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NEW YORK CORN SILAGE HYBRID TESTS – 2012

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Corn silage hybrids were tested at three locations in New York in 2012. We evaluated 85 to 115-day hybrids in relative maturity (RM) at the Aurora Research Farm in Aurora (Cayuga Co.), and at Sparta Farms in Groveland Station (Livingston Co.). We evaluated 85-105 day RM hybrids at Cornell's T&R Center in Harford (Cortland Co.). The Aurora and Groveland Station sites average about 2450 growing degree days (GDD, 86-50^{o} system) from May through September, whereas the Harford site averages about 2100 GDD. Seed companies were invited to enter their hybrids in these tests for a fee.

MATERIALS AND METHODS

We planted all hybrids with a 2-row plot planter at 36,000 plants/acre to achieve harvest populations of 32,000-34,000 plants/acre. The Aurora site was planted on 20 April, the Harford site on 30 April, and the Groveland Station site on 3 May. All hybrids were grouped within a 5-day RM (i.e. 91-95 day RM, 96-100, etc.), and planted in a randomized complete block design with four replications. Each individual plot consisted of two 20-ft. rows spaced 30 inches apart. Each individual plot received about 250 lbs/acre of 10-20-20 at planting. The Aurora site, which followed soybeans, received about 140 lbs N/acre of side-dressed N at the 4 to 5-leaf (V4 to V5) stage. The other two sites were well-manured dairy sites, which were 1 or 2 years removed from perennial forages, so they received no side-dressed N. We used preemergence/postmergence herbicides and hand-weeding to control weeds.

Both rows, trimmed back to an 18-foot length, were harvested for silage yield with a retrofitted 3-row New Holland Chopper with a platform and a weigh-basket, mounted on load cells. The goal was to harvest all hybrids in the 65% moisture range (plus/minus 3%), but some of the early-season hybrids were drier than planned, despite harvesting the Aurora and Harford sites in August.

The Aurora site was harvested on two dates: 85-99 day RM groups on 22 August when hybrids in the three maturity groups ranged from about 62 to 65% moisture. The 96-115 day RM groups were harvested on 27 August when hybrids in the three maturity groups ranged from about 61 to 64%. We harvested all maturity groups at the Harford site on 30 August when moistures ranged from about 60% for the 84-90 RM group to about 66% for the 101-105 RM group. We harvested the Sparta Farms site in Livingston Co. on 5 September. Moisture ranged from about 60% for the 85-95 RM group and then increase by about 2 percentage points with each 5 day RM increase up to 68% moisture for the 111-115 day RM.

An approximate 10,000 g well-mixed sample was originally collected from the chopper after harvest of each plot. The 10,000 g sample was then ground further in the field with a chipper-shredder. An approximate 700 g sub-sample was then weighed and recorded with a gram-scale wired to a computer in the field and refrigerated in a generator-powered freezer (samples were kept cool but not frozen). At the end of each day, the samples were brought back to a Cornell Research Farm for drying. The samples were dried at 140^{o} F in a forced air drier to constant moisture and then weighed to determine moisture content of each sample.

Dry samples were ground to pass a 1 mm screen using a Wiley mill. Samples were processed and analyzed by Cumberland Valley Analytical Services, Inc. Samples were analyzed by wet chemistry for neutral detergent fiber (NDF), according to procedures by Van Soest et al. (1991). Samples were incubated for 30 hours at 39^{o}F in a buffered rumen fluid, according to procedures by Van Soest and Robertson (1980) using a flask system and Van Soest buffer. Following fermentation, residues were analyzed for NDF by wet chemistry to determine 30-hour NDF digestibility (NDFD). The NDF digestibility was calculated as ([1-NDF residue/initial NDF] x 100). Crude protein (CP), starch, ether extract, and ash were determined using NIRS. Milk per ton and milk per acre were then calculated using the Milk2006 spreadsheet program (Tables 2-5). Data were analyzed using the PROC GLM procedure of SAS. The LSD values for separating hybrid means were generated at the P = 0.10 level.

RESULTS AND DISCUSSION

April and May were relatively dry, which allowed April planting dates at Aurora and Harford and an early May planting date at Sparta Farms (Table 1). Interestingly, the Aurora site received 5 inches of snow 2 days after planting and temperatures did not exceed 50 degrees for the first 8 days after the 20th April planting date. Nevertheless, stand establishment averaged 84 to 88%, resulting in final stands of at least 32,000 plants/acre for all hybrids. June and July were warm months. Also, conditions were exceedingly dry and hot from 20 June until 15 July at all three sites. Most hybrids attained the tasseling/silking stage by 10-15 July at Aurora, and 15-20 July at the Harford and Sparta Farms site. The Aurora site, however, received close to 3 inches of rain during the latter half of July, whereas Sparta Farms and especially Harford remained dry. Consequently, yields were reduced more at Sparta Farms, and especially at the Harford site, compared to the Aurora site. Although August was quite dry at Aurora, the crop had been essentially made by mid-August when drought stress set in so the dry conditions only hastened dry-down with minimum impact on yield.

