Another great Ashtabula County Fair week is in the books. It was great seeing many of you there last week. A reminder tonight is our Cover Crops Workshop in Trumbull County at the Barnett farm in North Bloomfield. Remember to bring a lawn chair. Our beef cutting demonstration for this coming Saturday at Smokin T’s is already sold out. Thanks for your great response. Have a great week.

David Marrison, AG Educator

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NE Ohio Agronomic Crops Report- August 14, 2015
By Les Ober CCA

This is the time of year that producers need to be scouting their fields. Soybeans are clearly in the cross hairs of some very destructive insects. Last week I found several area of Soybean Aphid infestation in central Geauga County Fields. Population numbers were small and nowhere near economic threshold (250 per plant at flowering through R-4 full pod), but they have arrived and should be watched closely. It is amazing how fast a population can move from a very few aphids to problematic levels. One very important thing to consider is the soybean stage of growth. Late planted beans are at the highest level of risk because aphid populations have more time to expand and the plants are still in the early stages of reproduction. Early planted soybeans in the late R-5 and R-6 growth stage can withstand more pressure. In fact soybeans going from R 5, beginning seed and R-6, full seed, can withstand populations of up to 1000 aphids per plant without an impact on yield. Aphids have not been a real problem over the last several years because they have arrived late and economic threshold levels were not reached until after the plants were mature. The next couple of weeks will be critical.

Another soybean pest, the Two Spotted Spider Mite has just shown up. I did not think, because of all of the early rain we had that this pest would be a problem. However, we have been very dry since the middle of July. TSSM loves dry weather. Scout the edges of you soybean fields. The first thing you will notice is a yellowish bronzing of the leaves. As the infestation increases the leaves will have a sandblasted appearance turning red and then dead. The pest is
microscopic and is best seen with some form of magnification. Remember these are mites not insects they are members of the arachnid family and have the characteristic 8 legs. The bodies are white to reddish with two distinctive black spots. They are usually found on the underside of the leaf. Shake the leaves over white paper and watch for moving specks. They usually show up on the field boarders so one pass around the outside of field with a product like Lorsban or dimethoate may control the pest.

This has been a tough year and it is easy to get complacent and say I have put enough into a crop that may not yield up to expectation. However, yields can get worse if you do not control these late season pests. Scouting is always worth the effort to learn more about your crops giving you the peace of mind that you did all you could do.

**Crop Progress Report**

**Corn:** has reached R-3 to R-4. The crop across the region rates between good and very poor depending on the location. Biggest problem is N deficiency with many plants firing right up to the ear leaf.

**Soybeans:** are faring better but will need additional rain to fill the pods out. Crop rated fair to excellent and everywhere in between.

**Oats:** The oat crop is the one bright spot with most growers reporting excellent yields. Now if only the prices were that good.

**Forages:** Bring on the second cutting because the first cutting was a mess, for the most part. We will need a lot more rain to make that happen. Right now August looks like a good month to plant a new forage crop. The field conditions are favorable to work the soil into condition and put on fertilizer and lime. A few timely rains and forage producers will be all set to replace some of that beat up forage ground.

**Don’t Press the Panic Button on Soybean Aphid Yet**

By Andy Michel

As predicted, we have begun to see soybean aphids move into soybean fields over the past few weeks. Coincidentally, this is the 3rd year in a row that we have seen aphids move in relatively late in the growing season. Hopefully, most of our soybean are starting to mature and reaching the R6 stage, but there are some that still have a way to go due to delayed spring maturity.

By now we all should be familiar with the soybean aphid threshold of a rising population of 250 aphids per plant. But keep in mind that this number is the action threshold, it is not the economic injury level (EIL) at which soybean aphid causes yield loss. Yield loss occurs when aphids reach 500-600 aphids per plant. If you soybeans are at R4 and below, then continue to use the 250 threshold. However, the threshold does not apply to beans at R6 and later. The thresholds at these growth stages increase to over 1,000 aphids per plant. So if you are in an R5 stage, and have 250 aphids per plant should you treat? Here is some information to help you guide your decision:

1) Check again in 3-4 days, are the aphids increasing (remember a RISING population of 250 per plant)? At many sites, natural enemies like lady beetles are keeping aphids down or maintaining them at the 250 level.
2) At this point in the summer, you can expect aphids to double in size in about a week. Do you think you will reach R6 stage before aphids get to 500 per plant? If so, then it probably won’t pay to treat. Bottom line is predicting when you can get to R6 when thresholds go up.

