



Ag & Hort Update



November 2008

The harvest season is progressing; Mother Nature has been pretty cooperative. Only a few rain showers have slowed farmers down. In a few weeks the focus of many farmers will shift more towards fall field work and nitrogen applications. Before we can start making those fertilizer and nitrogen decisions, you need to make sure that your soil sampling records are current. Soil sampling results will help you to make a wise decision in fertilizer rates, but more importantly save you money. It is recommended to resample every 3-4 years.

Enjoy the final stretch of the harvest season; it won't be long and the winter blues will set in. All of us here at Iowa State University Extension Shelby County would like to wish you and your family a very safe and wonderful Thanksgiving.

Kent Ganzer

Upcoming Dates:

November 12 – Turf Grass CIC, 1:30 p.m.

November 19 – Commercial Ag CIC, 9:00 a.m.

November 21 – Agriculture Outlook & Management Seminar, Atlantic 8:30 a.m.

November 27 – Office Closed, Happy Thanksgiving!

November 28 – Office Closed

December 2 – Fumigation CIC, 9:00 a.m.

December 3 – Pest Control CIC, 9:00 a.m.

December 10 – Cow/Calf & Feedlot Producer Meeting, Dunlap Livestock Auction, 5:30 p.m.

Want To Start Applying NH₃? Make Sure You Watch the Soil Temperature

Soil temperature is the best indicator that we have to reduce the risk of nitrogen loss when fall applications of anhydrous ammonia, or manure with high ammonia content is applied. We have learned that the conversion to nitrate is greatly reduced at soil temperatures below 50 degrees, though not totally avoided.

Soils in Western Iowa have cooled to below 50 degrees by the first week of November, but generally it reaches the 50 degree mark sometime in mid-November. Soil temperature can also vary several degrees depending on the slope of a field and the soil condition. Please take your soil temperature at least 4 inches deep, you can start applying nitrogen when the soil has reached 50 degrees and is cooling. If you wish to not track your own soil temperatures, you can visit

<http://extension.agron.iastate.edu/NPKnowledge/> to track daily temperatures of every Iowa County. The soil temperature for Shelby County was 54 degrees on November 2.

Fall Tillage / Soybean Disease Management

Fall tillage is not recommended on most fields here in Western Iowa, but there are a few considerations in determining if tillage will be useful or appropriate, especially if you are trying to help control and/or manage soybean diseases. Tillage is an effective way to manage many crop diseases because it reduces the pathogen infested crop residue, and will also adjust soil moisture and soil temperature. Several of the soybean diseases that were present this year in many fields can be effectively controlled by tillage, but some cannot.

Diseases that can be controlled with tillage: Tillage practices are very effective in reducing the risk of almost all of Iowa's soybean foliar and stem diseases; like cercospora leaf spot, brown spot, frogeye leaf spot, downy mildew, bacterial blight, brown stem rot and phomopsis. Pathogens of these diseases survive in crop residues in the absence of soybeans. When the infested crop residues are buried in the soil, their decomposition rate increases and the fungi die. Tillage reduces the amount of pathogens that survive to the next crop year.

Corn-soybean rotations also help in reducing your disease risk. The infested crop residues, especially infected leaves, will decompose during the next growing season even when left on the soil surface without tillage. The leftover soybean leaves will definitely be totally disintegrated, however residue of infected soybean stems may be carried over a year when soybeans will be planted next; they may not decompose completely.

Diseases that are affected or partially controlled by tillage: The occurrence of white mold, sudden death syndrome (SDS), and phythophthora rot are generally affected by tillage. Tillage has varying effectiveness on each of these diseases. For control of white mold, the use of no-till corn the following year after a severe white mold infestation is effective in controlling white mold. When leaving it on the soil surface it will germinate the next year during the corn season. Soybean sudden death syndrome becomes more severe under no-till. Tillage will increase the soil temperature and will reduce spring moisture which helps in cutting the risk of soybean sudden death. Tillage should be considered when phythophthora rot is present – tillage will improve soil water conditions and allows soil drainage, phythophthora rot is usually severe when soils are saturated.

Diseases that cannot be controlled with tillage: Soybean cyst nematode and other soilborne diseases, such as rhizoctonia root rot, will not be reduced by tillage. In fact, tillage usually increases the movement and spread of soybean cyst nematode. *Information gathered by X B Yang, ISU Department of Plant Pathology.*

What is a biennial plant?

It is a plant that completes its life cycle in two years. The plant will produce leafy growth during the first growing season. Biennial plants will flower, produce seeds, and then die in their second growing season.

Are the fruit of the American Cranberry bush edible?

The American Cranberry bush is a deciduous shrub that grows 8 to 12 feet tall and will produce flat-topped clusters of white flowers in the spring. After flowering, berry-like fruit develop that will turn bright red in the fall, the fruit are edible and can be made into jellies and preserves.

What is my plant hardiness zone?

The USDA has published a hardiness zone map, northern Iowa is zone 4 and southern Iowa is zone 5. When selecting trees, shrubs and perennials, choose plants that are in your respective hardiness zone and are labeled as cold hardy.

There are black spots on the surface of my apples. Can I eat the skins?

The black spots are most likely sooty blotch or flyspeck. They are both two different fungal diseases that often occur on apples. Sooty blotch occurs as dark brown to black .5 inch or larger smudges on the surface of the apple. Flyspeck produces clusters of shiny, round black dots, usually about the size of a pinhead. Moderate temperatures and extended periods of rainfall favor disease development. The skins can be eaten; they just don't look very appetizing.