The dry conditions from 20 June until 15 July coincided with the 10th leaf stage (V10) to R1 or silking stage at all three sites, which reduced secondary wall and lignin formation in the stover during the latter stage of vegetative development. Consequently, most hybrids had high NDFd concentrations. In addition, rains during the second half of July resulted in excellent kernel set throughout the somewhat small ears. The excellent kernel set coupled with moistures in the 60-65% range for most hybrids, resulted in relatively high starch concentrations for most hybrids. When averaged across maturity groups at Aurora, average yields ranged from about 21.5 tons/acre (85-95 day RM) to 23.5 tons/acre (adjusted to 65% moisture) for the 95-99 day hybrids harvested on 22 August (Table 2). Average yields ranged from about 23.5 tons/acre (111-115 day RM) to 25.5 tons/acre for hybrids in the 101-110 RM harvested on 27 August (Table 2). At the Groveland Station site, which has a relatively deep soil with high soil water holding capacity, silage yields ranged from 20 to 22 tons/acre across maturity groups with the highest yields in the 101-110 day RM (Table 3) The Harford site is on a very well-

drained Howard gravelly loam soil and thus is droughty when dry conditions set in. Yields ranged from about 17-18 tons/acre for all RM groups (Table 4).

DEKALB hybrids, **DKC38-03 GENVT2P** and **DKC39-07 GENVT2P**, had high calculated milk yields at the two sites, Aurora and Harford, where they were entered in the **84-90 day RM** (Tables 2 and 4). Equally impressive, **FS 3722VP3** from FS InVISION had high calculated milk yields at all three sites (Tables 2, 3, and 4). The hybrid, **DKC40-22 GENSS** from DEKALB performed exceptionally well at Harford, whereas **TA290-31** from T.A. Seeds performed above-average in 2012, especially at Aurora and Sparta Farms. This was the 5th consecutive year that TA290-11 performed well in the NY Corn Silage Hybrid trials. Also, **RPM 269GRQ** from Doebler's performed well for the second consecutive year. The hybrids, **DKC39-07 GENVT2P, DKC40-22 GENSS,** and **FS 3722VT3P** generally had above-average NDFd concentrations, whereas **DCK38-03 GENVT2P** and **RPM 269GRQ** generally had above-average starch concentrations in 2012.

The hybrid, **TA333-22DP** from T.A. Seeds had the highest calculated milk yield at all three sites in the **91-95 day RM** group. Rarely do we observe one hybrid have the highest calculated milk yield at all three testing sites. Other hybrids that performed exceptionally well include **H5084VT3P** and **H5151VT3P** from Hubner. Both hybrids performed well at Aurora and Sparta Farms, the two sites where they were entered. Likewise, **HHG 33B12** from Healthy Herd Genetics performed well at the two sites where it was entered, especially at Harford, as did **DKC43-48 GENVT3P** and **DKC42-72 VT3** from DEKALB. Also, **P9630AM1** from Pioneer had above average calculated milk yield at Aurora and Sparta Farms.

Hybrids that yielded exceptionally well in the **96-100 day RM** group include **HHG 39HF13** from Healthy Herd Genetics, **HiDF3197-7** from Dairyland Seed Co., **197-67VT3P** from Channel, **FS 4811VP3** from FS InVISION, and **DKC46-20-GENVT3P** from DEKALB. The hybrid, **HHG 39HF13** performed exceptionally well at the Aurora and Sparta Farms sites as did **197-67VT3P**. The hybrid, **HiDF3197-7** had the highest

calculated milk yield at both the Aurora and Harford sites, and **FS 4811VP3** from FS InVISION had above-average calculated milk yields at all three sites, especially at Sparta Farms. Also, **RPM 472RR** from Doebler's had above-average calculated milk yield at Aurora and Harford. The hybrids, **HHG 39F13, HiDF3197-7,** and **197-67VT3P** generally had above-average NDFd, and **197-67VT3P, FS 4811VP3,** and **RPM 472RR** generally had above-average starch concentrations in 2012.

Hybrids that performed exceptionally well in the **101-105 day RM** group in 2012 include **203-43VT3P** from Channel; **FS 5429VP3** from FS InVISION; **HiDF3702-9** from Dairyland ; **D45Q50** from Dyna-Gro; **NK N53W-3000GT** from Syngenta; **H5222VT3P** from Hubner; and **TA545-20** from T.A. Seeds. The hybrid, **203-43VT3P**, had the highest calculated milk yield at Aurora; **TA545-20** had the highest calculated milk yield at Sparta Farms, and **N53W-3000GT** had the highest calculated milk yield at Harford. The hybrid, **HiDF3702-9** performed exceptionally well at Aurora and Harford, whereas **D45Q50** performed exceptionally well at Aurora and Sparta farms, and **FS 5429VP3** performed exceptionally well at Aurora. The hybrids, **TA545-20** and **D45Q50**, generally had above-average NDFd concentrations and **203-43VT3P** and **NK N53W-3000GT** generally had above-average starch concentrations in 2012.