3) Do you have to use ground equipment? Then expect a 2-3 bushel loss on yield which might impact whether or not you see a return on the application cost.

Predicting when soybean will reach the R6 stage and frequent scouting will provide the best information on whether or not it pays to treat.

For more information about the soybean aphid, scouting procedures and thresholds click on the following link: Soybean Aphid OSU Extension fact sheet

**Estimating Soybean Yield**

By Laura Lindsey

To estimate yield, four soybean yield components need to be considered: plants per acre, pods per plant, seeds per pod, and seeds per pound (seed size). A printable worksheet to estimate soybean yield can be found by [http://corn.osu.edu/newsletters/2015/2015-26/Estimating%20Soybean%20Yield%202013%20form-%20Lindsey.pdf](http://corn.osu.edu/newsletters/2015/2015-26/Estimating%20Soybean%20Yield%202013%20form-%20Lindsey.pdf) It is difficult to accurately predict soybean yield because of plant variability and fall weather conditions can influence seed size. Estimates become more accurate as the growing season progresses.

**To estimate soybean yield:**

1. To calculate plants per acre, count the number of pod-bearing plants in 1/1,000th of an acre. In 7.5-inch row spacing, count the number of plants in 69 feet, 8 inches of row. In 15-inch row spacing, count the number of plants in 34 feet, 10 inches of row. In 30-inch row spacing, count the number of plants in 17 feet, 5 inches of row.

2. To estimate pods per plant, count the number of pods (containing one or more seeds) from 10 plants selected at random. Divide the total number of pods by 10 to get the average number of pods per plant.

3. To estimate the number of seeds per pod, count the number of seeds from 10 pods selected at random. Generally, the number of seeds per pod is 2.5, but this number can be less in stressful environmental conditions. Divide the total number of seeds by 10 to get the average number of seeds per pod.

4. To estimate the number of seeds per pound (seed size), assume that there are 3,000 seeds per pound. If the soybean plants experienced stress, seed size will be reduced, and it will take more seeds to make one pound. Use a seed size estimate of 3,500 seeds per pound if smaller seeds are expected because of late season stress.

Using the above estimates, the following formula is used to estimate soybean yield in bushels per acre: bushels per acre = [(plants/1,000th acre) x (pods/plant) x (seeds/pod)] ÷ [(seeds/pound) x 0.06]
**Weather Outlook and El Nino Update**

By Jim Noel

Not much change from previous weeks thinking. Temperatures will average normal to slightly above normal for the rest of August while rainfall will be close to normal or slightly below. Nothing extreme is forecast. See the 8-14 temperature and precipitation outlook maps at the following links:

http://www.cpc.ncep.noaa.gov/products/predictions/814day/814temp.new.gif
http://www.cpc.ncep.noaa.gov/products/predictions/814day/814prcp.new.gif

Going into autumn and harvest season, climate models continue to suggest a turn to wetter conditions again across the corn and soybean belt including Ohio which would make harvest season a bit tougher. The good news for harvest season is frost and freeze dates could be delayed.

El Nino is well underway in the eastern Pacific Ocean of the equatorial region. This El Nino is shaping up to be a strong one from the second half of 2015 into 2016. The effect will likely extend from winter wheat season into planting season and possibly beyond for 2016. This El Nino of 2015 into 2016 will likely be similar to the years of 1997/98, 1982/83, 1972/73 and 1957/58.

See historical links to El Nino temperatures and precipitation from NOAA National Weather Service Climate Prediction Center here with climate trends adjusted here:

http://www.cpc.ncep.noaa.gov/products/precip/CWlink/ENSO/composites/EC_ENP_index.shtml

**2015 Ohio Wheat Performance Test Available Online**

Laura Lindsey, & Rich Minyo

A pdf of the 2015 Ohio Wheat Performance Test can be found at the Soybean and Small Grain website at:

http://stepupsoy.osu.edu/node/35. A sortable version of the Ohio Wheat Performance Test can be found at: http://www.oardc.ohio-state.edu/wheattrials/regions.asp?year=2015#single. Test results are for 78 soft red winter wheat varieties grown at five Ohio locations (Wood, Crawford, Wayne, Darke, and Pickaway County). Variety selection should be based on disease resistance, average yield across test sites and years, winter hardiness, test weight, and standability.

