Results of the 2018 Southeastern Hay Contest Presented by Massey Ferguson

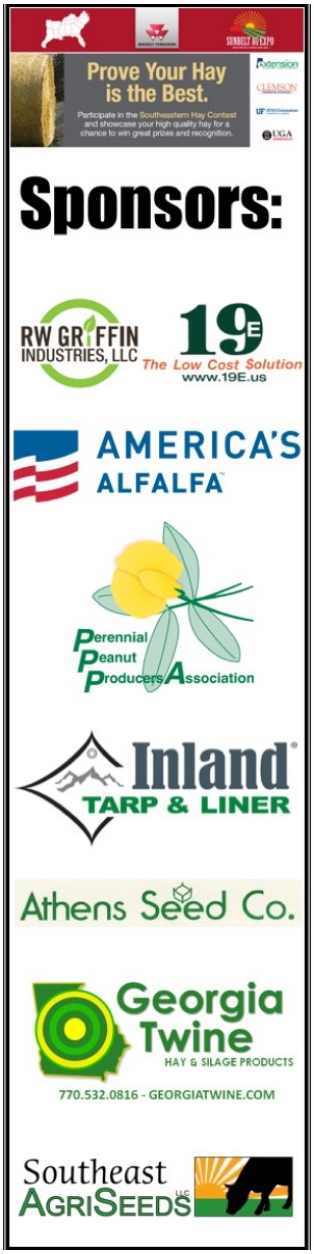
October 16-18, 2018

Sunbelt Agricultural Exposition, Moultrie Georgia

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

MASSEY FERGUSON

The 2018 Southeastern Hay Contest (SEHC) presented by Massey Ferguson was a fierce competition, with 286 entries vying for the top spot. Final results for the 2018 SEHC are listed in Table 1. The results are broken down into the Contest's categories of the contest: warm season perennial grass hay (bermudagrass, bahiagrass), alfalfa hay, perennial peanut hay, perennial cool season grass (tall fescue, orchardgrass, etc.) hay, mixed and annual grass hay, grass baleage, and legume baleage. This contest is held in conjunction with the Sunbelt Agricultural Expo in Moultrie, GA. Winners were announced during the opening ceremonies at the Sunbelt Expo on Tuesday, Oct. 16, 2018. In each of the categories, the highest three entries in terms of relative forage quality (RFQ) received cash prizes. First place received $125, second received $75, and the third place entry received $50. Top honor was also awarded to the highest overall RFQ. This year, Flatwoods Farms in Murrayville, GA took home the overall high RFQ prize with some extremely high-quality alfalfa, which maxed out the scale at 300. Flatwoods Farms also received their choice of the use of a new Massey Ferguson DM Series disc mower or RK Series rotary rake for the 2019 hay production season plus $1000 in cash!



Weather is always a major factor when attempting to produce high quality forage. This year, wet conditions early and dry conditions late in the growing season proved to be a major limitation for many producers. The wet conditions in the first two-thirds of the season caused many producers to struggle to get hay dry, and 37 entries (13%) into the contest had to be disqualified because the hay moisture exceeded 18%. Drought stress late in September also increased the incidence of high nitrate levels in the forage in 2018, and 8% of the samples submitted to the contest were disqualified because nitrates were greater than 5000 ppm. Though the average forage quality this year was very high, these weather challenges caused the average RFQ to be down slightly from previous years. Still, the winning entries were on par with or greater than record winning values in the Contest's 14-year history. Good management can make a remarkable improvement in forage quality in both favorable and unfavorable weather conditions.

What is Relative Forage Quality? In the past, hay quality prediction equations were based on the fiber *concentration* of the hay crop. However, forage crops can have similar fiber content but have very different digestibility. For instance, Tifton 85 bermudagrass often has a higher fiber concentration than other bermudagrass varieties, yet it is more digestible. This improved digestibility results in enhanced animal performance, but is not reflected using traditional forage 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's Feed and Environmental Water 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 100 or more can usually be economically fed to maintain beef cows, while 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 100 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 2018 Southeastern Hay Contest (286 Sample Entries).

Categories and Farm	City,	State	CP, %	TDN, %	RFQ	Sponsors
1. Warm Season Per. Grass Hay: 92 entries						
Jeff Bacon	Dudley	GA	18.7	61.3	144	
Eddy Turner	Tennille	GA	14.1	61.1	142	
Hodges Farm	Mansfield	GA	13.3	61.1	141	
				Category Average	***114.4***	
2. Alfalfa Hay: 13 entries						
Flatwood Farms	Murrayville	GA	27.7	76.3	343	
Cline Farms	Valdese	NC	27.3	72.2	283	
Bohlen and Son Farms	Madison	GA	25	71	254	
				Category Average	***194.4***	
3. Per. Peanut Hay: 14 entries						
Bill Conrad	Malone	FL	15.2	69.4	205	
Justin Williams	Graceville	FL	12.9	65.6	171	
Basford Farms	Grand Ridge	FL	17.8	65.7	169	
				Category Average	***161.9***	
4. Cool Season Per. Grass Hay: 17 entries						
Oak Ridge Ranch, LLC	Dahlonega	GA	11.5	69.1	182	
Jimbo Crumley	Bostwick	GA	14.1	61.7	143	
Fence Row Farms	Marshallville	NC	15.4	59.2	131	
				Category Average	***127.5***	
5. Mixed, Annual Grass or Other Hays: 63 entries						
Pittman Farms	Nicholson	GA	10.6	68.3	175	
Cline Farms	Valdese	NC	25.2	66.2	170	
Fence Row Farms	Marshallville	NC	12.5	65.3	161	
				Category Average	***130.7***	
6. Grass Baleage: 80 entries						
Yon Family Farms	Ridge Spring	SC	15.7	70.4	196	
Ernie Cooper	Lavonia	GA	27.6	70.3	195	
Thrasher's Farm	Carlton	GA	14.2	69.5	190	
				Category Average	***148.3***	
7. Legume Baleage: 7 entries						
Fence Row Farms	Marshallville	NC	11.7	70.7	153	
JS McRae Farms LLC	Alma	GA	21.5	60.7	125	
				Category Average	***165.0***	