

Testing Hay for Protein

Hay is not just hay!

Every cutting of hay, even those from the same field, will vary in quality. Quality of hay is generally determined by its protein content. Protein content is determined by the stage of growth the plants harvested were in at the time of cutting. The more immature the plants harvested, the higher the protein content. The more mature the plant (closer to producing seed) the lower the protein content.

Many people believe protein content is highly affected by rate of fertility. Fertilizer, especially nitrogen, does dramatically affect hay yield, but has only a small effect on protein content of harvested forage.

As you harvest hay this summer, sample hay in the windrow prior to baling or after baling so you can test hay for protein. Native grass hay baled in early July will typically test five to six percent crude protein and will do so consistently with a very small range. Bermuda grass and fescue hay can vary dramatically in protein content, while seven and eight percent protein is typical, the range can vary from four to sixteen percent protein. Hays with protein contents of ten percent or above when full fed will meet the nutritional needs of even lactating cows with no supplemental feeds required. Hays with protein content of 10 percent or higher are best used with classes of cattle with high nutritional needs such as growing calves, replacement heifers, and lactating cows. High quality hay enhances gain performance and reduces cost as less if any supplemental feed will be required to meet animal nutritional needs.

Knowing the protein content of your hay sources will let you more effectively meet your cow's nutritional needs. For more information of testing forages for protein contact the Tulsa County OSU Extension Office at 918/746-3725.