Overall, grain test weight averaged 56.3 lb/bu (compared to an average test weight of 58.8 lb/bu in 2014). Grain yield averaged between 77 and 92 bu/acre at the five locations in the test. Lower than normal test weight and grain yield may be attributed to wet weather in June and July and delayed harvest.

**USDA Adds More Eligible Commodities for Farm Storage Facility Loans**

U.S. Department of Agriculture (USDA) Farm Service Agency (FSA) Administrator Val Dolcini today announced that the Farm Storage Facility Loan (FSFL) program, which provides low-interest financing to producers to build or upgrade storage facilities, will now include dairy, flowers and meats as eligible commodities.

“For 15 years, this program has provided affordable financing, allowing American farmers and ranchers to construct or expand storage on the farm,” said Dolcini. “By adding eligible commodities, these low-interest loans will help even more family farmers and ranchers to expand on-site storage.”

The new commodities eligible for facility loans include floriculture, hops, rye, milk, cheese, butter, yogurt, meat and poultry (unprocessed), eggs, and aquaculture (excluding systems that maintain live animals through uptake and discharge of water). Commodities already eligible for the loans include corn, grain sorghum, rice, soybeans, oats,
peanuts, wheat, barley, minor oilseeds harvested as whole grain, pulse crops (lentils, chickpeas and dry peas), hay, honey, renewable biomass, and fruits, nuts and vegetables for cold storage facilities.

Since 2000, more than 35,000 facility loans have been approved totaling $2 billion in rural investments. On average, about 1,600 new loans are made each year. Producers do not need to demonstrate the lack of commercial credit availability to apply. The loans are designed to assist a diverse range of farming operations, including small and mid-sized businesses, new farmers, operations supplying local food and farmers markets, non-traditional farm products, and underserved producers. To learn more about the FSA Farm Storage Facility Loan, visit www.fsa.usda.gov/pricesupport or contact a local FSA county office. To find your local FSA county office, visit http://offices.usda.gov.

**Great Bulbs of Garlic Workshop to be held on September 10, 2015**
Join the Ashtabula County Master Gardeners as they host an educational seminar titled “Great Bulbs of Garlic” on Thursday, September 10, 2015 from 6:30 to 8:30 p.m. at the Ashtabula County Extension office located at 39 Wall Street in Jefferson, Ohio.

This program will offer the opportunity for home gardeners to learn how to plant, maintain, and harvest garlic. Learn the common pests and diseases of garlic and their solutions. Participants will also learn fun facts about garlic through the ages and highlights of cooking with garlic. This class is geared to the home gardener.

The registration fee for this workshop is $3 per person and registration is limited to the first 30 persons. Light refreshments will be served. More information about this program can be obtained by calling the Ashtabula County Extension office at 440-576-9008. A program flyer can be found at: http://go.osu.edu/ne-events

**2015 Statewide Sheep Shearing School – September 18-19, 2015**
The Statewide Sheep Shearing School will be held Friday and Saturday, Sept. 18-19, 2015 from 9 a.m.-4 p.m. at the Dave Cable Farm, 10491 Canal Rd., Hebron, OH 43025. No Class size limit and the cost is $40 per student which must be returned with registration form by Friday, Sept. 11, 2015. As part of the registration fee, a box lunch and drinks will be provided each day of the school.

If you decide to register after that date, or if you have further questions, please call Roger A. High at (614)246-8299 or by email at rhigh@ofbf.org. Make checks payable to Ohio Sheep Improvement Association. Return bottom portion of the registration form with payment by Friday, Sept. 11, 2015 to Ohio Sheep Improvement Association – Sheep Shearing School, c/o Roger A. High, 280 N. High St. P.O. Box 182383, Columbus, OH 43218.

**Flies, Beetles and Cattle**
By Steve Boyles, OSU Beef Extension Specialist

**Horn Fly:** The horn fly is the major insect pest on pasture cattle and is less often found around farmsteads. They deposit their eggs in fresh manure, usually within minutes after the manure is dropped. Horn fly eggs hatch and reach the adult stage in about 10 to 14 days. They pass the winter in the pupal stage with the first of the season’s adults emerging and moving to the livestock about mid-May. Horn flies have blood sucking mouthparts and usually take several blood meals per day. These flies roost on cattle.

