

# KENTUCKY DEPARTMENT OF AGRICULTURE

**Jonathan Shell, Commissioner**

Frankfort, Kentucky



**KENTUCKY**  
DEPARTMENT OF  
**AGRICULTURE**

## Forage Sample Analysis Request Form

Producers Name: \_\_\_\_\_ County: \_\_\_\_\_

Mailing Address: \_\_\_\_\_ Farm Name: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ Email: \_\_\_\_\_

### LOT INFORMATION

Lot Number \_\_\_\_\_  
 Sampler \_\_\_\_\_  
 Date Harvested \_\_\_\_\_  
 Initial Tons \_\_\_\_\_  
 Produced \_\_\_\_\_  
 Purchased \_\_\_\_\_  
 Sample Date \_\_\_\_\_

Type of Forage – Check all that apply			
Small Grain	Legume Hay	Grass Hay	Mixed Hay (Leg/Grass)
Wheat _____	Alfalfa _____	Bermuda _____	Alfalfa-Orchard _____
Other _____	Clover _____	Fescue _____	Alfalfa-Timothy _____
		Orchard _____	Alfalfa-Grass _____
	<b>Haylage</b> _____	Sudan/Sudex _____	Clover-Grass _____
	Legume _____	Teff _____	Lespedeza-Grass _____
	Grass _____	Timothy _____	Other _____
Cornstalk Hay _____	Mixed _____	Wheat _____	
Soybean Hay _____	Small Grain _____	<b>Other</b> _____	
Other _____			

We test for nutrition & energy levels only, we do not test for nitrate, mineral, toxin, sugar or corn silage.

<b>LIST ALL COMMENTS REGARDING SAMPLE HERE:</b>	

**IS THIS HAY FOR SALE? NO  / YES**

**ALL QUESTIONS IN THIS SECTION IS REQUIRED IF FORAGE IS "FOR SALE" / OPTIONAL IF "NOT FOR SALE"**

Cutting Date: \_\_\_\_\_  
 Date Baled: \_\_\_\_\_  
 Cutting No: \_\_\_\_\_  
 Bale Size: \_\_\_\_\_  
 Bale Weight: \_\_\_\_\_  
 No. of Bales: \_\_\_\_\_  
 Storage Type: \_\_\_\_\_

Foreign Matter%: \_\_\_\_\_  
 Foreign Matter Identity: \_\_\_\_\_  None  
 Injurious Foreign Matter: \_\_\_\_\_  None  
 Preservatives: \_\_\_\_\_  None  
 Drying Agents: \_\_\_\_\_  None  
 Rain Damage: Yes  No

#### COLOR:

\_\_\_\_\_ Lt-Green  
 \_\_\_\_\_ Green  
 \_\_\_\_\_ Dk-Green  
 \_\_\_\_\_ 5-10% Bleach  
 \_\_\_\_\_ 10-15% Bleach  
 \_\_\_\_\_ Hv-Win Bleach  
 \_\_\_\_\_ Lt-Rain  
 \_\_\_\_\_ Mod-Rain  
 \_\_\_\_\_ Bleach  
 \_\_\_\_\_ Haylage

#### STEM TEXTURE:

\_\_\_\_\_ Coarse-Hard  
 \_\_\_\_\_ Coarse-Med  
 \_\_\_\_\_ Coarse-Soft  
 \_\_\_\_\_ Med-Hard  
 \_\_\_\_\_ Med-Med  
 \_\_\_\_\_ Med-Soft  
 \_\_\_\_\_ Fine-Hard  
 \_\_\_\_\_ Fine-Med  
 \_\_\_\_\_ Fine-Soft  
 \_\_\_\_\_ Haylage

#### MATURITY STAGE:

**GRASS**  
 \_\_\_\_\_ Vegetative  
 \_\_\_\_\_ Early Head  
 \_\_\_\_\_ Head  
 \_\_\_\_\_ Bloom  
 \_\_\_\_\_ Seed  
 \_\_\_\_\_ Haylage

#### STEM/LEAF

\_\_\_\_\_ Excellent  
 \_\_\_\_\_ Good  
 \_\_\_\_\_ Fair  
 \_\_\_\_\_ Poor

#### MOLD

\_\_\_\_\_ Lt-Cure-Discolor  
 \_\_\_\_\_ Lt-Brown-Cure  
 \_\_\_\_\_ Dk-Brown-Cure  
 \_\_\_\_\_ White-Mold  
 \_\_\_\_\_ None

#### LEGUME:

\_\_\_\_\_ Prebud  
 \_\_\_\_\_ Prebloom  
 \_\_\_\_\_ 5% Bloom  
 \_\_\_\_\_ 10% Bloom  
 \_\_\_\_\_ 15% Bloom  
 \_\_\_\_\_ 25% Bloom  
 \_\_\_\_\_ 50% Bloom  
 \_\_\_\_\_ Full Bloom  
 \_\_\_\_\_ Haylage

#### LEAF RETENTION:

\_\_\_\_\_ 90%  
 \_\_\_\_\_ 75-90%  
 \_\_\_\_\_ Mod-Shatter  
 \_\_\_\_\_ Hv-Shatter  
 \_\_\_\_\_ Haylage

#### ODOR:

\_\_\_\_\_ Fresh  
 \_\_\_\_\_ Bland  
 \_\_\_\_\_ Dull  
 \_\_\_\_\_ Lt-Musty  
 \_\_\_\_\_ Mold  
 \_\_\_\_\_ Haylage

