University of Florida/Institute of Food and Agricultural Sciences
Results from the 2021 Spring Forage Sorghum hybrid test
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FORAGE TEAM

Company	Hybrid	Total Production	Estimated silage production (35% DM)	Milk production per ton	Milk production per acre	Disease score‡	Lodging score‡	DM% at harvest	NE_l
		lb DM/A	*Ton silage /A*	*lb milk/ton silage*	*lb milk/A*				*Mcal/lb DM*
Alta Seeds	ADV F7424	12823 *n.s.*	18.3 *n.s.*	2035 *n.s*	12602	1.1	0.25	28%	0.52 *n.s*
Alta Seeds	ADV F8322	14082	20.1	2103	15075 *	0.9	0	32%	0.53
Alta Seeds	AF7401	10990	15.7	2041	11064	1.6	0	29%	0.52
DynaGro	5 STAR	13339	19.1	1793	11794	1.3	0.5	29%	0.48
DynaGro	F72FS05	13537	19.3	1963	13243	0.8	0.375	32% *	0.51
DynaGro	F74FS23 BMR	5647	8.1	2142	6040	1.8 *	2.5 *	24%	0.53
DynaGro	F74FS72 BMR	7043	10.1	2094	7311	1.9 *	2.5 *	28%	0.52
DynaGro	FX21815	10871	15.5	1951	10402	1.1	0	37% *	0.51
DynaGro	FX21842	13057	18.7	1905	12517	1.1	0	26%	0.50
DynaGro	Super Sile 30	13295	19.0	1943	12707	1.2	1	30%	0.50
DynaGro	SWEET TON	10237	14.6	2207	11583	1.3	1.75 *	24%	0.54
Croplan	IQ3501	13681	19.5	2102	14439	1.0	0	27%	0.53
MOJO Seed Enterprises	OPAL	9305	13.3	2078	9924	1.1	0	32%	0.52
MOJO Seed Enterprises	PEARL	9266	13.2	2018	9218	1.3	1.375	35% *	0.51
Mean	**Mean**	**11227**	**16.0**	**2027**	**11280**	**1.2**	**0.73**	**29%**	**0.52**
SE	**SE**	**1872**	**2.7**	**113**	**2008**	**0.3**	**0.40**	**0%**	**0.02**

* 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)§
	% DM							% NDF	
ADV F7424	53.7 *n.s*	6.5 *n.s*	69.6	12.2 *n.s*	10.9	63.0 *n.s*	31.2 *n.s*	49.5	**
ADV F8322	54.4	5.8	70.2	12.9	11.7	63.0	31.0	49.4	**
AF7401	53.5	6.4	69.4	11.7	11.2	63.2	30.6	48.3	**
5 STAR	49.7	4.7	71.4	13.2	13.7 *	64.8	29.3	45.2	
F72FS05	52.2	5.7	69.3	12.2	12.0	63.6	29.9	47.0	
F74FS23 BMR	55.3	6.5	73.6 *	12.6	13.0	60.2	30.4	50.6 *	
F74FS72 BMR	54.6	7.4	71.2	13.8	11.2	61.5	30.8	50.1	
FX21815	52.2	7.2	69.3	13.4	10.9	61.8	29.1	47.1	
FX21842	51.5	7.0	70.4	12.0	11.8	63.0	29.5	46.8	
Super Sile 30	52.1	6.5	70.4	12.3	12.1	63.2	30.0	47.6	
SWEET TON	56.3	7.3	73.4 *	13.8	12.8	58.7	30.0	51.3 *	
IQ3501	54.4	6.0	70.8	10.9	12.6	62.9	30.8	48.9 *	**
OPAL	53.8	5.9	69.1	10.3	11.7	65.0	31.4	48.3	
PEARL	53.2	5.0	69.7	12.2	12.1	64.8	31.5	48.7	
Mean	**53.4**	**6.3**	**70.6**	**12.4**	**12.0**	**62.8**	**30.4**	**48.5**	
SE	**1.9**	**0.6**	**1.4**	**1.1**	**0.8**	**1.4**	**1.2**	**2.1**	

