Getting the best start to your organic winter grains

Dr. Lauren Kolb, Postdoctoral Research Associate

Fall-planted cereals are a great way to keep the ground covered over the winter and through early spring, reducing soil and nutrient losses. Winter cereals are also multi-purpose, in that they can be used strictly as a cover crop, chopped for high-quality forage in the mid- to late-dough stage, or grown for grain. Though these crops are typically good competitors with weeds, a little extra planning before planting can make the difference between an excellent stand with minimal weeds and yield loss, and provide the benefit of reducing weed populations in following years.

To get the most weed suppression, it is important to focus on enhancing the competitive ability of the crop. In other words, a vigorous, healthy stand will be better able to compete with weeds. By following these five steps, you will give your crop a head start in the fight for resources and hopefully reduce both yield and quality (protein) losses due to weeds and their growth and proliferation.

1. **Plant at the appropriate date.** Recommendations for planting winter grains for Maryland vary with climate and location, however the earlier the planting after the Hessian-fly free date, the better. In Western Maryland, this means being ready to plant on September 20, while on the lower Eastern Shore, growers should wait until October 11. Ideally, fields will be prepped for planting 2-3 weeks ahead of the target planting date. This ensures that everything is ready to go when the planting date arrives plus it provides an opportunity to employ a stale seedbed technique, i.e., light tillage is used immediately prior to planting to eliminate the flush of winter annuals that will be highly competitive with your grains. When the planting date is late, seeding rates should be increased in order to offset the losses in tillering that occurs for late-planted winter grains. The amount of the increase depends on when the crop is planted after the optimum planting date; a good rule of thumb is a 10% increase in seeding rate for every week past the optimum date.

2. **Location, location, location.** Select fields that are less prone to ponding and freezing out during the winter, two conditions which can lead to over-winter mortality of winter grains. Generally, grains planted on light sandy loams and gravelly loams will perform better, as most
cereal grains do not like “having their feet wet,” and will be less prone to over-winter mortality. However, these well-drained soils tend to be low in cation exchange capacity (CEC), which means that they are low in binding sites for nutrients in the soil that are necessary for crop growth. Winter grains planted on these types of soils may need more frequent, but smaller doses of nutrients to ensure a healthy stand. Location also ties into planting date. If winter grains are slated to follow a crop that does not get harvested until mid- to late-October, you are reducing the likelihood of getting the grains in on time, if at all, and the over-winter survival and yield capacity of the crop. When selecting crop rotations, you should be mindful of the need for early planting of winter grains to avoid this tight scheduling.

3. **Check your fertility.** Proper nutrition is paramount to a good winter grain crop. Too little fertilization results in sluggish, lackluster growth from your crop. Too much fertility, especially if it is readily available, will encourage weed seed germination and give a competitive advantage to weeds, which are often more competitive with crops in fields with high soil nutrient levels. Or the nutrients may just leach out of the rooting zone of the crop over the winter. Determining if your crop needs any nutrients in the fall starts with a soil test to determine which nutrients are adequate, which nutrients are in abundance, and which nutrients are lacking. If you are not sure of the crop’s nutrient needs, a consultation with your crop adviser or extension agent can help you determine how to best meet those needs for the duration of the growing season.

4. **Organic seed is expensive; make sure you’re getting the most out of it.** Select varieties that are adapted to or bred for your growing region, so that you are sure that they can withstand the various climatic conditions that occur between planting and harvest. Buy and plant only certified seed that is true to variety, has high germination (>90%) and is free of weed seed, chaff, and damaged kernels. Researchers in Montana and Canada have observed that sowing larger seeds, i.e. higher TKW (thousand kernel weights), results in earlier and better emergence, greater early growth, greater tillering, and higher yield, so selecting varieties or seed lots that have more plump kernels will give your crop and extra boost of competitive ability at planting.

5. **Check your drill calibration.** Corn and soybeans are planted on a population basis. The population goal (bushel) per acre basis alone, can result in differences in plant populations by as much as 50%. This can more than explain the difference between a good, vigorous weed-suppressing stand, and a wimpy stand that is slow to fill in, leaving time for weeds to establish in the gaps and consume those precious nutrients.

