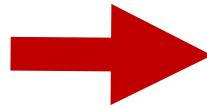


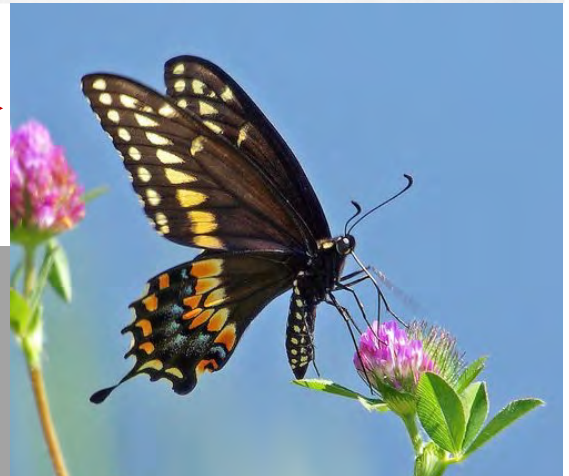
NORTHEAST OHIO AGRI-CULTURE NEWSLETTER

Your Weekly Agriculture Update for
Ashtabula, Portage and Trumbull Counties

August 2, 2022



*Know your
pest before
you feed it
to the
chickens!*



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Hello Northeast Ohio Counties!

We continue to struggle to find some rain in parts of the region. Northeast Ohio has the driest conditions in the state and we are still classified at D0, or abnormally dry.

Corn is varied in condition based on where the rain has fallen. Most corn is in full tassel, and some is post pollination, so rain is critical right now for a good crop.

Beans appear to be handling the dryer weather slightly better, but we still need rain to fill those pods. If there is any upside to the dry weather, it has delayed much of the normal disease.

Stay safe and healthy!

Lee Beers
Trumbull County
Extension Educator

Andrew Holden
Ashtabula County
Extension Educator

Angie Arnold
Portage County
Extension Educator

Warm Weather to Persist Into Fall Harvest

By Jim Noel

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2022-25/warm-weather-persist-fall-harvest>

After a drier June and wetter July, August is shaping up to be the tail of two months with the first half normal to slightly wetter than normal followed by drier for the second half of August.

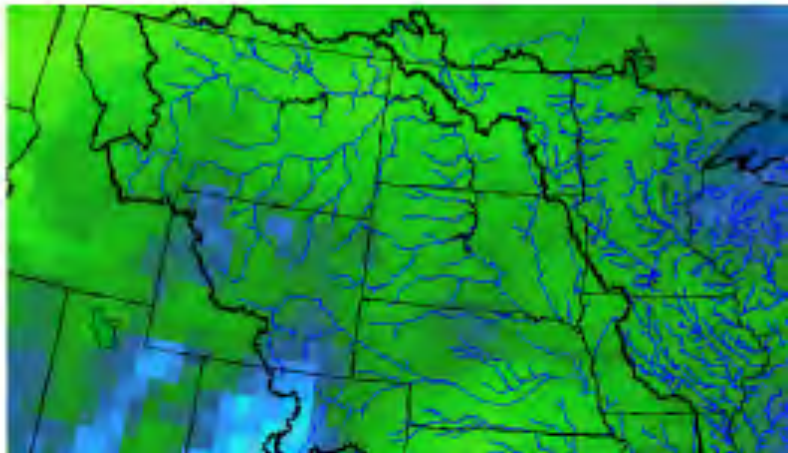
Temperatures are forecast to be above normal but nothing extreme (limited days at or above 95). Going toward the end of growing season and the start of harvest in September, it still looks warmer than

normal with below normal rainfall. The warmer and potentially drier pattern will likely persist into October as well. It would not be surprising if harvest season gets going in late September again this year. Early indications are the first frost and freezes will either be normal or later than normal much like 2021. Overall, much of the information indicates an August to October period not a lot different than last year thanks in part to our ocean patterns. In the short-term, rainfall in the attached graphic for the first half of August is projected to range from 1-3 inches. This means most places will be normal or slightly above except in those areas that only receive an inch. You can see a comprehensive seasonal outlook on the Ohio River Forecast Center website including autumn and winter anytime at: <https://www.weather.gov/ohrfc/SeasonalBriefing>



NAEFS 16-day Ensemble Mean Total

Creation date/time: Mon Aug 1 09:4



All Puckered Up: Dicamba Drift Reminders

By Alyssa Essman

Source: <https://agcrops.osu.edu/newsletter/corn-newsletter/2022-25/all-puckered-dicamba-drift-reminders>