**Face Fly:** The face fly looks like the house fly and has sponging-type mouthparts. It prefers to be in the sun and seldom enters barns or shady areas. Face flies breed in fresh manure They overwinter as adults and are usually the first flies seen in the spring. Face flies feed on the mucous membranes of the eyes, nose and mouth of and in addition play a role in the transmission of pink eye.
**House Fly:** Around barnyards, house fly populations can reach very high levels during the summer months. House flies breed in rotted plant or animal material and manure. Barnyard sanitation in controlling these flies. The winter is passed in the pupal stage in barnyard litter. House flies, like the face fly, have sponging-type mouthparts and feed on livestock secretions and moisture in the manure.

**Stable Fly:** The stable fly (sometimes called the biting house fly) is similar in appearance and habitat preference to the house fly but has piercing-sucking mouthparts. Like the house fly, the stable fly breeds in decaying organic matter of many types. The stable fly, like the housefly and horn fly passes the winter in the pupal stage.

**Insect Control:** When using any insecticide, workers must always read and follow label directions. Effective control of livestock insects can be obtained through timely treatment with approved insecticides used in conjunction with thorough barnyard sanitation. High fly population may require a combination of control methods.

**Backrubbers, Oilers, and Dust Bags:** Backrubbers and oilers will provide some reduction in face fly numbers but are generally not as good for controlling face flies as they are for horn flies. Models that force the animal to get the toxicant around the head area are generally best for reducing face fly numbers. Backrubbers offer cattle the incentive to satisfy their instinct to scratch and are most effective if placed in pasture areas where livestock loaf. Reductions in face fly and horn fly populations can be achieved by the effective use of dust bags.

**Spraying:** Routinely spraying cattle with insecticide sprays can be effective for horn fly control, but requires labor. Most insecticides available in spray formulations last only 1 to 2 weeks, and cattle need to be handled and brought into a confined area to be sprayed.

**Ear Tags:** There are numerous trade names and designs currently marketed containing pyrethroid, organophosphate, and avermectin insecticides. Depending on the product, one or two tags are installed per animal. Ear tags containing pyrethroids provide excellent control of horn flies and face flies. However, horn flies have developed some resistance to these pyrethroids. The organophosphate tags available will control pyrethroid-resistant horn flies. Ear tags release insecticide most efficiently during the first two months after application. Remove the tags at end of the fly season.

**Pour-on:** Pour-on is applied from the head down to the tail. Where pyrethroid-resistant horn flies are present, a non-pyrethroid-resistant pour-on should be used.

**Oral Methods:** Boluses prevent immature fly larvae from becoming adults. Another means of oral treatment is the use of larvicide feed additives in free-choice in mineral.

**Biological control:** Dung beetles can be of benefit by aiding in the destruction of manure piles. Managing pasture flies and promoting dung beetles is a delicate balancing act. If there has been the extensive use of certain dewormers and systemic insecticides, the residues from them may kill dung beetles. If you find holes in the surface of the manure piles, or piles appear to be shredded, you probably have dung beetles. To confirm their presence, open the piles look for adult beetles.

**Northeast Ohio Cover Crops Field Night Scheduled for August 18**
OSU Extension is pleased to be offering a “Northeast Ohio Cover Crops Field Night” on Tuesday, August 18, 2015 at Caroma Farms located at 9499 State Route 46 in North Bloomfield, Ohio from 6:00 to 8:00 p.m. We are very appreciative of the Barnett family for hosting this field night. The family is one of the early adopters of the use of cover crops and this will be a great opportunity for area farmers to learn more about cover crops.
This field night will feature Jim Hoorman from OSU Extension. Jim is a nationally known speaker in cover crops and will be on hand to help producers learn how to successfully use cover crops. This will be a great opportunity for crop producers who are looking to use cover crops to improve soil fertility, improve soil structure and increase the capacity of soil drainage.

During the field night Jim will discuss the basics of how cover crops increase soil organic matter and improve nutrient recycling and how roots change soil structure and improve drainage. Jim will share details of the major cover crops and how they are used in crop rotations such as corn and soybean. Each cover crop has a niche or special purpose. Legume cover crops are typically used to produce homegrown nitrogen. Grass cover crops are used to increase soil organic matter, recycle excess nutrients, and reduce soil compaction. Brassica crops are grown to loosen the soil, recycle nutrients, and suppress weeds. Some other cover crops are grown to suppress insects, disease, weeds, or attract beneficial insects.

