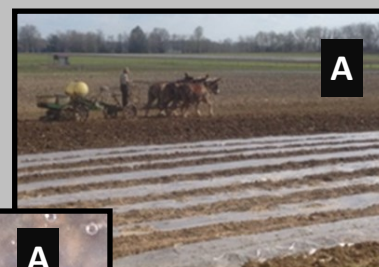


Pictures above: Ten nights of sprinkler protecting peaches paid off; most of the crop will need thinned with only 50% damage on average, whereas, non-protected peaches received 80 to 100% damage. (photos by Brad Bergefurd and Paige's Produce)

throughout Ohio. Field planting of red beets, radishes, lettuce, onions, sweet corn, beans, potatoes, tomatoes, and cabbage is in full swing.

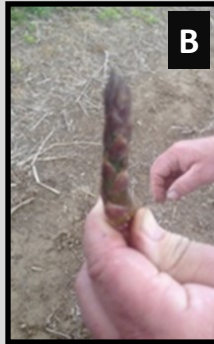
SWEET CORN, GREEN BEANS, and TOMATOES PLANTED

The last sweet corn under plastic in the region was planted on Friday, April 15 and the first reported bare ground sweet corn plantings also went into the ground throughout this past weekend. With the sunshine and warmer temperatures in the high 70s over the weekend, temperatures under the plastic are exceeding 90 degrees F with holes having to be punched for ventilation. The first field tomatoes have been set in the field and sweet onions continue to be planted. The first onions that went in mid-March are looking good. Green beans have been planted under plastic as well as in bare ground throughout the region.

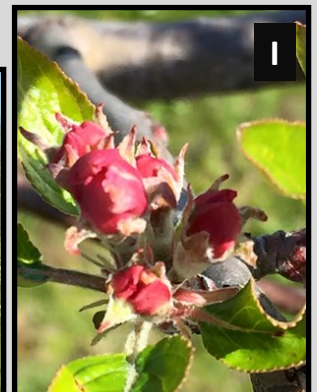


A. The last of sweet corn plantings in plastic went in April 15. Early April plantings have good germination. (photos by Brad Bergefurd)

Southern Ohio Vegetable and Fruit Update Continued...



- A. Second and third plantings of high-tunnel tomatoes were planted the past two weeks. (photo by Brad Bergefurd)
- B. Asparagus which was frozen by the April 15th, 20 degree F freeze event was hand removed resulting in one lost harvest. (photos by Brad Bergefurd)
- C. Malting barley planting resumed this week. (photos by Ryan Slaughter)
- D. Raised beds have been made and plastic mulch laid since April 15th. (photos by Paige's Produce and Voltolini Produce)
- E. Plasticulture strawberries continue to receive weekly nitrogen fertigation and have come through the freeze events with little damage. (photo by Jones Produce Farm)
- F. Hop planting is keeping Ohio nurseries busy with plant shipments. (photos by Barn Talk Hops)
- G. Field work and planting has been almost non-stop since April 14th. (photos by Brad Bergefurd)
- H. Apples not damaged by the freeze continue to show great bloom near Hillsboro. (photos by Brad Bergefurd)
- I. Honeycrisp apples in bloom. (photo by Paiges Produce) Granny Smith apples in bloom. (photo by Fuhrmann Orchards)



Blueberry Bushes at Pink Bud Stage

From Gary Gao, Ph.D., Extension Specialist and Associate Professor, OSU South Centers

Blueberry bushes are at the pink flower bud stage. According to a fact sheet at http://msue.anr.msu.edu/topic/blueberries/growing_blueberries/growth_stages_table, “the pink corolla tubes (petals) are short and closed. This bud stage can tolerate 23 to 25°F (-5 to -4°C).” I certainly hope we are done with cold temperatures.

A dormant spray should have been made already before bud break. Another fungicide spray will be needed soon to prevent fruit diseases. Refer to the 2016 “Midwest Fruit Pest Management Handbook” for a spray schedule.

An application of nitrogen should have been made at bud break stage. Urea or ammonium sulfate is the preferred form, since blueberry bushes do not like the nitrate form. About 30 to 50 lbs. of actual nitrogen can be applied, depending on the age of the bushes. Younger bushes will need about 30 pounds while older bushes need about 50 pounds. A soil test should be done to determine the exact amount.

