



## 2011 Cool-Season Perennial Grass Report

### Research Report 12-10

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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 perennial grass varieties at the Research and Education Center at Greeneville.**

Variety	Yield ton DM/acre					
	2009 Total	2010 Total	2011			3 Year Total
			May 5	Oct 31	Total	
Bonus festolium	5.38*	1.18*	0.97*	0.16*	1.14*	7.70*
Boost perennial ryegrass	4.27	0.97	0.72	0.16*	0.89	6.13
APH 1002 timothy	3.51	1.47*	1.26*	0.24*	1.49*	6.47
Spring Green festolium	4.70*	0.89	0.26	0.24*	0.50	6.10
LSD ( P=.05)	0.84	0.32	0.38	0.29	0.55	0.89
CV %	10	15	26	77	30	7
* yielded statistically the same as the top-yielding variety						
Nitrogen Application: 60 lb/acre at green-up, 30 lb/acre after first cut, 60 lb/acre in September						
Planted September 22, 2008						

**Table 2: Yield of cool-season perennial grass varieties at the Research and Education Center at Milan.**

Variety	Yield ton DM/acre			
	2009 Total	2010 Total	2011 May 18	3 Year Total
Bonus festolium	2.45*	0.00	0.00	2.45
Boost perennial ryegrass	2.19*	0.00	0.00	2.19
APH 1002 timothy	2.05*	3.1*	0.00	5.15*
Spring Green festolium	1.92*	0.00	0.00	1.92
LSD ( P=.05)	0.62	0.24	0.03	0.67
CV %	14	11	5	9
* yielded statistically the same as the top-yielding variety				
Nitrogen Application: 60 lb/acre at green-up, 30 lb/acre after first cut, 60 lb/acre in September				
Planted September 29, 2008				

**Table 3: Variety Information**

Variety	Supplier	Commercially Available
Bonus festolium	Allied Seed	Yes
Boost perennial ryegrass	Allied Seed	Yes
APH 1002 timothy	Pro Seeds	No
Spring Green festolium	Rose Agri-Seed	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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