Jim will also share how cover crops may be used to supplement forages for dairy, beef, and sheep. Attendees will also learn more about the economics of using and purchasing cover crops. Discussion will also be held on how cover crops may increase soil productivity and decrease chemical input costs through reduced herbicides, less fungicides, and improved nutrient efficiency.

The use of cover crops should be strongly considered in 2015 as we have thousands of acres which were not planted due to the extremely wet weather. Now is a great chance to plant a cover crop, or two, to help improve and protect our heavy soils here in Ashtabula County.

This workshop is free and open to the public. Light refreshments will be served. Participants are requested to dress for the weather as it will be held rain or shine. Participants are asked to bring a lawn chair. More information about this program can be obtained by calling the Ashtabula County Extension office at 440-576-9008. A program flyer can be found at: [http://go.osu.edu/ne-events](http://go.osu.edu/ne-events)

**OSU Extension to host Northeast Ohio Grape Field Day on Thursday, August 27**

OSU Extension will be hosting the Northeast Ohio Grape Field Day on Thursday, August 27 in Harpersfield, Ohio. This field day has been developed to increase the management skills of commercial juice and wine grape growers.

The afternoon session titled, “Strategies for Managing Winter Injured Vines“ will be held from 3:00 - 5:00 p.m. at Ferrante Winery & Ristorante located at 5585 State Route 307, Harpersfield, Ohio and at M Cellars located at 6193 South River Road, Harpersfield, Ohio. This session will continue the grape industry’s focus on recovering from two severe winter injury events in 2014 & 2015.

At Stop #1 at Ferrante Winery & Ristorante, Dr. Imed Dami and Nick Ferrante will present information on how the Ohio grape industry is adapting to winter injury concerns. Learn more about the Ferrante’s hilling & dehilling practices. Participants will also learn more about OARDC’s retraining trials which are being conducted in this vineyard.

Participants will then travel to Stop #2 at M Cellars on South River Road. Matt Meineke will present information on how M Cellars has changed their winter protection strategies for vine protection through the practice of burying canes. Learn the when, how and the outcomes of burying canes. It will be a great chance for producers to see how the grapes at this location were able to survive through the 2015 winter.

Following the afternoon portion, participants will travel a short distance to Kosicek Vineyards located at 636 State Route 534, Harpersfield, OH 44041. A picnic style dinner will be served prior to the sprayer calibration workshop at
Kosicek Vineyards from 5:3- to 6:00 p.m. The dinner fee will be $5 per person. In order to ensure a meal, we must have reservations by Thursday, August 20. Reservations can be made by calling the Ashtabula County Extension office at 440-576-9008.

Following the picnic dinner, growers will participate in a “Preparing and Calibrating Air Blast Sprayers” session from 6:00 to 8:00 p.m. at Kosicek Vineyards. Dr. Erdal Ozkan, from OSU’s Department of Food, Agriculture, and Biological Engineering, will lead an air blast sprayer calibration session and update growers on optimizing spray coverage for better control of pests and diseases. This workshop will help save you MONEY and make you a more effective, efficient spray applicator. Learn more about calibration, how to use water sensitive paper strips, and learn about enhanced coverage and drift reduction through recent nozzle advancements. Dr. Ozkan will also recommend improvements to equipment, GPA, pressure, nozzle selection, and speed to maximize coverage and control. A special thank you is extended to Fred’s Water Service in Madison, Ohio for supplying the air blast sprayer for this workshop. Two hours of Commercial & Private CORE Pesticide Applicator Credits will be offered for attendees.

To register for this program, please contact the Ashtabula County Extension office at 440-576-9008. A complete registration flyer can be found at: [http://go.osu.edu/ne-events](http://go.osu.edu/ne-events)

**Ashtabula County Dairy Farm Appreciation Picnic**
Join OSU Extension and the Ashtabula County Dairy Service Unit for a “Ashtabula County Dairy Farm Appreciation Picnic” on Saturday, August 29, 2015 from 1:00 to 3:00 p.m. in the Bob Barnard Pavilion at the Ashtabula County Fairgrounds.

