FIELD & FEEDLOT

NORTHWEST AREA EXTENSION DECEMBER 2007 ISSUE

Beef News

By Beth Doran, ISU Extension Beef Field Specialist

Test Moldy Cornstalks Before Feeding

Heavy rains have affected the quality of cornstalks this fall. Consider testing for mycotoxins if the cornstalks have visible mold and you plan to use them in beef cattle rations. The extra moisture has increased the chance for mold and mycotoxins to develop.

Cattle are more tolerant than other animals, such as horses, to the most common mycotoxins associated with wet cornstalks – fumonisins and vomitoxins. However, avoid feeding questionable feeds to animals that are more sensitive, such as breeding animals, young stock, or stock that is more fragile due to health or age.

According to Dr. Gary Osweiler, veterinary toxicologist at the ISU Veterinary Diagnostic Laboratory, consumption of these mycotoxins should not result in major health issues for beef cattle. Feed refusal is the only well-documented effect on cattle that consume vomitoxins. Cattle are less likely to show effects from feeding fumonisins. Fumonisins are more toxic than vomitoxins, but cattle are fairly resistant to them compared to hogs and horses. Cattle can tolerate up to 100 ppm of fumonisins without any demonstrable problems. Horses should never have access to moldy feeds or bedding.

To test for mycotoxins, the ISU Veterinary Diagnostic Laboratory offers a qualitative test for $30 and a quantitative test for $35. Testing may also be conducted at a commercial laboratory. A listing of these laboratories is available in the ISU Extension publication – Forage Testing Laboratories (PM 1098a) and may be accessed on the web at: www.extension.iastate.edu/Publications/PM1098A.pdf

There has been a blackish soot on some cornstalk bales, and producers inquired about their use. The ISU Plant Pathology Department has identified two fungus that cause the black growth. Both kinds of fungus (Alternaria and Colletotrichum) decompose dead organic matter and increase stalk degradation. The ISU Veterinary Diagnostic Laboratory indicated that these two fungus do not produce harmful mycotoxins for cattle. Using affected cornstalks for bedding should be okay. However, producers are encouraged to move the cornstalks into the pens after the cattle have been fed, so they will be less likely to consume the stalks.

Financial Assistance for Deep-Bedded Confinement

Low interest loans are available for open feedlots (<1000 head) that are considering deep-bedded confinement buildings. Funding can be used for deep-bedded buildings that 1) replace an existing open feedlot or 2) expand a facility as an addition to an existing open feedlot, provided the existing open feedlot remains in compliance with all environmental rules.

Loans are available to small and mid-size operations and can be used as a sole source of financing or can be combined with an EQIP loan. The deep-bedded building loans are available only to facilities with less than 1,000 head of beef cattle. Producers may apply for loans through local lenders. Applications and information are available through the Iowa Ag Development Authority. Contact Jeff Ward, 515-281-6444 or go to www.iada.state.ia.us/livestock_wqfp.htm

USDA to Cease Back Verification of Cattle Age

USDA announced that, beginning January 1, 2008, cattle eligible for export verification programs can no longer be back verified for age.

Cattle that have left the ranch of origin must be age verified by Jan. 1, 2008, or they will not be eligible for export verification programs that require age verification, such as Japan.

Beginning Jan. 1, 2008, cattle must be age verified prior to leaving the ranch of origin to qualify for age verification premiums.

Census of Agriculture

By Jerry Weiss, ISU Extension Swine Field Specialist

What is the Census of Agriculture?

The Census of Agriculture, taken every five years, is a complete count of U.S. farms and ranches and the people who operate them. The Census looks at land use and ownership, operator characteristics, production practices, income and expenditures and many other areas. For America's farmers and ranchers, the Census of Agriculture is their voice, their future and their responsibility.

Who uses Census of Agriculture data?
Census data is used by all those who serve farmers and rural communities – federal, state and local governments, agribusinesses, trade associations and many others. For instance, companies and cooperatives use the information to determine the locations of facilities that will serve agricultural producers. Community planners use the information to target needed services to rural residents. USDA uses the information to ensure that local service centers are staffed at appropriate levels. Legislators use the information when shaping farm policies and programs. And of course, farmers and ranchers can use Census data to help make informed decisions about the future of their own operations.