To ensure a good stand, and reduce the expensive alternatives of both under- (less competitive with weed) and over- (wasted seed) populating a field, winter grains should receive the same type of precision and attention at planting time as corn and soybeans; they should be planted on a population basis. The population goal recommendation for a non-organic system is 1,500,000 emerged seedlings/acre.

To calibrate a drill requires knowing the germination rate, which should be on the seed bag tag or easily determined using a small handful of seeds and some damp paper towels, the thousand kernel weight, which can be measured by counting and weighing 1000 seeds, and typical stand losses for your farm, which requires observations of previous years, anywhere from 10-40%. Once you have this information, you can calculate how much seed you need to plant on a weight per area basis and you are ready to calibrate. How this is done varies with the drill, but typically involves knowing how many rotations the driving wheel of the grain drill makes in 100 feet and then weighing how much grain comes out of a single drop tube in those 100 feet, which then is multiplied by the number of drop tubes. The charts inside of your drill should be used only as a reference to begin drill calibration, rather than an absolute setting.
Factors Affecting Corn Harvest Losses in Missouri

The following discussion was recently published by T.C. Shauck and R.J. Smeda in the Crop Management section of the online Plant Management Network. It is a compilation of information collected during a three year survey of corn harvest losses across Missouri. Since many of you are in the midst of corn harvest, this information may prove beneficial as you survey your fields for either kernels or volunteer corn seedlings.

Results from the three-year survey in Missouri indicate that a number of factors contribute to grain losses. Among them, specific equipment (header width, presence of self-leveling header) and environmental (year of survey, seed moisture) factors were most important. Combines with wider headers that were self-leveling appeared important in influencing reduced grain losses. This indicates that growers may manipulate combine factors to reduce losses. Rainfall and temperatures varied by year; therefore, seed moisture content and harvest dates were factors that could not be controlled. Less kernel loss occurred for corn with harvest moisture content of 21-24% than occurred for corn with harvest moisture 13-16%. In-season lodging typically becomes a problem when soils are saturated by precipitation. However, during harvest, as corn plants dry they become more susceptible to stalk lodging and ear dropping. Data from this survey indicates that harvest losses were lower following high rainfall events. High amounts of rainfall and low temperatures delayed kernel dry down, which may have resulted in lower harvest losses. Losses may be higher during dry conditions; as seed moisture decreased the number of dropped ears and harvest losses increased. This observation from our survey is supported by numerous others who have reported that as percent seed moisture decreased, plants became more susceptible to lodging and ear dropping, ultimately leading to harvest losses. It should be noted that on average, over 90% of kernels lost in all fields were individual kernels and not kernels still attached to cobs. This would suggest that most of the corn lost occurred during the harvest process rather than pre-harvest events.

While individual kernel losses were high for some fields, these losses were relatively insignificant considering overall grain yields. Harvest losses cannot be reduced to zero, but the skill of the operator can minimize the losses. However, even when yield losses are minor, resulting volunteer corn densities may appear to be high. For every two kernels or seedlings you find per foot², your loss is approximately 1 bu/acre. The goal of the operator should be to keep this loss to less than 2-3% of crop yield.

Managing Flood Damaged Crops

The U.S. Department of Agriculture (USDA) and the U.S. Food and Drug Administration (FDA) announced on September 12th that assistance will be available to farmers whose crops were damaged by severe flooding from Tropical Storms Irene and Lee. USDA and FDA are working closely together to ensure that farmers with flood-damaged crops that cannot be marketed are compensated for their losses.

FDA considers ready-to-eat crops whose edible portion has been in contact with flood waters to be adulterated due to potential exposure to sewage, animal waste, heavy metals, pathogenic microorganisms, or other contaminants. Therefore, these crops should not enter the food or animal feed supply. Crops insured by federal crop insurance or by the Noninsured Disaster Assistance Program (NAP) are covered when floodwaters have rendered them valueless.

Foods that should be destroyed.

