

Auglaize County OSU Extension Weekly Agriculture Newsletter – August 12, 2020

Scouting and Latest Information



Corn



Soybean

Hello!! Good afternoon! I pray you are well! If you have not heard I am resigning from my job. My last day at the office will be until noon on September 9, 2020. With getting married, my wife and I have decided to move to North Dakota to start our lives together. I have accepted a position as the Agriculture Extension Agent for Griggs County, North Dakota. I will start my new position on September 14, 2020. I want to take this opportunity to say thank you to all of you for your assistance and support while I have been at this current position for 5.5 years. I pray that all goes well for you into the future and if you have any questions, feel free to contact me. Have a great day and again thank you.

Every Tuesday from 8:30 to 9:30 AM we will be hosting a virtual meeting via Zoom that can also act as a simple conference call for those of you not able to get online to view live. The meeting will be set up to discuss key, timely information for your operation and to open the floor for questions and sharing of information. You may propose topics for the next meeting at anytime during the week by e-mailing or calling me. **Next week will be our Ag Breakfast / Farm Talk with an unidentified speaker yet.** Please join us every Tuesday for Auglaize County Farm Talk.

If you are a buyer or seller of hay or straw, let me know and I can keep a list to share with others.
List of individuals searching for hay or straw: None

List of individuals selling hay or straw:

1. About 200 3' X 3', 2019 wheat straw bales for sale.
2. At least 500 small square wheat straw bales from 2019 for sale.

Call the OSU Extension office at 419-739-6580 or my cell phone at 701-541-0043 or e-mail me at stachler.1@osu.edu to get the contact information.

Joke: Why was the cucumber mad??

Agricultural Fun Fact: One bushel of wheat contains about 1 million kernels of wheat!!

Rain fell 2 days somewhere in the county in the last week. Much of the county is dry again, especially the Waynesfield area! Rainfall on Tuesday, August 4th ranged from 0" at 9 locations in the NW and North Central part of the county to 0.3" near Feikert and St. Rt. 385 roads. Rainfall Monday ranged from 0.06" near Wapakoneta-Fisher and Townline Lima roads to 0.9" near Sommers and Minster-Ft. Recovery roads. Rainfall for the week ranged from 0.09" near Wapakoneta-Fisher and Townline Lima roads to 0.92" near Sommers and Minster-Ft. Recovery roads. Rainfall for the week averaged 0.4", 2.59" less than last reported. There is at least a 40% chance of rain Friday, Saturday, and Sunday, otherwise it will be dry.

The average high temperature now is still 83 degrees F. Temperatures were above normal for 2 days since the last newsletter and below normal for 5 days since the last newsletter. The range in high for the week was 72 to 86 degrees F. The average high temperature for the week was 78.9 degrees F, which is 3.8 degrees F cooler than last week and 4.1 degrees F **cooler than** the current normal high temperature of 83 degrees F. Temperatures will mostly be above normal for the next 7 days.

Wheat

Start making preparations to seed wheat this fall.

Alfalfa



3rd cutting alfalfa



3rd cutting alfalfa in bloom

Second cutting alfalfa is all harvested and much of 3rd cutting has been made. Yields have surprisingly been near normal for third cutting alfalfa. The leafhopper population has picked up a bit this past week. Continue to scout fields and spray if needed! Again threshold just over one leafhopper per inch of stem growth.

Corn



Corn

Average ear of corn

Corn development slowed a bit this past week! Because of the moisture stress and some early yield checks, I decreased the corn quality slightly. I rated the corn crop at 2% excellent, 25% good, 72% fair, and 1% poor. Last week's crop quality was 3% excellent, 27% good, 69% fair, 1% poor, and 0% very poor. The range in corn is from VT (tasseling) to R3 (milk) stage. Almost all corn (95%) is at the R3 (milk) stage. Grey leaf spot is still at very low levels as of Sunday and there is no Northern corn leaf blight. I took yield checks out of two fields on Sunday. The yields were 127 and 190 bushels per acre. I will do more yield checks this Sunday.

