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Taxation Tidbits — 2009
(source: Parman R. Green, Ag Business Mgmt. Specialist)

Maximum Self Employment (Social Security) earnings $106,800

Recovery period for most new machinery & equipment 5 years

Section 179 expensing amount $133,000

50% first-year bonus depreciation NA

Standard business mileage rate 50¢

Annual Gift Exclusion $12,000

Federal Estate Exemption $3.5 million

Did You Know?

Historical accounts from the extended cool years of the middle-ages in Europe tell of people having conditions similar to livestock with ergot poisoning and even entire villages seeming to go crazy. Witch hunts in Europe and the Salem witch trials are said to be a result of ergotism. Both St. Anthony’s fire and St. Vitus’ dance diseases are from ergot poisoning.

Ergot in Hay

This spring and summer was an ideal time for ergot development on grass seed. Ergot contains alkaloids toxic to animals. The disease from eating ergot in hay or feed is called ergotism. Some other effects concern its being a source for lysergic acid diethylamide or LSD. The toxic alkaloids produced are similar in ergot and fescue endophyte.

The ergot spores mimic pollen. When cool weather conditions slow flowering of grasses and frequent rains during pollination carry ergot spores into grass flowers, the fungus is more common. Infected seed heads may have empty sections but more obvious are the dark, oversized growths taking the place of seeds. Ergot looks like horn or banana shaped purple-brown structure. These may be missed for mouse or rat droppings when they fall out of the seed head or are separated during combing. This is a bad year to use screenings as fillers in livestock feeds.

Most of our forage grains can get ergot growing in their seed heads. This makes hay from grasses other than fescue not a perfect way to avoid problems similar to fescue toxicity.

The fescue toxin-like symptoms include: cattle will look identical to fescue foot and get summer slump plus abortions. Swine may have agalactia, early parturition and still births; sheep will get necrosis of the tongue, glitis and dry gangrene; poultry will get comb gangrene; and horse syndromes are also like fescue toxicosis with agalactia, dystocia, dysmature foals, thickening of the placenta and abortions plus dry gangrene. Also, livestock may act abnormally. Therefore, feeding hay that was allowed to go to seed before harvest should be checked for ergot. Fescue hay allowed to go to seed before harvest may be doubly infected.

There is some good news. The longer hay was allowed to cure and the longer it is stored, the lower the amount of ergot and endophyte toxins present. They still may not be low enough to avoid toxic symptoms especially if we have a cold winter.

Another way to reduce the toxins is using anhydrous ammonia treatment which also improves the nutrition and palatability of low quality hay. The University of Missouri Extension Center has information on how to treat hay with anhydrous ammonia. Baleage made from ergot infected hay may not be as detoxified as more typically cured or dried hay. The ensiling process is not perfectly uniform in all cases. Research on baleage shows toxic level variation from different years, fields, baling and ensiling methods and other unknown factors.

Livestock showing symptoms of ergotism or fescue toxicity should be removed from the source of ergot in order for the toxins to dissipate. There is no other form of treatment.

Source: Jim Jarman, Agronomy Specialist

For more information, contact your county University of Missouri Extension Center:

Aurora (573) 581-3231
Benton (660) 438-5012
Boone (573) 445-9792
Callaway (573) 842-0755
Carroll (573) 542-1792
Chariton (660) 289-3239
Cole (573) 634-2824
Cooper (660) 882-5661
Howard (660) 248-2272
Morgan/Moniteau (573) 378-5358
Osage (573) 897-3648
Petit (660) 827-0591
Saline (660) 880-6908

University of Missouri, U.S. Department of Agriculture & Local University Extension Councils Cooperating

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New Herbicides for 2009

Several new herbicides have been approved for use over the past year. Some were available for use in 2008 and others will be available for the first time for use in 2009. Following is a brief description of each herbicide and what it offers.

Balance Flex is labeled for corn and seed corn. It is soil applied through the V2 stage of corn and is typically tank mixed with atrazine. Once corn emerges, only atrazine can be added. Balance Flex has targeted at broad spectrum grass and broad leaf weed control. It has the potential to be weak on heavy grass populations.

Corvus is labeled for corn. Corvus is soil applied through the V2 Stage of corn and is typically tank mixed with atrazine. Once corn emerges only atrazine can be added. Heavy populations of large-seeded broad leaf weeds may be a challenge.

Dupont has two new "Q" products available. Accent Q is nicosulfuron with a safener that can be applied to corn post-emergent up to 20-inch or V6, whichever comes first. Steadfast Q is nicosulfuron, rimsulfuron and a safener that can be applied to corn post-emergent up to 20-inch or V6 corn, whichever comes first.

