



University of Florida/Institute of Food and Agricultural Sciences  
Results from the 2021 Spring Sorghum Sudan hybrid test  
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Company	Hybrid	Total Production <i>lb DM/A</i>	Estimated silage	Milk production	Milk	Disease score‡	DM% at harvest	NE <sub>l</sub> <i>Mcal/lb DM</i>
			production (35% DM) <i>Ton silage /A</i>	per ton <i>lb milk/ton silage</i>	production per acre <i>lb milk/A</i>			
ADVANTA	ADV XS005	15279	21.8	1549	11843 <i>n.s</i>	1.3	24%	0.44
ALTA	ADV S6404	14711	21.0	1818	13028	1.5	38% *	0.48
ALTA	ADV S6504	12511	17.9	2077 *	13021	1.5	25%	0.52 *
ALTA	ADV S6520	11754	16.8	1857	10996	1.4	24%	0.49
Dyna-Gro Seed	DYNAGRAZE II	12653	18.1	1602	10107	1.9 *	31%	0.46
Dyna-Gro Seed	DYNAGRAZE II BMR	10172	14.5	1810	9206	2.3 *	29%	0.48
Dyna-Gro Seed	FIRST GRAZE	12795	18.3	1522	9980	1.1	32%	0.44
Dyna-Gro Seed	FULLGRAZE II	16994 *	24.3 *	1575	13394	0.6	35% *	0.44
Dyna-Gro Seed	FULL GRAZE II BMR	12032	17.2	1969 *	11812	0.9	28%	0.50 *
<b>Mean</b>	<b>Mean</b>	<b>12781</b>	<b>18.3</b>	<b>1785</b>	<b>11280</b>	<b>1.5</b>	<b>30%</b>	<b>0.48</b>
<b>SE</b>	<b>SE</b>	<b>1994</b>	<b>2.8</b>	<b>85</b>	<b>1418</b>	<b>0.3</b>	<b>2%</b>	<b>0.01</b>

\* Indicates hybrids that performed similarly to the best hybrid, according to F-test at  $p < 0.05$ ; n.s. means no statistical difference between hybrids. All mean reported are least square means.

§Hybrids marked with "\*\*\*" are on the top right quadrant of the production chart, with superior biomass production and superior milk production per ton of silage compared to averages.

‡ Disease and lodging scores, low values mean less disease incidence or lodging. \* Indicates hybrids with the most incidence of disease or lodging.

**Parameters:**

Disease score: 0 = no disease 3 = heavy disease (>75% incidence); Lodging score: 0 = no lodging 3 = mostly lodged (>75% fallen)

'Milk per ton of silage' and 'Milk per acre of silage yield' were calculated using the Milk2006 formulas from the University of Wisconsin  
DM, dry matter (%); NEL, net energy for lactation (Mcal/lb DM)

Hybrid	TDN	CP	IVTDMD30	Starch	WSC	aNDF	dNDF30	NDFD30	Top performing (chart) <sup>§</sup>
ADVXS005	46.5	6.5	63.0	5.1	8.0	75.3 *	35.5	47.2	
ADV S6404	50.6	6.4	66.1	11.5 *	9.7	67.6	32.8	48.6	**
ADV S6504	55.0 *	7.0	67.7 *	5.2	9.9	69.3	37.6 *	54.2 *	
ADV S6520	51.6	7.0	66.7 *	6.2	9.3	71.2	36.7 *	51.7 *	
DYNAGRAZE II	46.5	5.9	62.9	10.1 *	10.7 *	68.0	28.9	42.5	
DYNAGRAZE II BMR	50.1	6.0	64.0	7.2	9.8	71.4	34.2	47.9	
FIRST GRAZE	45.5	6.0	63.5	14.5 *	9.8	67.5	28.7	42.5	
FULLGRAZE II	47.2	5.0	59.8	7.3	7.2	77.8 *	38.1 *	49.0	
FULL GRAZE II BMR	53.7 *	7.3 *	66.5	7.2	8.8	70.7	38.3 *	54.2 *	
<b>Mean</b>	<b>50.2</b>	<b>6.5</b>	<b>64.8</b>	<b>8.4</b>	<b>9.2</b>	<b>70.6</b>	<b>34.6</b>	<b>49.1</b>	
<b>SE</b>	<b>1.3</b>	<b>0.4</b>	<b>1.0</b>	<b>0.9</b>	<b>0.4</b>	<b>1.0</b>	<b>0.6</b>	<b>1.1</b>	

