



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>