Crops
If the edible portion of a crop is exposed to flood waters, it is considered adulterated and should not enter human food channels. There is no practical method of reconditioning the edible portion of a crop that will provide a reasonable assurance of human food safety. Therefore, the FDA recommends that these crops be disposed of in a manner that ensures they are kept separate from crops that have not been flood damaged to avoid adulterating "clean" crops.

Disposition of crops in proximity to, or exposed to a lesser degree of flooding, where the edible portion of the crop has NOT come in contact with flood waters, may need to be evaluated on a case-by-case basis. Factors to consider in the evaluation include:

- What is the source of flood waters and are there potential upstream contributors of human pathogens and/or chemical contaminants?
- Type of crop and stage of growth, e.g., is the edible portion of the crop developing? How far above the ground does the lowest edible portion grow?
- Were conditions such that the crop may have been exposed to prolonged periods of moisture and stress which could foster fungal growth, and possibly, development of mycotoxins?

Grains and similar products stored in bulk can also be damaged by flood waters. These flood damaged products should not be used for human and animal food.

**Fresh Fruits and Vegetables**

Fresh fruits and vegetables that have been inundated by flood waters cannot be adequately cleaned and should be destroyed. Fresh fruits and vegetables that have begun to spoil due to the lack of refrigeration should also be destroyed. These food items may be considered for diversion to animal feed under certain circumstances.

**Food Requiring Refrigeration and Freezing**

Refrigerated and frozen foods, including beverages such as milk, that have been immersed in flood waters must be destroyed. Storage vats or sealed tanks of milk in processing plants that have been under water cannot be reconditioned. Foods that have begun to spoil due to the lack of refrigeration must also be destroyed. These food items may be considered for diversion to animal feed under certain circumstances.

USDA encourages all farmers and ranchers to contact their crop insurance companies and local USDA Farm Service Agency Service Centers, as applicable, to report damages to crops or livestock loss. More information about federal crop insurance may be found at www.rma.usda.gov. Additional resources to help farmers and ranchers deal with flooding may be found at http://www.usda.gov/disaster.

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**Preventing Combine Fires**

*Richard Nottingham, Agent—Agriculture & Natural Resources*

Dry field conditions that are ideal for a successful fall harvest also bring the danger of combine fires. Dry crop residue provides the tinder, and a small spark or heat source is all that is necessary for a combine fire to start. Combine fires can lead not only to time lost but substantial property damage and even injury or loss of life.

**Keep Your Equipment Clean**

What can you do to lessen your risk of a combine fire? First and foremost, prevention is essential. Remember the old saying, “an ounce of prevention is worth a pound of cure.” Cleanliness and maintenance are essential for combine fire prevention. Use a pressure washer or a compressed air blowgun to thoroughly clean and remove dust, dirt, grease, and crop residues from your equipment. Many farmers also find a hand-held gas powered leaf blower useful for cleaning equipment in the field. Not only will you have eliminated the “tinder” from which a fire can start, but you will have equipment that will run cooler and more efficiently. Regardless of how busy you may be, take the time to keep your equipment clean.

**Pay Special Attention to Routine Maintenance**

Check lubricant levels often, and grease fittings regularly. Fix leaking oil, fuel, or hydraulic lines promptly. Check belts for proper tension and wear to reduce friction. Carefully check bearings for excessive heat—overheated bearings are a major cause of combine fires. Pay particular attention to the exhaust system, checking for leaks, damage, or an accumulation of crop residue. High heat or a spark from the exhaust can easily ignite dry crop residue. Take a close look at the wiring system, checking for exposed wiring or insulation deterioration. Remember, a blown fuse indicates an electrical problem—never replace a blown fuse with a new fuse of higher amperage.

**Special Precautions for Refueling**

When refueling becomes necessary, always shut off the engine and let the equipment cool for 15 minutes before you refuel. Extinguish all sources of flame and smoking materials before refueling. If fuel spills on the engine, wipe off any excess and allow the fumes to dissipate. Never store flammable liquids in glass or non-approved containers. The few minutes that you spend safely refueling are insignificant compared to the property damage or injury that can be caused by a fire.