Hybrids that performed exceptionally well in the **106-110 day RM** group in 2012 include **FS 5667GT3** from FS InVISION, **TA583-22DP** from T.A. Seeds, **Garst 85E98-3000GT** from Syngenta **, TA108-00** from T.A. Seeds, **594GRQ** from Doebler's, **DKC58-83 GENVT3P** and **DKC57-50VT3** from DEKALB, **HHG 57C12** from Healthy Herd Genetics, and **P1498AM-R** from Pioneer. The hybrid, **FS 5667GT3**, had the second highest calculated milk yield at both Aurora and Sparta Farms. The hybrid, **TA583-22DP**, had the highest calculated milk yield at Sparta Farms, and **TA108-00** had the highest calculated milk yield at Aurora. The hybrids, **594GRQ** and **P1498AM-R** performed well at Aurora, whereas **Garst 85E98-3000GT** and **HHG 57C12** performed well at Sparta Farms. The hybrids, **FS 5667GT3** and **Garst 85E98- 3000GT** had high NDFd and starch concentrations at both sites. The hybrid, **P1498AM-R**, had high NDFd

concentrations, whereas **594GRQ, TA583-22DP, DKC57-50VT3, and 209-85VT3P** had high starch concentrations at both sites.

We only had 4 entries in the **111-115 day RM** in 2012, which was surprising because we typically have 12 entries or so. In addition, we have had three consecutive years with above-average growing degree days and late frosts so it was surprising that the entry number in the late-season RM was much lower this year. The hybrid, **214-VT3P** from Channel performed well at both sites in 2012, especially at Aurora. Also, **V5294HXTRNS** from Dyna-Gro performed very well at Aurora. The hybrid, **214-VT3P**, had high starch concentrations at both sites in 2012

CONCLUSION

The 2012 growing season looked bleak until about mid-July when rains finally arrived and reduced or relieved droughty conditions in most regions of NY except perhaps on the gravelly soils in the Southern Tier region and clay soils north of the NYS Thruway in Niagara and Orleans Co. Although grain yields were surprisingly high (3rd highest on record in NY at a projected yield of 135 bushels/acre), silage yields did suffer because of the short-stature of the crop. Nevertheless, the high NDFd and starch concentrations resulted in above-average quality of the silage crop, which softens the blow of reduced yields. The results of this study was probably very representative of yields on silt loam soils in most of the Finger Lakes Region (Aurora) and gravelly loam soils in the Southern Tier (Harford). The results of this study were incorporated into the recommended corn silage tables in our **2013 Cornell Guide for Integrated Field Crop Management**, which will be released at the Cornell Field Crop Dealer Meetings in December of 2012. We only recommend hybrids that have above-average comparative calculated milk yields (>100%) in their hybrid RM group (i.e. 96-100, 101-105 day RM, etc.). We also list the comparative silage yields and milk/ton values for the recommended hybrids. Look for the updated recommended hybrids first in our November 2012 newsletter, **What's Cropping Up?** (at our web site: www.fieldcrops.org) and then in the Cornell Guide. We urge all seed companies to

participate in our corn silage testing program in 2013 so we can provide the best information under New York growing conditions to our New York dairy producers.

Table 1. Monthly and seasonal precipitation and growing degree days (GDD, 86-50 F system) at Aurora, Sparta Farms (Groveland Station), and Cornell's T&R Center (Harford) during the 2011 growing season for the Cornell corn silage hybrid trials.

	Precipitation			GDD (86-50 F)		
Month	Aurora	Sparta Farms*	Harford	Aurora	Sparta Farms*	Harford
		inches			^{0}F	
May	3.25	2.90	3.89	430	473	374
June	4.09	2.64	3.32	498	503	434
July	3.63	2.94	1.66	707	713	611
August	1.84	2.48	3.61	620	620	531
Seasonal	**15.81**	**10.96**	**12.48**	**2255**	**2309**	**1950**

*Weather from Dansville

Table 2. Silage yield (adjusted to 65% moisture), moisture at harvest, quality characteristics, milk/ton, and calculated milk yields of corn hybrids at the Aurora Research Farm in Cayuga Co. in 2012.