Soybean



Most developed soybean (R6)



Early R4 soybean



Still seeing potassium deficiency

The soybean crop is looking good to excellent. Moisture stress was visible on Sunday!. I left the crop quality the same so current condition of soybean in the county is 29% excellent, 52% good, 16% fair, 3% poor, and 0% very poor. The range in soybean stage is from R1 (begin flower) stage to R6 (Full seed – full-sized seed in pod on one of 4 upper nodes of plant) stage, but most are at R4 (Full pod - at least one pod 3/4” long on one of 4 upper nodes of plant). It is still very difficult to find frog-eye leaf spot in fields! The most frequent disease is still downy mildew. I have found some fields with a fair amount of Septoria. Most fields have at least 5% defoliation with some up to 10% defoliation from grasshopper and Japanese beetles, but this is not enough defoliation to warrant insecticide use. I see no spider mites at this time. Start watching for stink bugs! I found one in a field!

Weeds



Good amount of velvetleaf in a field

We are nearing the end of herbicide applications in soybean! Be sure to pull escaped waterhemp plants from fields to reduce seed production. You will be greatly rewarded if you hand-weed fields having waterhemp! Remember you only need to remove the female plants, but if you are not sure of how to identify the female plants, then pull and remove all plants. The need to remove the pulled plants from the field is because many plants are starting to flower.

Insects/Other

I have no insect counts as I'm no longer trapping for insects. Insects are still active, but very few populations warrant an insecticide application.

With the cancellation of dicamba products applied to dicamba soybean, I did not update the label information below. Not sure of label changes for Tavium (<http://www.syngenta-us.com/herbicides/tavium-tank-mixes>) this week. With the end of Engenia, FeXapan, and XtendiMAX, I deleted the tank-mix information, but since Tavium is still legal, I kept that. There are 47 herbicides, 101 DRA's, 316 adjuvants, 96 nutritionals, 16, insecticides, 7 fungicides, 8 other products, and 41 nozzles approved for use with Tavium.

Enlist One and **Enlist Duo** for Enlist soybeans and corn also have approved tank-mix partners and nozzles like the dicamba products. **There were no changes to the labels this week that I had time to find out!** The list of approved tank-mixtures for both of these products has been updated. Please follow these labels online

at <https://www.enlist.com/en/herbicides.html> . There are 48 nozzles, 153 herbicides (10 new ones), 20 glyphosate formulations (1 new one), 10 glufosinate formulations (1 new one), 11 Dry AMS products, 85 insecticides, 30 fungicides, 21 plant growth regulators, 645 other products, and 315 fertilizers / nutrients labeled with Enlist One. There are 23 nozzles, 89 herbicides (15 new ones), 51 insecticides (3 new ones), 17 fungicides, 22 plant growth regulators, 8 Dry AMS products, 512 Other products, and 168 fertilizers / nutrients labeled with Enlist Duo.

Other information about the Enlist products include the following:

1. Enlist Duo rate is 4.75 pts/A which only has 1.0 lbs ae/A of glyphosate which is really not enough. You would think you could just add more glyphosate, but you CAN NOT add more glyphosate with Enlist Duo.
2. Enlist One can be mixed with ANY rate of glyphosate, glufosinate and 192 other herbicides.
3. Never use Enlist One alone on Enlist crops and always apply Enlist One at 2 pts/A
4. You CAN NOT add glufosinate with Enlist Duo!
5. When adding a postemergence grass soybean herbicide like quizalofop, clethodim, sethoxydim, or fluazifop to Enlist One add 33% higher rate of these products to reduce the antagonism with grasses OR apply the postemergence grass herbicides 7 days after the Enlist One.

Upcoming Meetings

1. **Auglaize County Farm Talk.** On Tuesdays from 8:30 to 9:30 AM we will have a virtual meeting. The link to get onto the meeting is as follows:
<https://osu.zoom.us/j/264219671?pwd=K0VDSTZF0VldGJWeUZaeVA3QUVrQT09> A password may be needed. If so it is Farmtalk (first letter in caps, then lower case for rest with no spaces). If you just want to call in the phone number and meeting code are as follows: 646-876-9923 264219671# with password of 07099073.
2. **The OSU Farm Office is Open.** The OSU Extension Farm Office Team will open our offices online and offer biweekly live office hours on Thursdays from **9:00-10:30 am** EST. The next session is next week. Each office session is limited to 500 people and if you miss our office hours, we'll post

recordings on farmoffice.osu.edu the following day. **Register** at <https://go.osu.edu/farmofficelive>.

3. All OSU Extension face to face meetings have been cancelled or postponed.
4. The Farm Science Review has been cancelled for 2020 due to COVID-19, however it will proceed virtually, but the process has not been determined yet!