As in years past, we are hearing reports of soybean damage caused by off-target movement of plant growth regulator (PGR) herbicides. Off-target movement can be

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classified as primary or secondary. Primary herbicide movement takes place at the time of application, also referred to as particle drift. Nozzle type, droplet size, sprayer speed and other management factors affect particle drift, along with wind speed. Particle drift is not influenced by herbicide formulation. Plant injury from primary movement typically has a distinct pattern, often occurring along field edges closest to the treated field and becoming less noticeable farther from the source. Secondary herbicide movement occurs after the time of application and is often used in reference to vapor drift (volatility) or wind erosion. This source of off-target spread is extremely problematic and can be very difficult to predict. There is not always a tell-tale pattern of injury. The growth regulator herbicides 2,4-D and dicamba can be particularly volatile due to their chemical makeup and high vapor pressure. Formulation greatly affects the volatility of 2,4-D. Higher temperatures and lower humidity generally increase the potential for secondary movement of these herbicides. Contamination of shuttles or sprayers with a growth regulator is another source of injury. This can resemble off-target movement but is typically more uniform over the treated area. Injury from growth regulators often appears within 7 to 14 days following an off-target event or contaminated application. Symptoms of PGR (group 4 & 19) herbicide injury include leaf cupping, leaf strapping, epinasty (stem twisting), and plant stunting. Soybean tolerance to sublethal rates of these herbicides varies between the different active ingredients even within the same mode of action classification.

Soybean is extremely sensitive to dicamba, with injury symptoms occurring at rates as low as 1/20,000x of a labeled application rate. The introduction of crops tolerant to dicamba greatly increased use of this herbicide by allowing for POST applications later in the season. Newer dicamba formulations are purported to reduce the risk of secondary movement, but have not eliminated this. In 2021, there were 34 official reports of dicamba injury in Ohio, compared to 28 in 2017 (the first year for legal over the top applications). These reports likely underestimate actual damage to soybean, ornamental, horticultural and residential areas. Most instances of injury from off target movement are not reported. Typical dicamba injury includes leaf cupping with a white or yellow leaf tip and plant stunting, but there can be a wide range of symptoms.

PGR damage can also occur later in the season as a result of other dicamba products used in corn, such as DiFlexx, and Status (dicamba + diflufenzopyr; group 4 + 19). Other PGR's such as clopyralid (group 4; Stinger) or Enlist One/Duo (group 4; 2,4-D) can cause injury similar in appearance. All of these herbicides can cause dicamba-like symptomology when used near sensitive soybean. Soybean sensitivity varies based on herbicide active ingredient. According to research at the University of Illinois, soybean sensitivity to PGR herbicides is as follows: dicamba > dicamba + diflufenzopyr > clopyralid > 2,4-D (see fact sheet #2). The addition of diflufenzopyr does not seem to increase injury to soybean relative to dicamba alone. Clopyralid injury can take place due to residue carryover or off-target movement. Clopyralid has a long half-life in the soil and risk of injury is increased in years with low rainfall. Typical PGR symptoms can

occur following carryover or off-target movement of clopyralid, but injury may be less severe with more rapid recovery, compared with dicamba. Soybean is least sensitive to 2,4-D relative to the other PGR herbicides discussed. Whereas dicamba causes severe leaf cupping, 2,4-D tends to result in more leaf strapping (plant veins parallel) and callus formation on stems. Several years ago, OSU was involved in a multi-state study looking at dicamba and 2,4-D injury at various soybean growth stages. Injury from 2,4-D was occasionally undetectable, and higher rates were necessary to cause similar yield reduction that occurred with lower rates of dicamba (see fact sheet #3). Product and rate used, as well as weather conditions following off-target movement influence damage severity and yield potential.

Some speculation has occurred over the years about other sources that can cause injury that appears to be from PGRs. Leaf malformation (crinkling) can result from postemergence applications of acetochlor (Warrant). There is no evidence that AMS (ammonium sulfate), glufosinate (Liberty), or PPO inhibitors (Flexstar) cause the leaf cupping associated with plant growth regulator injury. We have also heard of dicamba-like symptoms (leaf cupping, spike-like appearance of upper soybean stem) following application of 2,4-D to Enlist soybeans. Per EPA guidelines, generic 2,4-D can have up to 250 ppm of dicamba contamination, and only 100 ppm are required to cause visible injury to soybean. Dicamba applications to tolerant soybean systems are not legal past the June 30 cutoff. Other potential sources of off-target injury can occur from PGR applications to ditches, pastures, lawns, and contaminated water movement.

