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Auglaize County OSU Extension Weekly Agriculture Newsletter – December 18, 2019

Scouting and Latest Information

Snow in corn staks

Hello!! Good afternoon! I pray you are well. Hey, we have some white stuff again!

I will NOT be preparing a newsletter for Christmas week. It will return the following week.

If you are a buyer or seller of hay, let me know and I can keep a list to share with others. Call the OSU Extension office at 419-739-6580.

OSU Extension is conducting a survey. Please take some time to read the information below and please participate in the survey! If we get enough of you to complete this survey from Auglaize County we will get a county report, so please help out!! A hard copy will be attached with the e-mail if you need that format:

Attached is the 2019 Yield Survey that will be shared in this week's CORN newsletter. There are two ways to complete the survey: 1. a Qualtrics survey that can be accessed at go.osu.edu/yield19, or 2. completing the attached paper form and returning to Elizabeth Hawkins (by email: Hawkins.301@osu.edu or US mail: 111 S. Nelson Ave, Suite 2, Wilmington, OH 45177).

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We would like to gather information for as many fields as possible, in as many counties as possible to maximize what we can learn from 2019 and the planting delays caused by the excessive rainfall. The results will be summarized and shared with you. The survey needs to be completed by December 31, 2019 to ensure we will have the information available for use at your local meetings this winter. If you have any questions, please don't hesitate to ask.

Joke: **I asked a farmer if it's easy to milk a cow**

Rain and snow fell three days this past week. Rainfall for Saturday, December 14th, ranged from 0.08" at about 3 miles west of St. Marys and near Bloody Bridge to 0.15" at Kettlersville and Santa Fe – New Knoxville Roads. Total liquid precipitation on Monday ranged from 0.03" at Wapakoneta – Fisher and Townline – Lima roads to 0.2" at about 1 mile northeast of Fryburg. Total liquid precipitation on Tuesday ranged from 0.03" at Townline-Lima and Wapakoneta – Fisher Roads to 0.2" at about 1 mile northeast of Fryburg. Total liquid precipitation for the week ranged from 0.28" near Bloody Bridge to 0.5" at about 1 mile northeast of Fryburg. The average liquid precipitation for the week was 0.37". Snowfall on Monday ranged from 1.5" at about 3 miles west of St. Marys to 2.5" at my house south of St. Marys. Snowfall on Tuesday ranged from 1.5" at my house south of St. Marys to 2.6" at Wapakoneta – Fisher and Townline – Lima Roads. The average snowfall for the week was 4.2". The average high temperature should now be around 37 degrees F, a 3-degree drop from last week. Temperatures were mostly below normal.

Wheat – I rated the wheat the same as last week which was 7% excellent, 29% good, 69% fair, and 0% for poor and very poor.

Alfalfa – Nothing to report.

Corn – All corn is at the R6 (black layer) stage. We now have about 99% of the corn harvested in the county. There are still a couple of fields left.

Soybean – All are harvested that I am aware of.

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Weeds – Nothing to report

Insects - No report.

There WERE changes to the Engenia label. There were NO changes to the XtendiMAX, FeXapan, and Tavium labels. The Engenia label still has the most approved products compared to XtendiMAX and FeXapan. No new herbicides were added to the XtendiMAX label this past week, which totals 152 herbicides. No new adjuvant was added the XtendiMAX label, now totaling 344. No new nozzles were added to the XtendiMAX label, which totals 37. No new Drift Reducing Adjuvant (DRA's) was added to the XtendiMAX label this week, making a total of 58 DRA's. No new nutritional products were removed from the XtendiMAX label which totals 203. No new products were added to the Insecticides, Fungicides, Plant Growth Regulator and Other group on the XtendiMAX label which totals 61. Fourteen new adjuvants were added to the Engenia label, which now totals 498. Two new herbicides were added to the Engenia label, which brings the total herbicide count to 146. No new products were added to the Other category (growth regulators, and fungicides) on the Engenia label, which totals 29. No new insecticide were added to the label which currently has 28 products. Three new Drift Reducing Adjuvants (DRA's) were added to the Engenia label, which totals 108. No new nozzles were added to the Engenia label, which totals 29. No new nutritional products were added to the Engenia label which totals 177 products. No new product was added to the pH Modifier group of the Engenia label which totals 16 products. The FeXapan label has many of same the products and nozzles as the XtendiMAX label, but NOT all are the same, so check the FeXapan label carefully. There are 120 herbicides, 49 DRA's, 312 adjuvants, 151 nutritionals, 44 insecticides, fungicides, and others, and 26 nozzles that have been approved for the FeXapan label. There are 13 herbicides, 66 DRA's, 185 adjuvants, and 41 nozzles approved for use with Tavium.