Answer to joke: Because it was in a pickle!!

Getting Ready to Plant Wheat - What Variety Should I Plant?



It is time to start planning for planting wheat. To help you make decisions about what variety or varieties to plant, the 2020 Ohio Wheat Performance Test data is now available.

There were five test locations planted around the state, Darke, Pickaway, Union, Wayne, and Wood Counties. However, Union County was not included in the results due to too much variability. Wheat was planted on the fly free date at Darke and Pickaway Counties. Wayne and Wood County sites were planted 9 and 21 days after the fly free date. Wheat entered dormancy in good to excellent condition at all locations.

Row spacing is 7.5 inches. Minimum tillage was performed at each site.

The site closest to us and most similar in soil type is Darke County. The Darke County site has a Crosby soil type.

The highest yielding variety for 2020 at Darke County was AgriMAXX 498 at 103.9 bushels per acre and 57.7 pound per bushel test weight. The following varieties were statistically similar to AgriMAXX 498: AgriMAXX 473; Strike Genetics 503; AgriPro SY 576; Rupp RS 902; Strike Genetics 203; Wellman W 304; AgriMAXX 496; Rupp RS 961; Wellman W 310; and AgriPro SY 547. When deciding what varieties to plant it is a good idea to look at data for multiple years and locations to see how consistent a variety can be. The highest yielding variety from 2019 to 2020 was Seed Consultants SC 13S26™ at 92.2 bushels per acres with a test weight of 56.6 pounds per bushel. The varieties within 1 bushel per acre of Seed Consultants SC 13S26™ in order from highest to lowest include: AgriMAXX 496; Rupp RS 902; and Dyna-Gro 9002. The highest yielding variety from 2018 to 2020 was Seed Consultants SC 13S26. The varieties within one bushel per acre of Seed Consultants SC 13S26 for 2018 to 2020 were Rupp RS 902 and Wellman W 304.

Since it is important to look at multiple locations, let's look at the all locations data. The highest yielding variety at all locations for 2020 was KWS 291 at 101.3 bushels per acre with a test weight of 57.9 pounds per bushel. Thirty-three varieties were statistically similar to KWS 291 with Wellman W 304, Rupp RS 902, AgriPro SY 547, AgriMAXX 473, and AgriMAXX 498 being within one bushel per acre of KWS 291. The highest yielding variety at all locations for 2019 and 2020 was Seed Consultants SC 13S26 at 95.9 bushels per acre and 56.6 pounds per acre test weight. The next highest yielding varieties at all locations for 2019 to 2020 within one bushel per acre included: Wellman W 304; AGI 217B; Rupp RS 902; and AgriPro SY 547. The highest yielding variety at all locations for 2018 to 2020 was Seed Consultants SC 13S26 at 94.9 bushels per acre and a test weight of 56.5 pounds per bushel. Other varieties within one bushel per acre were AGI 217B and Wellman W 304.

Yield is a very large component in choosing a variety, but disease resistance is may be more important for wheat than other crops. Resistance to Fusarium Head blight is probably the most important trait to have, but resistance to powdery mildew, glume blotch and leaf blotch are important as well. Forty-three varieties are moderately resistant to Fusarium head blight and one, Albert Lea LCS 3334 being resistant! Two varieties are resistant to powdery mildew and nine moderately resistant to powdery mildew. Fourteen varieties have resistance to glume blotch. One variety has resistance to leaf blotch.

For further information about the 2020 Wheat Performance Test visit the following website:

<https://www.oardc.ohio-state.edu/wheattrials/> .

C.O.R.N. Newsletter

<https://agcrops.osu.edu/newsletter/corn-newsletter>

Updated Tri-State Fertilizer Recommendations Available

The authors of the Tri-State Fertilizer Recommendations for Corn, Soybeans, Wheat, and Alfalfa include Steve Culman, Anthony Fulford, James Camberato, Kurt Steinke, Laura Lindsey, Greg LaBarge, Harold Watters, Ed Lentz, Ryan Haden, Eric Richer, Bethany Herman, Nicole Hoekstra, Peter Thomison, Rich Minyo, Anne Dorrance, Jeff Rutan, Darryl Warncke, Cassandra Brown

The Tri-State Fertilizer Recommendations for Corn, Soybeans, Wheat, and Alfalfa was first published in 1995 and has served as a cornerstone in nutrient management in field crops for Indiana, Michigan, and Ohio. As crop production practices in this region changed over the past 25 years, many questioned if these nutrient management guidelines were still relevant today.

