

2010 Southeast Hay Contest Results

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

Final results for the 2010 Southeastern Hay Contest (SEHC) are listed in Table 1. The results are broken down into the six categories of the contest: 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. This contest is held in conjunction with the Sunbelt Agricultural Expo in Moultrie, GA.

Rainfall in the Southeast was quite variable from one area to another this year. Some areas suffered from drought, others had plenty of rain, while a few had too much rain to allow for good hay-making weather. Despite these conditions, 210 entries were received from all across the Southeast in 2010. However, there was an across-the-board reduction in forage quality in entries received this year. In fact, the overall average Relative Forage Quality (RFQ) of samples submitted for the 2010 SEHC was just under 103, which is the lowest average RFQ since the contest began in 2004. Why the reduction in quality relative to years past? A major reason for this is that we had over substantially more bermudagrass entries this year than in years past. This disproportionate increase resulted in an overall lower average RFQ score for the SEHC. However, this does not explain away the reduction in forage quality within each of the categories. One reason for this reduction is that harvests were frequently delayed this year because of sporadic but frequent afternoon showers. Another major contributing factor was the very hot summer during 2010. Many areas set records for the number of days with 90°+ temperatures, and nighttime temperatures frequently brought no respite. High temperatures and, especially, hot and humid nights can severely reduce forage quality (and quantity). These factors likely combined to suppress forage quality in 2010.

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 Florida and the University of Wisconsin to predict the fiber *digestibility* and animal intake of harvested crops. Since 2003, hundreds of warm season samples have been used to refine the 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 nutritive 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. Producers can purchase hay lots depending on its end use. For example, there is little need to feed high-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).

Table 1. Category winners from the 2010 Southeastern Hay Contest. (210 Sample Entries)

Category	Farm	Crude Protein, %	TDN,%	RFQ
Warm Season Per. Grass Hay <i>138 Entries</i>	Cherry Farms Walton County, GA	10.9	56.2	124
	Paul Austin Lauderdale County, AL	18.7	60.1	118
	Wayne Collins Edgewood County, SC	14.4	57.2	117
	Overall Range:	(5.0 – 11.4)	(41.5 – 61.4)	(49 – 124)
Per. Peanut/Alfalfa Hay <i>19 Entries</i>	Vickers Still Farm Coffee County, GA	18.7	66.8	204
	McGee Ranch Lubbock County, TX	33.4	70.0	190
	Vickers Still Farm Coffee County, GA	22.0	65.1	180
	Overall Range:	(12.1 – 33.4)	(57.1 – 70.0)	(105 – 204)
Cool Season Per. Grass Hay <i>12 Entries</i>	Duncan Legacy Farm Carroll County, GA	12.0	54.2	125
	Sid Hetzler Walker County, GA	10.7	57.3	118
	Trice Farm Upson County, GA	14.0	56.4	110
	Overall Range:	(9.5 – 15.2)	(47.6 – 57.3)	(82 – 125)
Mixed and Annual Grass Hay <i>26 Entries</i>	Trice Farm Upson County, GA	16.0	66.6	209
	Joe Armstrong Grady County, GA	14.6	58.0	159
	Joe Armstrong Grady County, GA	9.6	57.0	147
	Overall Range:	(7.6 – 18.6)	(49.9 – 66.6)	(75 – 209)
Grass Baleage <i>13 Entries</i>	Verner Farms Morgan County, GA	15.4	61.6	192
	Cabe Bros. Farms Franklin County, GA	17.1	60.7	170
	Fussell Farms Coffee County, GA	17.0	62.6	165
	Overall Range:	(7.3 – 17.1)	(45.5 – 62.6)	(63 – 192)
Legume Baleage <i>2 Entries</i>	Ron Prokop Walton Co., FL	16.6	52.3	112
	Bear Creek Angus Farm Coffee County, GA	9.8	50.4	81

Think you can do better? Submit your sample in 2010 through your local county Extension office. An official entry form and the contest guidelines for next year's contest will be posted soon. at www.georgiaforages.com.