Upcoming Meetings

Get signed up for these important meetings!!

1. **Ag Outlook.** This meeting will be held **January 8, 2020** from 1:00 PM to 4:30 PM and a second session from 5:45 PM to 9:15 PM at the Wapakoneta Eagles (25 East Auglaize St., Wapakoneta). Topics discussed will be Farm Bill Nuts and Bolts, Farm Bill, Farming Outlook, and Grain Market Outlook. Register before 12-31. A meal will be provided for free between the two sessions. See attached flyer for more information.

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2. **Small Grains Management Workshop.** This meeting will be held **January 9, 2020** from 9:00 AM to 2:30 PM in the downstairs room of the Auglaize County Administration Building (209 S. Blackhoof St.). This will be the best small grains meeting you have ever been to so get signed up. See the flyer for additional information.

3. **Plant and Soil Nutrient Management.** This meeting will be held **January 22, 2020**. The exact starting time has not been determined but it will be an all day meeting. The location will be the Eagles in Wapakoneta. This meeting will talk about all aspects of nutrient management.

Answer to joke: He said, "Sure. Any jerk can do it."

What are Soybean Cyst Nematodes?

Soybean cyst nematode is a microscopic roundworm that feeds on soybean roots. It is about 1/64th inch in length. The scientific name for soybean cyst nematode is *Heterodera glycines*.
Soybean cyst nematode was first identified in Ohio in 1987. Soybean cyst nematode has been confirmed in 72 of Ohio's 88 counties, but is likely in every Ohio County today. In recent work about 7% of Ohio soybean fields have greater than 5,000 eggs per 100 to 200 cc of soil, which is considered a high population with significant yield loss occurring.

There are three major life stages of soybean cyst nematodes: egg, juvenile, and adult. Soybean cyst nematode can reproduce rapidly because it can complete its life cycle in Ohio in 24 to 30 days. Therefore there can be three to five generations within a growing season, causing a quick increase in the population. The juveniles hatch from eggs and search for soybean roots or roots of other host plants. Juveniles travel only short distances in the soil before entering a root. If it finds no root the soybean cyst nematode juvenile dies from lack of food. Water can aid in the dispersion of the juvenile nematodes. After penetrating the root, the nematode feeds on cells in the vascular tissue. The feeding site is established by the secretion of digestive enzymes that stimulates the development of enlarged cells.

The cyst stage is the body of the dead female nematode filled with eggs. The cyst is highly resistant to many adverse conditions and serves to protect the developing eggs and young nematode larvae for many years. One cyst holds about 250 to 500 eggs, although the exact number is variable. Before the female dies it will release

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some eggs outside its body which will hatch anywhere from days to months later, but will not survive the winter. The majority of the eggs are found in the cyst, which may live for many years. Usually, 50 percent of the eggs produced by a female hatch each year, thus the population may drop significantly after several years if there are no susceptible host plants present.

The soybean cyst nematode females can be found clinging to the sides of the soybean roots throughout the summer. The female can be identified by it's swollen body full of eggs looking like a small white pearl or lemon on the root. To look for the females, carefully dig the plants and gently shake off the soil or wash the soil off the roots, looking for bright white to yellow females. The females will be about the size of a sand grain.

Symptoms of soybean cyst nematode in the field are highly variable. Symptom development depends upon population density of nematode, presence of other pathogens, soil nutrient status, field history of planting soybean cyst nematode resistant varieties, and rainfall. Circular to oval patches of dying, stunted, and yellowed plants are symptoms of a severe population. Moderate symptoms include patches of stunted plants and lower than desired yields. Symptoms of soybean cyst nematode can be confused with nutrient deficiencies, injury from herbicides, soil compaction, and other diseases.