In 2014, work began to revise and update the nutrient management recommendations in corn, soybeans and wheat. Over 300 on-farm trials were conducted across 34 Ohio counties, including trials evaluating crop response to N, P, K, and S. It was a tremendous collective effort with the ultimate goal of providing objective information to farmers to manage nutrients as judiciously and profitably as possible.

The recommendations have been comprehensively revised and updated. A summarized version can be found online: go.osu.edu/fert-recs

There is menu at the bottom of this webpage that will allow users to view the topics of interest, including an executive summary that provides the highlights. The full version of the recommendations is being finalized at OSU Extension Publishing and a downloadable pdf and printed bulletin will be available soon.

Author(s):

[Steve Culman](#)

Late-Season Waterhemp - The Goal is Stopping Seed



Flowering Waterhemp

In our windshield scouting of soybeans this year we have seen a lot of weedfree fields. This makes sense given the shift toward Xtend, LibertyLink, LLGT27, and Enlist soybeans over the past several years, which provides us with effective POST options for our major weed problems – common and giant ragweed, marehail, and waterhemp (now if we could just get rid of the baggage some of these traits carry). We are however getting many reports of late-season waterhemp as it grows through the soybeans and becomes evident. This also makes sense given that statewide we are in the midst of an overall increase in waterhemp, and continue to move up the curve in terms of number of fields infested and the size of the infestations. Prevention and management of waterhemp and Palmer amaranth has been one of the primary goals of our state and county educational programs for half a decade or more. And one of the most important points about waterhemp and Palmer that we try to get across is their capacity for prodigious seed production – 500,000 to upwards of a million seeds per plant – and what this means for their ability to rapidly ramp up populations, infest equipment, etc.

The bottom line here is that it's essential to scout fields this time of the season and kill or remove plants that could produce seed. Allowing even a few plants to produce seed means an increased population for the next year or two at least. Running harvest equipment through planst loaded with seed is a primary mechanism of spread from field to field. Plants can survive into late season because they emerged after herbicide treatments, or survived an improperly timed and less than effective POST treatment. These plants should produce less seed than plants allowed to grow full season without interruption. It's also possible given waterhemp's propensity to become resistant to any herbicide used against it, that the survivors are resistant to whatever POST herbicide was used. Resistance to glyphosate, ALS, and PPO inhibitors is widespread in Ohio, and we expect the development of resistance to dicamba, 2,4-D, and glufosinate will occur given their intensity of use (which is why the current period of clean fields makes us nervous). The only way to ensure that resistance does not develop is to follow herbicide programs with later season scouting and removal of plants to prevent seed.

The most effective way to prevent seed is to cut off waterhemp or Palmer plants just below soil line, remove plants from the field, and burn or compost or bury deep enough. Plants left in the field can reroot at multiple nodes and regrow. Another option to at least reduce seed production – use a weedeater to cut the tops of plants off. Once plants develop mature seed (hard brown or black), most effective strategy may be to cut off and bag up seedheads and remove from field. The value of herbicides this late in the season is questionable. PPO herbicides are the only legal option at this point, with following restrictions (DBH = days before harvest; from Table 18 of Weed Control Guide): Cobra/Phoenix – 45 DBH; fomesafen – 45 DBH; Ultra Blazer – 45 DBH. Carryover and injury to corn from late-season applications of fomesafen is possible. None of these herbicides are likely to kill large waterhemp plants although they may reduce suppress smaller plants enough to reduce seed. Keep in mind that PPO inhibitors would be completely ineffective in waterhemp populations that are resistant to PPO inhibitors.

We suggest taking some time from now into September to scout fields for waterhemp and Palmer amaranth with the goal of preventing seed. If you are lucky enough to have avoided waterhemp, use scouting to maintain this status and prevent new infestations. If you are currently managing waterhemp infestations, consider late-season removal of plants as an important component of that management plan, and critical to maintaining POST herbicide utility. Scouting should include local roadsides and waterways, and areas of fields subject to flooding or near migratory bird or deer paths. Since combines are an effective dispersal mechanism, check the part of fields first harvested where combines are started up. If you need to harvest fields with waterhemp or Palmer amaranth, harvest these last followed by thorough cleaning of combines, grain carts, semis, etc. These efforts can go a long way toward avoiding future headaches and increased production costs.