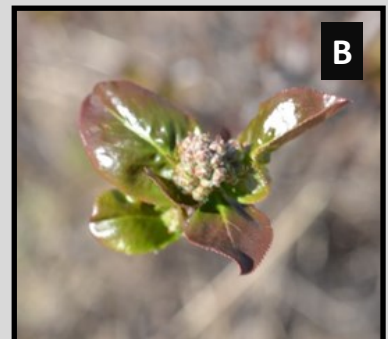
“Super Berry” Specialty Crop Block Grant is in its second year:

The research plots for our “super berry” Specialty Crop Block Grant are looking quite good. Aronia plants are showing their flower buds. Their leaves are expanding and showing a little purple color. Aronia is very high in antioxidant content and is becoming a popular crop. Some Ohio growers started planting Aronia.

I have started an Ohio Super Berry Facebook page. You are encouraged to follow our Facebook page at [Facebook.com/OhioSuperBerries](https://www.facebook.com/OhioSuperBerries). This is a good place to exchange information among fellow growers and get updates from me. It is easier and faster for me to update this Facebook page since I can do this from anywhere and anytime. Some of our Ohio Aronia growers started their own Facebook page.

Aronia is a pretty interesting crop. It has gained popularity in Iowa, with about 1,000 acres of Aronia now in that state. The planting size in Ohio is not very big yet. If you are considering an Aronia planting or a planting of any fruit crops, please email me (Gao.2@osu.edu) a picture. I would love to see expansion of all fruit production in Ohio.

Other super berries are Chinese goji berries, elderberries, honeyberries. Blackberries, blueberries, and raspberries are also considered super berries. Our blackberries and raspberries look pretty good so far. I hope this will turn into a good year for both of them. I would like to thank the Ohio Department of Agriculture for their support of our Super Berry Program through a USDA specialty crop block grant.