There are 16 races of soybean cyst nematodes. Knowing the race is very important to helping manage the population. It is also important to know the density of the eggs and cysts in a field to assist in management. To gather this information, soil samples need to be collected. It is best to collect soil samples in the fall after soybean harvest to know what the maximum population is, but samples can be taken at any time of the year. Collect 15 to 20, 6 to 8 inch soil cores for every 10 to 20 acres. Composite the cores for each 10 to 20 acre area and place 1 pint of soil into a soil bag or plastic zippered bag. Store the sample in a cool, dark place until shipped.

Soybean cyst nematode is a serious problem. Soybean yield loss can occur when there are only 40 to 200 eggs per 100 to 200 cc of soil, which is considered to be a trace population. Sixteen to 18 bushels per acre yield loss can occur with susceptible soybean varieties with an egg count of 2000 to 5000 eggs per 100 to 200 cc of soil.

The best strategy to reduce soybean cyst nematode populations is to plant non-host crops, such as alfalfa, wheat, and corn. The more years these crops are grown the greater the reduction of soybean cyst nematode populations.

Despite the rotation of crops, weeds can be host to the soybean cyst nematode, so keeping certain weeds out of a field for as much of the growing season as possible is important. The list of weeds acting as hosts to soybean cyst nematode include common and mouseear chickweed, common mullein, henbit, pokeweed,

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common purslane, wild mustard, purple deadnettle, field pennycress and shepherd's-purse. Purple deadnettle is the best alternative host.

Another management strategy is to plant resistant soybean varieties. However, the resistance is starting to break down with the most common source of PI88788. Please switch to soybean varieties having Hartwig (PI437654) or Peking/CystX source of genetics.

Other management strategies include maximizing plant growth through fertility and having soil pH below 7.1, optimize planting and harvesting dates for maturity group, optimize drainage, manage sudden death and brown stem rot, and prevent the introduction of soybean cyst nematode through soil movement.

C.O.R.N. Newsletter

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

Choosing Varieties & Hybrids for 2020 - Check Disease Resistance Ratings

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The seed suppliers want your early orders and the catalogues are all spread out on the tables. Now to begin the process of choosing the best variety or hybrid for **your fields** that can hold up to the all of the challenges facing soybeans and corn in Ohio. Our recommendation is to first focus on the disease and insect scores. Every company uses a different scale based on 1 to 10 – but for some companies 1 is best and for others, 10 best – so first read the fine print. In addition, some companies use a distributive disease rating scale, using words like "excellent disease package," "good disease package," or "poor." While this scale is unclear as to which specific disease the hybrid is most resistant to, it can still be used as a guide for hybrid/variety selection. For instance, a hybrid listed as having an "excellent disease package" should be less susceptible to the primary diseases than one listed as having a "good disease package." Next step – what key diseases and insect pests do we need to focus on.

Soybeans: the four diseases that impact Ohio farmers the most are: Phytophthora (on poorly drained soils), Frogeye leaf spot (continuous soybean fields from central Ohio-south), Sclerotinia (fields with poor air drainage – Northeast and Eastern regions), and SCN (more than 50% of fields now have detectable populations of SCN – with more than 7% in severely high populations).

Phytophthora root and stem rot. This pathogen, *Phytophthora sojae*, can be found in most fields in Ohio but causes disease when those fields are saturated with rains for 24 hours or more. Under these conditions highly susceptible varieties can have 100% yield loss. The heavy clays of Northwest Ohio are particularly prone to this disease. During 2019, we detected Phytophthora stem rot over a broader geographic region due to the amount of rain. In the seed catalogues, there are two ratings for resistance, 1) a listing of a *Rps* gene and 2) a quantitative resistance score on a 1 to 9 scale. The *Rps* genes were the first line of defense and have been used since the 1960s (Rps1a was the first). Based on recent check-off funded research, we can confirm that most fields in Ohio have populations of *P. sojae*, where these genes are no longer 100% effective. They might work in one spot in the field, but not 2 feet away. The next line of soybean defense is the quantitative resistance, which is many, many genes working together to limit the growth of the pathogen. Much like a teenager that is immune to all of the badgering to do their chores – it isn't bothered at all by the presence of the pathogen. This quantitative resistance has been called many things in the seed catalogues: partial resistance, field resistance, and tolerance. Our best varieties have scores of 3 on a scale of 1 to 10 where 1 is very high resistance (really an effective *Rps* gene) and 10 is dead. Focus on the best score rating for that seed company.

