

2009 Tall Fescue Report

Research Report 10-11

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The forage cultivar evaluation program is a partnership between University of Tennessee Extension and UT AgResearch to aid producers in the selection of the best cultivars for their farm. The data in the following tables were determined using plot design and experimental techniques. This study was conducted using a randomized complete block design with 3 replications. The crop was grown using management practices considered to be the best for the crop, including fertilization according to soil test results.

Least significant difference (LSD) values at the 5 percent level are shown at the bottom of each table. Within any table, yields of any two varieties being compared must differ by at least this amount to be considered different. Also, coefficient of variation (CV %) values are shown at the bottom of each table. This value is a measure of the consistency of yields found within each study, with lower CVs indicating less variability.

Table 1: Yield of tall fescue varieties at the Plateau Research and Education Center in Crossville.

	Yield (ton DM/acre)				
	2008	2009			
Variety	Total	May 12	Nov 4	Total	
Cowgirl	3.79*	1.02*	1.62*	2.64*	
Select	4.19*	1.03*	1.49*	2.52*	
BAR FA MT9301	3.78*	1.02*	1.52*	2.54*	
BarOptima PLUS E34	3.46	1.17*	1.41*	2.58*	
ERF 48	3.75*	1.18*	1.39*	2.57*	
Jesup Max Q	4.04*	1.10*	1.31*	2.41*	
AMTF-25	3.82*	1.07*	1.37*	2.44*	
LSD (P=.05)	0.50	0.47	0.35	0.43	
CV (%)	7	5	14	10	
* yielded statistically the same as the top-yielding variety					
Nitrogen Application: 60 lb/acre at green-up, and 30 lb/acre after first					
cut, 60 lb/acre in September					
Planted September 20, 2007					

Table 2: Yield of tall fescue varieties at the Middle Tennessee Research and Education Center in Spring Hill.

	Yield (ton DM/acre)				
	2008	2009			
Variety	Total	Apr 15	May 27	Nov 5	Total
Cowgirl	3.59*	0.79*	1.26*	0.67*	2.72*
Select	3.66*	0.76*	0.85	0.61*	2.22
BAR FA MT9301	3.68*	0.48	1.19*	0.51	2.17
BarOptima PLUS E34	3.74*	0.72*	1.17*	0.64*	2.53*
ERF 48	3.71*	1.02*	1.06*	0.85*	2.94*
Jesup Max Q	3.74*	0.75*	0.93*	0.51	2.19
AMTF-25	3.95*	0.81*	1.19*	0.69*	2.69*
LSD (P=.05)	0.82	0.27	0.34	0.33	0.66
CV (%)	12	20	18	29	15

^{*} yielded statistically the same as the top-yielding variety

Nitrogen Application: 60 lb/acre at green-up, and 30 lb/acre after first cut, 60 lb/acre in September

Planted September 19, 2007

Table 3: Yield of tall fescue varieties at the Research and Education Center at Greeneville.

	Yield (ton DM/acre)				
T 7	2009				Total
Variety	Apr 28	Jun 16	Sep 1	Nov 3	Total
Cowgirl	1.56*	1.92*	0.56	1.58*	5.62
Select	1.80*	2.13*	0.78	1.74*	6.45*
ERF 48	1.61*	2.43*	1.39*	1.98*	7.40*
Jesup Max Q	1.27	2.14*	0.78	1.77*	5.96
GA-186	1.23	2.26*	0.88	2.02*	6.39*
GA-593R	1.85*	2.16*	0.44	1.47*	5.91
Cajun II	1.39	2.00*	0.76	1.77*	5.92
AGRFA 144	0.91*	2.36*	0.79	1.99*	6.06
AGRFA 150	1.56*	2.15*	0.63	1.71*	6.05
AGRFA 152	1.32	2.09*	0.73	1.56	5.71
TF-25(Goliath)	1.08	1.80	0.79	1.95*	5.62
LSD (P=.05)	0.41	0.56	0.45	0.45	1.31
CV (%)	17	15	34	15	13

^{*} yielded statistically the same as the top-yielding variety

Nitrogen Application: 60 lb/acre at green-up, and 30 lb/acre after first cut, 60 lb/acre in September

Planted September 22, 2008

Table 4: Yield of tall fescue varieties at the Research and Education Center at Milan.

	Yield (ton DM/acre)			
	2009			
Variety	Jun 23	Nov 19	Total	
Cowgirl	1.44*	1.53*	2.97*	
Select	1.48*	1.51*	2.99*	
ERF 48	1.50*	1.48*	2.98*	
Jesup Max Q	1.49*	1.40*	2.89	
GA-186	1.43*	1.55*	2.98*	
GA-593R	1.41*	1.49*	2.89	
Cajun II	1.46*	1.58*	3.04*	
AGRFA 144	1.38*	1.63*	3.02*	
AGRFA 150	1.62*	1.81*	3.43*	
AGRFA 152	1.61*	1.41*	3.02*	
TF-25(Goliath)	1.66*	1.72*	3.38*	
LSD (P=.05)	0.28	0.42	0.52	
CV (%)	11	16	10	
* yielded statistically the same as the top-yielding variety				
Nitrogen Application: 60 lb/acre at green-up, and 30 lb/acre				
after first cut, 60 lb/acre in September				

Table 5: Variety Information

Planted September 29, 2008

Variety	Supplier	Commercially Available
AGRFA 144	Ag Research USA Limited	No
AGRFA 150	Ag Research USA Limited	No
AGRFA 152	Ag Research USA Limited	No
Select	Allied Seed	Yes
TF-25(Goliath)	AMPAC Seed	No
AMTF-25	AMPAC Seed	No
BAR FA MT9301	Barenbrug	No
BarOptima PLUS E34	Barenbrug	Yes
Jesup Max Q	Pennington Seed	Yes
Cowgirl	Rose Agri-Seed	Yes
Cajun II	Smith Seed	Yes
ERF 48	Turner Seed/ Pro Seeds	No
GA-186	University of Georgia	No
GA-593R	University of Georgia	No

This and other useful information can be found on the University of Tennessee Forages Web site. http://forages.tennessee.edu