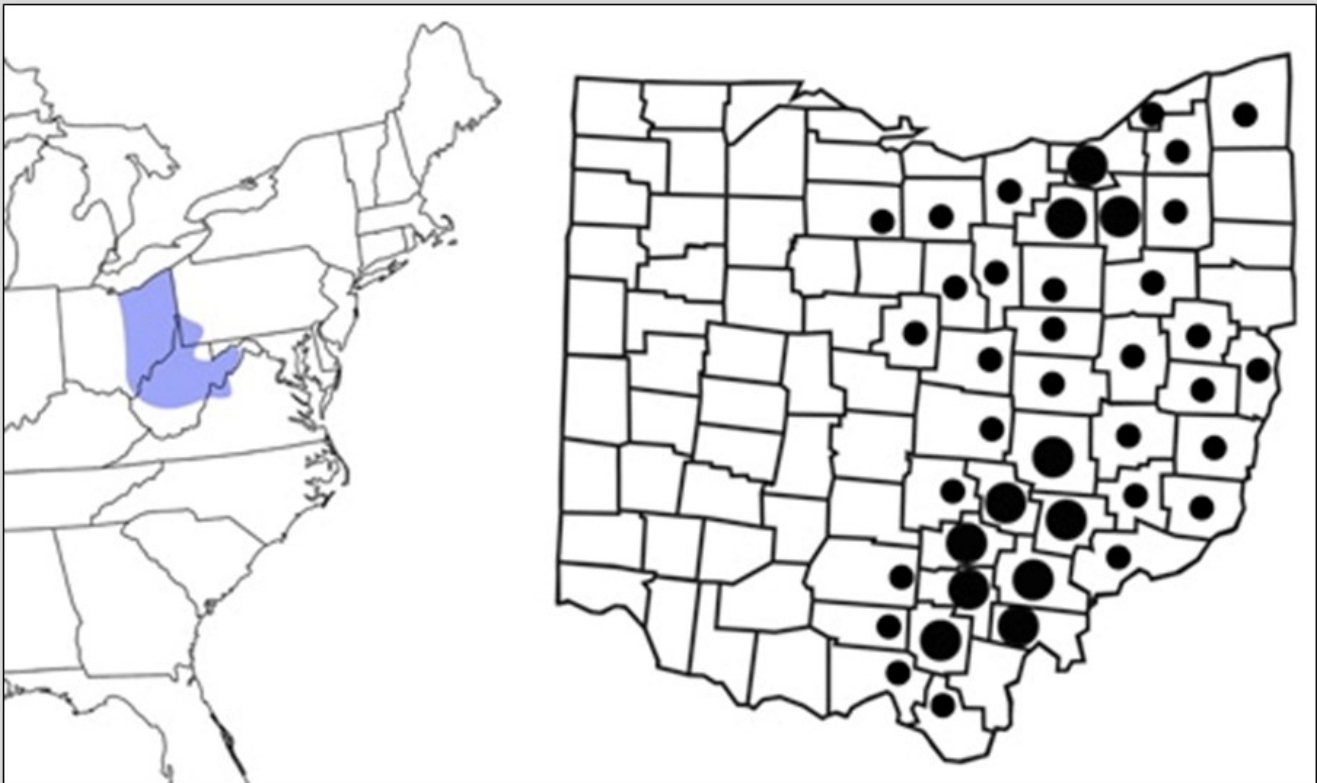


- A. Blueberry flowers at early pink stage. (photo by Gary Gao, OSU South Centers)
- B. Aronia showing flower buds. (photo by Gary Gao, OSU South Centers)

Ready for Cicadas in Eastern Ohio?

From Celeste Welty, Extension Entomologist

Fruit growers in the eastern half of Ohio need to be prepared for the periodical cicada this year. Last seen and heard in 1999, this brood has spent 17 years developing underground, and will be emerging in May through July this year. A map of the areas where emergence is expected this year is shown below.



Map of area in which brood V of the periodical cicada is expected to emerge in 2016 (from Mount St Joseph University Cicada Website, by Dr Gene Kritsky). Dots in the map of Ohio indicate counties where Brood V has been reported in the past.

The adult cicadas injure woody stems of fruit crops by egg laying. The adult female cicada makes a series of slits in woody stems, then inserts an egg into each slit. They prefer to lay eggs in woody stems that are $\frac{1}{4}$ to $\frac{1}{2}$ inch in diameter, which is a size commonly found in young apple and peach trees and in blueberry, grape, and raspberry plants. Terminal leaf clusters often wilt and die on stems that are injured, leading to a tree with 'flagging' symptoms. In addition to the physical injury to fruit plants, this insect is a nuisance pest to humans due to its large size, its presence in large numbers, and the loud mating call of the male cicadas. The adults live for 2 to 4 weeks. Eggs take 6 to 10 weeks to hatch.

Ready for Cicadas in Eastern Ohio? Continued...

Fruit growers in affected areas should avoid planting new nursery stock this spring; wait until autumn or next spring. Mechanical control in existing plantings can be done by ¼ to ½-inch netting to exclude the cicadas (sample product: www.industrialnetting.com/applications/lawn-garden/cicada-netting.html), and injured stems can be pruned and destroyed before eggs hatch. Orchards should be scouted frequently to look for the start of egg-laying injury, starting one week after the cicada calling begins. Chemical control can be used by applying insecticide, starting when egg laying begins and, if needed, repeated 7 to 10 days later. Insecticides that are effective and have cicadas listed as a target pest on the label are Asana (esfenvalerate), Warrior (lambda-cyhalothrin), Baythroid (cyfluthrin), and Danitol (fenpropathrin), which are all restricted-use products. Be aware that these products are in the pyrethroid group, which are known to be harsh on some natural enemies and thus their use can lead to flare-ups of spider mites and San Jose scale. Also effective is Sevin (carbaryl), which is not restricted-use, but it should be used with caution during 30 days after bloom, due to fruit thinning effects. Insecticides known to be effective for cicada control but which do not have cicadas listed as a target pest on the label are Mustang Max, Brigade, and Vydate, as well as the pre-mixes Hero and Gladiator; these are all restricted-use products. Assail is not restricted-use and is known to have some activity on cicadas. Danitol, Brigade, and Hero have broader activity than other pyrethroids and can kill spider mites – but only if used at the maximum labeled rate. An alternative chemical approach is to use Admire Pro (imidacloprid) as a soil drench; cicada is not listed as a target pest on the Admire label, but Admire is known to provide effective control.

