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An Update on Hay Quality and the Southeastern Hay Contest

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The majority of farmers in the southeastern US do not sample their hay. Many do not base management decisions on hay quality. One reason that hay sampling is not conducted frequently is that producers have little incentive to market hay based on quality. The Relative Forage Quality (RFQ) index was developed by the University of Wisconsin to predict the fiber digestibility and animal intake of harvested crops and consists of a single, easy-to-interpret number relating quality of a forage sample to that of full bloom alfalfa hay. Unfortunately, these equations were not originally applicable to warm season forages like bermudagrass, bahiagrass or perennial peanut. Warm season forage crops have recently been added to this forage quality index so a useful equation is now available for producers in the southeastern United States. Several hundred warm season samples have since been used to develop an RFQ equation for bermudagrass and other warm season forages. Currently, all forage sample results from the University of Georgia 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 forage quality and should help to establish a fair market value for the product.

To promote the usefulness of the RFQ index and educate producers on the value of producing high-quality forages, a multi-state hay show called the Southeastern Hay Contest was initiated in 2003. The contest is open to producers across the southeastern United States and hay entries are placed solely on their RFQ score. Six categories including warm season perennial grass hay, cool season perennial grass hay, mixed hay, legume hay, legume baleage and grass baleage are evaluated.

The hay contest has continued to grow over the past three years, with sample numbers increasing from approximately 40 total in 2003 to 197 total in 2006. The majority of these samples are of bermudagrass hay; however, the numbers of round bale silage entries continues to increase every year. Figure 1 gives the number of entries received in each hay category over the past three years.

Figure 1. Number of hay samples submitted to the Southeastern Hay Contest. 2004-2006.



Interestingly, the quality of forage samples submitted to the contest has also tended to improve over the past three years. The average RFQ has improved in three of the four hay categories in each of the contest years (Figure 2). Hopefully, this indicates improvements in producer forage management practices.



Figure 2. Average Relative Forage Quality of individual hay categories from 2003-2006.

Many excellent hay and baleage samples were received from Florida, Georgia, Alabama and South Carolina this year. Contest winners by entry category are listed at the end of this document in Table 1.

We hope to use this hay contest as a tool to (1) increase producer awareness of management factors that affect hay quality, (2) improve the accuracy of warm season forage analysis, (3) simplify hay quality measures to allow easy interpretation and comparison of harvests and (4) ultimately develop a quality-based hay market in the Southeastern U.S.

We intend to continue this hay contest in upcoming years and encourage all producers to enter hay samples beginning next summer. Entry is open to all producers and cost will be the same as for a standard NIR hay analysis including nitrates- \$10. Contact your local county agent for entry forms next hay season.

Table 1. Category winners from the 2006 Southeastern Hay Contest. Total SamplesEntered = 197.

	Farm	Crude Protein, %	TDN, %	RFQ
Warm Season Grass Hay	Overall Range	5.8-16.2	51-70	61-155
1 st place	John Case Dade Co, GA	12.4	68	155
2 nd place	Jerome Bunn Monroe Co, GA	15.6	70	141
3 rd place	Rusty Bean (GA),	14.5	67	139
	Ed Trice (GA)	12.7	67	139
Logumo Hov	Overall Range	98-216	59-70	98-180
1 st place	Mark Harris	21.6	67	180
i place	Huntsville, AL	21.0	07	100
2 nd place	Richard Cone Madison Co, FL	17.0	70	155
3 rd place	Hudson Farms, Madison Co, FL	13.8	67	145
Cool Season Grass Hay	Overall Range	6.4-12.1	52-62	80-116
1 st place	Sid Hetzler Walker Co, GA	10.1	58	116
2 nd place	Split Tree Farm Walker Co, GA	11.4	62	108
3 rd place	Luke Gray Dade Co, GA	10.6	60	108
Mired Her	Overall Dange	50108	45.60	50 164
1 st place	Bill Jackson	13.1	43-09 68	164
1 place	Washington Co, GA	13.1	00	104
2 nd place	Joe Armstrong Grady Co, GA	15.9	66	162
3 rd place	Ed Trice Upson Co, GA	16.6	69	155
Grass Baleage	Overall Range	7.9-17.7	51-65	53-128
1 st place	Troy Platt Madison Co, FL	12.0	58	128
2 nd place	Greenview Farms Inc. Wayne County, GA	13.2	64	119
3 rd place	Troy Platt Madison Co, FL	10.6	54	111
Leaume Roloogo	Overall Range	11 4-15 0	56-68	95-215
1 st place	Trov Platt	15.9	68	215
- p	Madison Co, FL			
2 nd place	Sundown Farms Madison Co, FL	13.1	67	140
3 rd place	Troy Platt Madison Co, Fl	15.7	67	137