

## 2019 RED CLOVER VARIETY TRIAL

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 crop was grown using management practices considered to be the best for the crop, including fertilization according to soil test results. This study was conducted using a randomized complete block design with four replications. Least significant difference (LSD) values at the 5 percent level are shown at the bottom of each table with the coefficient of variation (CV). Within any table, yield of any two varieties being compared must differ by at least this amount to be considered different.

**Table 1: Yield of red clover varieties at the Highland Rim AgResearch and Education Center. Springfield, TN.**

Variety	Supplier	Commercially Available	Yield (ton DM/acre)					
			2017 Total	2018			2018 Total	2 Year Total
				May 1	Jun 14	Oct 18		
BARDURO	Barenbrug USA	Yes	3.15	1.31	0.76	0.59	2.57	5.81
FREEDOM!	Barenbrug USA	Yes	3.25	1.28	0.93*	0.51	2.89	5.86
FSG 401RC	Tennessee Farmers Cooperative	Yes	3.19	1.30	0.99*	0.48	2.90	6.10
<i>Experimental Varieties</i>								
BAR TP BAFR	Barenbrug USA	No	3.20	1.32	0.78	0.44	2.58	5.80
BAR TP CWBA	Barenbrug USA	No	3.21	1.22	0.81*	0.59	2.60	5.86
CW30091	Barenbrug USA	No	3.28	1.52	0.82*	0.59	2.64	6.32
DFRC11	USDA-ARS	No	2.90	1.23	0.85*	0.59	2.80	5.74
WI-CHK	USDA-ARS	No	3.11	1.54	1.10*	0.59	3.04	6.00
CV			4	9	13	11	7	3
LSD (P<0.05)			nd <sup>1</sup>	nd	0.28	nd	nd	nd
* yielded statistically the same as the top-yielding variety								
<sup>1</sup> not significantly different in yield from the highest numerical yielding variety in the column								
Fertilization: Seed was inoculated at time of planting for microbial nitrogen fixation Soil tested and amended annually, if needed.								
Planted September 9, 2016								

**Table 2: Mean forage nutritive values by 2018 harvest.**

Species	Constituents <sup>1</sup>	Harvest Date		
		May 1	Jun 14	Oct 18
Red Clover	CP	22.3	26.2	18.6
	ADF	30.5	33.3	38.6
	NDF	39.4	41.4	46.4
	TDN	66.7	63.7	58.2

<sup>1</sup> Nutritive values represented at 100% DM Basis for CP, crude protein; ADF, acid detergent fiber; NDF, neutral detergent fiber; TDN, total digestible nutrients; (Analysis performed using Near Infrared Spectrometer [NIRS] Technology) Target stage of growth for harvest was late boot. Predicted using the legume hay model (NIRS Consortium, 2018).

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

