

Feed and Forage Analysis

Sampling Information



ANR-494



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Sampling Information

Sampling your feed or forage is an important step in determining its nutritive value. If you do not get a representative sample of the feed that is to be tested, the results of the chemical analysis will be worthless. If the results are to reflect the true feeding value of the material, you must obtain a sample that represents the entire lot of forage, mixed feed, or individual ingredient to be analyzed.

Hay. Hay samples should be taken with a hay probe. Check with your county Extension office about the availability of a probe. Each sample should represent a batch or lot of hay that has been treated alike—cut from the same field on the same date and stored in a like manner. Separate samples should be collected and submitted for different batches of hay.

Standard square bales: Take core samples from the ends of as many bales as possible. Minimum of 10 bales.

Large round bales: Take the core sample from the round side of the bale and sample as many bales as possible.

Silage. Take a silage sample from an upright silo after the top 3 to 4 feet of silage have been removed. In a trench or pit silo, sample from the fresh surface of silage after some has been removed. Take double handfuls from at least a dozen locations. When a silage unloader is used, place a container under the chute once per minute collecting about a half-gallon at a time until a total of 2 to 3 gallons is collected. Mix this thoroughly and take a subsample to send to the lab. Put into a plastic bag, remove air, seal, and mail or deliver to lab as soon as possible.

Mixed feed or grain. For on-farm mixed feed, samples should be taken as the mixer wagon is being unloaded. For ingredients or mixed feeds stored in bulk, take small samples from as many locations as you can—at least a dozen. A grain probe is most useful for grains stored in a grain bin.

Submitting the Samples

Fill out the reverse side of this sheet—one for each sample that is being submitted. Keep a good record of how you labeled your samples so that matching the results will be simple when you receive the report. Attach this completed information sheet to the bag containing the sample and place both bag and sheet in a mailing envelope. Additional information as well as information sheets, plastic bags, and mailing envelopes can be obtained from your county Extension office.

Mail samples to

Soil Testing Laboratory
Alfa Agricultural Services
and Research Building
961 South Donahue Drive
Auburn University, AL 36849

Enclose a check payable to **Feed Analysis Lab.**

Forage and Feed Testing Information Sheet

Fill out form (one for each sample being submitted) as completely as possible. See reverse side for sampling and mailing instructions.

Name: _____ County: _____ Phone: _____

Address: _____

Your Sample ID: _____

Date Submitted: _____

Check analysis desired*:

- Basic \$10
- Basic Plus Minerals \$25
- Broiler Litter Feed \$9
- Crude Protein \$6
- Fat \$8
- Nitrate Nitrogen \$6

* It is important to choose the correct analysis to meet your needs. For hay, forage, silage, and complete feed samples, the basic analysis is what you should choose. This will include dry matter, moisture, crude protein, fiber, and TDN (total digestible nutrients). If the mineral content is important, choose the next option. If broiler litter is being used as a feed, choose the third analysis. Many producers are interested in checking the feed value of a commodity feed or a single grain; for most of these feeds, the only analysis necessary is crude protein. For example, corn grain is variable in protein content, but its energy value is fairly constant at 90 percent TDN. The best way to check its energy value is by bushel test weight rather than by laboratory analysis. For commodity feeds (e.g., soyhulls, cottonseed, corn, oats, etc.) choose crude protein only. Fat is self-explanatory. Nitrate levels can become toxic in forages experiencing drought stress and levels can be determined. See Extension publication ANR-112, "Nitrate Poisoning of Cattle in Alabama," for complete details.

Type of Feed

(Check appropriate box)

Hay

- Bermudagrass
- Bahiagrass
- Dallisgrass
- Crabgrass
- Fescue
- Orchardgrass
- Alfalfa
- Clover
- Serecia
- Peanut
- Soybean
- Other Legume
- Small Grain
- Ryegrass
- Sorghum/Sudan
- Millet
- Johnsongrass

Silage

- Corn
- Other

Total Mixed Ration

- Contains Roughage
- Contains Only Grains
- and Commodity Feeds

Grain or Commodity Feed

- Corn
- Cottonseed
- Soyhulls
- Broiler Litter
- Other

Type of Animal and Supplement

(An example diet will be formulated using your hay analysis if you provide animal information and type of supplement that you might use.)

Beef Cattle

- Dry Cow, 3 Months Pre-Calving
- Superior Milking Cow, 1 to 3 Months Post-Calving
- Average Milking Cow, 1 to 3 Months Post-Calving
- First Calf Heifer, 1 to 3 Months Post-Calving
- Weaned Steers/Heifers, 2.5 ADG
- Yearling Heifers, 1.5 ADG
- Yearling Bulls, 2.5 ADG
- Yearling Bulls, 3.0 ADG

Dairy Cattle

- Horses
- Sheep
- Goats
- Swine

Supplemental Feed

- Shelled Corn
- Range Cubes
- Soybean Hulls
- Whole Cottonseed



Your Experts for Life

Darrell L. Rankins Jr., *Extension Animal Scientist*, Associate Professor, Animal Sciences, and **Hamilton Bryant**, *Extension Research Associate*, both with Auburn University; and **Mike Davis**, *Extension Area Agronomist*, Blackbelt Regional Research and Extension Center.

For more information, call your county Extension office. Look in your telephone directory under your county's name to find the number.

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