

2016 SUMMER ANNUAL VARIETY TRIAL

Table 2. Summer annual varieties, characteristics, and seed source, 2016.

Variety	Species	Characteristics	Company
FSG 300	Millet	non-BMR	Seedway
Wonderleaf	Millet	non-BMR	Alta Seeds
Exceed	Millet	Dwarf, BMR	

RESULTS

Seasonal precipitation and temperatures recorded with a Davis Instruments Vantage Pro 2 weather station with WeatherLink data logger in Alburgh, VT are shown in Table 3. From June through August there was an accumulation of 1784 Growing Degree Days (GDDs) in Alburgh, which is 90 GDDs more than the 30-year average. Rainfall was below normal at planting by almost an inch. Slow and patchy emergence of the crop was a result of dry soil conditions. These droughty conditions persisted through the growing season with the driest month being July, which was the driest month of the season. Temperatures were approximately normal with the exception of August, which was about 3 degrees above normal. These warm dry conditions continued into September causing poor regrowth and no third harvest.

Table 3. Seasonal weather data collected in Alburgh, VT, 2016.

Alburgh, VT	June	July	August
Average temperature (°F)	65.8	70.7	71.6
Departure from normal	0.00	0.10	2.90
Precipitation (inches)	2.80	1.80	3.00
Departure from normal	-0.88	-2.37	-0.93

Table 4. Yield and quality of 13 summer annual varieties, 1st cut, 2016.

Variety	Species	DM Yield tons ac ⁻¹	Crude protein % of DM	ADF % of DM	NDF % of DM	NDFD % of NDF
FSG 300	Millet	1.29	19.9*	28.3*	52.4*	61.3*
Wonderleaf	Millet	2.14*	18.1*	30.4	56.2	55.8
Exceed	Millet	1.67	20.3*	27.0*	51.3*	60.8*
AF 7101	Sorghum	2.56*	13.0	34.6	62.5	55.7
AF 7201	Sorghum	2.04	13.5	34.3	61.1	55.5
FSG 214						

Table 5. Yield and quality of 13 summer annual varieties, 2nd cut, 2016.

Variety	Species	DM Yield tons ac ⁻¹	Crude protein % of DM	ADF % of DM	NDF % of DM	NDFD30 % of NDF
FSG 300	Millet	1.54	20.0*	29.0*	53.3*	64.2

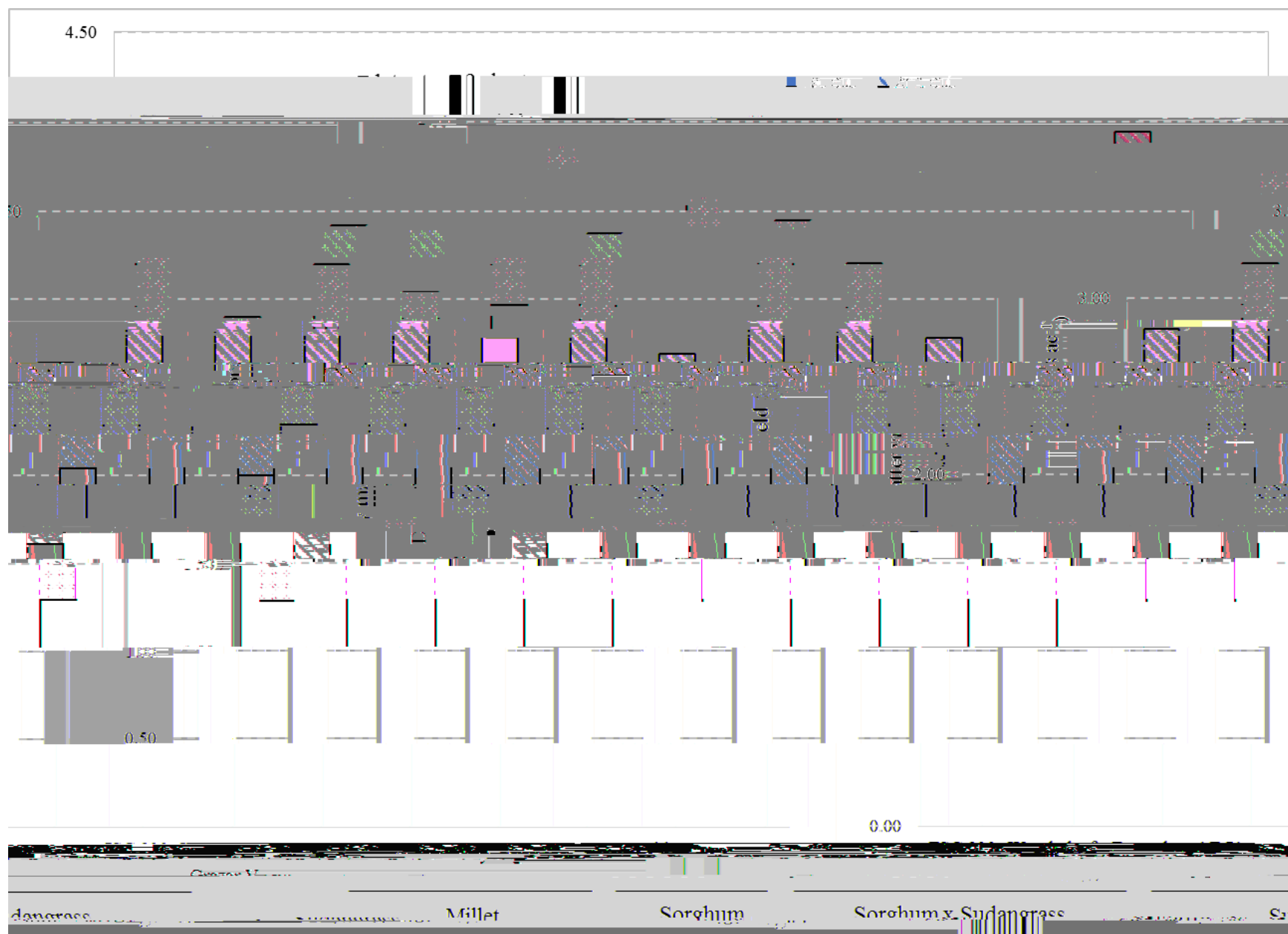


Figure 1. Yields of 13 summer annual grass varieties across two cuttings, 2016.

DISCUSSION

Summer annual grasses can provide substantial dry matter yields at a very crucial time of the grazing and forage production season in the Northeast. They can also provide the producer with flexibility to use the grasses as needed for grazing, hay, or silage. As with any decision on the farm, it is important to consider the goals of integrating summer annuals into the system as well as the specific management concerns for each species when deciding which is best. In addition, as this experiment has shown, there can be dramatic differences in yield, quality, and growth habit of different varieties of these species. Important consideration of all of these factors is pgeguuctÖ c æ S