Ignite contains glufosinate-ammonium and is the same active ingredient in Liberty. Ignite contains 2.34 lbs per gallon while Liberty contains 1.67 lbs per gallon of active ingredient. Ignite is labeled to be applied to LibertyLink soybeans and corn. Use rate is limited on an annual basis. For burn down, 29 to 36 fl oz is used but no additional applications in LibertyLink crops if a burndown is made. In crop applications of 22 oz/ac per application with a maximum of 44 ounces for the cropping year are allowed. The label also allows a one-time post application rate of 36 fl oz/ac on soybean. Ignite requires the additive AMS at the rate of 1 gallon per 100 gallons. Ignite 280SL is expected to be available in 2009. Ignite 280SL is labeled for LibertyLink soybeans. For soybeans it can be applied from emergence up to but not including bloom growth stage. There cannot be more than two applications and 44 fl oz per season. If Ignite 280SL is applied as a burndown, no additional Ignite applications can be made in crop. Glufosinate is not Glyphosate, waiting too long to control weeds will result in disappointing weed control.

Cedat is a new post-emergence broadleaf herbicide from FMC. It is labeled for corn from the 2 leaf stage up to 48 inches and for soybeans from the 1st trifoliate through full flowering. This was a common tank-mix with glyphosate in RR soybeans in 2008.

Spartan Advance is a new product from FMC that is primarily targeted for the sunflower market but also has a propanil or prometryn label in bean. Source: Wayne crook, Agronomy Specialist

Hay Quality from 2008

During the 2008 growing season, most of Central Missouri had abundant rainfall. This was good for growing plants, but not so good for curing hay. Many hay fields were very mature when the products were finally able to get into the fields to harvest. Nutrient value of hay is primarily determined by plant maturity. Therefore, 2008 hay quality will most likely be poorer than normal.

Grass hay samples collected by Gene Schmitz (MU Extension) in Central Missouri from 2004 to 2006 averaged 14.4 percent crude protein (CP) and 51.1 percent Total Digestible Nutrients (TDN). Samples collected from the 2008 hay crop averaged 6.9 percent CP and 47.7 percent TDN. This represents a 52 percent reduction in protein content and an 11 percent reduction in TDN compared to averages of hay sampled from previous years.

The protein requirement for a 1200 pound beef cow two months prior to calving is about 8 percent. This increases to 10 percent at calving for a cow with moderate milk production. The TDN requirement for a 1200 pound cow two months prior to calving is 52 percent and increases to 59 percent after calving. For dry beef cows, the average 2008 hay crop is 12 percent below their requirement for protein and 10 percent below their requirement for TDN. For lactating beef cows, it is 30 percent below their protein requirement and 20 percent below their TDN requirement.

Central Missouri producers have access to a variety of ingredients, such as grain and grain by-products, to supply nutrients to overcome nutrient deficiencies in hay. However, these feed ingredients may be more expensive than in past years. Therefore this year more than ever, it makes economic sense to sample your hay supply. Your area livestock specialist can help develop a least-cost supplementation strategy to meet the nutrient needs of your beef cow herd.

Source: Gene Schmitz, Livestock Specialist

Managing Nitrogen

The price of fertilizer is a continuing concern for producers. Nitrogen (N) source, rate, timing, placement, tillage and weather are all factors that influence how efficiently N is used. The following is several ways a producer can fine tune N management.

1. Select the most profitable N rate. Nitrogen has a point of diminishing returns above which yields will increase but the N may not pay for itself.

2. Use the cheapest source of N available because all N fertilizers convert to nitrate-N in the soil. When available, anhydrous ammonia is typically the most cost effective source of N.

3. Spring applications are better. The closer to the time that the plant uses the N, the better. Fall application can be more convenient, but the risk of N loss is greater. Studies in various Midwestern states indicate that losses from fall applied nitrogen can easily range from 10 to 20 %.

4. If anhydrous ammonia is applied in the fall, wait until the soil temperature at 4-6 inch depth are consistently lower than 50 degrees F. The use of a nitrification inhibitor in Missouri for both fall and spring applications should be considered.

5. Fall application on sandy and poorly drained soils should be avoided. Sandy soils have a high potential for nitrification leaching; whereas poorly drained soils have a high risk for N loss from denitrification.

6. If a producer uses urea, it should be incorporated within three days. Incorporation may be accomplished by rain or tillage. Urease inhibitors can increase stability, but only for about 10 days.

7. Side dressing the N at the time when there is more available. This is common practice when the plants are between knee to shoulder height.

8. Make sure that application equipment is operating properly and distributing the N uniformly and that application rates are within the 100 lbs N/acre to 500 lbs N/acre range. Source: Wayne Crook, Agronomy Specialist

9. Control weeds early. Research in Wisconsin found that when weeds control was postponed until weeds were 12 to 32 inches tall, an extra 100 lbs N/acre was needed to produce the same yield as pre-emergent control. An additional 40 lbs N/acre was needed when weeds were controlled at a 4-inch height.

10. Monitor your crop during the growing season. Plant color sensors can help identify N deficiency and fine tune in-season fertilization. This is a developing technology but showing a lot of possibilities.

11. Use the cheapest source of N available because all N fertilizers convert to nitrate-N in the soil. When available, anhydrous ammonia is typically the most cost effective source of N.