Some fact sheets worth reviewing:

<https://cdn.shopify.com/s/files/1/0145/8808/4272/files/A416pdf>

<http://weeds.cropsci.illinois.edu/extension/factsheets/PGR.pdf>

<https://ag.purdue.edu/btny/purdueweedscience/wp-content/uploads/2021/01/WS-56.pdf>

Bish M, Oseland E, Bradley K (2021) Off-target pesticide movement: a review of our current understanding of drift due to inversions and secondary movement. *Weed Technol.* 35: 345– 356. doi: 10.1017/wet.2020.138

Are Your Cucurbits Yellowing or Wilting?

By Sally Miller

Source: <https://u.osu.edu/vegnetnews/2022/07/30/are-your-cucurbits-yellowing-or-wilting/>

We are seeing many reports of yellowing and/or wilting squash, pumpkin and other cucurbits in commercial fields and gardens this month. Chances are that the cucurbits have been affected by cucurbit yellow vine decline (CYVD) or bacterial wilt. Both of these diseases are caused by bacteria transmitted to plants during the feeding of their insect vectors. Once infected, the plants cannot recover; these diseases must be managed preventatively by controlling the insect vectors, ideally early in the season. At this point, insecticides may be applied to prevent the diseases from spreading to healthy plants. It is also useful to remove and destroy symptomatic plants that serve as sources of bacterial inoculum.

Bacterial wilt affects many cucurbits including cucumber, melon, pumpkin and squash. The causal agent, *Erwinia tracheiphila*, overwinters in the digestive system of spotted and striped cucumber beetles. When these beetles emerge in the spring, the pathogen is spread from beetle feces to healthy cucurbits mainly via wounds caused by insect feeding. Bacterial wilt occurs almost every summer in Ohio, but is less severe after very cold winters that reduce overwintering beetle populations. Symptoms begin as discoloration and wilting of individual leaves. As the disease progresses, the entire plant begins to wilt and collapse as the bacteria clog the xylem vessels. When the stem is cut along the base, clear to white elastic strands comprised of the bacteria and “gum” are visible when cut ends of stems are slowly pulled apart. More details can be found [here](#).

Insecticides labeled for cucurbits and effective against the beetles can be found in the [Midwest Vegetable Production Guide](#)



Sticky bacterial ooze from a cucumber vine with bacterial wilt



Bacterial wilt of melon

for Commercial Growers. Covering plants with netting or floating row covers until flowering can also protect plants from early infection.

Cucurbit yellow vine decline(CYVD) is caused by the bacterial pathogen *Serratia marcescens*, transmitted by squash bugs. It is uncommon in some years but in others can do a lot of damage. Bright yellowing of leaves, followed by wilting and death of plants is indicative of possible CYVD. If squash bug adults, nymphs or eggs are found on the underside of leaves, this is a good clue that the symptoms are caused by CYVD. A cross-section of the vine may show a light tan discoloration of the vascular tissues. CYVD is managed by applying insecticides (see Guide link above). For both CYVD and bacterial wilt, fields and gardens should be scouted regularly for the insect vectors beginning soon after transplanting or seedling emergence. The OSU Plant Disease Diagnostic Clinic in Wooster can provide a definitive diagnosis of CYVD using a PCR assay. Testing for this and other diseases and pests is free of charge for Ohio commercial vegetable growers thanks to financial support from the Ohio Produce Growers and Marketers Association.



Cucurbit yellow vine decline in summer squash



Cucurbit yellow vine decline in pumpkins.

Coming Soon: Ohio's New Beginning Farmer Tax Credits

By: Peggy Kirk Hall, Associate Professor, Agricultural & Resource Law

Source: <https://farmoffice.osu.edu/blog/tue-08022022-227pm/coming-soon-ohio's-new-beginning-farmer-tax-credits>

The idea to use income tax incentives to help Ohio's beginning farmers gain access to agricultural assets floated around for several years in the Ohio General Assembly. The idea became a reality when the Beginning Farmer Bill sponsored by Rep. Susan Manchester (R-Waynesfield) and Rep. Mary Lightbody (D-Westerville) passed the legislature, was signed by Governor DeWine and became effective on July 18, 2022. The law is now in the hands of the Ohio Department of Agriculture (ODA), charged with implementing its provisions.



The new law sets initial eligibility criteria for certifying "beginning farmers," directs ODA to establish the certification program, and authorizes two types of income tax credits for certified beginning farmers and those who sell or lease assets to certified beginning farmers. According to ODA, the income tax credits will be available for 2023, once the certification program is up and running. Here's a summary of what to expect from the new law.