**What If, Despite Our Best Efforts at Prevention, a Fire Does Occur?**

Being prepared can prevent substantial loss. Experts recommend that at least one fully charged 10-lb. ABC fire extinguisher...
be carried on all equipment. Better yet, carry two: one in the cab and one where it can be reached from the ground. The cost of fire extinguishers is insignificant when compared with the cost of your equipment. Remember that any partial discharge from an extinguisher requires it to be recharged. Visually check your extinguishers monthly, looking for cracks in the hose and inspecting the gauge to see if the extinguisher is fully charged. Have a professional fire extinguisher company inspect your fire extinguishers annually. Carry your cell phone or 2-way radio with you at all times so you can summon help. If a fire does occur, CALL 911 FIRST, and then attempt to extinguish the fire by pulling the pin on the fire extinguisher and squeezing the handles together. Aim the nozzle at the base of the fire and sweep from side to side. Remember P.A.S.S., which stands for Pull, Aim, Squeeze, and Sweep. By exercising proper fire prevention and preparedness and keeping your equipment well maintained and clean, you can help ensure a safe harvest season.

Closing thoughts about 2011 growing season

Sudeep A. Mathew, Editor-Agronomy News

This final issue for the season marks the successful 2nd year that we are publishing Agronomy News from University of Maryland Extension. We will resume the publication for 2012 growing season in April. This publication is a collective effort from extension agents & specialists to serve our farmers and agriculture industry by providing timely information during production season to help them make the best decision to achieve success for their family, our communities and the great state of Maryland. During the season, Agronomy News reached about 800 subscribers electronically and the print edition was distributed to about 3000 farm community members through our 23 county office mailing list. I would like to express my heartfelt gratitude to the Maryland Grain Producers Utilization Board and Maryland Soybean Board for providing financial assistance for the Agronomy News distribution. We would really appreciate if you would give us the feedback on how Agronomy News is impacting your life and your operation. I encourage you to complete a brief survey listed in this following link http://www.surveymonkey.com/s/3YYPJJS. It will only take 60 seconds to complete it and will be of great help to us. For those of you who prefer to complete it on paper, the survey is included on the last page of this Agronomy News.

The 2011 season started out with promise as most of our growers enjoyed timely planting. Then, drought which hit most of Maryland came for the second year in a row. The continuous unpredictability caused by recent droughts made many farmers apply for new applications to drill irrigation wells. Many areas missed crucial rain at corn pollination. To add more injury, Hurricane Irene moved across the Eastern Shore on August 26th causing crop damage that ranged from flattened corn fields to flooded watermelons. As is usually the case, when confronted with obstacles, we witnessed optimism and ingenuity among our growers. Many obtained corn head reels that helped to pick up the lodged corn as fast as possible. Grain elevators also helped by increasing the moisture level for receiving grain to 20% on some days. The 2011 growing season has been one of contrasts. For much of the state, April through July precipitation ranged from below average to excessively below average. Hurricane Irene resulted in August, alone, receiving rainfall of 8 inches or more. To our benefit, the soybean crop will benefit from this late summer rainfall and will produce a good harvest for those who have kept weeds, insects and diseases in check.

The future of agriculture looks brighter than other industries worldwide. Agriculture is among the few segments that add a trade surplus to our economy caused by exceptional export demands. According to U.S. Agriculture Secretary Tom Vilsack, this year's trade surplus is projected to be a record-setting $42.5 billion. Agriculture exports have already reached an all-time high of $75 billion in the first half of fiscal year 2011, up 27% from the same period last year and on track to reach the $137 billion forecast for the entire year. Forecast for US agriculture export for 2012 is also very promising. With additional export opportunities arising in Brazil, China, India and other emerging countries, the prospects for US agriculture trade will increase for next 5-10 years according to the International Trade Administration.