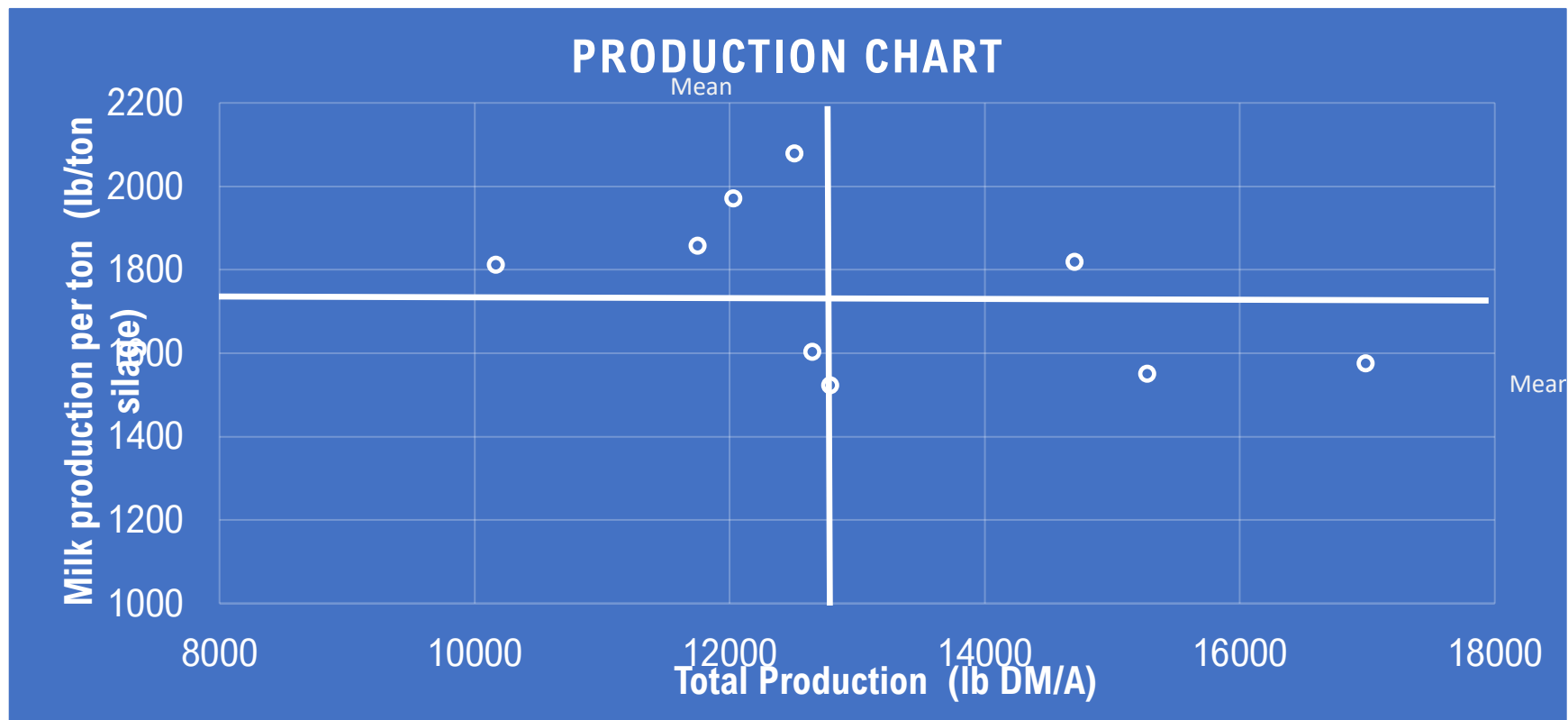
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**Parameters:**

TTDN, total digestible nutrients (% DM); CP, crude protein (% DM), IVTDMD30, in vitro true dry matter digestibility at 30h in rumen (% DM); starch (% DM); WSC, water soluble carbohydrates (% DM); ADF, acid detergent fiber (% DM); dNDF30, digestible NDF at 30 h in rumen; NDFD30, NDF digestibility (as % of NDF) at 30 h in rumen



**Disclosure**

This hybrid test is conducted independently by UF/IFAS faculty and is open for all seed companies to enter hybrids for the test.

**Management information**

Trial was conducted at the Plant Science Research and Education Unit, in Citra, FL

Planting date April 7, 2021

Planting rate was 70,000 seeds/Acre, 30-inch rows; all seeds received already treated with seed safener

Fertilizer Application LBS/Acre -N 198; P 56; K 120; Mg 27; S 28; Mn 10; Zn 4; divided in pre-incorporated, starter and 4 other applications; Last applications over irrigation

Pesticide application - Bifenthrin planting, with Prowl and Dual at planting and Athrazine at around 12"; Tebustar, Headline Amp at tasseling; Insecticide as needed, total 6 applications (Coragen, Besiege, Warrior and Belt)

Trial was irrigated as needed

Harvest occurred on Aug 6, 2021

**Contact**

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