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2024 WARM-SEASON ANNUAL VARIETY TRIAL

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 crop was grown using management practices considered to be the best for the crop, including fertilization according to soil test results. This study was conducted using a randomized complete block design with four replications. Least significant difference (LSD) values at the 5 percent level are shown at the bottom of each table with the coefficient of variation (CV). Within any table, yield of any two varieties being compared must differ by at least this amount to be considered different.

Table 1: Yield of orchardgrass varieties at the Middle Tennessee AgResearch and Education Center, Spring Hill, TN.

Variety	Species	Supplier	Commercially	Yield (ton DM/acre)		
			Available	Jul 13	Aug 9	Total
Dal's Big River	Crabgrass	Dalrymple Farms	Yes	2.53*	1.05	3.48*
Mojo	Crabgrass	Barenburg USA	Yes	1.76	1.33	2.98
Quick N Big	Crabgrass	Dalrymple Farms	Yes	2.52*	1.07	3.48*
Quick N Big Spreader	Crabgrass	Dalrymple Farms	Yes	2.12	0.66	2.78
Red River	Crabgrass	Dalrymple Farms	Yes	2.25	0.99	3.19
Bonus	Teffgrass	Mountain View Seeds	Yes	2.49*	1.28	3.64*
CW0604	Teffgrass	Barenburg USA	Yes	2.38*	1.14	3.52*
Dessie	Teffgrass	Allied Seed, LLC	Yes	2.07	1.37	3.40*
Moxie	Teffgrass	Barenburg USA	Yes	1.68	1.16	2.75
Tiffany	Teffgrass	Barenburg USA	Yes	0.96	1.59	2.56
Experimental Varieties	•	.			•	•
Marandu	Brachiaria	Gasparim	No	1.02	2.14*	3.15
Paiaguas	Brachiaria	Gasparim	No	1.16	1.57	2.75
Piata	Brachiaria	Gasparim	No	1.11	1.63	2.75
Ruziziensis	Brachiaria	Gasparim	No	1.42	1.77	3.19
Xaraes	Brachiaria	Gasparim	No	1.35	1.83	3.19
	C				28	11
P-Value LSD (P<0.05					<0.0001	<0.0001
					0.26	0.33

*yielded statistically the same as the top-yielding variety

Nitrogen application: 60 lb/acre at planting, 30 lb/acre after first harvest. Soil ammended for the required Lime, P, and K.

Planted: May 13, 2024



Table 2: Average forage nutritive value by harvest.

		Harvest		
				Trial
Species	Constituents ¹ (%)	Jul 13	Aug 9	Average
Crabgrass	СР	12.5	12.4	12.4
	ADF	41.8	45.4	43.6
	NDF	66.0	68.6	67.3
	TDN	54.9	51.0	52.9
Teffgrass	CP	14.6	11.6	13.1
	ADF	36.1	45.0	40.5
	NDF	64.4	72.3	68.3
	TDN	60.8	51.5	56.1
Brachiaria	СР	14.9	10.3	12.6
	ADF	36.8	43.9	40.3
	NDF	61.2	69.9	65.5
	TDN	60.1	52.6	56.3

¹ Nutritive values represented at 100% DM Basis for CP, crude protein; ADF, acid detergent fiber; NDF, neutral detergent fiber; TDN, total digestible nutrients; (Analysis performed using Near Infrared Spectrometer [NIRS] Technology). Target stage of growth for harvest was mid to late boot. Grass Hay Equation (NIRS Consortium).

This and other useful information can be found at your local UT Extension office, or on our website.

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