University of Florida/Institute of Food and Agricultural Sciences

Results from the 2021 Summer Sorghum x Sudan Silage hybrid test

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FORAGE TEAM

	Hybrid	Total Production	Estimated silage production (35% DM)	Milk production per ton	Milk production per acre	Disease score‡	DM% at harvest	NE_l
		lb DM/A	*Ton silage /A*	*lb milk/ton silage*	*lb milk/A*			*Mcal/lb DM*
Dyna-Gro Seed	DYNAGRAZE II	7880	11.3	2854	11291 *n.s.*	0.0	31%	63.06
Dyna-Gro Seed	DYNAGRAZE II BMR	9177	13.1	2924 *	13537	0.0	32%	63.51 *
Dyna-Gro Seed	FIRST GRAZE	10002	14.3	2913 *	14574	0.0	31%	63.91 *
Dyna-Gro Seed	FULLGRAZE II	12925 *	18.5 *	2451	15845	0.6 *	33% *	57.09
Dyna-Gro Seed	FULLGRAZE II BMR	10257	14.7	2781	14281	0.8 *	30%	61.81
Mean	**Mean**	**10049**	**14.4**	**2784**	**13906**	**0.3**	**31%**	**61.87**
SE	**SE**	**1026**	**1.5**	**48**	**1659**	**0.1**	**1%**	**0.77**

* 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 score, low values mean less disease incidence. * 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)

Company	Hybrid	TDN		CP		Starch		WSC		aNDF		NDFD30		uNDF30		Top performing (chart)§
		% DM										% NDF				
Dyna-Gro Seed	DYNAGRAZE ll	59.9		9.0	*	4.1		7.7		63.8		58.7		25.8	*	
Dyna-Gro Seed	DYNAGRAZE ll BMR	62.2	*	7.7		3.4		8.5		66.6		63.6	*	23.5	*	
Dyna-Gro Seed	FIRST GRAZE	60.8	*	8.5	*	6.0	*	8.0		63.2		59.2		25.2	*	
Dyna-Gro Seed	FULLGRAZE ll	54.4		6.3		0.1		9.0		72.5	*	56.7		20.9		
Dyna-Gro Seed	FULLGRAZE ll BMR	59.4		7.2		1.3		14.4	*	63.8		59.7		16.7		
Mean	**Mean**	**59.3**		**7.7**		**3.0**		**9.5**		**66.0**		**59.6**		**22.4**		
SE	**SE**	**0.5**		**0.4**		**0.6**		**0.3**		**1.2**		**0.6**		**0.4**		

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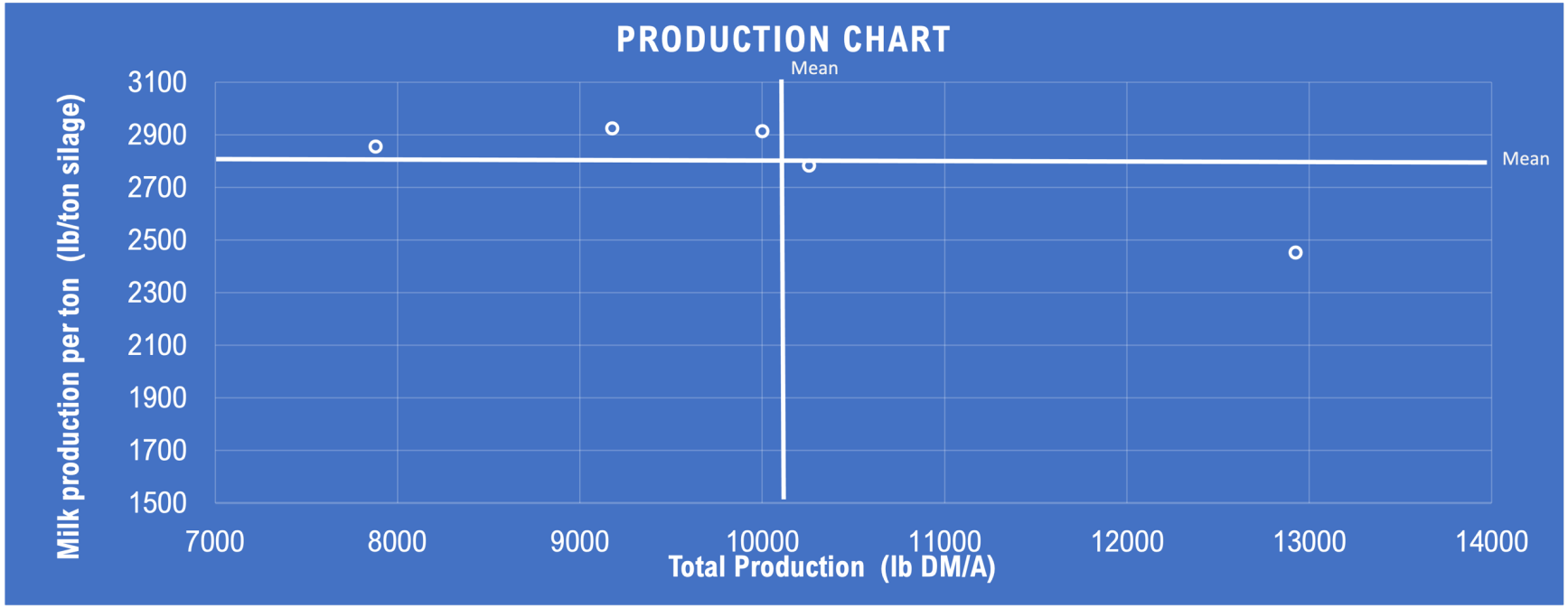
‡ Disease score - low values mean less disease incidence; * Indicates hybrids with the most incidence of disease.

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 July 13th, 2021

Planting rate was 20 lb /Acre, 7.5-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 between October 26th and November 2nd, 2021

Contact

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