



2020 Irrigated Forage Sorghum Hybrid  
Performance Trial at Rocky Ford

Brand	Hybrid	Yield				Forage Type <sup>b</sup>	Relative Maturity <sup>c</sup>	Traits <sup>d</sup>	Forage Quality												
		Forage <sup>a</sup>	Dry Matter	Yield	Moisture				CP	aNDFom	Lignin	WSC			NDFD		TDN	NEL	Milk/Ton		
												percent	Starch	Ash	Fat	30hr				240hr	
Sorghum Partners	SP 3905	<b>19.6</b>	6.7	125	66.4	FS	ME	-	109	6.9	55.0	2.6	6.9	4.9	13.3	2.6	54.2	69.0	58.0	59.2	2,308
Gayland Ward Seed	18119	<b>19.6</b>	6.4	125	69.0	FS	M	BMR-6, MS, DS	113	7.5	54.7	3.5	8.9	4.8	11.2	2.5	51.0	66.6	58.8	60.1	2,400
Gayland Ward Seed	19102	<b>18.0</b>	6.3	115	74.3	SS	PPS	-	91	6.8	61.7	5.2	7.3	3.0	9.2	1.9	44.7	63.7	54.3	55.1	2,092
Dyna-Gro Seed	TopTon	<b>17.7</b>	5.7	113	71.4	FS	L	-	110	6.5	48.2	3.1	10.7	10.6	10.9	2.6	41.3	60.5	61.4	63.0	2,471
Dyna-Gro Seed	Fullgraze II	<b>17.7</b>	6.0	113	63.6	SS	ML	-	97	6.0	57.6	4.5	9.4	4.7	9.1	2.3	42.8	61.6	57.1	58.2	2,235
Sorghum Partners	NK300	<b>17.5</b>	6.1	112	67.6	FS	ME	BMR	94	6.2	59.6	3.8	4.8	3.2	13.0	2.4	49.6	67.6	55.7	56.7	1,975
Dyna-Gro Seed	F74FS72 BMR	<b>17.4</b>	6.4	111	71.4	FS	ML	BMR, BD	124	8.0	48.9	2.6	7.6	9.8	13.1	3.0	54.2	70.0	60.9	62.5	2,525
Gayland Ward Seed	19038	17.3	6.0	111	74.4	FS	M	BD	114	7.6	55.0	3.1	8.2	5.6	11.7	2.7	53.8	69.8	59.8	61.2	2,403
Gayland Ward Seed	19042	17.2	6.0	110	74.3	FS	ML	BD	115	6.5	53.3	3.6	11.5	5.7	8.7	2.3	46.2	66.3	59.8	61.2	2,571
Dyna-Gro Seed	F71FS72 BMR	17.0	6.2	108	70.0	FS	E	BMR	131	6.8	44.4	1.9	8.2	17.7	9.7	2.8	49.6	65.9	65.8	67.9	2,913
Sorghum Partners	SS405	16.7	5.9	106	69.0	FS	L	-	93	5.4	58.3	4.3	8.8	5.3	9.8	2.1	45.6	65.7	56.8	57.8	2,231
Dyna-Gro Seed	F70FS91 BMR	16.2	5.5	103	70.2	FS	E	BMR	118	8.1	53.1	2.4	6.9	7.9	11.9	2.6	51.5	68.9	60.1	61.5	2,407
Dyna-Gro Seed	Super Sile 20	15.8	5.4	101	72.9	FS	ML	-	103	6.6	55.4	4.1	7.9	7.1	10.3	2.3	45.7	63.0	58.8	60.1	2,296
Gayland Ward Seed	18180	15.6	5.3	99	69.6	SS	L	-	111	7.6	54.4	4.1	8.8	7.0	10.1	2.4	46.0	63.7	58.4	59.7	2,372
Dyna-Gro Seed	Fullgraze II BMR	15.5	5.4	99	71.0	SS	ML	BMR	100	6.3	60.5	3.6	8.6	2.6	9.8	2.3	50.8	66.8	56.9	58.0	2,257
Dyna-Gro Seed	Dynagraz II	15.0	5.6	96	67.5	SS	ME	-	100	6.6	53.9	5.0	6.2	9.1	10.3	2.2	41.1	59.4	57.4	58.5	2,237
Sorghum Partners	SP 3904	15.0	5.0	96	74.2	FS	ME	BMR	127	8.4	51.9	2.1	7.5	9.3	13.5	3.2	60.5	72.7	61.7	63.3	2,541
Gayland Ward Seed	20268	14.8	5.4	95	70.8	SS	ML	BMR-6	131	9.1	50.7	2.8	8.6	9.9	10.3	2.8	52.6	68.4	62.3	64.0	2,677
Gayland Ward Seed	19011	14.8	5.1	94	69.9	SS	M	BMR-6, BD	117	8.5	49.5	3.0	7.1	9.0	12.9	2.7	48.1	64.8	60.1	61.6	2,389
Gayland Ward Seed	18096	14.5	4.9	93	72.6	DP	ME	-	110	8.3	53.0	3.1	7.2	6.6	12.8	2.5	47.9	65.6	59.8	61.2	2,266
Dyna-Gro Seed	Dual Forage SCA II	14.5	4.9	93	66.0	DP	ML	-	120	9.2	54.5	3.3	6.0	6.8	12.4	2.8	53.2	67.8	59.2	60.6	2,344
Dyna-Gro Seed	Danny Boy II BMR	14.4	5.4	92	74.3	SS	PS	BMR	103	8.1	52.7	4.2	7.4	8.1	11.2	2.3	40.1	56.1	58.6	59.8	2,202
Dyna-Gro Seed	F74FS23 BMR	14.2	5.0	91	73.8	FS	M	BMR	98	5.7	53.5	2.6	7.1	5.8	14.3	2.5	51.6	66.4	59.0	60.4	2,203
Dyna-Gro Seed	F72FS05	13.9	4.9	89	70.5	FS	ME	SCA	97	7.1	59.1	4.1	6.5	3.8	11.9	2.6	50.8	69.0	56.2	57.2	2,123
Gayland Ward Seed	19040	13.9	4.9	89	76.0	FS	M	BD	116	7.9	52.1	3.1	10.6	4.7	12.0	2.7	49.2	66.2	60.5	62.0	2,438
Gayland Ward Seed	19174	12.9	4.8	82	69.6	FS	ME	BMR-6, DS	112	6.6	53.5	2.4	12.1	5.1	10.9	2.8	52.5	70.0	61.1	62.6	2,487
Dyna-Gro Seed	Super Sile 30	12.8	4.6	82	73.2	FS	ME	-	104	6.4	52.9	3.9	8.3	11.1	9.3	2.4	41.2	62.0	59.0	60.3	2,376
Dyna-Gro Seed	F75FS13	12.5	4.5	80	70.3	SS	ML	-	95	5.6	55.0	4.1	9.7	4.9	10.9	2.4	44.2	62.5	57.6	58.8	2,233
Dyna-Gro Seed	Super Sweet 10	12.3	4.5	78	72.2	SS	ME	-	109	7.9	52.4	4.2	7.6	8.8	11.1	2.4	43.5	62.1	58.1	59.4	2,313
<b>Average</b>		<b>15.7</b>	<b>5.5</b>		<b>70.9</b>				<b>109</b>	<b>7.2</b>	<b>54.0</b>	<b>3.5</b>	<b>8.1</b>	<b>7.0</b>	<b>11.2</b>	<b>2.5</b>	<b>48.4</b>	<b>65.6</b>	<b>59.1</b>	<b>60.4</b>	<b>2,355</b>
<sup>†</sup> LSD (P<0.30)																					
<sup>†</sup> LSD (P<0.05)																					