Brand/Company	Hybrid	Silage Yield	Moisture	NDF	30 hour NDFD	CP	Starch	Milk2006 Milk/ton	Milk2006 Milk Yield
		tons @65	%DM	%DM	%	%DM	%DM	lbs/ton	lbs/acre
				84 to 90-d RM					
Dekalb	DKC38-03 GENVT2P	22.4	62.2	36.3	59.5	8.4	36.0	3512	27514
Dekalb	DKC39-07 GENVT2P	22.8	62.0	37.1	61.2	8.7	34.9	3445	27482
Doebler's	RPM 278HXR	22.1	60.2	35.8	58.0	8.2	39.0	3528	27222
TA Seeds	TA290-31	22.4	61.0	39.8	60.6	8.4	36.3	3450	27072
FS InVISION	FS 3722VT3P	22.7	62.7	38.3	59.9	8.6	34.3	3397	27048
Healthy Herd	HHG 28B12	21.9	62.4	42.3	65.5	8.8	32.4	3467	26572
Doebler's	Doebler 269GRQ	22.4	61.8	37.0	55.1	8.3	35.8	3365	26452
Dairyland Seed	HiDF3290-9	21.0	64.0	36.7	61.0	8.2	35.5	3477	25627
Doebler's	RPM 357AM1	19.4	58.9	34.2	63.2	8.9	37.5	3598	24432
Healthy Herd	HHG 26A12	20.7	59.6	41.1	61.7	9.2	30.3	3335	24238
Dekalb	DKC40-22 GENSS	19.6	63.8	38.4	64.0	8.2	34.5	3503	24096
	Average	**21.6**	**61.7**	**37.9**	**60.9**	**8.5**	**35.1**	**3461**	**26159**
				91 to 95-d RM					
TA Seeds	TA333-22DP	23.0	62.9	37.8	61.8	8.4	35.1	3512	28196
Hubner	H5084VT3P	23.3	62.8	38.6	60.6	8.4	34.1	3439	28006
Hubner	H5151VT3P	24.1	62.2	38.0	59.7	8.6	32.5	3255	27516
Pioneer	P9630AM1	22.2	64.1	38.2	60.5	8.2	36.7	3491	27101
Doebler's	RPM 437AM1	22.0	61.5	39.4	61.3	8.2	36.0	3457	26613
Dekalb	DKC42-43 GENVT3P	21.9	63.3	39.0	60.3	8.6	35.0	3448	26490
Dekalb	DKC43-48 GENVT3P	22.3	63.5	37.9	61.1	8.1	34.9	3385	26420
Healthy Herd	HHG 33B12	22.1	62.4	41.5	64.7	7.7	31.7	3370	26144
Dekalb	DKC42-72 VT3	21.2	63.1	35.7	60.1	8.7	37.4	3514	26037
Mycogen	F2F387	20.2	64.2	38.2	72.3	8.6	34.3	3649	25842
TA Seeds	TA095-00	20.0	62.0	36.0	63.2	8.8	38.4	3633	25490
Mycogen	TMF2L418	20.0	64.7	40.5	63.9	8.3	32.5	3424	23927
	Average	**21.8**	**63.1**	**38.4**	**62.5**	**8.4**	**34.9**	**3465**	**26482**
				96-100-d RM					
Dairyland Seed	HiDF3197-7	25.3	63.5	38.6	62.1	8.1	35.5	3468	30682
Channel	197-67VT3P	24.3	64.8	40.0	62.5	8.3	33.9	3494	29713
Healthy Herd	HHG 39HF13	25.3	63.0	41.8	61.5	8.2	31.0	3316	29470
Dyna-Gro	D40SS09	24.7	66.2	40.3	59.7	8.6	33.7	3389	29296
Doebler's	Doebler 459GRQ	23.9	63.4	36.7	60.9	8.1	36.5	3501	29203
FS InVISION	FS 4811VP3	24.1	63.4	38.5	59.4	7.8	34.4	3433	28982
Doebler's	RPM 472RR	23.7	63.6	38.6	61.8	8.5	34.8	3477	28927
Channel	200-91VT3P	24.3	66.4	40.1	61.4	7.9	32.4	3384	28825
Dekalb	DKC46-20 GENVT3P	23.7	63.2	40.9	61.0	8.4	34.6	3399	28175
Dairyland Seed	HiDF3396SSX	22.4	63.1	38.7	63.0	8.6	34.2	3521	27567
Pioneer	P0533AM1	22.5	63.4	37.5	62.9	7.9	34.9	3472	27267
Dekalb	DKC49-94 GENSS	23.0	64.9	38.0	57.4	8.7	33.7	3369	27149
Dyna-Gro	D39QN29	22.1	65.8	40.3	62.8	9.4	31.7	3467	26749
Doebler's	RPM 468AMX-R	22.0	64.4	39.5	59.4	8.5	35.3	3431	26335
Healthy Herd	HHG 40B12	23.6	66.1	44.7	62.6	8.3	25.9	3121	25846
Doebler's	Doebler 478SL	22.6	64.3	43.2	63.6	8.2	27.7	3210	25418
TA Seeds	TA477-31	21.3	66.1	40.0	59.9	8.1	32.9	3396	25365
Dekalb	DKC46-61 GENSS	20.0	65.4	37.3	60.4	8.5	36.1	3493	24436
	Average	**23.3**	**64.5**	**39.7**	**61.2**	**8.3**	**33.3**	**3408**	**27745**

Aurora, NY, 2012 (page 2)

