



## 2010 Alfalfa Report

### Research Report 11-8

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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: Yield of alfalfa varieties at the East Tennessee Research and Education Center in Knoxville.**

Variety	Yield (ton DM/acre)						
	2008 Total	2009 Total	2010			2010 Total	3 Year Total
			May 17	Jun 16	Aug 18		
PGI 459	1.60*	7.04*	2.12*	1.16*	0.50*	3.78*	12.42*
Evermore	1.49*	6.97*	2.15*	0.95*	0.49*	3.59*	12.05*
Phoenix	1.40*	7.02*	2.11*	1.05*	0.62*	3.77*	12.19*
Farm Pro Anchormate	1.42*	6.59*	2.18*	0.91*	0.57*	3.66*	11.67*
Barfalfa	1.42*	7.13*	2.15*	1.09*	0.62*	3.86*	12.41*
Rebound 5.0	1.44*	6.64*	2.13*	1.05*	0.50*	3.69*	11.77*
DKA50-18	1.50*	6.81*	2.29*	1.05*	0.62*	3.96*	12.27*
Genoa	1.33*	6.37*	1.86*	0.95*	0.53*	3.34*	11.04*
Mountaineer 2.0	1.57*	6.91*	2.20*	1.04*	0.53*	3.78*	12.26*
AmeriStand 407TQ	1.64*	6.66*	2.24*	1.07*	0.61*	3.92*	12.22*
WL 363 HQ	1.25	6.25*	1.89*	0.82*	0.44*	3.16*	10.66*
LSD P=.05	0.31	1.12	0.54	0.43	0.26	1.12	2.29
CV %	12	10	15	25	28	18	11
* yielded statistically the same as the top-yielding variety							
Planted April 24, 2008							

**Table 2: Yield of alfalfa varieties at the Highland Rim Research and Education Center at Springfield.**

Variety	Yield (ton DM/acre)						3 Year Total
	2008 Total	2009 Total	2010			2010 Total	
			May 12	Jun 16	Jul 30		
Mountaineer 2.0	1.58*	6.86*	2.41*	1.90*	0.61	4.92*	13.36*
Evermore	1.45*	6.38*	1.96*	1.78*	0.53	4.26*	12.09*
Phoenix	1.47*	6.87*	2.18*	1.96*	0.84*	4.98*	13.31*
Farm Pro Anchormate	1.40	6.96*	2.02*	1.90*	0.71*	4.63*	12.98*
Barfalfa	1.43*	6.87*	2.08*	1.79*	0.72*	4.59*	12.90*
Rebound 5.0	1.46*	6.91*	2.03*	1.87*	0.66*	4.55*	12.92*
DKA50-18	1.39	6.48*	2.02*	2.02*	0.76*	4.80*	12.66*
Genoa	1.51*	6.76*	2.15*	1.82*	0.70*	4.67*	12.94*
AmeriStand 407TQ	1.52*	6.61*	1.93	1.86*	0.84*	4.63*	12.75*
WL 363 HQ	1.44*	6.57*	2.03*	1.83*	0.67*	4.53*	12.55*
PGI 459	1.44*	6.48*	2.04*	1.83*	0.67*	4.53*	12.46*
LSD P=.05	0.18	0.73	0.48	0.28	0.23	0.75	1.30
CV %	7	6	13	9	19	10	6
* yielded statistically the same as the top-yielding variety							
Planted April 17, 2008							

**Table 3: Yield of alfalfa varieties at the Plateau Research and Education Center at Crossville.**

Variety	Yield (ton DM/acre)					2 Year Total
	2009 Total	2010			2010 Total	
		May 19	Jun 23	Aug 10		
Archer III	3.02*	2.39*	1.97*	0.71	5.07*	8.08*
Evermore	2.50*	2.34*	2.09*	0.74*	5.17*	7.67*
Phoenix	2.71*	2.38*	1.91*	0.78*	5.07*	7.78*
AmeriStand 407 TQ	2.83*	2.14	1.67	0.69	4.50	7.33*
Syngenta 64Q22	2.35*	2.34*	2.03*	0.71	5.09*	7.44*
Rebound 5.0	2.71*	2.32*	2.19*	0.85*	5.35*	8.06*
AmeriStand 403T Plus	2.39*	2.45*	1.82*	0.77*	5.04*	7.43*
GA-MPX	2.55*	2.27	1.99*	0.75*	5.01*	7.55*
Bulldog 505	2.70*	2.51*	1.84*	0.74*	5.09*	7.79*
GA-APGC	2.59*	2.48*	1.83*	0.88*	5.20*	7.79*
LSD P=.05	0.73	0.24	0.37	0.15	0.49	1.01
CV %	16	6	11	12	6	8
* yielded statistically the same as the top-yielding variety						
Planted April 27, 2009						

**Table 4: Yield of alfalfa varieties at the Research and Education Center at Greeneville.**

Variety	Yield (ton DM/acre)					
	2009 Total	2010			2010 Total	2 Year Total
		May 11	Jun 17	Aug 27		
Bulldog 505	3.63 *	2.50*	1.62*	0.77*	4.89*	8.52*
Evermore	2.79	2.37*	1.83*	0.71*	4.92*	7.71*
Phoenix	2.91*	2.51*	1.85*	0.79*	5.15*	8.06*
AmeriStand 407 TQ	2.96*	2.45*	1.57*	0.75*	4.77*	7.73*
Archer III	2.59	2.40*	2.23*	0.80*	5.44*	8.03*
Syngenta 64Q22	2.55	2.43*	1.60*	0.73*	4.76*	7.32*
Rebound 5.0	2.88*	2.53*	1.85*	0.85*	5.23*	8.11*
AmeriStand 403T Plus	2.84*	2.65*	1.85*	0.79*	5.29*	8.13*
GA-MPX	3.14*	2.58*	1.71*	0.73*	5.02*	8.16*
GA-APGC	3.14*	2.33*	2.06*	0.70*	5.10*	8.24*
LSD P=.05	0.84	0.58	0.78	0.20	0.83	1.38
CV %	17	14	25	15	10	10
* yielded statistically the same as the top-yielding variety						
Planted April 28, 2009						

**Table 5: Variety Information**

Variety	Supplier	Commercially Available
Evermore	Allied Seed	Yes
Phoenix	Allied Seed	Yes
Archer III	America's Alfalfa	Yes
AmeriStand 407TQ	America's Alfalfa	Yes
AmeriStand 403T Plus	America's Alfalfa	Yes
Bulldog 505	Athens Seed	Yes
Barfalfa 53HR	Barenbrug Seed	Yes
Rebound 5.0	Croplan Genetics	Yes
Mountaineer 2.0	Croplan Genetics	Yes
DKA50-18	Monsanto	Yes
Genoa	NK Brand Seeds	Yes
PGI 459	Producer's Choice/ CalWest Seed	Yes
Syngenta 64Q22	Syngenta Seeds	Yes
Farm Pro Anchormate	Turner Seeds/ Pro Seeds	Yes
GA-MPX	University of Georgia	No
GA-APGC	University of Georgia	No
WL 363 HQ	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>**

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