The Ashtabula County Dairy Service Unit will have hamburgers, hotdogs, assorted side dishes and ice cream available for dairy farm families. Take a well-deserved break from the dairy and enjoy fellowship with fellow dairy families. This picnic is free and will be held rain or shine. Please dress for the weather. Participants are asked to bring a lawn chair. In order to better plan for food, please courtesy RSVP to the Ashtabula County Extension office at 440-576-9008 by August 25, 2015. A program flyer can be found at: [http://go.osu.edu/ne-events](http://go.osu.edu/ne-events)

**Farm Science Review Tickets Available at OSU Extension Offices and On-Line**
OSU Extension is pleased to announce that Advance tickets for the Farm Science Review are available at all Ohio State University Extension county offices for $7. This year’s Farm Science Review will be held at the Molly Caren Agricultural Center in London, Ohio on September 22-24, 2015. Tickets are $10 at the gate. Children 5 and under are admitted free. The review hours are 8:00 a.m. to 5:00 p.m. on September 22 & 23 and from 8:00 a.m. to 4:00 p.m. on Thursday, September 24, 2015.

Tickets can be purchased at OSU Extension offices through Monday, September 21, 2105. Tickets can also be purchased on-line at [fsr.osu.edu/onlineticketform](http://fsr.osu.edu/onlineticketform). Online tickets are available to purchase for $7 until Sept. 11. Tickets ordered online will be mailed to the buyer.

Farm Science Review is known as Ohio’s premier agricultural event and typically draws more than 130,000 farmers, growers, producers and agricultural enthusiasts from across the U.S. and Canada annually. Participants are able to peruse 4,000 product lines from roughly 620 commercial exhibitors and engage in educational workshops, presentations and demonstrations delivered by experts from OSU Extension and the Ohio Agricultural Research and Development Center, which are the outreach and research arms, respectively, of the college. More information about the Farm Science Review is at [http://fsr.osu.edu/](http://fsr.osu.edu/)
Properly Using & Calibrating Airblast and Boom Sprayers Workshop to be held in Chardon on August 28
Fruit growers and agricultural producers are invited to participate in the hands-on workshop “Properly Using & Calibrating Airblast and Boom Sprayers” from 9:00 to 11:30 a.m. at Sage’s Fruit Farm located at 11355 Chardon Road, Chardon, OH 44024 on Friday, August 28, 2015. Dr. Erdal Ozkan, from OSU’s Department of Food, Agriculture, and Biological Engineering, will lead the calibration sessions for the orchard airblast and boom sprayer. This workshop is intended to update and demonstrate to growers how to optimize spray coverage to better manage pests and diseases. This session will help save you MONEY and make you a more effective, efficient spray applicator. Learn more about calibration, how to use water-sensitive paper strips, and learn about enhanced coverage and drift reduction through recent nozzle advancements. Dr. Ozkan will also discuss improvements to equipment, GPA applied for coverage, pressure, nozzle selection and speed to maximize coverage and control. A special thank you is extended to Fred’s Water Service in Madison, Ohio for supplying both the orchard airblast and boom sprayer for this workshop. Two hours of Commercial & Private CORE Pesticide Applicator Credits will be offered to workshop attendees. Call the Geauga County Extension office at 440-834-4656 for more information.

Properly Using & Calibrating A Horse-Drawn Airblast and Boom Sprayers Workshop to be held in Burton on August 28
Commercial vegetable growers and agricultural producers are invited to participate in the hands-on workshop “Properly Using & Calibrating A Horse-Drawn Airblast and Boom Sprayers” from 2–4:30pm at Abner Miller’s Farm, located at 16828 Jug Street, Burton, OH 44021. Dr. Erdal Ozkan, from OSU’s Department of Food, Agriculture, and Biological Engineering, will lead the calibration sessions for the airblast and boom sprayer. This workshop is intended to update and demonstrate to growers how to optimize spray coverage to better manage pests and diseases. This session will help save you MONEY and make you a more effective, efficient spray applicator. Learn more about calibration, how to use water-sensitive paper strips, and learn about enhanced coverage and drift reduction through recent nozzle advancements. Dr. Ozkan will also discuss improvements to equipment, GPA applied for coverage, pressure, nozzle selection and speed to maximize coverage and control. A special thank you is extended to Fred’s Water Service in Madison, Ohio for supplying the latest in boom sprayers for this workshop. Two hours of Commercial & Private CORE Pesticide Applicator Credits will be offered to workshop attendees. Call the Geauga County Extension office at 440-834-4656 for more information.

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PLEASE SHARE...this newsletter with farmers or others who are interested in agricultural topics in Ashtabula & Trumbull Counties. Past issues can be located at: https://go.osu.edu/ag-news. Please tell your friends and neighbors to sign up for the list. CONTACT: marrison.2@osu.edu
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The Ohio State University
College of Food, Agricultural, and Environmental Sciences
**************************************************************************
“Northeast Ohio Cover Crops Field Night”

Tuesday, August 18
6:00 to 8:00 p.m.