How is the Census conducted?
Report forms for the 2007 Census of Agriculture will be mailed to farm and ranch operators in December 2007 to collect data for the 2007 calendar year. Completed forms are due by February 4, 2008. Producers can return their forms by mail or, for the first time, they have the option of filling out the Census online via a secure web site. Respondents are guaranteed by law that their individual information will be kept confidential. NASS uses the information only for statistical purposes and publishes data only in tabulated totals. The report cannot be used for purposes of taxation, investigation, or regulation.

Must I respond to the Census?
Yes. United States Law (Title 7, U.S. Code) requires all those who receive a Census report form to respond even if they did not operate a farm or ranch in 2007.

When will 2007 Census results be released?
NASS will release Census data, in both electronic and print formats, beginning in February 2009. Detailed reports will be published for all counties, states and the nation.

Essentials of Milk and Dairy Products Safety

By Chris Mondak , ISU Extension Dairy Field Specialist

As milk processors attempt to gain unique marketing niches, our grocery store shelves are now filled with an array of milk products. Not only do we have 1%, 2%, whole, or flavored milk, we now also have "natural," "organic," and "hormone free" on the milk labels. Increasing options often lead to increasing consumer confusion and indecision: "What's best?" What's wholesome?" What's safe?" To address this confusion, here are some essential "must know" facts about the realities of milk procurement, testing, and quality.

Milk is one of the most closely regulated and protected agricultural food products, and the primary focus of all regulations is to ensure a safe food product for humans. The US Public Health Service actions to ensure milk safety began in the early 1900s, and were joined by efforts of federal, state, and local government agencies, plus producers and manufacturers in the industry. The guiding document that sets the standards for milk safety in this country is the PMO (Pasteurized Milk Ordinance).
In Iowa, the Iowa Dept of Agriculture and Land Stewardship includes a Bureau of Dairy Products, which enforces the PMO and sets rules for milk safety in this state. Milk producers who do not operate to the standards of this office lose their license to sell milk. In the words of David Brown, Bureau Chief of Iowa Dairy Products, "Milk is the most tested food product. Quality is taken very seriously, and our number one priority is protecting human health."

What about antibiotics in milk? Dairy farmers are allowed to use prescribed antibiotics to treat infections in dairy cows, but they are not allowed to ship milk from treated cows. **There is ZERO TOLERANCE for antibiotics in milk.** Every tank of milk sold is sampled, and every tanker-load delivered to processing plants is tested. Shipments testing positive for any trace of antibiotic are dumped and this milk does not become food. Dairy owners that erred and shipped a positive load are severely fined (thousands of dollars), and will lose the license to sell milk if violations continue.

What about aflatoxins in milk? In some years, dry weather conditions are conducive to the growth of *Aspergillus* molds in corn; these molds can produce aflatoxin. **There is ZERO TOLERANCE for aflatoxin in milk.** In years where there is a chance of aflatoxin presence in feed grain going to livestock, IDALS requires testing of grain at elevators and testing of all milk going to Iowa milk processing plants. A positive test results in dumping of the whole load; it does not become food. The dairy farm that shipped the positive milk is severely fined (thousands of dollars) and will lose the license to sell milk if violations continue. Dairy producers bear responsibility to test grain, silage, and DDGs. Positive feeds cannot be blended down to achieve the 20ppb limit for dairy cattle. This feed must not be used for dairy cattle and young stock; there is ZERO Tolerance for aflatoxin in milk.