In the days ahead, our Washington politicians will be considering ways to reduce the deficit while maintaining a balance of spending to sustain future growth. I keep hearing about rebuilding the American infrastructure. While we hear about rebuilding our infrastructure, we see a weakening of one of the finest infrastructures in the country, the land-grant university system that includes the state agriculture experiment stations and extension services. Over the years, the land grant universities have made numerous contributions to the advancements attained by American agriculture. The ultimate impact resulting from the continued weakening of this system will result in humanity paying a huge price. Let's encourage those who represent us in Washington to make wise decisions.
Crop Reports

Western
In the past couple of weeks Garrett County has seen frequent showers making the start of the corn harvest difficult especially for dairy farmers harvesting corn silage. The majority of the corn crop is excellent this year with silage yields in Garrett likely pushing 25-30 tons/acre on some farms. In the other parts of the western region, silage yields are slightly below average but not so little that they are a concern. Grain corn and soybeans are also looking very good. In general, things are moving slowly here in the west as we have received between 7 -9 inches of rain during September. Wherever possible, fall cover crops have been planted behind corn silage. Corn grain harvest has begun but wet field conditions are slowing progress. Soybeans are starting to turn color with some of the earliest maturity groups dropping leaves. The brown marbled stink bug seems less severe than last year but the proof will be in the pudding when the corn and soybean fields have been harvested and yields have been determined. Apple harvest will be winding down in October with yields looking good. Hay supplies are short which may lead to a winter of discontent.

Central
Moisture continues to be plentiful in Central Maryland, limiting all field work. Corn grain harvest is underway with yields being reported as slightly below to near the 5 -year average. Low test weights, poor quality grain and even sprouted kernels are being reported. Corn silage harvest is progressing slowly as many fields remain too wet. Soybeans have responded nicely to the late summer moisture with some excellent full season beans being tall with full pods. As leaves are beginning to drop on the beans, the amount of stink bug damage to the field borders is becoming evident. Alfalfa and grass hay harvest will be in full force just as soon as we get a few days of sunshine. Pasture growth is better than anytime this year. Oats planted in early to mid August following silage corn look great. Barley planting has begun. For some early planted small grains, flooding and extremely wet field conditions have caused poor stands and even complete losses in low areas.

Northeast
September 2011 is the wettest September on record (12.8 inches as of 9-27). So, it is no wonder that corn harvest is going slowly and there are some reports of sprouting in the ear. Corn yields have a ranged from 80 bushels/acre in droughty areas to 150+ bu/acre in areas that got timely summer showers. The wet weather has put hay making on hold. Soybeans range from fields still fully green to fields that have lost all leaves. Indications are that small grain planting will be delayed. The excess rain has damaged the grape and pumpkin harvest. Pastures are doing well.

Southern
Most corn has been harvested. The ground has remained saturated since Hurricane Irene and the additional rains from Tropical Depression Lee. Some of the lodged corn that has not been harvested is beginning to sprout on the cob, making harvest even more difficult. Soybeans have improved from the effects of the dry summer. Most full-season beans are beginning to yellow now with harvest anticipated in 2 weeks if conditions allow. The Soybean Necrotic Vein Virus confirmed a couple of weeks ago appears to be widespread in the area, but visual observations do not indicate large yield reductions. Barley planting is just starting. Cover crops are being planted, though wet weather has slowed the progress. Not much hay has been made, though hay fields have responded well to the cooler weather and moisture. Tobacco farmers are facing losses from barn rot caused by high humidity. I can’t believe I’m saying this, but we need some dry weather to get crops out and small grains in.

Upper Eastern Shore
Corn harvest has continued, but it has been slow; a result of damp conditions and lodged corn. Maturity Group 3 beans are nearing harvest. Hay harvest has been frustrating and behind schedule. Early planted cover crops look good. The wet conditions have been ideal for aerial seeding of radish, rape, and cereals.

