

## 2009 Cool-Season Annual Grass Report

## **Research Report 10-8**

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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. The data in the following tables were determined using plot design and experimental techniques. This study was conducted using a randomized complete block design with 3 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.

| Greeneville.                                                         |                   |        |       |       |       |  |
|----------------------------------------------------------------------|-------------------|--------|-------|-------|-------|--|
|                                                                      | Yield ton DM/acre |        |       |       |       |  |
|                                                                      | 2009              |        |       |       |       |  |
| Variety                                                              | Mar 6             | Apr 28 | Jun 3 | Jul 7 | Total |  |
| 06-B LH annual ryegrass                                              | 0.00              | 1.31*  | 2.25* | 0.76* | 4.32* |  |
| Marshall annual ryegrass                                             | 0.22*             | 1.75*  | 2.29* | 0.00  | 4.27* |  |
| PSG 29 BF 06 annual ryegrass                                         | 0.00              | 1.51*  | 1.86* | 1.04* | 3.99* |  |
| ME-4 annual ryegrass                                                 | 0.20*             | 1.67*  | 1.83* | 0.00  | 3.71* |  |
| ME-94 annual ryegrass                                                | 0.09              | 1.55*  | 1.94* | 0.00  | 3.58* |  |
| Jackson annual ryegrass                                              | 0.00              | 1.42*  | 1.66* | 0.00  | 3.09  |  |
| Grazer annual ryegrass                                               | 0.00              | 1.42*  | 1.59  | 0.00  | 3.00  |  |
| Passerel Plus annual ryegrass                                        | 0.00              | 1.05   | 1.73* | 0.00  | 2.78  |  |
| TAMTBO annual ryegrass                                               | 0.00              | 0.78   | 1.93* | 0.00  | 2.71  |  |
| TXR-2006-T22 annual ryegrass                                         | 0.00              | 1.05*  | 1.26  | 0.00  | 2.32  |  |
| DH-3 annual ryegrass                                                 | 0.00              | 0.46   | 1.27  | 0.00  | 2.15  |  |
| Vendure annual ryegrass                                              | 0.00              | 0.00   | 0.71  | 0.00  | 0.71  |  |
| LSD P=.05                                                            | 0.08              | 0.70   | 0.68  | 0.38  | 1.02  |  |
| CV %                                                                 | 111               | 35     | 23    | 149   | 19    |  |
| * yielded statistically the same as the top-yielding variety         |                   |        |       |       |       |  |
| Nitrogen Application: 45 lb/ acre at planting, 30 lb/acre spring cut |                   |        |       |       |       |  |
| Planted September 22, 2008                                           |                   |        |       |       |       |  |

**Table 2: Variety Information** 

| Variety                       | Supplier                | Commercially Available |  |
|-------------------------------|-------------------------|------------------------|--|
| DH-3 annual ryegrass          | Allied Seed             | Yes                    |  |
| TAMTBO annual ryegrass        | Oregro Seed             | Yes                    |  |
| Passerel Plus annual ryegrass | Pennington Seed         | Yes                    |  |
| 06-B LH annual ryegrass       | PickSeed USA Inc.       | No                     |  |
| PSG 29 BF06 annual ryegrass   | PickSeed USA Inc.       | No                     |  |
| Vendure annual ryegrass       | Smith Seed              | Yes                    |  |
| TXR-2006-T22 annual ryegrass  | Texas Agrilife Research | No                     |  |
| Marshall annual ryegrass      | The Wax Company         | Yes                    |  |
| ME4 annual ryegrass           | The Wax Company         | No                     |  |
| ME-94 annual ryegrass         | The Wax Company         | No                     |  |
| Jackson annual ryegrass       | The Wax Company         | Yes                    |  |
| Grazer annual ryegrass        | University of Georgia   | Yes                    |  |

This and other useful information can be found on the University of Tennessee Forages Web site. http://forages.tennessee.edu