Caroma Farms
9499 State Route 46
North Bloomfield, Ohio 44450

Join OSU Extension as we explore the use of cover crops in Northeast Ohio at the “Northeast Ohio Cover Crops Field Day” on Tuesday, August 18, 2015 at Caroma Farms located at 9499 State Route 46 in North Bloomfield, Ohio. We are very appreciative of the Barnett family for hosting this field night. The family has been one of the early adopters of the use of cover crops.

This field night will feature Jim Hoorman from OSU Extension. Jim is a nationally known speaker in Cover Crops and will be on hand to help producers learn how to successfully use cover crops. Learn more about:

Using Cover Crops to Improve Soil Fertility, Improve Soil Structure, and Increase Drainage - Will cover the basics of how cover crops increase soil organic matter and improve nutrient recycling and how roots change soil structure and improve drainage.

Selecting and Managing Cover Crops to Maximize Crop Yields- Includes a description of the major cover crops used in corn and soybean rotations and how cover crops may be used to supplement forages for dairy, beef, and sheep.

Cover Crop Economics- How cover crops may increase soil productivity and decrease chemical input costs (reduced herbicides, less fungicides, improved nutrient efficiency). Learn the economics of purchasing different cover crops.

This workshop is free and will be held rain or shine. Please dress for the weather. Participants are asked to bring a lawn chair. Light refreshments will be served. More information about this program can be obtained by calling the Ashtabula County Extension office at 440-576-9008. This field night has been approved for 1 hour soil & water and 1 hour crop management CCA Credits.

Directions on Back
Program Location:
Caroma Farms is located at 9499 State Route 46 in North Bloomfield. The farm is on the west side of the road just north of Wakefield Creek Road. The farm is 1.6 miles south of the Ashtabula/Trumbull County border or 1 mile north of State Route 87.

Join us for another great Northeast Ohio Field Night

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information: http://go.osu.edu/cfaesdiversity.
Soybean Yield Estimates

1. Count the number of pod-bearing plants in 1/1,000th of an acre.

   7.5-inch rows count plants in 69’ 8” of row
   15-inch rows count plants in 34’ 10” of row
   30-inch rows count plants in 17’ 5” of row

   Number of plants in 1/1,000th acre ____________

2. Estimate pods per plant by counting number of pods (containing one or more seeds) from 10 plants selected at random.

   Plant 1 _____  Plant 6 _____  Total pod number ____________
   Plant 2 _____  Plant 7 _____  (Add up total pods from 10 plants)
   Plant 3 _____  Plant 8 _____
   Plant 4 _____  Plant 9 _____
   Plant 5 _____  Plant 10_____  Average pods/plant ____________
   (Total pod number divided by 10)

3. Estimate the number of seeds per pod by counting number of seeds from ten pods selected at random. Generally, number of seeds per pod is 2.5, but this number can be less in stressful environmental conditions.

   Pod 1 _____  Pod 6 _____  Total seed number ____________
   Pod 2 _____  Pod 7 _____  (Add up total seeds from 10 pods)
   Pod 3 _____  Pod 8 _____
   Pod 4 _____  Pod 9 _____
   Pod 5 _____  Pod 10_____  Average seeds/pod ____________
   (Total seed number divided by 10)

4. Estimate number of seeds per pound (seed size). Assume 3,000 seeds/pound. If the soybean plant experiences stress, seed size may be smaller (more seeds/pound). Use a seed size estimate of 3,500 seeds per pound if smaller seeds are expected because of late season stress.

   bushels per acre =
   
   \[ \frac{[(\text{plants}/1000^{th} \text{ acre}) \times (\text{pods/plant}) \times (\text{seeds/pod})]}{[(\text{seeds/pound}) \times 0.06]} \]

   **Results are more accurate later in the growing season.
   **Results are more accurate if this calculation is done in several areas of the field.
“Ashtabula County Dairy Appreciation Picnic”

Saturday, August 29, 2015
1:00 to 3:00 p.m.

Bob Barnard Pavilion
Ashtabula County Fairgrounds
Jefferson, Ohio

Join OSU Extension and the Ashtabula County Dairy Service Unit for a “Ashtabula County Dairy Farm Appreciation Picnic” on Saturday, August 29, 2015 from 1:00 to 3:00 p.m. in the Bob Barnard Pavilion at the Ashtabula County Fairgrounds.