Certification of beginning farmers. The ODA will establish a process for designating a farmer who meets the eligibility criteria to be a "certified beginning farmer." The law sets initial criteria for beginning farmers designation but also allows ODA to create additional requirements. ODA may seek participation from Ohio State and Central State in the certification of beginning farmers. The initial certification conditions are:

- Resident of Ohio.
- Seeking entry to or has entered farming within the last 10 years.
- Farms or intends to farm on land in Ohio.
- Is not a partner, member, shareholder, or trustee of the assets the individual is seeking to purchase or rent.
- Has a total net worth of less than \$800,000 in 2021, including spouse and dependent assets, as adjusted for inflation each year.
- Provides majority of daily physical labor and management of the farm.
- Has adequate farming experience or knowledge in the type of farming for which seeking assistance.
- Submits projected earnings statements and demonstrates profit potential.

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- Demonstrates farming will be a significant source of income for the individual.
- Participates in a financial management program approved by ODA.

Financial management programs for beginning farmers. ODA must approve financial management programs that meet the certification requirement, in consultation with Ohio State and Central State. The list of approved programs will be available on ODA's website.

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Income tax credits for certified beginning farmers. An individual who attains certification as a beginning farmer may apply for a state income tax credit equal to the cost incurred during the calendar year for participating in an ODA approved financial management program or a substantially equivalent financial management program approved by the USDA. The tax credit is nonrefundable. If the tax credit exceeds the beginning farmer's tax liability in the year granted, the excess can carry forward for not more than three succeeding tax years.

Income tax credits for owners who sell or rent assets to certified beginning farmers. An owner who sells or rents "agricultural assets" to a certified beginning farmer during the calendar year or in either of the two preceding calendar years may apply for a state income tax credit. The credit will be equal to 3.99% of the sale price or the gross rental income received during the calendar year for either a cash or share rental agreement. "Agricultural assets" includes agricultural land (at least 10 acres and in agricultural production or earning \$2500 in average yearly gross income from agricultural production if under 10 acres), livestock, facilities, buildings, and machinery used for agricultural production in Ohio. The owner cannot be an equipment dealer, however, nor can the certified beginning farmer receiving the assets be a partner, member, shareholder, or trustee of the owner of the assets. Rented assets must be rented at prevailing community rates, as determined by ODA in consultation with the Ohio tax commissioner. The tax credit is nonrefundable but may be carried forward for seven succeeding tax years if it exceeds the owner's tax liability.

Time to plan. As we await ODA's rules and procedures for the new tax credits, beginning and existing farmers can use this time for planning. Review the new law with your attorney and accountant to determine how the income tax credits could affect you. If you are a beginning farmer seeking agricultural assets, spend time trying to connect with an existing farmer who is ready to sell or rent agricultural assets. Although the 3.99% credit for those transfers may not sound significant, run the numbers and see how they could play out. The hope of the new law is that those numbers will be enough to help a beginning farmer have greater access to those important assets that are critical to farming in Ohio.

Information on House Bill 95, the Beginning Farmer bill, is available [at this link](#).

Extension Talk: Fair is fair, its that time a year again!

By: Andrew Holden

It's fair time Ashtabula County! The Ohio State Fair runs from July 27th thru August 7th, and the 2022 Ashtabula County Fair is scheduled for Tuesday, August 9th thru Sunday, August 14th.

At the State Fair, we have many Ashtabula County 4-Hers participating at state fair including livestock, photography, engineering, sewing, and more! You can see updated local results from the State Fair online at www.Ashtabula.osu.edu on the home page. Congratulations to all the 4-H youths who made it to the State Fair!

I would also like to congratulate Jeff and Doug Greig from Greig's Christmas Tree Farm for winning Grand Champion Christmas Tree with their Canaan Fir. Showing everyone that the best Christmas trees are grown right here in Ashtabula County!

The Ashtabula County Fair is right around the corner and the Fair Board, Jr. Fair Board, and the Extension Office are all preparing for another great year. As always the fair will feature livestock exhibitions, horse races, fair games, rides, delicious fair food, and much more. If you enjoy gardening like me, I encourage you to enter some of your vegetables! If you are a painter or a photographer, enter some of your art! If you make can goods, bake cookies or pies, or grow flowers, all can be entered in competition at the fair. There are no age limits, and you can enter as many categories as you like. The deadline to enter for the floral competition is August 8th, 6:00 p.m. & August 12th, 10 a.m. with all other competitions deadlines being August 2nd.