Frogeye leaf spot. This has now become a recurring problem for soybeans in southern up to Central Ohio. High levels of inoculum (lots of leaf spots) in the fall that can overwinter in Ohio, so this is especially important for those fields that are continuous soybean. The first thing is if you had Frogeye at the end of the season in 2019, please do not plant the same variety back in that field. I do that to create the best opportunity for our research plots to develop disease for fungicide studies, and since I have that covered, you don't need to do that. Any frogeye in fields in 2019 (conditions were not as favorable as previous years) means it's time to choose something with better resistance scores. A resistant cultivar will not develop frogeye, so no yield hit and no added input costs for fungicides if conditions are favorable for disease to develop.

Sclerotinia stem rot. The infections for this disease occur during flowering under conditions of cool temperatures (70s F) and high humidity. High plant population and poor air drainage can also favor this

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disease. Resistance to this pathogen, *Sclerotinia sclerotiorum*, is also quantitative (many genes) and some are associated with limiting pathogen growth but also with longer internodes to help with disease escape. The structure, sclerotia, looks like a mouse or rat dropping, and can survive for long periods of time if they are buried. This is one soybean disease where no-till can favor the degradation of the sclerotia.

Soybean Cyst Nematode. This nematode continues to expand in the number of fields it can be detected in (> 50%) in Ohio. More importantly, we are also identifying fields with super high numbers of SCN (7% of those sampled during 2018 & 2019)! It is very important to continue to purchase varieties with SCN resistance. This is a success story. Planting soybean varieties with resistance has kept this nematode at very low levels for over 20 years. Based on earlier reports from the '90s, it had the potential to become a major problem, but then the companies all worked hard to provide new varieties with SCN resistance. Now, as you would expect, similar to Phytophthora, where the same resistance has been deployed for 20 years, we do have a number of fields in Ohio where the SCN populations are adapting to PI 88788 or Peking or both sources of resistance. Interestingly, not like the *Rps* genes of Phytophthora where they work or they don't, SCN adapts slowly by increasing the number of successful feeding sites on the roots of resistant plants. So early in the process, we don't see the decline in SCN numbers when soil tests are collected and yields begin to drop. Later in the process, increases in SCN occur overall in the field and yield loss is similar to that of a susceptible variety. We are in the midst of wrapping up this statewide survey as part of the SCN coalition (https://www.thescncoalition.com/) to assess where SCN is in Ohio and if it has adapted. Summary results from this for Ohio will be coming in April.

Gray leaf spot (GLS) of corn. This is still the most frequently occurring foliar disease of corn in Ohio and neighboring states, but thanks to genetic resistance, the impact of this disease is low in most years. On rare occasions when susceptible hybrids are planted under warm, humid conditions in river-bottom fields, yield loss can exceed 50%. Resistance in the case of GLS does not mean "no disease," it means less disease or low disease severity. Compared to susceptible hybrids, fewer and smaller lesions develop on resistant hybrids, leading to slower disease spread from the lower to the upper leaves. Some companies rank their hybrids for resistance to GLS on a 1 to 9 scale, with 1 being most resistant and 9 being most susceptible. However, some companies do the opposite, with hybrids with higher scores being more resistant than those with low scores.