The Ashtabula County Dairy Service Unit will have hamburgers, hotdogs, assorted side dishes and ice cream available for dairy farm families. Take a well-deserved break from the dairy and enjoy fellowship with fellow dairy families.

This picnic is free and will be held rain or shine. Please dress for the weather. Participants are asked to bring a lawn chair. In order to better plan for food, please courtesy RSVP to the Ashtabula County Extension office at 440-576-9008 by August 25, 2015.
Strategies for Managing Winter Injured Vines – Stop #1 (3:00 - 4:20 p.m.)
at Ferrante Winery & Ristorante - 5585 State Route 307, Harpersfield, Ohio

Every grower in the state of Ohio was affected by the extreme low temperatures the past two winters. Dr. Imed Dami and Nick Ferrante will present information on how the Ohio grape industry is adapting to winter injury concerns. Learn more about the Ferrante’s hilling & dehilling practices. Participants will also learn more about OSU’s retraining trials which are being conducted in this vineyard. Dr. Dami, Department of Horticulture and Crop Science, will demonstrate different strategies for retraining trunks with pros and cons. (travel to stop #2 from 4:20-4:40 p.m.)

Strategies for Managing Winter Injured Vines – Stop #2 (4:40 - 5:15 p.m.)
at M Cellars – 6193 South River Road, Harpersfield, Ohio

Matt Meineke will present information on how M Cellars has changed their winter protection strategies for vine protection through the practice of burying canes. Learn the when, how and the outcomes of burying canes. Participants are requested to park on the east side of the winery by the equipment barns -look for signs. (travel to dinner 5:15-5:30 p.m.)

Picnic Dinner (5:30 - 6:00 p.m.)
Kosicek Vineyards - 636 State Route 534, Harpersfield, OH 44041

A picnic style dinner will be served prior to the sprayer calibration workshop at Kosicek Vineyards. The dinner fee will be $5 per person. In order to ensure a meal, we must have reservations by Thursday, August 20.

Preparing and Calibrating Air Blast Sprayers (6:00 - 8:00 p.m.)
Kosicek Vineyards - 636 State Route 534, Harpersfield, Ohio 44041

Dr. Erdal Ozkan, from OSU’s Department of Food, Agriculture, and Biological Engineering, will lead an air blast sprayer calibration session and update growers on optimizing spray coverage for better control of pests and diseases. This workshop will help save you MONEY and make you a more effective, efficient spray applicator. Learn more about calibration, how to use water sensitive paper strips, and learn about enhanced coverage and drift reduction through recent nozzle advancements. Dr. Ozkan will also recommend improvements to equipment, GPA, pressure, nozzle selection, and speed to maximize coverage and control. A special thank you is extended to Fred’s Water Service in Madison, Ohio for supplying the air blast sprayer for this workshop. Two hours of Commercial & Private CORE Pesticide Applicator Credits will be offered for attendees.

**2015 NE Ohio Grape Field Day**

<table>
<thead>
<tr>
<th>Name ________________________________</th>
<th>Address ________________________________</th>
<th>Phone __________________________</th>
<th>Email ______________________</th>
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<tbody>
<tr>
<td>I will attend the Session at Ferrante’s Winery</td>
<td>yes</td>
<td>no</td>
<td># attending</td>
</tr>
<tr>
<td>I will attend the Session at M Cellars</td>
<td>yes</td>
<td>no</td>
<td># attending</td>
</tr>
<tr>
<td>I will attend the Pesticide Session at Kosicek Vineyards</td>
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<td># attending</td>
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<tr>
<td>I will be eating at the Picnic Dinner</td>
<td>yes</td>
<td>no</td>
<td># attending</td>
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<tr>
<td>Picnic Dinner @ $5.00 per person</td>
<td>Total Due $ ________</td>
<td></td>
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</tbody>
</table>

Reservations are due by August 20, 2015. Please mail with checks payable to OSU Extension and mail back to OSU Extension, 39 Wall Street, Jefferson, OH 44047. Call 440-576-9008 for more information.
Ferrante Winery
5585 State Route 307, Harpersfield, Ohio

M Cellars
6193 South River Road, Harpersfield, Ohio

Kosicek Vineyards
636 State Route 534, Harpersfield, Ohio

Thank you to you supporters of OSU’s Grape Research & Extension Programs