

2007 Southeastern Hay Contest Results

A Cooperative Extension Effort of
Auburn University, Clemson University, The University of Florida,
and The University of Georgia

Overall results for warm season perennial grass hay (bermudagrass, bahiagrass), perennial peanut and alfalfa hay, perennial cool season grass (tall fescue, orchardgrass, etc.), mixed and annual grass hay, grass baleage, and legume baleage categories in the 2007 Southeastern Hay Contest are listed in Table 1. This contest is held in conjunction with the Sunbelt Agricultural Expo in Moultrie, GA.

Despite a severe drought across the entire Southeast, 250 entries were received in 2007. This represents a 25% increase in entries over the previous record number of entries! Samples came from in from all across the Southeast. The average nutrient content of the submitted samples also continued to increase over previous years. This year's average Relative Forage Quality (RFQ) over all samples was 117.

What is Relative Forage Quality? Past hay quality prediction equations were based on the fiber *concentration* of the hay crop. However, forage crops can have similar fiber content yet have very different digestibility. For instance, Tifton 85 bermudagrass often has a higher fiber concentration than other bermudagrass varieties, yet is more digestible. This improved digestibility results in enhanced animal performance, but is not reflected using traditional hay testing methods. The Relative Forage Quality index was developed by the University of Wisconsin to predict the fiber *digestibility* and animal intake of harvested crops. Unfortunately, these equations were not applicable to warm season forages like bermudagrass, bahiagrass or perennial peanut. Since 2003, hundreds of warm season samples have been used to develop an RFQ equation for bermudagrass and other warm season forages. Currently, all forage sample results from the UGA Feed and Forage Testing Lab in Athens contain an estimate of Relative Forage Quality. This value is a single, easy to interpret number that improves producer understanding of a forage's quality and helps in establishing a fair market value for the product.

How can Relative Forage Quality help me? Relative Forage Quality allows hay producers to easily categorize and price hay lots based on relative quality. Cattle producers can purchase hay lots depending on its end use. For example, there is little need to feed high-end quality hay to livestock that could easily utilize poorer quality forage. Hay with a RFQ of 115-130 can be fed to maintain beef cow-calf pairs, hay with an RFQ of 125-150 is adequate for stocker cattle or young growing replacement heifers, and hay with an RFQ of 140-160 is suitable for dairy cattle in the first three months of lactation. It is also easy to see that Relative Forage Quality could provide the framework for a quality hay marketing system. For example, hay with a RFQ of 155 could conceptually be labeled "premium" hay, while hay with an RFQ of 105 could be labeled "fair". This simple system could allow producers to price hay consistently and fairly across harvest maturity, fertilization regimes, or plant species (i.e. bermudagrass, bahiagrass, perennial peanut, or tall fescue).

Think you can do better? Submit your sample in the summer of 2008 through your local county Extension office. Find an official entry form and the contest guidelines at www.georgiaforages.com.

Table 1. Category winners from the 2007 Southeastern Hay Contest. (250 Total Samples Entered)

Category	Farm	Crude Protein, %	TDN, %	RFQ
Warm Season Perennial Grass Hay	<i>Overall Range:</i>	(5.4 - 20.7)	(42.1 - 69.1)	(63 - 148)
	Wayne Hurley Chattooga Co., GA	16.2	66.1	148
	David Buffamoyer Anderson Co., SC	15.9	65.3	147
	Joe Armstrong Grady Co., GA	17.4	67.7	145
Perennial Peanut/Alfalfa Hay	<i>Overall Range:</i>	(11.7 - 24.7)	(51.1 - 69.9)	(97 - 237)
	Mark Vickers Coffee Co., GA	18.3	69.9	237
	Mark Vickers Coffee Co., GA	20.1	69.3	228
	William Schultz Kearny Co., KS	24.7	68.5	219
Cool Season Perennial Grass Hay	<i>Overall Range:</i>	(10.9 - 17.6)	(50.7 - 64.8)	(83 - 157)
	Richard Matthews Barrow Co., GA	16.6	64.8	157
	Rod Nowland Calhoun Co., AL	12.7	64.3	135
	Ken Smith Banks Co., GA	16.6	61.4	127
Mixed and Annual Grass Hay	<i>Overall Range:</i>	(6.3 - 19.3)	(44.3 - 72.0)	(64 - 211)
	Troy Platt Madison Co., FL	11.2	72	211
	David Harden Walker Co., GA	15.8	65.8	178
	Robert Gamble Chattooga Co., GA	19.3	66.9	154
Grass Baleage	<i>Overall Range:</i>	(8.3 - 10.4)	(46.7 - 64.6)	(91 - 225)
	Troy Platt Madison Co., FL	8.7	64.6	225
	Madison Madison Co., FL	10.4	56.9	146
	Madison Madison Co., FL	10.4	54.4	134.7
Legume Baleage	<i>Overall Range:</i>	(8.8 - 18.7)	(50.4 - 66.6)	(96 - 256)
	Troy Platt Madison Co., FL	8.8	66.6	256
	Troy Platt Madison Co., FL	9.3	64.0	206
	Hudson Farms Madison Co., FL	16.9	58.8	188