Author(s):
[Mark Loux](#)

Poultry Litter Application



Loading Chicken Litter

Stockpiles of poultry litter can be seen in farm fields across Ohio. While common each year in wheat stubble fields, there also many stockpiles in soybean fields. Poultry litter is an excellent source of plant nutrients and readily available in most parts of the state.

Poultry litter can be from laying hens, pullets, broilers, finished turkeys, turkey hens, or poults. Most of the poultry litter in the state comes from laying hens and turkey finishers. Typical nutrient ranges in poultry litter can be from 45 to 57 pounds of nitrogen, 45 to 70 pounds of P₂O₅, and 45 to 55 pounds of K₂O per ton. The typical application rate is two tons per acre which fits nicely with the P₂O₅ needs of a two-year corn/soybean rotation.

Like all manure sources, the moisture content of the poultry litter greatly influences the amount of nutrients per ton. Handlers of poultry litter have manure analysis sheets indicating the nutrient content. They are also required to inspect stockpiles and address any insect issues that may develop from the time stockpiles are created to the time the manure is field applied.

Poultry manure for permitted operations needs to follow the Natural Resource Conservation Service 590 standards when being stockpiled prior to spreading. These include:

- 500 feet from neighbors
- 300 feet from streams, grassed waterways, wells, ponds, or tile inlets
- not on occasionally or frequently flooded soils
- stored for not more than eight months
- not located on slopes greater than six percent
- located on soils that are deep to bedrock (greater than 40 inches to bedrock)

Farmers who want to apply the poultry litter delivered to their fields are required by Ohio law to have a fertilizer license, Certified Livestock Manager certificate, or be a Certified Crop Advisor. Check with your local Soil and Water Conservation District for proper setbacks from steams, ditches and wells when applying poultry litter.

Author(s):