<sup>a</sup>Forage yield adjusted to 65% moisture content based on dried samples.

<sup>b</sup>Forage Type: DP=Dual Purpose Sorghum; FS=forage sorghum; SS=sorghum sudangrass.

<sup>c</sup>Relative maturities are provided by the companies. E=early; ME=medium-early; M=medium; ML=medium-late; L=late; PPS=photoperiod sensitive.

<sup>d</sup>Traits are provided by the companies. Dashes mean conventional (no traits) or information isn't available. BD=brachytic dwarf; BMR=brown mid-rib; BMR-6=one of the three main brown mid-rib genes; DS=dry stalk; MS=Male sterile; SCA=Sugar Cane Aphid.

<sup>e</sup>If the difference between two hybrid yields equals or exceeds the LSD value, the difference is significant. Hybrid yields in the top yield group (P<0.30) are in bold. Farmers should use the LSD (P<0.30) for selecting superior hybrids to minimize economic loss due to false negative results and others may use LSD (P<0.05) to minimize the risk of false positive results.

All forage quality analyses results are dry basis values. CP=crude protein; aNDFom=ash free neutral detergent fiber; WSC=water-soluble carbohydrates; NDFD=neutral detergent fiber digestibility; TDN=total digestible nutrients; NEL=net energy for lactation; Milk/ton= predicted amount of milk produced per ton of silage dry matter calculated using MILK2013.

**Site Information**

Collaborator: Arkansas Valley Research Station (Mike Bartolo and Kevin Tanabe)  
 Planting Date: May 26, 2020  
 Harvest Date: September 29 and 30, 2020  
 Herbicide: Pre-Emerge: Dual II Magnum at 1.3 pt/ac and Mad Dog Plus at 1 qt/ac applied May 27  
 Post-Emerge: Huskie at 14 oz/ac and Starane at 5 oz/ac applied June 19  
 Fertilizer: Pre-plant incorporated: N at 16.5, P at 78 lb/ac in April  
 Irrigation: Furrow irrigated  
 Soil Texture: Silty clay (12% sand, 40% silt, 48% clay)  
 Comments: Trial received 4 inches of snow on September 8th and station reached a low temperature of 31.7°F on the morning of Sept. 9th.