

### Testing Forages Is A Good Investment

Beef producers can develop economical feeding programs when they have their forages tested. The forage test can be used to determine if additional protein or energy should be fed to their animals. The testing of forages is necessary because there can be considerable variability due to fertilization, maturity, harvesting conditions and other factors.

To check for possible variation in hay quality, sixty samples of fescue and orchardgrass hay taken during May and June of 2005. The analyses presented on a “dry matter” (all moisture removed) basis are shown in the following table.

Species	Crude Protein, % (range)	TDN, % (range)
All	8.8 (5.8 - 19)	53 (41 - 66)
Fescue	10.5 (5.8 - 15.1)	54 (42 - 65)
Orchardgrass	9.1 (6.7 - 11.0)	54 (41 - 66)
Fescue - Orchardgrass	9.4 (6.8 - 12.5)	53 (44 - 63)

As noted in the table there was a tremendous amount of variation in crude protein and TDN (Total Digestible Nutrients). For all species the average crude protein content of 8.8% was acceptable, however, the range of 5.8% to 19% extremely wide. The TDN for all species was 53, however, the range was 41% to 66%. Balancing a ration for any class of beef cattle utilizing the averages for crude protein and TDN would surely result in most rations not giving the expected performance.

Tennessee beef producers should send their forages to the University of Tennessee Forage Testing Laboratory for analysis. For a fee of \$10.00, a producer can get an analysis of the forage plus a feeding recommendation. The feeding recommendations are based on the forage analysis and the producer's description of his/her animals. For producers outside of

Tennessee check with the local Extension agent or feed dealer for information about forage testing.

A forage analysis can be a real money saver when figuring on protein costs. Protein is the most costly of the major feed ingredients, however it is usually the most over fed or under fed. With too much protein the ration cost is too high and when not enough protein is fed animals do not gain at the desired rate.

For additional information on forage testing and other topics related to beef production, contact your local Extension agent.