

## FORAGE TEST YOUR HAY

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We have had a pretty good forage year, but the excess rain in the spring caused many producers to be a little late on the hay cutting. There were some people that got hay up pretty much on time, however. It is important for everyone to take stock in the hay that they currently have, and forage test every cutting and/or load. Why should you forage test? It is important that you know the nutrient content of the hay in order to adequately supplement your herd this winter. Below are a few of the things you should specifically be looking for.

**Crude Protein level** – Protein is one of the nutrients needed in the largest quantity by beef cattle. A producing beef cow will need a diet that is about 10-12 percent protein. A forage test will provide this information.

**Energy content** – Energy is the second nutrient needed in the highest amount by cattle. A forage test will usually report the energy content as TDN (total digestible nutrients), which is an estimate that is based off of the fiber content of the hay.

Both of these levels can be determined with a standard forage test. At The University of Tennessee Soil, Plant and Pest Center, every sample run can have a ration balanced to inform you of the supplements needed to make up any deficiencies in the hay.

**Nitrates** – Many of the summer forages grown will store nitrogen in the form of nitrate. If cut for hay, this nitrate does not break down, so it remains. If cattle eat a hay with high levels of nitrate, a process occurs in the rumen which ultimately will interfere with the blood's ability to transport oxygen. Cattle will basically suffocate. It is a good idea to test any summer grasses like sorghum x sudangrass or bermudagrass cut to determine the nitrate level. The UT laboratory will test for nitrates, but you must mark this specifically on the submission form. It is not included in a basic forage test.

The best way to sample a hay is by using a forage sampling auger. Check with your Extension agent to see if they have one you can borrow. They can also provide a submission form and provide details about sample submission. A form can be found on the Center's website <https://ag.tennessee.edu/spp/>.

If you have any questions about forage testing, be sure to contact your local UT Extension agent. They are a valuable resource for information about many different topics.