Northern Corn Leaf Blight (NCLB). Like GLS, this is one of the most common leaf diseases of corn in Ohio, and over the last few years, NCLB has been more severe than GLS. Two types of resistance are available to protect against races of the fungus that cause NCLB: partial resistance (non-race specific), which protects against all known races of the fungus, and race-specific resistant, which is controlled by single Ht genes and, as the name suggests, protects against specific races of the pathogen. Partial resistance is expressed as a reduction in the number and size of the lesions, and the amount of spores produced in the lesions, as well as an increase in the length of time it takes for new lesions to develop and a new crop of spores to be produced. Race-specific resistance is controlled by one or more Ht genes, such as Ht1, Ht2, Ht3, and HtN. Resistance conferred by Ht1, Ht2, and Ht3 is expressed as small chlorotic lesions with limited sporulation, whereas resistance conferred by HtN results in fewer, smaller lesions, similar to what is observed with partial resistance. For years, races 0 and 1 were the most predominant races of the NCLB fungus in Ohio. If we assume that these races are still the most prevalent, the fact that

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we continue to see susceptible reactions on multiple hybrids at multiple locations across the state suggests that we are either planting hybrids without Ht genes (susceptible to races 0 and 1) or with Ht1 only (susceptible to race 1). Avoid planting hybrids without Ht resistance. Click here for more on NCLB resiatance: https://agcrops.osu.edu/newsletter/corn-newsletter/select-hybrids-resistance-northern-corn-leaf-blight-how-does-it-work
For diseases like ear rots for which there is very little information in seed catalogs on disease resistance, use your own experience as a guide for making hybrid selection. For instance, if the hybrid you planted this or last season (or five seasons ago) ended up with high levels of Gibberella ear rot and vomitoxin, it means that the hybrid is susceptible. Avoid planting it in that same field next year. Also, since resistance may change over time, your experience with a hybrid may be just as good as or even better than the information in some seed catalogs when it comes to disease susceptibility.

Author(s):
Anne Dorrance, Pierce Paul

What's in my Corn? Insect Management Traits in Corn Hybrids

Corn hybrid selection is about more than maturity and agronomic properties. Many corn hybrids also come with a package of Bt traits for the management of various insects below-ground (for example corn rootworm) and above-ground (for example, corn borer) pests. These traits can add substantially to the cost of the seed so it's worth evaluating which ones you really need. In fields without a consistent history of insect pest pressure Bt traits are an added cost that likely won't pay for itself. Sometimes you only need protection against soil pests, sometimes against above-ground pests, and sometimes neither. But how do you know what Bt traits the various hybrids contain and what insects they are meant to manage? This can be confusing or hard to figure out.

There is an excellent resource available to help with this – the Handy Bt Trait Table. This invaluable reference is written by Dr. Chris DiFonzo at Michigan State University and is updated every year. In one place it lists what types of Bt are present in which corn hybrids, what insects they are targeted for, and for which insects resistance to a given Bt protein has been documented (leading to a loss of efficacy). You can

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find the Handy Bt Trait Table linked on the OSU Ag Insects website. Check it out to learn which Bt traits are in which hybrids so you can make the most informed and economical decisions for your farm.

https://aginsects.osu.edu/bt-corn-trait-table

Author(s):
Kelley Tilmon, Andy Michel

Winter Application of Manure - Remember Setbacks

Some Ohio livestock producers will be looking to apply manure to farm fields frozen enough to support application equipment. Permitted farms are not allowed to apply manure in the winter unless it is an extreme emergency, and then movement to other suitable storage is usually the selected alternative. Thus, this article is for non-permitted livestock operations.

In the Grand Lake St Marys watershed, the winter manure application ban from December 15th to March 1st is still in effect. Thus, no manure application would normally be allowed from now until March 1st. In the Western Lake Erie Basin (WLEB) watershed, the surface application of manure to frozen and snow-covered soils require there to be a growing crop in the field. This could be a pasture, alfalfa, clover, ryegrass or a rape crop. There must be enough vegetation visible to provide a 90% cover of residue and growing vegetation. Radishes and oats would not qualify as a growing crop as both are typically winter

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killed. Manure can be applied to fields without growing crops if the manure is incorporated at the time of application or incorporated within 24 hours of application.