Lower Eastern Shore
Continued wet and cloudy weather have dominated agriculture over the past several weeks and slowed corn harvest. Much of the corn that was damaged by Hurricane Irene remains to be harvested. Soybean leaves are turning and dropping. Field reports are indicating that some fields of soybean will be harvested starting next week. Disease and insect pressure is light at this time. Most aerial cover crop planting is complete.
Announcements

Wheat and Barley Farmer—Volunteer Wanted

Following five years of small plot testing, researchers at the University of Maryland have identified a fall soil nitrate test that will assist farmers with the fall fertilizer nitrogen decision when planting wheat or barley. Our research has shown that when when residual soil nitrate in the surface 6-inches exceeds 10-15 ppm (part per million), the equivalent of 20-30 lb nitrate/acre, the addition of fall nitrogen fertilizer has little probability of being economical. We want to do on-farm testing of this concept across the state. Many of you have combine yield monitors that will easily accommodate on-farm yield testing. If you produce wheat and/or barley and you are willing to establish some replicated strip plots across your fields with and without fall nitrogen, please contact Dr. Bob Kratochvil either by phone (301 405-6241) or by email (rkratoch@umd.edu).

Protocols for an on-farm strip plot test.
1. Establish a minimum of 3 (4-6 would be ideal) pairs of field length strips where you apply 30 lb/acre fall fertilizer nitrogen or do not apply any fertilizer nitrogen. Place each pair of fertilized and non-fertilized comparison strips adjacent to each other.
2. Plant wheat or barley during what is considered to be the optimum planting period for each.
3. Do not apply any spring fertilizer nitrogen to the field until March 1 (per the commodity cover crop regulations).
4. On or after March 1, apply spring fertilizer nitrogen per your usual rate and application method (i.e. either split application or a one-time application).
5. At harvest, combine each fall fertilized and non-fertilized strip separately and record the weight of each using your yield monitor.
6. Measure the length of each strip and list it with the yield for the strip.
7. Prior to applying any fall nitrogen, collect 4-6 soil samples (6-inch depth) from randomly selected locations within each strip. Mix each sample thoroughly and place a sub-sample into a quart size zip lock storage bag. Place the samples into a freezer.
8. Record the following:
   i. Date wheat or barley was planted.
   ii. Variety.
   iii. Previous crop and yield.
   iv. Date of spring nitrogen application/s and rate/s for previous crop.
   v. Harvest date of previous crop.
   vi. Yield for each test strip.
   vii. Strip size (field length and combine head width).

Maryland Clean Sweep - Pesticide Disposal Program

WANTED: OLD, BANNED, UNWANTED OR UNUSABLE PESTICIDES

NO questions asked.

NO fees to pay.

Do your part to protect Maryland’s environment.

Open to all agricultural operations (farm, forest, nursery, greenhouse, etc) throughout Maryland. Applications are available online at www.mda.state.md.us/pdf/regform.pdf. Applications will also be available at your County Extension Office or by calling the Maryland Department of Agriculture at 410-841-5710.

Applications must be received by January 16, 2012. Pick-up to begin April/May, 2012. While MDA anticipates being able to conduct collections throughout Maryland, registration does not guarantee pick-up. MDA will review registrations and determine which areas of the State will be serviced. Operations not chosen for the current program will be notified and placed on a waiting list.

Sponsored and funded by the Maryland Department of Agriculture.

Upcoming Events

Poultry Farm Management Class on November 4th
The University of Maryland Extension is conducting a one-day workshop for new and existing poultry farmers on Delmarva. A variety of topics will be addressed including, site management and maintenance, mortality, manure handling, litter management, windbreaks/vegetative environmental buffers, concentrated animal feeding operation regulations, nutrient management, comprehensive nutrient management plans, EPA inspections and emergency preparedness. The workshop will be held at Chesapeake College, Economic Development Center, Room EDC 27, Route 50 & 213, Wye Mills, MD 21679 from 8:00 am to 3:30 pm. Registration cost is $30 which includes refreshments, lunch and materials. For more information contact Jenny Rhodes at 410-758-0166 or jrhodes@umd.edu.
Annual Small Farm Conference, November 4-5

Eighth Annual Small Farm Conference will be held November 4 through 5 in the Richard A. Henson Center on the UMES campus, Princess Anne, MD. Registration fee is $25 for an individual and $40 for couples. Registration deadline is October 28th. For more information call 410-651-6206 or email to blrogers@umes.edu

Lambing & Kidding School on November 19th

The 2011 Lambing & Kidding School will be held on Saturday, November 19th at Chesapeake College in Wye Mills, MD. This year's main speaker is Dr. Susan Kerr, Ruminant Veterinarian from Washington State University. This program is ideally suited to persons who have been raising sheep and/or goats for less than five years.