Brand/ Company	Hybrid	Silage Yield tons @65	Moisture %DM	NDF %DM	30- h NDFD %	CP %DM	Starch %DM	Milk2006 Milk/ton lbs/ton	Milk2006 Milk Yield lbs/acre
				101-105-d RM					
Channel	203-43VT3P	27.3	61.2	37.3	60.1	8.0	37.4	3537	33796
Dairyland Seed	HiDF3702-9	27.1	59.0	37.6	61.9	7.6	37.3	3526	33399
FS InVISION	FS 5429VP3	26.9	60.9	37.3	60.1	8.0	37.5	3504	33014
Dyna-Gro	D45Q50	26.3	63.3	38.0	61.4	7.6	35.7	3450	31748
Hubner	H5222VT3P	25.9	60.4	37.6	61.7	7.4	35.8	3484	31567
Syngenta	NK N53W-3000GT	25.9	62.7	39.3	62.0	7.5	35.5	3443	31215
TA Seeds	TA557-00F	27.5	59.1	41.4	59.5	8.4	29.7	3234	31194
Syngenta	NK N45P-4011	25.4	59.8	38.2	60.4	8.0	36.2	3455	30717
TA Seeds	TA545-20	24.5	60.3	37.5	62.2	7.6	36.6	3471	29713
Mycogen	TMF2L533	26.1	61.2	44.6	59.3	7.6	29.4	3211	29379
Dekalb	DKC53-45 GENSS	25.0	61.2	40.8	61.2	7.8	34.1	3352	29316
Healthy Herd	HHG 41C12	25.2	60.8	43.6	62.0	8.3	31.3	3323	29310
Syngenta	Garst 87P52-4011	24.1	59.0	37.7	59.9	7.7	36.7	3451	29085
Pioneer	P0448AMX-R	24.6	62.0	39.5	56.4	7.7	34.9	3293	28381
Dekalb	DKC52-04 GENVT3P	23.7	59.7	35.8	57.0	8.3	37.1	3410	28248
TA Seeds	TA550-20ND	23.8	61.9	41.7	59.5	8.6	30.7	3283	27365
	Average	**25.6**	**60.8**	**39.2**	**60.3**	**7.9**	**34.7**	**3402**	**30465**
				106 to 110-d RM					
TA Seeds	TA108-00	27.9	63.3	41.8	59.0	7.7	34.6	3355	32786
FS InVISION	FS 5667GT3	26.6	60.7	39.5	60.5	7.4	34.5	3418	31795
Pioneer	P1498AM-R	26.9	62.9	41.6	63.2	7.8	31.2	3370	31664
Channel	209-85VT3P	26.8	60.8	40.1	58.4	8.1	34.8	3354	31457
Doebler's	Doebler 594GRQ	26.2	62.8	38.8	60.7	7.6	35.4	3403	31284
Doebler's	RPM 609AM1	26.6	62.1	39.9	58.9	7.6	34.3	3354	31230
Syngenta	Garst 85E98-3000GT	26.4	61.7	38.8	61.0	7.6	34.5	3369	31199
Channel	207-13VT3P	26.5	61.9	40.9	57.9	7.7	33.1	3356	31127
Dekalb	DKC57-50 VT3	26.0	60.1	37.1	55.9	7.5	37.1	3405	30937
Dekalb	DKC58-83 GENVT3P	25.9	60.8	38.8	60.0	7.8	34.6	3405	30877
Healthy Herd	HHG 57C12	27.3	62.9	45.2	62.8	7.6	28.3	3219	30732
TA Seeds	TA583-22DP	25.2	62.1	37.6	58.5	7.6	37.0	3436	30330
Pioneer	P0210AM-R	24.9	61.4	37.2	59.0	7.4	38.4	3467	30242
Dyna-Gro	D50VN10	24.8	63.3	39.0	58.8	8.5	32.9	3402	29458
Hubner	H5333VT3P	23.4	62.4	37.3	62.4	7.9	36.1	3524	28878
Dekalb	DKC57-76 GENVT3P	23.7	60.7	37.0	60.8	8.1	37.0	3471	28751
TA Seeds	TA615-16ND	24.0	64.3	38.7	60.6	8.4	33.1	3418	28735
TA Seeds	TA617-20	23.0	64.4	39.1	60.2	8.1	32.7	3342	26937
Dairyland Seed	HiDF3108Q	24.0	64.6	42.8	59.1	8.1	30.1	3203	26881
Mycogen	TMF2H699	22.7	64.0	44.8	62.0	8.1	28.5	3229	25658
	Average	**25.4**	**62.3**	**39.8**	**60.0**	**7.8**	**33.9**	**3375**	**30048**
				111-114-d RM					
Channel	214-14VT3P	26.2	62.3	38.6	60.6	8.7	34.3	3476	31814
Dyna-Gro	V5294HXTRNS	24.8	64.3	37.8	63.9	8.3	32.9	3436	29809
Pioneer	P1376XR	21.6	65.6	41.5	69.0	8.4	30.6	3497	26403
TA Seeds	TA657-13VP	22.2	63.5	40.2	59.9	8.2	31.5	3322	25732
	Average	**23.7**	**63.9**	**39.5**	**63.3**	**8.4**	**32.3**	**3432**	**28439**
	LSD 0.10	**2.57**	**1.54**	**2.70**	**2.92**	**0.40**	**2.88**	**139**	**3468**
	Overall Mean	**23.8**	**62.6**	**39.2**	**61.1**	**8.2**	**34.2**	**3418**	**28466**

Table 3. Silage yield (adjusted to 65% moisture), moisture at harvest, quality characteristics, milk/ton, and calculated milk yields of corn hybrids at Sparta Farms in Livingston Co. in 2012.