- **How to Pull a Core Sample:** <http://foragetesting.org> / Click on "Certified Sampler" icon.
- **Size:** Minimum sandwich size baggie or more.
- **Mail samples in a timely manner:** Haylage **should** be expedited due to mold issue; do not send on a Friday.
  - **Samples:** Samples can be dropped off between 8:00 am and 4:00 pm, Monday – Friday.
  - **Forms:** A separate form must be submitted with each sample for testing.
  - **Payment must be submitted with samples:** Enclose a \$10.00 check or money order (**do not send cash**) per sample or one check per person or group - payable to **"Kentucky State Treasurer"**.
  - **Mail to:** Kentucky Department of Agriculture / Forage Testing Program / 107 Corporate Drive, Frankfort KY 40601 • 502-782-9210

Per  # \_\_\_\_\_  
 MO  Date \_\_\_\_/\_\_\_\_/\_\_\_\_  
 Co  \$ \_\_\_\_\_  
 For office use only

## FOR SALE EXPLANATION:

**Foreign Matter% / Foreign Matter Identity / Injurious Foreign Matter:** Visual inspection can detect **foreign matter** (anything that has little or no feed value). Tools, sticks, rocks, wire, items of clothing, dead animals, and cow chips have all been found in hay and are obviously undesirable. Dead animals in hay can cause botulism, a deadly disease that can kill farm animals.

**Preservatives / Drying Agents:** Preservatives and drying agents are options that can be explored to reduce wilting periods for hay crops this year. Prolonged soil saturation and frequent rains have delayed hay harvest operations for many producers, and using treatments such as drying agents may increase dry-down rates, or using preservatives may reduce requirements for complete dry-down before storing the feed.

**Rain Damage:** This is due to water-soluble fractions being washed from the forage. Typically, these are more digestible and have higher nutritive value than what is left. Rain damage will leave you with hay that has higher fiber, unavailable protein and lower energy levels than hay that was not rained on. The digestibility of these hays are also usually reduced. The degree of damage is related to how dry the forage is when it is rained on. The closer the forage is to baling the worse the damage.

**Color:** Good hay is a pale green to pale gold in color. If it looks dull and brown there is a good chance it has been compromised by rain while drying. If it is golden in color, it may have been too dry when cut. The best area to assess color is in the heart of a bale, not the outside, which can bleach out in daylight. Do not be put off by a bale with part of its exterior bleached. Chances are it has simply been spending its days on the outside of a haystack. The bleached area will probably have lost its vitamin A content, but most of the nutrients should still be there.

**Leaf Retention:** Leaf retention has been shown to have a significant impact on forage quality. Two-thirds of the nutritive value of alfalfa hay is in the leaf material, and that value declines significantly as leaves are lost during drying.

**Stem Texture:** Softness usually results from early cutting, high leaf content, and a suitable moisture level at baling. When hay is “very soft” and pliable, it is difficult to distinguish between stems and leaves just by feeling the hay. “Fine-Medium” hay is soft to the touch, but stems can be detected easily. “Medium to Medium-Hard” hay has stems that are a little rough; “Coarse” hay is dry, stemmy, and unpleasant to the touch. “Coarse-Hard” hay can injure an animal’s mouth, lowering intake.

**Mold / Odor:** It comes from a plant chemical called coumarone. Your nose is an essential tool in detecting mold. You may smell mold before seeing it. If you are able to cut a sample bale, thrust your nose into its heart before the surrounding air can dilute any odors. Ideally, you will detect a pleasant sweet or fresh smell. If the smell is sharp, musty, almost metallic, and looks white, it is an indication the hay is mold-affected. Other smells are bland and dull.

**Maturity Stage Grass / Legume:** Of all the factors affecting hay quality, stage of maturity when harvested is the most important and the one in which greatest progress can be made. The main factors determining forage quality can be visually assessed. The number and maturity of seed heads and blooms, and the stiffness and fibrousness of the stems are indicators of plant maturity.

**Stem/Leaf Ratio:** Legume, Legume/Grass and/or Grass stands are important factors affecting diet selection, quality, and forage intake. The higher leaf retention relative to stem, the higher the quality.

**Comments:** Use this area to clarify your sample information/location (example: field 1 / home place). This will be listed on your analysis report.

**For Sale Listing:** If a producer has Kentucky-produced hay, has it tested by the Kentucky Department of Agriculture and would like to sell it, KDA will list it at no charge on the Forage Sales Directory/Tested Hay Web Page. Forage testing helps to determine fair market value and an equitable price. Listings on the Forage Sales Directory page are designed to support our consumers and producers. The hay search results can be sorted by any combination of county, relative feed value (RFV), bale size and type of hay. Each listing describes a lot’s type, cutting date, cutting number, bale size and weight, color, odor, and other characteristics.

**What is an analysis report and what do I do with it?** What do all the abbreviations mean? You and your extension agent will receive an analysis report by email from KDA. Mailed paper analysis reports can be requested. Your Extension Agent can assist you with your livestock ration balance. “Interpreting Forage Quality Reports” and “Understanding Forage Quality” are great reference material; you can find them at [www.kyagr.com/marketing/forage](http://www.kyagr.com/marketing/forage) in “Hay Testing Terms” or at [www.uky.edu/ag/forage](http://www.uky.edu/ag/forage) in “Publications”.

**Mail vs. Email:** Email should provide faster delivery than postal mail. Your information will not be shared outside of KDA. To mail: KDA / Forage Testing Program, 107 Corporate Drive, Frankfort KY 40601. 502-782-9210

**Mixed Hay vs. Mixed Grass:** Mixed Hay is considered a legume and grass mix. Mixed Grass consists of mixed grass.  
**Haylage:** Considered 40% and up for moisture level.

**For Sale:** We do not set bale price or transportation; this is between seller and buyer.

**We test for nutritional & energy levels only, we do not test for nitrate, mineral, toxin, sugar or corn silage.  
If you need one or all of these analysis, please contact your county Extension Agent.**