2012 Summer Annual Variety Trial

2012 SUMMER ANNUAL VARIETY TRIAL

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Warm season grasses are a high-yielding summer annual. They can provide quality forage in the hot summer months, when cool season grasses are not as productive. The addition of this crop into your rotation can allow you to harvest high-quality forage for stored feed or pasture. As with any crop though, summer annuals have their advantages and disadvantages. Some advantages include, fast germination/emergence, rapid growth, high productivity and flexibility in utilization. Some disadvantages include high cost of annual establishment and increased risk of stand failure when presented with variable weather patterns. In 2012, UVM Extension conducted a summer annual variety

Table 2. Agronomic and trial information for summer annuals. Borderview Research Farm in Alburgh,VT.

	Borderview Research Farm Alburgh, VT

is presented for each variable (i.e. yield). Where the difference between two treatments within a column is

At the first harvest on 23-Jul, many plant characteristics and forage quality indicators were impacted by variety (Table 4). Sudangrass variety Hayking BMR sudan was significantly taller than all other summer annuals. Dry matter content of the summer annuals averaged 15.3%, indicating that it contains a lot of moisture and can be difficult to dry properly for stored feed. The highest dry matter yield occurred in the sudangrass AS9301 variety (4172 lbs per acre), although it was significantly similar to all other varieties except BMR sorghum sudan AS6402 and sorghum AS7301. The sorghumxsudangrass variety AS6402 performed best for crude protein (21.5%), although it was significantly similar to all other varieties except hayking BMR sudan, sorghum AF7101, sorghum sudan AS6501 and sudangrass AS9301. The millet variety Elite had the lowest fiber concentrations and the highest fiber digestibility. The summer annuals did not differ statistically in TDN, NeL or NFC.

Table 4. Impact of varietal selection on forage quality of summer annual grasses, first harvest, 2012.

Species	Plant height	Dry matter	DM yield	CP	ADF	NDF	dNDF	TDN	NEL	NFC	NSC
	cm	%	lbs. ac^{-1}	% of DM	% of DM	% of DM	% of NDF	% of			

Table 5. Impact of varietal selection on forage quality of summer annual grasses, second harvest, 2012.

Species	Plant height	Dry matter	DM yield	CP	ADF	NDF	dNDF	TDN	NEL	NFC	NSC
	cm	%	lbs. ac^{-1}	% of DM	% of DM	% of DM	% of NDF	% of DM	Mcal lb^{-1}	% of DM	% of DM
AS6402	52.6	15.7	3428	**19.5***	33.0*	59.1	71.6*	**63.7***	**0.66***	14.8	9.8

Figure 1. In

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