SUMMER *field*
tour & *day*



SAVE THE DATE!

Quarry Hill Orchards
8403 Mason Rd
Berlin Heights, Ohio

June 22, 2016

Established in 1931, **Quarry Hill Orchards** is a family-owned farm in the rolling hills of Berlin Heights, Ohio. At the heart of every Quarry Hill harvest lives a strong bond with the land and our customers. We're passionate about cultivating quality fruit and meaningful relationships, inspiring people to enjoy fresh, wholesome tastes that spark engaging conversations and memorable experiences.

Join us!

...in the field!

...at the tradeshow!

...with *yummy* food trucks!

...for *fun*, live music!

Vegetable Workshop Series Offered for Growers

From Allen Gahler, Extension Educator, Sandusky County

The Ohio State University Extension office in Sandusky County, along with the Ohio Agricultural Research and Development Center's North Central Ag Research Station near Fremont will be hosting a vegetable production workshop series throughout the 2016 growing season. The meeting series, which will be free and open to the public, will be targeted toward an audience of vegetable producers in the county and surrounding northern Ohio area, as well as anyone interested in learning more about the research conducted at the station, and its impact on the community and the food industry.

The goal of the workshop series is to provide hands-on training and pertinent growing season information to producers in a more relaxed, informal learning environment than provided by traditional afternoon or evening field days held at the research station in the past.

"By moving to a monthly meeting, we can offer several topics throughout the year, as well as add in timely information as specific challenges occur during the season," reported Allen Gahler, Extension Educator for Sandusky County, and organizer of the series.

Matt Hofelich, manager at the research station, added, "By making it a regularly occurring event, we can include many different faculty, staff, industry reps, and growers that may not be able to attend one specific date, allowing greater outreach from the station and Extension. This should also benefit growers by providing regular fellowship and opportunity to network and swap growing notes."

The meetings will be offered on the second Thursday of each month, April through October, and will begin at 7:00 a.m. with breakfast provided by OSU Extension and sponsors. Industry representatives and researchers will be introduced during breakfast, and at 7:30 a.m., a featured speaker will present a specific topic relating to vegetable production. At the conclusion of the talk, participants are invited to walk the fields, visit with OSU researchers and industry representatives, and network with other producers.

According to Gahler, participants are also encouraged to bring plant disease samples and insects with them to the meetings for identification by OSU staff, or for same-day transport of the samples to the OARDC lab in Wooster, where full diagnostics can be run and reported back to the grower electronically. "Timely diagnosis in vegetable disease is key to managing the crop, and we want to do all we can to help ensure growers produce a wholesome product at a reasonable cost to them and to consumers," he stated.

Specific topics and dates for the workshop by month will include the following:

- * May 12: Scouting Cucurbits with drones, Jim Jasinski, OSU IPM Coordinator
- * June 9: Alternative Crop Enterprises – is Malting Barley an option for you?
Dr. Eric Stockinger, OSU/OARDC Department of Horticulture & Crop Science
- * July 14: The OSU Food Safety Program – what it can do for you
Dr. Beth Scheckelhoff, Extension Educator – Greenhouse Systems
- * Aug. 11: Sweet Corn Evaluation, field walk, and taste it for yourself
Mike Gastier, Extension Educator – Huron County
- * Sept. 8: Pepper Evaluation and field walk – Bells, Bananas, Jalapenos
Allen Gahler, Extension Educator – Sandusky County
- * Oct. 13: Soil Health and Water Quality - How does it affect me? A look at edge of field studies and NCARS water samples, Libby Dayton, OSU Soil Scientist

OHIO STATE UNIVERSITY EXTENSION, SANDUSKY COUNTY NORTH CENTRAL AGRICULTURAL RESEARCH STATION

OSU Vegetable Workshop Series

Join the staff at the North Central Ag Research Station near Fremont and OSU Extension on the 2nd Thursday of each month, April through October for catered breakfast, industry updates, and in-depth tips, tricks, and information from researchers to help make your 2016 growing season a profitable one! Attend when the topic suits you, or come each month and stick around after the speaker to view the OARDC field trials or network with peers and industry reps.

2nd Thursday: April – Oct.