The rainfall rule for surface manure application in the WLEB is a weather forecast saying "not greater than a 50% chance of a half inch or more of rain in the next 24 hours." It is advisable to print out the weather forecast when you start applying manure so you have the needed proof if an unexpected storm drenches the area. Weather.gov is the most commonly accepted website for this forecast. On this web page, you can type in the zip code for a seven-day forecast. On the lower right-hand side of the seven-day forecast page, is an hourly weather forecast that will provide a 48-hour weather forecast graph.

Winter manure application rates should follow the NRCS 590 standards, which limit solid manure application amounts to five tons per acre and liquid manure application amounts to 5,000 gallons per acre. These have 200 foot setback distances from ditches, streams and creeks and must be on slopes of less than 6% and less than 20 acre areas in size without additional buffers. These setbacks exist because as snow melts, it can carry manure to streams and ditches. These 200 foot setback distances apply to both liquid and solid manure application. In recent years there have been several fines levied against livestock producers applying manure too close to ditches and streams.

For liquid manure applicators, examine fields for tile blowouts, monitor tile outlets before, during, and after manure application and any other situations that might allow manure to reach surface waters.

Author(s):
Glen Arnold, CCA

Late Planted Corn Performance Test Results – How Did They Turn Out?

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Performance data for the Ohio Corn Performance Test (OCPT) site at Upper Sandusky planted June 22 was not presented in the *2019 Ohio Corn Performance Test* bulletin because of a late harvest (Nov. 26). However, results for this test are now available online at: http://oardc.osu.edu/corntrials/ Although a June 22 planting date is very atypical, many corn growers in northwest Ohio were planting well into June this year. There was considerable uncertainty as to what to expect from such a late planting, much less whether a grain crop was achievable.

The Upper Sandusky results provide insight on corn performance associated with late June planting dates. Grain yields in the early and full season tests averaged 226 and 222 bu/A, respectively. The results demonstrate that corn planted in late June can produce high yields under favorable growing conditions. The Upper Sandusky test was characterized by limited weather stress, timely rains during grain fill, and negligible pest injury. Despite the late November harvest, stalk lodging averaged less than 2%. However, these exceptional yields were associated with high grain moisture levels and low test weights. Harvest grain moisture averaged 30.1% and 33.7% for the early and full season tests, respectively and test weight averages for the early and late tests ranged from 49.9 to 50.5 lbs./A.

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"Ultra-early" Corn Performance

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Confronted with June planting dates, some Ohio corn growers planted hybrids with relative maturity ratings earlier (less than 102 days) than those of our commonly grown maturities. At the Hoytville OCPT test site, we evaluated 27 ultra-early hybrids with maturities ranging from 93-101 days. Yields averaged 190 bu./A and ranged from 163 to 219 bu/A; harvest grain moisture averaged 19.3 and ranged from 18.3-20.3%; and test weight averaged 56.6 and ranged from 53.3-58.5. In contrast, a 107 day commonly grown maturity hybrid included as a check yielded 220 bu/A with a 22.9 % harvest moisture and test weight of 51 lb/A. The Hoytville test site planted June 12 and harvested November 18, benefited from favorable growing conditions with timely rains. Pest injury was negligible. Several hybrids were subject to severe animal damage and not considered in this performance overview.

Author(s):
Rich Minyo, Allen Geyer, Peter Thomison

Final Reminder: 2019 Yield Survey

By: CFAES Ag Crisis Taskforce

Normal planting dates for Ohio range from mid-April to the end of May. This season was quite different when planting for both crops was delayed until late May and stretched into June and even July across many parts of Ohio. We found ourselves grasping for any information we could find including 1) how much of an effect late planting dates would have on yield, and 2) what, if anything, we should change in management of these late planted crops. The historical planting date information we did have was somewhat helpful, but we did not have any data on what could happen when planting is delayed into the second half of June nor July.

While it may be tempting to write off this year as a fluke from which there are no real lessons to be learned, there is a growing body of data from climatologists that suggest that this is a beginning of a trend. What we have is a giant, unplanned and involuntary trial being conducted by Ohio corn and soybean farmers this year. This experiment can help us understand the ramifications of how planting date and hybrid/variety maturity affected overall yields, as well as pinpoint where further research is needed to fill the gaps in knowledge for future management decisions. To accomplish these goals, we plan to collect a small amount of data on a large number of fields, which can be used to provide baseline information to share how to manage these crops under similar weather events in the future.