The registration fee is $40 per person. Additional family (or farm) members are $30. Youth registration is $25. Full registration includes the program, morning refreshments, a hot lunch, and a resource notebook or jump drive. The resource notebook and/or jump drive may be purchased separately for $10 ($15 for people who cannot attend the school). The registration deadline for the school is November 9. Checks made payable to University of Maryland should be mailed to 2011 Lambing & Kidding School, Western Maryland Research & Education Center, 18330 Keedysville Road, Keedysville, MD 21756.

Questions pertaining to registration should be directed to Pam Thomas at (301) 432-2767 x315 or pthomas@umd.edu.

Questions pertaining to the program should be directed to Susan Schoenian at (301) 432-2767 x343 or sschoen@umd.edu.

Aronia Growers Association meeting on November 21st

University of Maryland Extension is organizing a meeting of current and potential Aronia growers to form a grower association in the Mid-Atlantic to help growers and promote the highly nutritive Aronia fruit. This meeting will be held on Monday November 21st, 9.30 – 12.00 at Maryland Department of Agriculture, 50 Harry S. Truman Parkway, Annapolis, MD 21401. For questions and more information, please contact Debby Dant at 410 827-8056 or ddant@umd.edu.

Agronomy News QR

Shannon Dill

Want to see agronomy news on your smartphone or view the pictures in color?

A QR code (Quick Response) is a specific code that is readable by QR readers and camera phones. The code includes black graphics arranged in a square pattern on a white background. The information encoded may be text, website or other data.

How to use:
You will need a smart phone with Internet access and an application that reads QR Codes.

1. Download a code reader to your smart phone. There are lots to choose from. Just search your app marketplace for “bar code reader” or “QR code scanner.” Most are free.
2. Once it is downloaded go to that app and select the scan feature. Point the camera at the code and click. For the QR code above, it will take you to the Agronomy News website.
3. Tour the site on your phone.

Maryland Grain Producers’ Utilization Board and Maryland Soybean Board are both recognized for their financial contributions that support the publication and distribution of this newsletter. This is another example of the “checkoff dollars” at work.
SIGN-UP TO RECEIVE “AGRONOMY NEWS”

If you would like to receive this newsletter via email please contact Rhonda Barnhart at rbarnhar@umd.edu. The subject line should be: Subscribe Agronomy News 2012.

If you would like a hard copy please contact your local county extension office to sign-up for the mailing list. The list of local county offices can be found at www.extension.umd.edu.

Did You Know

There are 12,800 farms in Maryland with an average size of 160 acres.
Agronomy News 2011 - Evaluation Survey

Please take some time to complete this brief survey. Complete and return to us with your thoughts and comments. Use additional sheets if needed. If you need any assistance in completing this survey please give us a call at 410-228-8800. Please return the completed survey to: Agronomy News, University of Maryland Extension, 501 Court Lane, Room 208, P.O. Box 299 Cambridge, MD 21613.

What best describes you?
A. Grain farmer
B. Vegetable farmer
C. Fruit farmer
D. Dairy/Poultry/live stock
E. Ag Industry
F. Government
G. Education
H. Others ........................................

How many acres do you farm?
A. None
B. <50
C. 51-100
D. 101-200
E. 201-500
F. 501-1000
G. 1001-1500
H. 1501-2000
I. 2001-2500
J. 2501-3500
K. >3501

Your overall rating of the value of the articles presented in the Agronomy News?
A. Extremely valuable
B. Valuable
C. Neutral
D. Not valuable

How much do you think Agronomy News helped increase your net income ($/acre)?
A. 0
B. 1-10
C. 11-20
D. 21-30
E. 31-40
F. 41-50
G. >51

Rate the increase of your knowledge you gained through Agronomy News?
A. Very great
B. Moderate
C. Very little
D. None