"Bring your plant disease and insect samples for identification and same day delivery to the OARDC lab, free of charge!"

7:00 a.m. Breakfast

with OSU and industry updates

7:30 a.m. Featured speaker

8:00 a.m. Field walk / networking

Held at NCARS office, No rsvp, No cost!

For more information contact:

Allen Gahler, OSU Extension Sandusky County
419-334-6340
gahler.2@osu.edu

Matt Hofelich, North Central Ag Research Station
419-332-5142
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April 14: *New Fungicide Strategies with Orondis*
Dr. Sally Miller, OSU/OARDC Plant Pathologist

May 12: *Scouting Cucurbits with drones*
Jim Jasinski, OSU IPM Coordinator

June 9: *Alternative Crop Enterprises – Is Malting Barley an option for you?*
Dr. Eric Stockinger, OSU/OARDC Department of Horticulture & Crop Science

July 14: *The OSU Food Safety Program – what it can do for you*
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Libby Dayton, OSU Soil Scientist



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OHIO AGRICULTURAL RESEARCH AND DEVELOPMENT CENTER
OHIO STATE UNIVERSITY EXTENSION

Ohio State University Direct Marketing

Food & Agriculture

2016 Webinar Series

One-hour webinars will be offered to bring exceptional speakers to your home, office or local Extension center. If you're interested in finding out more about marketing issues, visit the website for details.



2016 Direct Marketing Webinar Series All webinars begin at 12 noon

Date	Topic	Lead Presenter	Connection
Feb. 18	Marketing Trends Learned from the Super Bowl	Eric Barrett & Rob Leeds	http://carmenconnect.osu.edu/marketingtrends2016/
Mar. 2	Using All Your Senses in Branding Your Business	Eric Barrett & Rob Leeds	http://carmenconnect.osu.edu/brandingyourbusiness/
Apr. 21	Enhancing Your Web Presence	Melissa Carter	http://carmenconnect.osu.edu/enhancingwebpresence/
May 26	Product Recall & Traceability	Eric Pawlowski	http://carmenconnect.osu.edu/productrecallandtracibility/
June 16	Product Labeling	Emily Adams	http://carmenconnect.osu.edu/productlabeling/
July 21	Celebrate Ohio Local Foods Week	Heather Neikirk & Patricia Barker	http://carmenconnect.osu.edu/localfoodsweek/
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/

For recordings of all webinars go to go.osu.edu/DirectMarketingWebinars



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<http://directmarketing.osu.edu>

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OHIO AGRICULTURAL RESEARCH AND DEVELOPMENT CENTER
OHIO STATE UNIVERSITY EXTENSION

Strawberry Field Night

At OSU South Centers

Hosted by Brad Bergefurd

Wednesday,
May 25, 2016
5:30 — 8:30 P.M.

Location: OSU South Centers
1864 Shyville Rd., Piketon, OH

Cost: \$20.00 per person
(Includes handouts and dinner served from 5:30 to 6:00)

To Register:
You must register
Contact Charissa Gardner at
Gardner.1148@osu.edu
740.289.2071 ext. 132

DEADLINE to Register:
May 23, 2016

For more information go to
<http://go.osu.edu/strawberryfieldnight2016>



Plasticulture and matted row strawberry field research will be showcased

Topics to be covered will include:

- winter protection techniques
- israeli drip irrigation demonstration and management
- fertigation and nitrogen management
- row cover management
- June bearing, day-neutral, ever-bearing cultivar evaluations
- pest and disease control
- integrated Pest Management (IPM) techniques
- petiole sap analysis demonstration



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VegNet Newsletter

COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

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Submit Articles:

To submit an article to the VegNet newsletter please send the article and any photos to Charissa Gardner at gardner.1148@osu.edu. For questions regarding the newsletter contact **Brad Bergefurd** at bergefurd.1@osu.edu or call 740.289.2071 ext.132

About the editor

Brad Bergefurd

Bergefurd is an Extension Educator, Agriculture and Horticulture Specialist with Ohio State University Extension, with statewide responsibilities for outreach and research to the agriculture and commercial fruit and vegetable industries Brad has offices at the OSU Piketon Research & Extension Center in Piketon and at OSU Extension Scioto County in Portsmouth.



Brad Bergefurd, MS

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