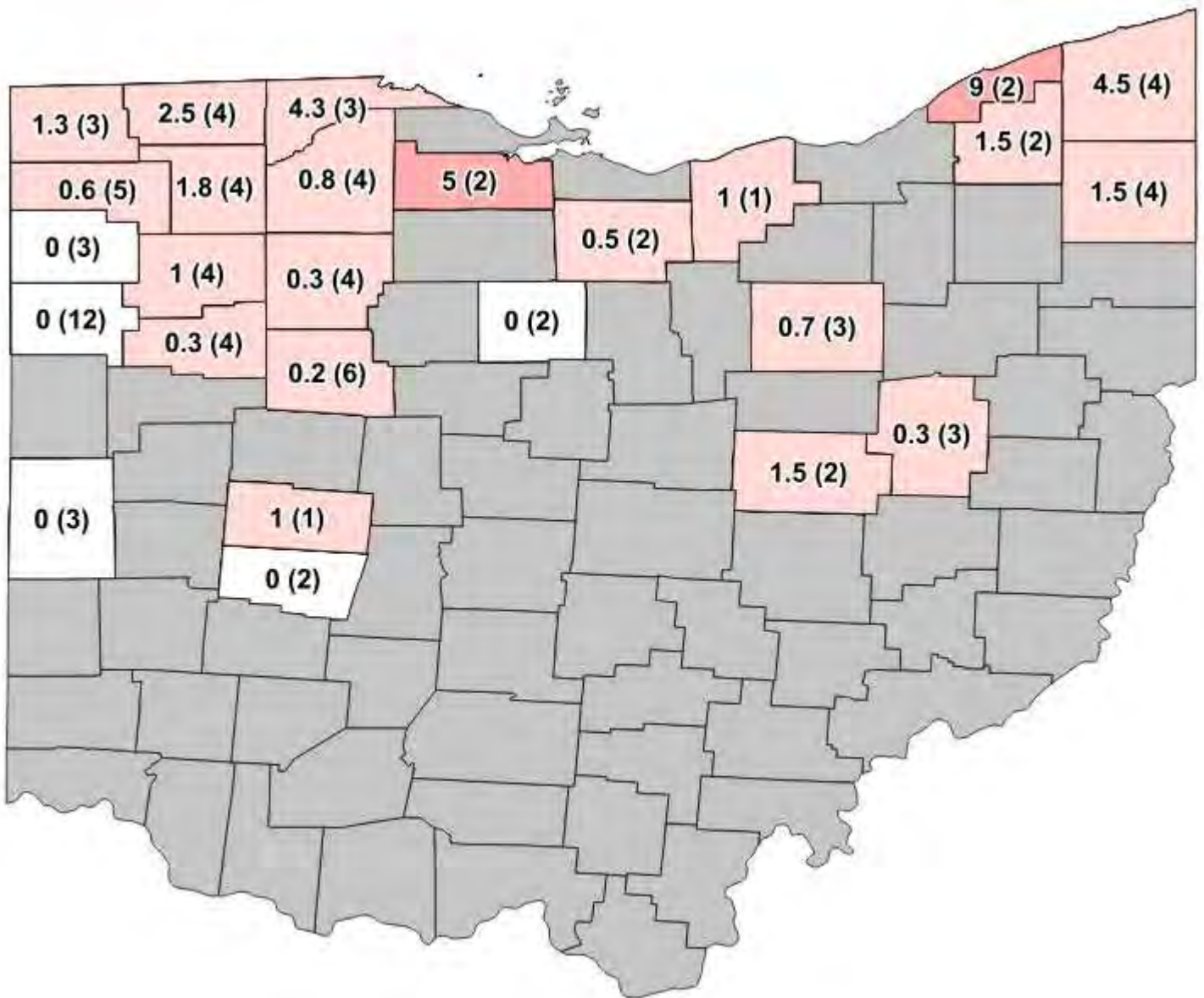
Glen Arnold, CCA

WBC Numbers Continue to Decrease



Western Bean Cutworm moth

Western bean cutworm (WBC) trap counts for the week of August 3 – August 9 continue to decrease in the majority of monitoring counties. Trap counts indicated only one county, Lake, had an average of 7 or more moths, suggesting scouting is necessary. Overall, a total of 26 counties monitored 89 traps, resulting in 111 WBC adults (a statewide average of 1.2 moths per trap) (Figure 1). Monitoring for WBC moths will continue in many counties until the end of August.



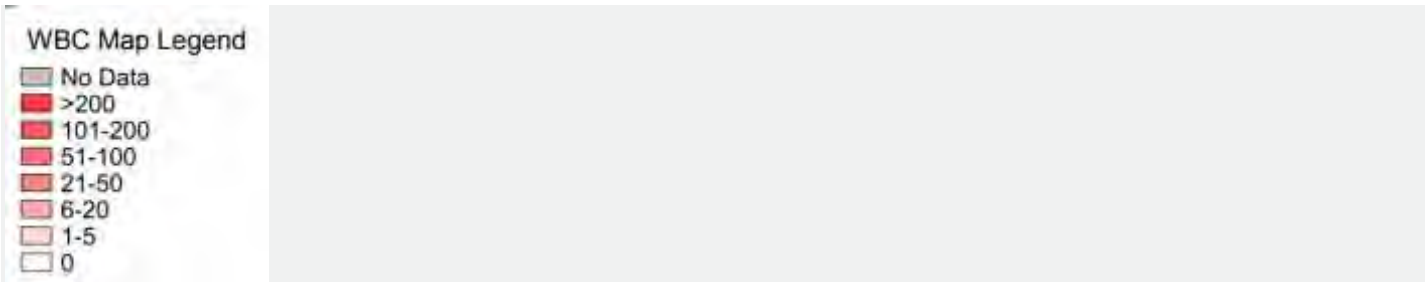


Figure 1. Average Western bean cutworm adult per trap followed by total number of traps in the county in parentheses for week ending August 9, 2020.

Author(s):

Amy Raudenbush, Mark Badertscher, Jordan Beck, Frank Becker, Lee Beers, CCA, Bruce Clevenger, CCA, Sam Custer, Tom Dehaas, Craig Everett, Allen Gahler, Jason Hartschuh, CCA, Andrew Holden, James Jasinski, Stephanie Karhoff, Alan Leininger, Ed Lentz, CCA, Rory Lewandowski, Cecilia Lokai-Minnich, Matthew Lorentz, David Marrison, Sarah Noggle, Les Ober, CCA, Eric Richer, CCA, Garth Ruff, Beth Scheckelhoff, Clint Schroeder, Mike Sunderman, Curtis Young, CCA, Chris Zoller, Andy Michel, Kelley Tilmon

Other Articles

Facing Farm Financial Stress: Assessing the Bankruptcy Option

By: Peggy Kirk Hall, Associate Professor, Agricultural & Resource Law Wednesday, August 12th, 2020



Farming has always been an unpredictable way to make a living, and that unpredictability can lead to financial stress. Whether caused by down markets, weather impacts, rising input costs, high land values, poor decision making, medical issues or a host of other unforeseen circumstances, serious financial stress can be a reality a farmer must face.

