University of Florida/Institute of Food and Agricultural Sciences Results from the 2021 Summer Corn hybrid test

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					silage	Γ	Milk		Milk		FORAGE TEAM		ГЕАМ		
		Relative	Total		production	proc	ductio	n	productior	n I	Diseas	е	DM ['] at		
Company	Hybrid	Maturity	Production		(35% DM)	pe	er ton		per acre		score	ŧ	harvest		NE
						lb n	nilk/tor	1							
			lb DM/A		Ton silage /A	A si	ilage		lb milk/A						Mcal/lb DM
Augusta Seed	A1367-3220GT	117	11851		16.9		3284		19522 <i>n</i>	.s	0.3		39%		0.70
Augusta Seed	A4467-DC5222	117	10663		15.2		3389		18096		0.8		37%		0.71
Croplan	5678vt2p	116	11947		17.1		3375		20220		0.1		40%		0.71
Croplan	5900vt2p	119	11802		16.9		3429		20255		1.6	*	48%	*	0.72
Local Seed	LC1506 VT2P	115	9760		13.9		3432		16761		0.3		42%		0.72
Local Seed	LC1616 TC	116	11885		17.0		3487		20717		0.1		38%		0.72
Local Seed	LC1688 SSXRIB	116	10757		15.4		3548		19073		0.3		41%		0.73
Local Seed	LC1707 VT2P	117	11066		15.8		3387		18756		0.5		45%	*	0.71
Local Seed	LC1919 VT2P	119	13170	*	18.8 *	4	3536		23281 *		1.4	*	48%	*	0.73
Pioneer	P1847VYHR	118	13315	*	19.0 *	k	3502		23376 *		1.4	*	46%	*	0.73
Pioneer	P1903YHR	119	10991		15.7		3494		19112		1.6	*	46%	*	0.73
Pioneer	P30F35VYHR	135	13543	*	19.3 *	k	3414		23101 *		0.6		46%	*	0.71
Progeny Ag	PGY 2118VT2P	118	11486		16.4		3439		19736		1.6	*	54%	*	0.72
Progeny Ag	PGY 8116SS	116	10606		15.2		3340		17707		0.8		40%		0.71
Progeny Ag	PGY 9117VT2P	117	11448		16.4		3330		19071		0.4		38%		0.70
Sun Praire Seeds	SP3517	116	9763		13.9		3598	*	17566		0.4		40%		0.74 *
Syngenta Seeds	NK1661-3120A	116	9765		14.0		3233		15852		2.1	*	42%		0.69
Syngenta Seeds	NK1677-3110	116	12010		17.2		3401		20547		0.4		39%		0.71
Syngenta Seeds	NK1748-3110	117	11297		16.1		3335		18865		0.5		37%		0.70
Syngenta Seeds	NK1808-3111	118	11860		16.9		3447		20431		1.4	*	47%	*	0.72
Mean	Mean		11449		16.4		3420		19602		0.8		43%		0.72
SE	SE		761		1.1		73		1458		0.2		1%		0.01

Estimated

* 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.

Parameters:

Disease score: 0 = no disease 3 = heavy disease (>75% incidence)

'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)

									Top performing
Company	Hybrid	TDN	СР	Starch	WSC	aNDF	dNDF30	NDFD30	(chart) [§]
	-			% D			% NDF		
Augusta Seed	A1367-3220GT	74.4				<u> </u>	40.0		
Augusta Seed	A4467-DC5222	/1.4	8.4	36.8	7.5	22.7	40.0	57.1	
Greenpoint Ag	5678vt2p	73.0	9.2 *	36.2	7.7	21.2	38.1	60.7	
Greenpoint Ag	5900vt2p	72.6	8.8	37.6	7.9	21.0	37.5	58.3	**
Local Seed	LC1506 VT2P	/3.3	8.3	35.7	8.4	20.6	37.0	59.3	
Local Seed	LC1616 TC	73.3	8.0 0.0	38.8 26 F	8.0	21.0	37.4	59.4	**
Local Seed	LC1688 SSXRIB	74.4	0.0 0.0 *	30.5	7.9 0 0	20.3	37.0 22 E	02.3 62.2	
Local Seed	LC1707 VT2P	74.9	9.0	40.4	0.0 7.6	19.0	33.3 40 7	02.5 60 5	
Local Seed	LC1919 VT2P	73.0	0.4 8 3	38.0	7.0 8.0	18.6	40.7 25 <i>/</i>	62.0	* *
Pioneer	P1847VYHR	74.5	8.0	38.0	8.0	20.3	37.1	61.6	**
Pioneer	P1903YHR	74.3	8.0	38.5	7.8	19.4	35.8	61.3	
Pioneer	P30F35VYHR	73.3	8.9 *	31.7	9.2 *	21.4	39.8	60.6	
Progeny Ag	PGY 2118VT2P	73.7	8.0	36.5	7.3	20.7	38.4	61.3	**
Progeny Ag	PGY 8116SS	72.1	9.1 *	36.9	7.5	21.4	38.5	57.4	
Progeny Ag	PGY 9117VT2P	72.3	9.0 *	32.6	8.0	23.0	41.2	60.3	
Sun Praire Seeds	SP3517	75.5 *	8.5	41.7 *	8.8 *	18.5	33.6	61.6	
Syngenta Seeds	NK1661-3120A	70.8	8.0	37.7	6.9	23.9 *	41.7 *	57.5	
Syngenta Seeds	NK1677-3110	73.2	9.1 *	35.5	8.4	21.7	38.8	60.9	
Syngenta Seeds	NK1748-3110	72.4	9.1 *	34.0	7.9	22.9	40.6	60.4	
Syngenta Seeds	NK1808-3111	73.5	7.6	40.1	7.5	19.8	36.3	59.4	**
Mean	Mean	73.3	8.5	37.0	7.9	21.0	38.0	60.2	
SE	SE	0.9	0.2	2.4	0.3	1.1	1.9	1.1	

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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 30,628 seeds/Acre, 30-inch rows.

Fertilizer Application LBS/Acre -N 270; P 56; K 211; Mg 16; S 36; Mn 10; Zn 4; divided in pre-incorporated, starter and 4 other applications; Last applications over irrigation

Pesticide application – Counter at planting, with Athrazine, Prowl and Dual; Tebustar, Headline at 30-inch plant height, and Headline Amp at tasseling; Insecticide as needed, total 6 applications (Coragen, Besiege, Warrior and Belt)

Trial was irrigated as needed

Harvest occurred between October $13^{\mbox{th}}$ and $19^{\mbox{th}}$, 2021

Contact

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