

WHAT'S HAPPENING IN AG

Dale Helwig Cherokee County Ag. and Natural Resources Agent

April 2015

Upcoming Events

Entries

due by July 15

Cherokee County Hay Contest

Submit samples to

Cherokee County Extension Office

Saturday, April 11

**Free Managing Your Money
Workshop**

9:00am Registration

Program 9:30- 11:30

Cherokee County Extension Office

Spring is here and the grass is beginning to grow again. Before long we will be breaking out the hay mower and start the yearly tradition of preparing for next winter. As we bale our hay remember quality counts. Application of nitrogen and timing of cutting has a direct effect on crude protein and TDN. High quality hay can decrease our need for high cost protein supplements, improve the milking ability, growth, and overall performance of our cattle. Cherokee County Extension will be hosting a hay quality competition sponsored by Farmers Coop of Columbus and Baxter Springs. This will be for grass hays only, no legumes, sorghum, or millet. Judging will be based on crude protein, TDN, and relative feeding value. Testing cost around \$12 a sample plus postage. This is a good chance to see how valuable your hay is and maybe win a little money. Feeding recommendations can be made based upon the results of the test.

The Managing Your Money Workshop on April 11 is free and designed for people of all ages and incomes. This would be especially useful for anyone starting out in life or wanting to gain control of their finances. Free child care will be provided for those attending the event and refreshments will be provided. Some of the topics that will be discussed are how to repay debt, meeting seasonal expenses, paying for emergency expenses, and how to set and meet major financial goals. Understanding how much money a person is making and what expenses he/she has, is useful for developing a workable budget. With this information and a few guidelines, a person can begin to manage their money instead of the debt and expenses managing them. If you have any questions about this or other programs please contact the office at 620-429-3849.

Sincerely,

Dale Helwig, CEA, AG

Soybean fertilizer requirements in Kansas

Compared to corn, wheat, and sorghum, soybeans remove significant amounts of nutrients per bushel of grain harvested. Nutrient uptake in soybeans early in the season is relatively small. However as they grow and develop, the daily rate of nutrient uptake increases. Soybeans need an adequate nutrient supply at each developmental stage for optimum growth. High-yielding soybeans remove substantial nutrients from the soil. This should be taken into account in an overall nutrient management plan. A 40-bushel-per-acre soybean crop removes approximately 30 pounds of P₂O₅ and 50 pounds of K₂O with the grain; in addition, approximately 10 pounds of P₂O₅ and 40 pounds of K₂O can be removed with the stover.

Nitrogen

Nitrogen is supplied to soybeans mainly by nitrogen fixation, and fertilizer nitrogen application is not recommended if the plants are well nodulated. Soybeans are heavy users of nitrogen, removing a total of 130 pounds per acre, and about 44 pounds with the stover for a 40-bushel-per-acre soybean crop. Soybeans use all the nitrogen they can fix plus nitrogen from the pool of available nitrogen in the soil. Nitrogen fertilizer application to soybean seldom results in any yield benefit, and efforts should focus on proper inoculation.

Phosphorus

Phosphorus applications should be based on a soil test. Responses to direct phosphorus fertilization is generally consistent in soils testing very low or low in soil test phosphorus. Response to starter phosphorus fertilizer application in soybeans can occur, but it depends on several factors. The most important factor is the soil test level. Generally, warmer soils at soybean planting, compared to corn, also may contribute to typically lower response to starter fertilizers in soybeans. However, starter fertilizer in soybeans can be a good way to complement nutrients that may have been removed by high-yielding crops in the rotation like corn. Banding fertilizer at planting is an efficient application method for soybeans. Soybean seeds are easily injured by fertilizer, therefore, no direct seed contact with fertilizer is advised.

Potassium

Soybean seeds are relatively high in potassium and removal of potassium by soybeans is greater than for other crops on a per-bushel basis when only the grain is removed. As with phosphorus, a soil test is the best index of potassium needs. Soils testing very low or low should be fertilized with potassium, either as a banded starter at planting or broadcast and incorporated. Potassium should not be placed in contact with the soybean seed because of possible salt injury. Yield increases from potassium can be comparable to those with phosphorus under very low and low soil test levels.

Dorivar Ruiz Diaz, Nutrient Management Specialist KSU

Teff Grass

Another forage we have in our arsenal to use for forage production is teff grass. Teff grass is thought to have originated in Ethiopia. It is a high quality, high yielding, fine stemmed warm season annual grass that is drought tolerant along with being able to handle wet conditions. The hay is very palatable and desired by cattle as well as horses.

One major advantage to teff is its ability to produce a large amount of forage in a short amount of time with limited fertilizer. You can expect to harvest teff the first time 45-55 days after planting. Subsequent cuttings can occur every 30-35 days. The key to harvest is timing. Harvest teff at the first sign of heading and cut no lower than 4 inches. This does a couple of things: 1) Increases the quality of the current cutting of hay by not being to mature 2) Provides the plant with the ability to regrow quicker. If teff is cut late or to low, following production yields will be diminished. Total yearly production can be 4-7 tons/acre or about 1 ½ to 2 ½ tons/acre per cutting.

Fertilization of teff is recommended at 40-50 units of nitrogen per cutting. Apply P and K as soil test recommends. The amount of N does have a direct effect on crude protein levels. It is not uncommon to see crude protein values from 12-17%. However, the higher rate of N the more likely lodging (falling over) will occur, especially if it is mowed late.

Teff does have its disadvantages.