Fungicide applications can help control these two diseases, but proper pruning and thinning of fruit promote drying and may help reduce disease severity.

ISU Extension is hosting an Agriculture Outlook Meeting Nov. 21 in Atlantic

Iowa State University Extension will be hosting an Agriculture Outlook and Management seminar November 21 in Atlantic at the Cass County Community Building. The meeting will start at 9:00 and will end at 3:00; the fee is \$35.00 and will include lunch, refreshments and materials. You must be pre-registered by November 14. Please stop by the Shelby County Extension office for a registration form.

Speakers include Chad Hart, ISU Grain Marketing Specialist and John Lawrence ISU Extension Livestock Marketing Specialist. Both speakers will discuss the trends of 2008, and will help us examine the outlook for 2009 and beyond. Hart will discuss the outlook for grain, oilseed, biofuel production, prices and trade for 2009. Lawrence will focus mostly on fed cattle and hog reports and will discuss the current market conditions and what market drivers will shape costs and returns in the year ahead.

The Agriculture Outlook meeting is directed towards area agribusiness and retail managers, but is very beneficial for the local producer. Local farmers are encouraged to attend the seminar as this workshop will give them grain and livestock outlook information well into 2009. If you have questions or need a registration form please contact me at the Shelby County Extension office, 755-3104 or ganzer@iastate.edu

Corn Quality Issues – Test Weights and Moisture

This year's fall weather has benefited the late planting corn by allowing it to fully mature before a killing frost. With that said, October USDA reports yield estimates of 172 bushels per acre; if this holds true 2008 will produce the third highest yield recorded, behind 173 bushels per acre in 2005 and 181 bushels per acre in 2004.

Yes, we are experiencing some good corn; but we are also getting some reports of corn quality. A cool, long, growing season will usually result in high yields with high grain moistures and low test weights. The lower test weight is a result of more starch and lower protein on a relative basis. This condition also reduces field dry down rates and increases farmer drying costs.

Corn that has not dried early in the harvest season often stops drying at 18-21 percent. This may very well be the case this year, as the number of drying hours has dropped considerably. When corn harvesting enters the month of November, field drying is almost non-existent with shorter days, fewer hours of sunlight and typically cooler temperatures.

Farmers should expect their drying costs to be about .05 cents per point of moisture removed. So if you had to remove eight points, down to 15 percent moisture, that would cost you about .40 cents per bushel plus weight shrink and other dockages. For this reason, farmers may have an incentive to hold corn at higher moistures, awaiting better drying conditions in the spring along with more blending opportunities or feeding your grain to livestock as high moisture corn.

Test weight is expressed as pounds per volumetric bushel. Corn test weights can range from 45 to 60 pounds per bushel. The market standard is 54 for No. 2 yellow corn. Kernel size, shape and density all affect test weight. Higher test weights mean better filled kernels with a higher percentage of hard endosperm. Low test weights usually imply that the crop did not mature entirely or that it was subject to some stress conditions. This year, dry corn test weights are 50-54 pounds per bushel, which are below the industry standards.

Food processors are especially sensitive to lower test weights. Product yield and quality is reduced. Ethanol processors may not be affected by the lower test weights; lower proteins and higher starch yields more ethanol, but does reduce the quality of DDGS. Pay close attention to moisture when delivering grain to ethanol plants; most plants stop taking grain at 17 to 18 percent moisture.

With test weight concerns producers will start having corn storability issues; test weight is a good indicator of corn storability. Corn that is below 54 pounds per bushel after drying should not be stored into warm weather and should be dried to less than 15 percent moisture before storage of any duration. Lighter corn typically breaks more when handling, increasing fines. *Information gathered by Charles Hurburgh, Department of Agriculture and Biosystems Engineering and Roger Elmore, professor of Agronomy.*

Low-Cost Rations Using Distiller Grains

Are you tired of high feed costs? Are you short on hay or pasture? Do you want to feed low-quality grass hay and cornstalks? If you answered yes, please come to Dunlap Livestock Auction December 10 at 5:30. The Shelby and Harrison County Extension Offices are sponsoring a meeting for local beef producers on feeding distiller grains along with low-quality forages to achieve a low-cost ration. Presenters include Daryl Strohbehn and Darrell Busby Iowa State University Extension Beef and Livestock Specialists and Jeff McDonough from Amazing Energy in Denison. The meeting will be FREE if you pre-register by December 5 by calling 1-888-644-2105; if you are not pre-registered it will be \$5.00 at the door. The meeting will include materials, supper and refreshments. For more information please call Kent Ganzer at 755-3104 or Clint McDonald at 644-2105. Hurry and tell your friends and neighbors. This will be an exceptional meeting with lots of information on feeding your cows and calves for low-cost. After hearing this information you will start to put more money back in your pocket.

USDA October Crop Production Report, NASS Reduced Its Numbers

The USDA National Agriculture Statistics Service (NASS) corrected the October crop production report by reducing the number of acres of corn and soybeans harvested nationally by one million acres each. The report was released October 28. It now estimates the national harvest to be 12 billion bushels for corn and 2.94 billion bushels for soybeans. For Iowa, the projected production is 2.15 billion bushels of corn and 441 million bushels of soybeans. The acre estimates were also reduced for Iowa, but the yield estimates remained the same at 172 bushels per acre corn and 46 bushel per acre soybeans. The November report will tell us even more; it will incorporate more data from the field including actual yields and test weights.