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To do this, we have a simple request: share your information with us. We ask only for the following information from as many fields as possible:

1. County where the field is located
2. Crop: corn or soybean
3. Planting date
4. Harvest date
5. Maturity rating (corn relative maturity (days RM); soybean maturity group) of crop planted
6. Yield
7. Harvest moisture
8. Test weight

Information on weather or management can be added, but this is optional. The information can be submitted to us in one of two ways: 1. Follow this link, go.osu.edu/yield19, to an online form with which you can report one field at a time or 2. Print or download a paper form at go.osu.edu/yield19form, fill it out for as many fields as possible, and send a copy via email to Elizabeth Hawkins (Hawkins.301@osu.edu). We will collect this data from farmers until December 31, 2019.
Additional notes:

1. Don't forget to include early or normal planting dates too. This will help us capture the breadth of the crop in 2019. We want data across a wide range of planting dates, not just late plantings

2. If a field has drowned-out spots where there's no yield, either don't use the field average or estimate yield from yield monitor data from parts of the field where stands were representative.

Author(s):
Elizabeth Hawkins

2019 Northwest Ohio Corn Silage Test

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In 2019, 68 corn silage hybrids representing 15 commercial brands were evaluated in a joint trial with Michigan State University (MSU). The Ohio location is combined with Michigan's two southern (Zone 1) silage locations. The trials were divided into two maturity groups designated early and full season on the basis of the relative maturity (RM) submitted by the companies with results listed in separate tables. The Ohio test site was located in our Northwest Region at Hoytville (Wood County). The two MSU sites are located in Branch and Lenawee counties, which are on the Ohio/Michigan state line. (Due to erratic final stands, Lenawee results will not be published.) Test results from the two 2019 locations are combined for the trail average. The plots were planted with 4-row Almaco SeedPro 360 plot planters and maintained by each respective state utilizing standard agronomic production practices. The center two rows were harvested using MSU's New Holland T6.175 tractor which powered a two-row Champion C1200 Kemper forage harvester with a rear mounted Haldrup M-63 Weigh system.

Silage tests were harvested uniformly as close to half milk line as possible. Near- Infrared Spectroscopy (NIRS) analysis was performed by MSU using their current procedures. Silage results present the percent dry matter of each hybrid plus green weight and dry weight as tons per acre. Other data presented include percent stand, the percentage of in vitro digestible dry matter, acid detergent fiber, neutral detergent fiber, neutral detergent fiber digestibility, crude protein and starch. Milk production in pounds per ton and pounds per acre were estimated using MILK2006 (UW-Madison Dairy Science Department).

A complete summary of the Ohio results are available online at: http://www.oardc.ohio-state.edu/silagetrials. More information on procedures and additional 2018 MSU silage test data can be viewed online at: http://www.varietytrials.msu.edu/corn. For more information on Ohio State crop variety testing, visit: http://u.osu.edu/perf.

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Managing Stored Grain – 2019 Considerations

The Ohio State University Extension will host a webinar featuring Dr. Ken Hellevang, North Dakota State University, to help farmers understand potential concerns with grain storage. This webinar will cover special areas of concern with high moisture grain and excessive fines. The webinar is scheduled for Friday, December 20, 2019 at 3:00 PM. It is free to participate but registration is required. Please register at go.osu.edu/StoredGrain.

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Managing Stored Grain – 2019 Considerations

FRIDAY, DECEMBER 20TH, 2019
3:00 - 4:00 PM

2019 conditions led to variable grain quality causing many potential storage issues. Dr. Ken Hellevang, North Dakota State University, will join us for a webinar to share information on managing stored grain including high moisture and damaged grain.

Register: go.osu.edu/StoredGrain

Cost: Free

For more information, contact: Elizabeth Hawkins, hawkins.301@osu.edu

go.osu.edu/agcrisis

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COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

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Corn Storage Flyer

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Other Articles

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