Brand/Company	Hybrid	Silage Yield tons @65	Moisture	NDF	30 hour NDFD	CP	Starch	Milk2006 Milk/ton	Milk2006 Milk Yield
			%DM	%DM	%	%DM	%DM	lbs/ton	lbs/acre
					84-90-d RM				
FS InVISION	FS 3722VT3P	21.4	60.2	34.4	62.6	8.7	39.8	3648	27389
TA Seeds	TA290-31	20.6	60.1	36.7	59.9	9.1	36.0	3470	24974
Dairyland Seed	HiDF3290-9	20.4	60.7	35.5	57.2	9.1	38.0	3467	24762
Doebler's	RPM 278HXR	19.7	59.3	35.5	57.9	9.1	36.9	3430	23605
Doebler's	Doebler 269GRQ	18.8	61.1	34.6	59.5	9.3	38.8	3534	23197
Doebler's	RPM 357AM1	18.0	57.3	33.4	61.7	9.1	39.5	3625	22978
	Average	**19.8**	**59.8**	**35.0**	**59.8**	**9.1**	**38.2**	**3529**	**24484**
					91 to 95-d RM				
TA Seeds	TA333-22DP	22.8	60.4	34.6	59.6	8.6	39.7	3541	28318
Mycogen	TMF2L418	23.0	62.5	35.8	60.5	9.1	37.2	3506	28215
Hubner	H5151VT3P	22.5	61.4	34.3	59.2	8.7	38.9	3534	27825
Hubner	H5084VT3P	22.6	60.0	36.7	60.3	8.5	37.8	3509	27789
Pioneer	P9630AM1	21.6	59.8	34.7	59.1	8.4	40.6	3530	26647
Mycogen	F2F387	18.8	63.6	36.0	72.4	9.0	36.4	3742	24592
Doebler's	RPM 437AM1	19.8	59.6	35.1	60.7	8.9	38.7	3547	24556
TA Seeds	TA095-00	18.6	58.4	35.1	59.4	8.9	38.8	3513	22867
	Average	**21.2**	**60.7**	**35.3**	**61.4**	**8.8**	**38.5**	**3553**	**26351**
					96 to 100-d RM				
Healthy Herd	HHG 39HF13	25.2	61.0	36.3	63.2	8.7	37.4	3572	31564
FS InVISION	FS 4811VP3	23.2	61.4	35.6	59.0	9.0	37.2	3506	28517
Channel	197-67VT3P	22.3	62.8	36.1	64.4	8.5	39.2	3601	28166
Healthy Herd	HHG 40B12	23.5	64.9	37.9	61.7	8.9	35.0	3403	28028
Doebler's	Doebler 478SL	22.8	63.9	39.1	60.6	9.0	34.5	3433	27325
Channel	200-91VT3P	22.1	63.6	35.8	63.1	7.9	38.0	3530	27294
Dairyland Seed	HiDF3396SSX	21.8	62.9	37.0	63.1	9.4	35.0	3535	27036
Doebler's	RPM 468AMX-R	21.2	62.0	33.8	60.9	8.5	40.3	3598	26712
Dyna-Gro	D40SS09	21.5	64.8	34.7	60.6	8.9	38.5	3531	26620
Dekalb	DKC46-20 GENVT3P	21.3	61.4	35.2	61.1	8.8	37.6	3546	26378
Dairyland Seed	HiDF3197-7	22.2	64.4	36.6	62.6	9.1	34.1	3389	26378
Pioneer	P0533AM1	21.0	62.0	35.4	62.4	8.8	39.4	3567	26244
Doebler's	Doebler 459GRQ	21.1	63.0	35.7	59.7	9.0	37.5	3490	25865
Doebler's	RPM 472RR	20.3	61.8	32.8	60.5	8.9	40.5	3596	25508
Dyna-Gro	D39QN29	20.1	65.7	33.9	61.9	10.4	37.9	3622	25501
TA Seeds	TA477-31	20.2	63.3	35.3	61.3	8.9	37.0	3505	24757
Dekalb	DKC49-94 GENSS	20.1	62.7	35.2	59.5	8.9	39.8	3501	24648
Dekalb	DKC46-61 GENSS	19.5	63.6	33.5	61.7	8.5	40.7	3572	24409
TA Seeds	TA481-20ND	19.1	66.7	34.1	64.3	10.5	37.0	3635	24261
	Average	**21.5**	**63.3**	**35.5**	**61.7**	**9.0**	**37.7**	**3533**	**26590**

Groveland Station, NY, 2012 (page 2)