Filing bankruptcy can be one way to address farm financial stress. But because of its consequences, bankruptcy is not a decision to take lightly and might not be the best option. Our newest resources target farmers who are dealing with financial challenges and considering bankruptcy. [***Facing Farm Financial Stress: An Overview of the Bankruptcy Option***](#) offers a seven part series of law bulletins and infographics focused on bankruptcy issues for farmers. The series covers:

- *Assessing the bankruptcy option.* Steps to take and considerations to make when dealing with financial stress, including alternatives to bankruptcy and farmer to farmer advice from families that have been through the bankruptcy process.
- *An overview of bankruptcy law.* We explain and visualize the legal process, people, institutions and legal terms involved in bankruptcy with a focus on Chapter 12, the law reserved for qualifying farmers and fishermen.
- *Thriving after a farm bankruptcy.* Ideas for setting a course to attain farm financial stability and reestablish relationships after filing bankruptcy, including farmer to farmer advice from those who've survived bankruptcy.

Our team of authors, which included myself along with OSU's David Marrison, Hannah Scott and Chris Zoller--created the resources with support from the **USDA's National Agriculture Library** and in partnership with the **National Agricultural Law Center (NALC)**. The series is available on our Farm Office site [here](#) or on NALC's site [here](#).

Decline in plant breeding programs could impact food security

Date: August 7, 2020

Source: Washington State University

Public plant breeding programs are declining across the United States.

A team of scientists led by Kate Evans, a Washington State University horticulture professor who leads WSU's pome fruit (apples and pears) breeding program, found that public plant breeding programs are seeing decreases in funding and personnel.

The study was published in the journal *Crop Science*.

Evans and her colleagues conducted a survey of 278 plant breeding programs around the country. Public programs are chiefly federal programs, like those run by the U.S. Department of Agriculture, or based at public research universities.

In the surveys, respondents estimated a 21.4% decline in full time employee (FTE) time for program leaders over the past five years and an estimated 17.7% decline in FTE time for technical support personnel.

The researchers also found that retirement looms for a significant number of plant breeding program leaders. Over a third of the responding programs reported having leaders over the age of 60 and 62% are led by people over 50.

This decline is concerning because plant breeding has a direct impact on food security, Evans said.

"Plant breeding plays a fundamental part of the long-term food security of this country," Evans said. "The tremendous increases in food production over the past century are largely due to plant breeding, and the world's population is only increasing."

The focus on food security has received more attention in the last few months, as the COVID-19 pandemic has moved around the world, she said.

"Plant breeding is a long-term, sustainable way to address concerns over having enough food and keeping our food sources secure," said Evans, who is based at WSU's Tree Fruit Research & Extension Center in Wenatchee.

Plant breeding takes on many forms, from breeding disease tolerance, increasing production, introducing new delicious varieties, or improving drought tolerance.

"It could be a disease, a pest, climate change, any number of things," Evans said. "We do not live in a stable environment, and there are many different ways to deal with that."

Plant pathogens, like bacteria, and pests are always adapting, so varieties of crops that were bred to naturally fight off a disease start to lose their defenses. Plant breeding programs help growers stay ahead of those potentially harmful adaptations.

Another impact of declining breeding programs is losing those with a local focus.

"In Washington, for example, our cereal breeding programs are very focused on local production," Evans said. "They breed wheat that grows very well for eastern Washington."

Another example is the citrus industry. Citrus greening disease has been devastating to growers, particularly in Florida, when trees produce bitter, green, and misshapen fruit. Plant breeding programs are working hard to develop varieties that naturally repel the pest that causes the problems.

One reason that plant breeding programs are declining is expense. It takes many years to develop a new variety of a crop, Evans said. And funding a program for that long requires significant investment.

"We can't rely on grants because those are often only for a few years," she said. "You can't do anything in plant breeding in three years, it requires long-term sustained funding to get a program going."

Washington State University. "Decline in plant breeding programs could impact food security." ScienceDaily. ScienceDaily, 7 August 2020. <www.sciencedaily.com/releases/2020/08/200807153653.htm>.

Prepared by Jeff Stachler

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