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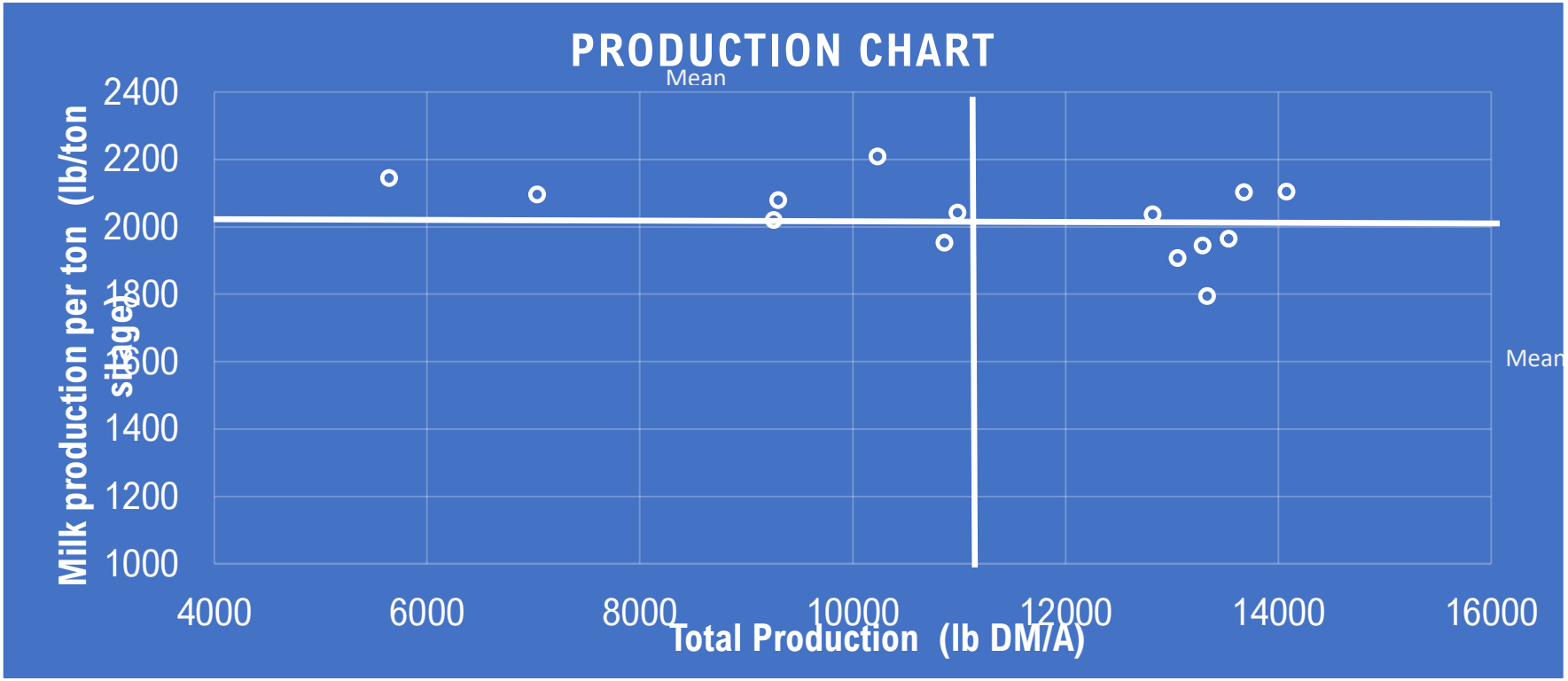
‡ Disease and lodging scores, low values mean less disease incidence or lodging. * Indicates hybrids with the most incidence of disease or lodging.

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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