



2012 Alfalfa Report

Research Report 13-8

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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: 2 year total yield of alfalfa varieties at the Highland Rim Research and Education Center at Springfield.

Variety	Yield (ton DM/acre)						2 Year Total
	2011 Total	2012				Total	
		Apr 25	May 30	Jul 6	Aug 4		
Ameristand 407 TQ	1.09*	2.00*	1.13*	0.70*	1.26	5.09	6.18
425RR	0.94	1.60	1.25*	0.65*	1.17	4.66	5.61
Evermore	1.14*	2.16*	1.28*	0.63*	1.72*	5.79*	6.93*
Phoenix	0.92	1.72	1.39*	0.54*	1.37	5.01	5.93
WL354HQ	1.29*	1.97*	1.35*	0.58*	1.54*	5.45*	6.74*
LSD P=.05	0.25	0.30	0.31	0.16	0.18	0.57	0.62
CV %	16	11	16	17	8	7	6
* yielded statistically the same as the top-yielding variety							
Planted May 11, 2011							

Table 2: 3 year total yield of alfalfa varieties at the Research and Education Center at Greeneville.

Variety	Yield (ton DM/acre)		
	2009 Total	2010 Total	2011 Total
Evermore	2.79	4.92*	5.47*
Phoenix	2.91*	5.15*	5.32*
AmeriStand 407 TQ	2.96*	4.77*	5.37*
Archer III	2.59	5.44*	4.73
Syngenta 6422Q	2.55	4.76*	4.89*
Rebound 5.0	2.88*	5.23*	4.83*
AmeriStand 403T Plus	2.84*	5.29*	5.13*
GA-MPX	3.14*	5.02*	5.20*
Bulldog 505	3.63*	4.89*	5.02*
GA-APGC	3.14*	5.10*	5.39*
LSD P=.05	0.84	0.83	0.67
CV %	17	10	8
* yielded statistically the same as the top-yielding variety			
Planted April 28, 2009			

Table 3: 3 year total yield of alfalfa varieties at the Plateau Research and Education Center at Crossville.

Variety	Yield (ton DM/acre)		
	2009 Total	2010 Total	2011 Total
Evermore	2.50*	5.17*	3.07*
Phoenix	2.71*	5.07*	3.22*
AmeriStand 407 TQ	2.83*	4.50	3.08*
Archer III	3.02*	5.07*	2.96*
Syngenta 6422Q	2.35*	5.09*	2.92
Rebound 5.0	2.71*	5.35*	2.88
AmeriStand 403T Plus	2.39*	5.04*	2.93
GA-MPX	2.55*	5.01*	3.02*
Bulldog 505	2.70*	5.09*	3.05*
GA-APGC	2.59*	5.20*	2.93
LSD P=.05	0.73	0.49	0.28
CV %	16	6	5
* yielded statistically the same as the top-yielding variety			
Planted April 27, 2009			

Table 4: Variety Information

Variety	Supplier	Commercially Available
Evermore	Allied Seed	Yes
Phoenix	Allied Seed	Yes
AmeriStand 407 TQ	America's Alfalfa	Yes
Archer III	America's Alfalfa	Yes
Syngenta 6422Q	Syngenta Seeds	Yes
Rebound 5.0	Croplan Genetics	Yes
AmeriStand 403T Plus	America's Alfalfa	Yes
GA-MPX	University of Georgia	No
Bulldog 505	Athens Seed	Yes
GA-APGC	University of Georgia	No
425RR	Allied Seed	Yes
WL354HQ	W-L Research	Yes

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

<http://forages.tennessee.edu>