Brand/ Company	Hybrid	Silage Yield tons @65	Moisture %DM	NDF %DM	30 hour NDFD %	CP %DM	Starch %DM	Milk2006 Milk/ton lbs/ton	Milk2006 Milk Yield lbs/acre
				101-105-d RM					
TA Seeds	TA545-20	23.3	62.6	33.6	63.6	8.1	40.7	3650	29808
TA Seeds	TA557-00F	24.1	63.7	38.6	62.7	9.2	33.1	3392	28647
Dyna-Gro	D45Q50	22.9	65.4	35.2	63.8	8.6	37.6	3528	28243
Healthy Herd	HHG 41C12	23.5	65.9	40.3	63.1	8.8	32.3	3382	27889
Channel	203-43VT3P	21.6	63.9	33.4	63.4	8.5	41.3	3652	27636
Hubner	H5222VT3P	22.3	65.4	35.8	61.8	8.2	38.6	3534	27572
FS InVISION	FS 5429VP3	22.2	67.3	35.6	62.9	9.6	35.6	3550	27567
Syngenta	NK N53W-3000GT	21.8	62.8	34.5	62.2	8.1	39.3	3607	27555
Syngenta	NK N45P-4011	22.4	62.8	34.5	60.0	8.6	38.1	3511	27550
Mycogen	TMF2L533	23.4	65.1	41.6	60.7	8.1	33.7	3358	27473
Pioneer	P0448AMX-R	22.6	65.2	36.3	59.4	8.8	36.5	3471	27447
Dairyland Seed	HiDF3702-9	22.0	62.1	36.8	63.7	7.7	40.3	3546	27325
Dekalb	DKC53-45 GENSS	21.5	65.9	34.3	63.6	8.5	39.3	3629	27297
Syngenta	Garst 87P52-4011	21.8	63.2	34.4	59.7	8.5	40.1	3516	26883
Dekalb	DKC52-04 GENVT3P	21.0	63.5	33.7	60.7	9.1	40.0	3601	26521
TA Seeds	TA550-20ND	19.0	68.5	38.8	60.4	10.4	30.4	3360	22384
	Average	**22.2**	**64.6**	**36.1**	**62.0**	**8.7**	**37.3**	**3518**	**27362**
				106 to 110-d RM					
TA Seeds	TA583-22DP	23.2	65.2	33.4	62.3	8.8	41.0	3616	29353
FS InVISION	FS 5667GT3	23.1	63.5	33.6	63.3	8.1	40.6	3625	29240
Mycogen	TMF2H699	24.2	66.3	40.0	62.0	8.5	33.1	3410	28944
Syngenta	Garst 85E98-3000GT	22.9	65.2	32.4	63.4	8.6	39.5	3576	28651
Hubner	H5333VT3P	22.5	66.6	34.9	62.7	8.9	38.9	3590	28310
Healthy Herd	HHG 57C12	23.6	67.0	39.0	64.0	8.8	32.7	3390	28013
Dekalb	DKC58-83 GENVT3P	22.7	65.0	36.2	60.4	8.8	37.6	3518	27941
Dyna-Gro	D50VN10	22.9	67.8	35.5	57.2	9.7	36.4	3475	27881
TA Seeds	TA615-16ND	22.8	68.0	36.0	61.6	9.3	34.6	3497	27876
Doebler's	Doebler 594GRQ	22.4	65.9	34.7	60.4	8.4	38.2	3521	27581
Dekalb	DKC57-50 VT3	21.9	65.3	33.5	59.6	8.2	41.1	3582	27497
Channel	207-13VT3P	23.2	65.5	39.7	59.3	8.4	35.2	3383	27419
Dekalb	DKC57-76 GENVT3P	21.6	65.5	33.9	62.8	8.4	39.5	3621	27378
Pioneer	P1498AM-R	22.4	66.8	37.7	61.5	8.7	36.7	3488	27373
TA Seeds	TA108-00	22.3	67.0	37.7	59.5	8.5	36.0	3453	27005
Channel	209-85VT3P	21.9	65.9	35.4	59.5	8.9	38.6	3519	26901
Doebler's	RPM 609AM1	22.3	66.1	36.6	59.6	8.5	35.9	3435	26813
Dairyland Seed	HiDF3108Q	22.8	66.5	40.2	59.7	8.9	32.3	3311	26466
Pioneer	P0210AM-R	19.2	65.3	36.2	62.8	8.8	37.6	3545	23902
TA Seeds	TA617-20	19.3	68.5	41.8	59.5	9.7	28.1	3182	21534
	Average	**22.4**	**66.1**	**36.4**	**61.1**	**8.7**	**36.7**	**3487**	**27304**
				111 to 114-d RM					
TA Seeds	TA657-13VP	22.3	65.7	35.5	60.8	8.7	37.9	3560	27783
Channel	214-14VT3P	21.9	67.6	35.0	60.9	9.3	37.7	3563	27252
Pioneer	P1376XR	20.6	69.5	35.7	63.8	9.0	35.3	3518	25297
Dyna-Gro	V5294HXTRNS	21.0	68.6	35.4	60.0	9.8	34.9	3423	25131
	Average	**21.4**	**67.9**	**35.4**	**61.4**	**9.2**	**36.4**	**3516**	**26366**
	LSD 0.10	**1.58**	**1.06**	**2.54**	**2.76**	**0.39**	**2.61**	**113**	**2259**
	Overall Mean	**21.7**	**64.0**	**35.8**	**61.4**	**8.8**	**37.4**	**3518**	**26743**

Table 4. Silage yield (adjusted to 65% moisture), moisture at harvest, quality characteristics, milk/ton, and calculated milk yields of corn hybrids at Cornell's T&R Center in Cortland Co. in 2012.

