



2010 Cool-Season Annual Grass Report

Research Report 11-5

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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. This study was conducted using a randomized complete block design with three 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 cool-season annual grass varieties at the Research and Education Center at Greeneville.

Variety	Species	Yield (ton DM/acre)		
		2010		
		Apr 7	May 14	Total
Winter Magic	rye	2.77*	1.97	4.73*
SS 76-30	oats	0.60	2.07	2.67
Grazer	annual ryegrass	1.50	1.80	3.30
DH-3	annual ryegrass	1.43	2.03	3.47
Winterhawk	annual ryegrass	1.20	2.13*	3.33
Wintermore	annual ryegrass	1.57	2.17*	3.73
Passerel Plus	annual ryegrass	1.27	2.17*	3.43
Flying A	annual ryegrass	1.37	2.03	3.40
TAMTBO	annual ryegrass	1.30	2.07	3.37
07-RWB	annual ryegrass	1.30	2.20*	3.50
TXR2006-T22	annual ryegrass	1.37	2.40*	3.77
Jumbo	annual ryegrass	1.23	2.30*	3.53
Maximus	annual ryegrass	1.20	2.10	3.30
Hercules	annual ryegrass	1.03	2.13*	3.17
Marshall	annual ryegrass	1.40	1.90	3.30
Jackson	annual ryegrass	1.33	2.10	3.43
ME 94	annual ryegrass	1.13	2.27*	3.40
ME 4	annual ryegrass	1.60	2.30*	3.90
FLX2003LRCT	annual ryegrass	1.53	2.27*	3.80
	LSD P=.05	0.38	0.28	0.48
	CV %	17	8	8
* yielded statistically the same as the top-yielding variety				
Nitrogen Application: 45 lb/ acre at planting, 60 lb/acre at green-up, 30 lb/acre after first cut				
Planted October 21, 2009				

Table 2: Yield of cool-season annual grass varieties at the East Tennessee Research and Education Center at Knoxville.

Variety	Species	Yield (ton DM/acre)			
		2010			
		Jan 6	Apr 12	May 20	Total
Winter Magic	rye	0.43*	2.87*	0.60	3.90
SS 76-30	oats	0.43*	2.53*	1.27	4.23
Cosaque	oats	0.30	2.43*	1.80*	4.53*
Grazer	annual ryegrass	0.60*	2.47*	1.53	4.60*
DH-3	annual ryegrass	0.43*	2.63*	1.63	4.70*
Winterhawk	annual ryegrass	0.23	2.17	1.93*	4.33*
Wintermore	annual ryegrass	0.50*	2.37*	1.63	4.50*
Passerel Plus	annual ryegrass	0.60*	2.37*	1.60	4.57*
Flying A	annual ryegrass	0.33	2.30*	1.43	4.07
TAMTBO	annual ryegrass	0.43*	2.33*	1.90*	4.67*
07-RWB	annual ryegrass	0.47*	2.47*	1.70	4.63*
TXR2006-T22	annual ryegrass	0.57*	2.60*	1.83*	5.00*
Jumbo	annual ryegrass	0.27	2.13	2.00*	4.40*
Maximus	annual ryegrass	0.40*	2.83*	1.80*	5.03*
Hercules	annual ryegrass	0.43*	2.47*	2.00*	4.90*
Marshall	annual ryegrass	0.57*	2.40*	1.43	4.40*
Jackson	annual ryegrass	0.47*	2.53*	1.63	4.63*
ME 94	annual ryegrass	0.40*	2.33*	1.63	4.37*
ME 4	annual ryegrass	0.27	2.57*	1.77*	4.60*
FLX2003LRCT	annual ryegrass	0.37	2.43*	1.70	4.50*
	LSD P=.05	0.22	0.66	0.28	0.72
	CV %	32	16	10	10
* yielded statistically the same as the top-yielding variety					
Nitrogen Application: 45 lb/ acre at planting, 60 lb/acre at green-up, 30 lb/acre after first cut					
Planted October 10, 2009					

Table 3: Yield of cool-season annual grass varieties at the Highland Rim Research and Education Center at Springfield.

Variety	Species	Yield (ton DM/acre)		
		2010		
		May 6	Jun 7	Total
Winter Magic	rye	3.44*	0.13	3.57
SS 76-30	oats	2.59	0.32	2.92
Cosaque	oats	2.66	0.35	3.01
Grazer	annual ryegrass	2.63	1.29	3.91*
DH-3	annual ryegrass	2.34	1.15	3.49
Winterhawk	annual ryegrass	2.41	1.49	3.90*
Wintermore	annual ryegrass	2.68	1.29	3.97*
Passerel Plus	annual ryegrass	2.24	1.41	3.65*
Flying A	annual ryegrass	2.34	1.19	3.53
TAMTBO	annual ryegrass	2.89	1.36	4.25*
07-RWB	annual ryegrass	2.12	1.33	3.45
TXR2006-T22	annual ryegrass	2.38	1.35	3.73*
Jumbo	annual ryegrass	2.63	1.31	3.94*
Maximus	annual ryegrass	2.56	1.38	3.94*
Hercules	annual ryegrass	1.87	1.80*	3.67*
Marshall	annual ryegrass	2.55	1.15	3.69*
Jackson	annual ryegrass	2.31	0.99	3.30
ME 94	annual ryegrass	2.35	1.07	3.42
ME 4	annual ryegrass	2.33	1.22	3.55
FLX2003LRCT	annual ryegrass	2.32	1.13	3.44
	LSD P=.05	0.50	0.30	0.65
	CV %	12	16	11
* yielded statistically the same as the top-yielding variety				
Nitrogen Application: 45 lb/ acre at planting, 60 lb/acre at green-up, 30 lb/acre after first cut				
Planted November 5, 2009				

Table 4: Variety Information

Variety	Species	Supplier	Commercially Available
Winter Magic	rye	Tennessee Farmers Co-Op	Yes
SS 76-30	oats	Tennessee Farmers Co-Op	Yes
Cosaque	oats	Miles Farm Supply	Yes
Grazer	annual ryegrass	Athens Seed Company	Yes
DH-3	annual ryegrass	Allied Seed	Yes
Winterhawk	annual ryegrass	Allied Seed	Yes
Wintermore	annual ryegrass	Allied Seed	Yes
Passerel Plus	annual ryegrass	Pennington Seed	Yes
Flying A	annual ryegrass	Oregro Seeds Inc.	Yes
TAMTBO	annual ryegrass	Oregro Seeds Inc.	Yes
07-RWB	annual ryegrass	Oregro Seeds Inc.	No
TXR2006-T22	annual ryegrass	Texas Agrilife Research	No
Jumbo	annual ryegrass	Barenbrug Seed Company	Yes
Maximus	annual ryegrass	Barenbrug Seed Company	Yes
Hercules	annual ryegrass	Barenbrug Seed Company	Yes
Marshall	annual ryegrass	The Wax Company	Yes
Jackson	annual ryegrass	The Wax Company	Yes
ME 94	annual ryegrass	The Wax Company	No
ME 4	annual ryegrass	The Wax Company	No
FLX2003LRCT	annual ryegrass	University of Florida	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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