- 1) It must be planted every year
- 2) Soil temperature needs to be around 65 degrees and well away from the chance of frost
- 3) Seed bed preparation is vital. It must be a firm seed bed. Loose soil will generally lead to a stand failure or limited stand. Planting depth is 1/8 to 1/4 inch deep only. Seeding rate is 8-10 pounds of seed per acre. The seed is extremely small (1.3 million seeds per pound). Using a Brillion seeder is recommended but is not the only method.
- 4) Grazing is not advised until the root system has been developed. It has a shallow root system making grazing difficult early in development.

Even with its disadvantages it is a great tool in our toolbox of forages. Teff does not have the problems with nitrate toxicity or prussic acid. It's quick growth, excellent nutritional value, and limited need for nitrogen makes it a feed source worth considering, especially in a year when forage may be limited.

Plan now for good marestail control in soybeans

Controlling glyphosate-resistant marestail in soybeans has been a big challenge for Kansas no-till producers in recent years. Because soybeans are generally planted later in the season, and marestail generally germinates in the fall or early spring, application timing and weed size are critical factors to successful control.

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In the early spring, using a growth regulator herbicide like 2,4-D and/or dicamba is an inexpensive and effective option to control rosette marestail. Dicamba has provided better control than 2,4-D and will also provide some residual control, especially at higher use rates. A combination of the two will give broader spectrum weed control than either one alone.

In addition, using a herbicide with longer residual control of marestail helps with weeds that germinate between treatment and soybean planting. Products that include Canopy EX, Autumn Super, Classic, FirstRate, Sharpen, metribuzin, or Valor can help provide residual control against several broadleaf species including marestail. However, it is very important to consult and follow the herbicide label guidelines for the required preplant intervals prior to planting soybeans.

As soybean planting nears, marestail control can become difficult because plants will have bolted and be considerably larger. Herbicides to apply as a burndown prior to planting include tank mixes of glyphosate with FirstRate, Classic, Sharpen, Optill, or 2,4-D. Be very careful to follow label directions when using 2,4-D prior to soybean planting because the plant-back restriction ahead of soybean can be from 7-30 days. Sharpen generally provides good marestail control and can be applied any time before soybean emergence. However, it is still most effective if applied before marestail starts to bolt, in a tank-mix with other herbicides, when used with methylated seed oil, and at spray volumes of 15 gallons per acre or more.

One additional herbicide to consider as a rescue burndown application to control bolting marestail prior to soybean planting is Liberty. Although, it would be better to control marestail at an earlier stage of growth, Liberty has been one of the most effective herbicides to control bolting marestail. Liberty also has broad spectrum non-selective activity on other broadleaf and grass species if treated at a young growth stage. Liberty is primarily a contact herbicide, so a spray volume of 15 gallons per acre or greater generally provides the most consistent weed control. Liberty tends to work best under higher humidity and warm sunny conditions at application.

Controlling marestail in the growing soybean crop can be the biggest challenge for producers. Glyphosate alone is often not effective on larger plants or glyphosate-resistant marestail. The most successful treatments for large marestail in Roundup Ready soybeans have been with combinations of glyphosate + FirstRate, glyphosate + Classic, or glyphosate + Synchrony. However, some marestail may also be resistant to Classic, FirstRate, and Synchrony and control may be marginal.

Another option to control marestail in soybean is to plant Liberty Link soybeans and use Liberty herbicide. It is important to remember that Liberty can only be applied post-emergence on Liberty Link soybeans.

Dallas Peterson, Weed Management Specialist

Herd Health Protocol For Cattle

Not every beef operation is the same, but there are some general guidelines to maintain herd health. When developing a herd health plan always consult your veterinarian for assistance. De-worming should be an integral part of that plan and de-worming livestock twice a year is important. Typically this is done before turnout on summer grass and in the fall at the end of the grass season so those cows are “clean” going into the winter. As cattle eat grass they pick up worms. Larvae climb up the grass blade about 3 inches to be ingested by the cow. If the grass is extremely short, cattle tend to ingest more worms than if the grass is tall. Worms can cause a decrease in appetite and diminish the feed efficiency of the cow.

Providing fly control is essential. There are numerous products and methods available to achieve this. When choosing a product, look at the length of efficacy. Applying a product too soon, such as fly tag, may not last the entire summer. Depending on the product and timing of application, repeating the application may be necessary or using another product in conjunction with the first treatment may be necessary. It is best to rotate the active ingredients in the insecticides you are using so resistance does not become a problem.

Breeding cattle should be vaccinated 30 - 60 days prior to breeding for leptospirosis, vibriosis, IBR-PI3-BVD. Suckling calves at less than 2 months of age should be vaccinated with clostridial spp. vaccine (blackleg). Castration and dehorning can also be performed at this time. At weaning calves should receive booster of clostridial spp., respiratory virals, and both internal and external parasite control. Implant any calves that are not going to be used for reproductive purposes. Any heifers that are retained for breeding purposes can be vaccinated for brucellosis between 4 and 12 months of age.

Other vaccinations or treatments may be necessary during the year. Consult your veterinarian to develop a herd health plan that is right for your operation.

Blackberry Control

Blackberries seem to be a nuisance in pastures. They can be difficult to control and may require more than one treatment. Mowing or burning is not very effective, but will provide short term relief. Chemical control is the most effective way to deal with them. Spraying blackberries at the end of May or first part of June will give the best results. If they have been mowed down, wait until they have 18 inches of growth before spraying. Recommendations for control of blackberries are 1.5pt/acre of Remedy or .5oz/acre of Escort. If using Escort be aware that it can cause stunting of fescue. Other chemicals are available. Consult the K-State 2015 Chemical Weed Control guide book for other options. Always read and follow label directions of the chemical you are using.

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