

2011 Tall Fescue Report

Research Report 12-11

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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 grass varieties at the Research and Education Center at Greeneville.

	Yield ton DM/acre					
	2009	2010	2011			3 Year
Variety	Total	Total	May 5	Oct 31	Total	Total
Cowgirl	5.62	2.79*	1.33*	0.47*	1.80*	10.21
Select	6.45*	3.14*	1.24*	0.20	1.44*	11.03*
ERF 48	7.40*	3.08*	1.43*	0.49*	1.92*	12.4*
Jesup Max Q	5.96	2.24	1.08*	0.45*	1.54*	9.74
GA-186	6.39*	2.32	1.22*	0.38*	1.60*	10.31
GA-593R	5.91	2.18	1.21*	0.33*	1.54*	9.63
Cajun II	5.92	2.55	1.23*	0.51*	1.73*	10.20
AGRFA 144	6.06	2.72	1.34*	0.56*	1.90*	10.68
AGRFA 150	6.05	2.03	0.92	0.38*	1.30*	9.39
AGRFA 152	5.70	2.84*	1.16*	0.45*	1.62*	10.16
TF-25 (Goliath)	5.62	2.61*	1.01*	0.47*	1.48*	9.71
LSD (P=.05)	1.31	0.54	0.49	0.24	0.65	1.57
CV %	13	12	24	33	23	9

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

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

Planted September 22, 2008

Table 2: Yield of tall fescue grass varieties at the Research and Education Center at Milan.

	Yield ton DM/acre			
	2009	2010	2011	3 Year
Variety	Total	Total	May 18	Total
Cowgirl	2.97*	2.41*	2.00	7.38*
Select	2.99*	2.65*	2.35*	7.98*
ERF 48	2.98*	2.37*	2.17*	7.52*
Jesup Max Q	2.89	2.35*	2.20*	7.44*
GA-186	2.98*	2.45*	2.58*	8.02*
GA-593R	2.89	2.52*	2.26*	7.67*
Cajun II	3.04*	2.46*	2.58*	8.08*
AGRFA 144	3.02*	2.60*	2.41*	8.03*
AGRFA 150	3.43*	2.59*	2.21*	8.23*
AGRFA 152	3.02*	2.42*	2.23*	7.67*
TF-25 (Goliath)	3.38*	2.68*	2.18*	8.23*
LSD (P=.05)	0.52	0.48	0.43	1.02
CV %	10	11	11	8

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

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

Planted September 29, 2008

Table 3: Yield of tall fescue grass varieties at the East Tennessee Research and Education Center at Knoxville.

	Yield ton DM/acre		
	2010	2011	2 Year
Variety	Total	Apr 26	Total
GA-29	2.45	0.87*	3.31
TF0202	2.14	0.72	2.85
Jesup MaxQ	2.36	0.95*	3.30
AgR1502	2.01	0.77	2.78
Agr1521	2.54*	0.86*	3.40
HyMark	2.57*	1.06*	3.63*
Select	2.15	0.79*	2.94
Drover	2.45	0.94*	3.39
BarOptima Plus E34	2.05	0.86*	2.91
BarElite	2.33	0.58	2.90
Bardurum	1.90	0.84*	2.74
Brava INTA	2.98*	1.15*	4.13*
Palenque Plus INTA	2.82*	1.14*	3.97*
LSD (P=.05)	0.48	0.37	0.64
CV %	12	25	12

^{*} yielded statistically the same as the top-yielding variety Nitrogen Application: 60 lb/acre at green-up, 30 lb/acre after first cut, and 60 lb/acre in September

Planted September 30, 2009

Table 4: Variety Information

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
Brava INTA	Allied Seed	No
Palenque Plus INTA	Allied Seed	No
Select	Allied Seed	Yes
TF-25(Goliath)	AMPAC Seed	No
Bardurum	Barenbrug	Yes
BarElite	Barenbrug	Yes
BarOptima PLUS E34	Barenbrug	Yes
Drover	Barenbrug	Yes
TF202	FFR Cooperative	No
HyMark	Fraser Seeds	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-29	University of Georgia	No
GA-593R	University of Georgia	No
AgR1502	University of Kentucky	No
Agr1521	University of Kentucky	No

This and other useful information can be found at your local extension office, or at our website. http://forages.tennessee.edu

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