The Ashtabula County Master Gardeners will again be in charge of the floral show and building. They will be available each day of fair to answer any floral or horticultural questions you may have! Stop by and see the hundreds of flower entries at the octagon building at the back of the fair grounds.

If you want to help support local youth and put some meat in your freezer while doing it, I encourage you to attend the Market Livestock Sale on Saturday August 13th, starting at 11:00 am in the grandstand. For buyers, admission is free, and you must register at MAC Arena prior to sale to get a bidder's number. Not only will you be purchasing top quality meat, but you will also be supporting the future of agriculture here in the county. I will be around the fair all week and working at the Holstein Club Milkshake Booth on Friday 11:00 AM to 2:00 PM so come say hello. I hope to see you at the fair!

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Do you have a home, yard, or garden question? Need expert advice but don't know where to turn? **Call the Ashtabula County Master Gardener Hotline at 440-576-9008** The hotline is open from May 2nd until October 31st, Every Monday, 9 AM to Noon and every Thursday, 1 PM to 4 PM. Call during listed hours to speak with a volunteer or call anytime and leave a message. The hotline can also be reached via email at Ashtabula.1@osu.edu and in person by stopping in at the Ashtabula OSU Extension Office – 39 Wall St. Jefferson, Ohio 44047.

For your home horticultural question call the Master Gardener Hotline today!

Andrew Holden is an Agriculture & Natural Resources Extension Educator for Ohio State University Extension. Andrew can be reached at 440-576-9008 or Holden.155@osu.edu

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information, visit cfaesdiversity.osu.edu

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We're Hiring! SNAP-Ed Program Assistant

- Use standardized curriculum materials to teach food, nutrition, food resource management, and other related topics to low-income adults, youth, and/or families as part of the Education branch of the Supplemental Nutrition Assistance Program (SNAP-Ed) in a variety of community settings.
- Use standardized evaluation instruments to assess program participants' knowledge, skills, attitudes, and behaviors to determine educational needs and impacts.
- Refer program participants to appropriate assistance programs.
- Recruit adults for the program by collaborating with community agencies and programs, as well as using other tools of promotion.
- Recruit youth for the program by collaborating with schools serving 50% or more free and reduced meals.
- Support target-audience and nutrition-related policy, systems, and environmental (PSE) interventions in the community.
- Participate in staff development and training opportunities to enhance knowledge of nutrition topics and successful methods for nutrition education.
- Regular travel will be required throughout the county from the county Extension office and occasionally to the state office and other regional locations around the state.
- This is a grant-funded position which is renewable by the sponsor agency and by OSU Extension.

Location: Position is located in Jefferson, Ohio with additional duties in neighboring Geauga county.

Salary: \$16.00 Hourly

Hours: Regular, Full-time

Posting #: R54121

Deadline to Apply: 8/5/2022

Interested applicants should apply at: <https://hr.osu.edu/careers>. Click on "Non-Ohio State Employees" and search for R54121.



**OHIO
SNAP-ED**

Better food choices for healthier Buckeyes

This institution is an equal opportunity provider. This material was funded by USDA's Supplemental Nutrition Program – SNAP



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Ohio Certified Volunteer Naturalist Training

Hosted by:

**Ohio State University Extension Offices of
Ashtabula and Trumbull Counties**

What is OCVN:

The OCVN program is a research-based education program of The Ohio State University offered in partnership with several host locations, such as, park districts and OSU Extension offices. The OCVN program emphasizes hands-on natural resource and environmental education coupled with volunteer service. Participants in the OCVN program receive 40 hours of combined classroom and field instruction. Upon completing the OCVN course, participants provide 40 hours of volunteer service at any Ohio organization with a compatible program mission.



The 40-hour instruction course will be offered as a combination of online and in person programming. The course will include readings, discussion forums, quizzes, optional homework, and live Zoom sessions. There are two field days at the Camp Whitewood and Trumbull County Extension Office/ Mosquito Lake State Park.

OCVN Mission:

To promote awareness and community stewardship of Ohio's natural resources through science-based education and community service.

Training starts September 27th and ends November 13th with zoom trainings each Tuesday from 6:00 – 9:00 PM and two all day Saturday trainings on October 8th & 29th

Spaces in the 2022 course will be filled on a first-come, first-served basis. Course size is limited so please contact us as soon as possible if interested.

You must be at least 18 years old to apply.

Total Cost: \$250

<https://go.osu.edu/ocvn22>



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