

University of Florida/Institute of Food and Agricultural Sciences

Results from the 2020 Summer Corn Silage hybrid test

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Table 1. Productivity

Company	Hybrid	Relative maturity	Total Production	Estimated silage production (35% DM)	Milk production per ton	Milk production per acre	Disease score	NE <sub>i</sub>
			<i>lb DM/A</i>	<i>Ton silage/A</i>	<i>lb milk/ton silage</i>	<i>lb milk/A</i>		<i>Mcal/lb DM</i>
AgraTech	88VT2P		7360	10.5	3056	11266	2.0 *	0.66 ns
AgraTech	908VIP		11298	16.1	3334	18842 *	0.9	0.70
Augusta seed	A4467-3220GT	117	10542	15.1	3448	18231 *	1.5	0.72
Croplan Genetics	S5700	118	10809	15.4	3440	18685 *	0.6	0.72
Croplan Genetics	S5900 vt2p DKC64-44RIB	118	9310	13.3	3153	14734	1.3	0.68
Dekalb	SS	114	10418	14.9	3354	17469	1.5	0.71
Dekalb	DKC68-69 VT2P	118	10812	15.4	3294	17914	0.6	0.70
Dekalb	DKC69-16 SS DKC69-99	118	11226	16.0	3420	19287 *	0.5	0.72
Dekalb	TRECEPTA	119	10709	15.3	3374	18035	1.3	0.71
Dekalb	DKC70-64 SS	119	12960 *	18.5 *	3325	21562 *	1.0	0.70
Local Seed	LC1688 SSX	116	10896	15.6	3395	18507 *	1.1	0.71
Local Seed	LC1898 TC	118	10272	14.7	3450	17792	1.3	0.72
Local Seed	LC1506 VT2P	115	11544 *	16.5 *	3392	19600 *	1.1	0.71
Local Seed	LC1707 VT2P	117	9601	13.7	3380	16249	1.4	0.71
Local Seed	LC1806 VT2P	117	10154	14.5	3400	17292	1.4	0.72
Pioneer	P30F35 VYHR	135	10975	15.7	3356	18409 *	0.0	0.71
Pioneer	P1847 VYHR	118	10932	15.6	3335	18216 *	1.4	0.70
Pioneer	P1903 YHR	118	10206	14.6	3417	17504	1.0	0.71
Syngenta	NK1573-5222	115	11017	15.7	3309	18183 *	1.8 *	0.70
Syngenta	NK1677-3110	116	12337 *	17.6 *	3431	21188 *	1.8 *	0.72
Syngenta	NK1748-3110	117	11607 *	16.6 *	3394	19773 *	1.4	0.71
<b>Mean</b>			<b>10714</b>	<b>15.3</b>	<b>3355</b>	<b>18035</b>	<b>1.2</b>	<b>0.71</b>
<b>SE</b>			<b>693</b>	<b>1.0</b>	<b>85</b>	<b>1466</b>	<b>0.1</b>	<b>0.01</b>

\* indicates hybrids that performed similarly to the best hybrid, according to F-test at  $p < 0.05$ . All mean reported are least square means.

**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)

Table 2. Nutritive value

Hybrid	TDN	CP	IVTDMD30	Starch	WSC	ADF	aNDF	dNDF30	NDFD30	
	----- % DM -----									% NDF
88VT2P	68.6	n.s.	8.6	72.6	20.9	5.6	29.7 *	51.7 *	24.7 *	47.9 *
908VIP	72.4		8.8	76.6 *	27.0	4.9	25.9 *	46.2 *	22.3 *	48.1 *
A4467-3220GT	73.8		9.0	77.9 *	28.6 *	5.4	24.2	43.2	20.1	46.3 *
S5700	73.4		8.6	78.4 *	30.4 *	5.7	23.5	42.1	18.9	44.8
S5900 vt2p	69.5		8.6	72.7	22.9	6.6 *	28.2 *	49.6 *	21.7 *	43.5
DKC64-44RIB SS	72.5		8.8	78.0 *	28.3 *	5.7	24.2	43.6	20.8	47.8 *
DKC68-69 VT2P	71.3		8.4	75.3 *	30.2 *	4.9	24.4	44.4	19.0	42.6
DKC69-16 SS	73.0		9.0	76.5 *	29.0 *	4.9	24.2	43.7	18.7	42.7
DKC69-99 TRECEPTA	72.4		8.2	75.4 *	31.0 *	4.5	23.7	43.4	18.2	42.0
DKC70-64 SS	71.8		8.8	74.8	25.7	6.7 *	25.3	45.2	19.4	42.8
LC1688 SSX	72.8		8.8	77.8 *	30.6 *	5.7	23.0	41.7	18.9	45.2 *
LC1898 TC	73.6		8.0	77.9 *	33.1 *	4.3	22.6	40.8	18.1	44.5
LC1506 VT2P	72.9		8.4	77.7 *	30.2 *	5.3	24.2	42.9	19.7	45.9 *
LC1707 VT2P	72.6		8.8	76.3 *	30.4 *	4.6	23.6	43.2	18.6	42.7
LC1806 VT2P	72.8		8.3	75.5 *	33.6 *	3.5	23.4	41.6	17.5	42.0
P30F35 VYHR	72.4		10.1 *	78.6 *	23.3	6.4 *	25.8 *	48.2 *	23.0 *	47.6 *
P1847 VYHR	72.5		8.8	75.8 *	24.3	5.3	27.2 *	47.4 *	22.0 *	46.5 *
P1903 YHR	73.5		9.0	78.1 *	27.0	5.5	25.3	44.7	21.1	47.1 *
NK1573-5222	71.8		9.0	76.2 *	27.7 *	6.2 *	24.9	44.1	20.3	45.9 *
NK1677-3110	73.5		8.5	78.6 *	30.8 *	5.5	23.6	42.9	19.8	46.3 *
NK1748-3110	73.2		9.1	77.2 *	27.8 *	4.7	25.6	45.0	21.2	47.1 *
<b>Mean</b>	<b>72.4</b>		<b>8.7</b>	<b>76.6</b>	<b>28.2</b>	<b>5.3</b>	<b>24.9</b>	<b>44.6</b>	<b>20.2</b>	<b>45.2</b>
<b>SE</b>	<b>1.1</b>		<b>0.2</b>	<b>1.2</b>	<b>2.3</b>	<b>0.3</b>	<b>1.4</b>	<b>2.0</b>	<b>1.2</b>	<b>1.1</b>

\* indicates hybrids that performed similarly to the best hybrid, according to F-test at  $p < 0.05$ . All means reported are least square means.

**Parameters:**

DM, dry matter (%); NEL, net energy for lactation (Mcal/lb DM), TDN, 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

**Management information**

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

Planting date July 8, 2020

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 application 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

Harvests occurred between Sep 28 and Oct 6, 2020

**Disclosure**

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

**Contact**

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