What about hormones in milk? Humans, plants, and cows are biological organisms that have their vital functions regulated by hormones. Milk production function in mammals, including dairy cows and humans, is governed by hormones, including bovine somatotropin (BST). As such, all milk products contain by-products of these normal biological activities. Labels that claim "Hormone free" are false labels and are illegal. Some dairy producers choose to supplement a cows' normal BST with a synthetic BST to support efficient milk production. FDA studies on milk from BST supplemented cows found no difference from milk in those cows not receiving supplemental BST.
The bottom line summary message is this: Milk is a highly regulated, highly tested food product. Milk that does not meet the standards for antibiotic free and aflatoxin free is dumped and does not go to our food supply. The variety of labels appearing on certain milk jugs reflects marketing attempts to sell products that often carry a higher price. The niche market label claims do

claims do not mean that those products are safer or more wholesome than conventionally labeled milk.

Sources:

- US Food and Drug Administration – Center for Food Safety and Applied Nutrition – www.cfsan.fda.gov
- Technology Assessment Panel. NIH Technology Assessment Conference statement on bovine somatotropin. Journal of American Medical Association 265: 1423-1425, 1991
- National Dairy Council
- Iowa Dept of Agriculture and Land Stewardship. Conversation with Chief of Bureau of Milk Products, David Brown.

Selecting Corn Hybrids for 2008

By Paul Kassel, ISU Extension Field Agronomist

It is that time of year again. Seed companies are offering new products, new pricing and early pay discounts. How do you decide what to plant? The following are some guidelines that can help make those seed buying decisions for your operation.

Consider the different GMO traits as your first consideration. The following is some discussion on those traits and their value.

Herbicide tolerance- Herbicide tolerance is likely the first trait to select. Glyphosate tolerance is effective and popular. Liberty hybrids are also available. The use of Liberty in alternating years with glyphosate *may help* reduce the chances of herbicide resistant weeds in future years.

Corn rootworm resistance - Traits for corn rootworm (CRW) control are effective and convenient. Rootworm protection is needed for almost all corn on corn rotations (unless you have scouted for rootworm beetles the previous summer).

Corn rootworm resistance on corn following soybean fields has become more commonplace. There is no effective way to predict the occurrence of rootworm damage on corn following soybean. Research has shown that there is about a 20% chance of having rootworm damage from extended diapause on corn following soybean fields. Understandably, some farmers have chosen to use rootworm resistance as an insurance policy against rootworm damage and lodged corn.

Refuge requirements have not changed for rootworm resistance traits. Fields that are planted to Bt- CRW corn hybrids need to have 20% of the field planted to non Bt-CRW corn. The refuge must be adjacent to or within the field.

Corn borer resistance - Management of corn borer has become less of a concern for many farmers. Some recent research at the ISU Northeast Iowa research farm at Nashua has shown that corn borer resistance is still beneficial most years. See the following for more info http://www.ag.iastate.edu/farms/05reports/ne/BT_NonBT.pdf

Some thoughts on corn hybrid selection:

- Select two or three companies as a starting place.
- Select the package of GMO traits that you desire.
- Select a standard hybrid for your comparison. You may want to pick a commonly used hybrid that will appear in numerous plots, or a hybrid that you consider as your standard of comparison.
- Select plots that are within your geographic area.
- Consider grain dry down, stalk quality, etc.

Make as many relevant comparisons as you can with the above criteria. Use university information and/or other credible test plot info (discussed below). Create a grid pattern for comparisons – where different locations with your standard comparison hybrid are listed across the top of the page and new hybrids for comparison are listed down the side of the page. This allows you to make numerous comparisons and easily summarize your findings.

Sources of university information on hybrid testing:

Iowa: http://www.croptesting.iastate.edu/corn/reports.php
Nebraska: http://varietytest.unl.edu/corn.html
Minnesota: http://www.maes.umn.edu/vartrials/corn/index.asp
South Dakota: http://agbiopubs.sdstate.edu/articles/C253-07.xls

Other sources of hybrid testing:

- Local seed company plots
- Commercial companies that conduct university- like trials
- Grower's plots or county test plots

Any test plot has a certain amount of credibility. However, that credibility becomes greater if you can find numerous plots with your standard hybrid and new hybrids you are considering.

1858 2008 150
IOWA STATE UNIVERSITY
www.iastate.edu/isu150