K-STATE Research and Extension | Wildcat District

FOR IMMEDIATE RELEASE

For more information,
Contact: Wendie Powell
Livestock Production Agent, Wildcat Extension District
wendiepowell@ksu.edu, (620) 784-5337

Are Forage Tests Important?

For nearly four decades, scientists have been refining the ability to test forages for quality. This research is being done in an effort to improve animal nutrition and, consequently, animal production. In the past, analytical procedures required a week or more to complete. They can now be done in less than 10 minutes, with greater accuracy than before.

As procedures for analyzing forages have improved, knowledge of how to use test results to increase animal efficiency and performance has also improved. Despite these advancements, there are still livestock producers out there that do not recognize forage quality testing as a valuable management tool.

Greater net profit is the primary reason livestock producers need to know the quality of forages they are feeding. Not knowing the forage's exact quality acts as a two-edged sword that can cut into profits either way it swings.

Dairy producers who estimate the crude protein (CP) content of their haylage to be just 2 percent lower than it actually is, and the crude protein content of their corn silage to be just 1percent lower than it actually is, end up feeding more supplemental protein in their ration than necessary. This extra crude protein in the ration will add $0.09 per cow per day in feed costs. For a herd of 100 cows, this is equivalent to $9.00 per day. It would take just a little over three days of not knowing the quality of the forages and feeding extra protein, as in this example, to pay for the cost of quality analyses.

The other edge of this two-edged sword cuts into profits when forage quality is overestimated. Unfortunately, the animals are being "short-changed" of crude protein, and this can lower milk production, especially in early lactation.

Guessing at fiber and mineral content also will have an enormous economic impact. For example, the neutral detergent fiber or NDF content of a forage helps determine how much of the forage an animal will consume. Estimating the NDF too high or too low can adversely affect intake, animal performance and health. Knowing the actual NDF content not only saves or makes more money, it also allows managers to provide better animal nutrition. Better nutrition results in greater production and improved efficiency.

Knowing the quality of the forages you're selling or buying is economically wise as well. This fact is confirmed at some New England hay auctions. Hay quality is analyzed and the results posted on each load of hay before the auction. At selling, each percent increase in the crude protein resulted in a selling price of $8 more per ton. Selling 10 tons of an estimated 18 percent CP, when the hay is actually 20 percent CP, will cost the seller about $160.00.

Remember, the results will only be as good as the sample taken. Follow the appropriate steps to collect a representative sample for an accurate analysis.

For more information on forage analysis, give me a call at the Wildcat Extension District, 620-784-5337.

# # #