Brand/ Company	Hybrid	Silage Yield tons_65	Moisture %DM	NDF %DM	30 hour NDFD %	CP %DM	Starch %DM	Milk2006 Milk/ton lbs/ton	Milk2006 Milk Yield lbs/acre
				84 to 90-d RM					
Dekalb	DKC40-22 GENSS	18.9	61.7	37.2	64.5	7.9	37.2	3583	23734
FS InVISION	FS 3722VT3P	18.5	60.6	36.3	64.8	7.7	38.4	3648	23575
Dekalb	DKC38-03 GENVT2P	18.9	60.2	37.8	62.4	7.6	37.8	3528	23292
Dekalb	DKC39-07 GENVT2P	17.3	61.6	37.9	65.2	8.0	37.2	3571	21630
Doebler's	Doebler 269GRQ	17.5	60.1	37.3	60.1	7.9	37.9	3487	21319
TA Seeds	TA290-31	17.2	59.9	40.6	62.9	7.5	34.6	3497	21078
Dairyland Seed	HiDF3290-9	16.8	59.7	37.1	59.0	7.6	39.0	3508	20621
Doebler's	RPM 278HXR	16.9	58.2	37.4	59.9	7.6	38.4	3455	20415
Doebler's	RPM 357AM1	16.0	55.2	39.4	64.8	7.8	37.3	3527	19796
Healthy Herd	HHG 28B12	16.0	62.9	45.9	65.9	7.9	29.3	3384	18946
Healthy Herd	HHG 26A12	16.3	61.0	41.7	60.4	8.5	30.5	3299	18840
	Average	**17.3**	**60.1**	**39.0**	**62.7**	**7.8**	**36.1**	**3499**	**21204**
				91 to 95-d RM					
TA Seeds	TA333-22DP	18.7	61.9	39.4	65.2	7.8	35.6	3561	23358
Healthy Herd	HHG 33B12	18.3	62.5	40.4	66.5	7.6	34.0	3537	22615
Dekalb	DKC43-48 GENVT3P	17.9	64.6	38.1	65.1	7.7	35.4	3574	22410
Dekalb	DKC42-43 GENVT3P	17.6	61.0	38.8	65.1	7.6	35.8	3568	21900
Doebler's	RPM 437AM1	16.6	60.0	36.9	62.9	7.7	39.4	3580	20845
Mycogen	TMF2L418	16.8	64.5	40.6	66.0	8.3	32.0	3508	20618
Dekalb	DKC42-72 VT3	16.6	62.0	37.5	62.2	8.0	37.7	3513	20466
Pioneer	P9630AM1	15.3	62.6	36.4	64.3	8.3	38.0	3598	19269
Mycogen	F2F387	15.6	65.1	41.0	74.2	8.6	29.9	3543	19265
TA Seeds	TA095-00	13.5	59.5	39.3	63.1	7.8	35.7	3482	16438
	Average	**16.7**	**62.3**	**38.8**	**65.5**	**7.9**	**35.4**	**3546**	**20718**
				96 to 100-d RM					
Dairyland Seed	HiDF3197-7	20.1	64.6	40.2	64.7	8.1	33.7	3499	24558
Doebler's	RPM 472RR	19.5	61.9	37.5	63.4	7.8	36.9	3511	23947
Dekalb	DKC46-20 GENVT3P	19.9	63.0	39.6	64.3	7.9	33.9	3424	23915
FS InVISION	FS 4811VP3	19.2	61.2	36.7	62.5	7.4	37.0	3520	23704
Doebler's	Doebler 459GRQ	18.3	62.3	38.6	63.9	7.7	35.3	3518	22537
Pioneer	P0533AM1	17.7	62.4	36.7	65.3	8.0	37.4	3617	22448
Dekalb	DKC49-94 GENSS	18.1	63.2	37.6	62.3	8.2	36.1	3521	22309
Healthy Herd	HHG 39HF13	18.4	65.2	40.2	62.3	7.8	33.4	3447	22212
Dekalb	DKC46-61 GENSS	17.6	64.3	36.1	64.0	7.6	38.9	3597	22162
TA Seeds	TA477-31	17.9	64.8	38.4	63.4	8.1	34.5	3502	21983
Dairyland Seed	HiDF3396SSX	17.2	64.3	37.5	65.9	8.2	36.8	3634	21872
Doebler's	RPM 468AMX-R	17.1	63.7	37.2	62.4	8.1	36.7	3559	21285
Healthy Herd	HHG 40B12	18.1	66.2	43.8	65.2	7.6	29.3	3350	21262
Doebler's	Doebler 478SL	17.0	65.3	41.1	65.2	8.7	29.4	3321	19844
TA Seeds	TA481-20ND	15.8	66.3	38.2	64.9	8.5	33.4	3525	19537
	Average	**18.1**	**63.9**	**38.6**	**64.0**	**8.0**	**34.8**	**3503**	**22238**

Harford, NY, 2012 (page 2)

Company	Hybrid	Silage Yield tons @65	Moisture %DM	NDF %DM	30 hour dNDF %	CP %DM	Starch %DM	Milk2006 Milk/ton lbs/ton	Milk2006 Milk Yield lbs/acre
					101 to 105-d RM				
Syngenta	Garst 87P52-4011	19.3	65.4	36.4	65.0	7.6	35.4	3461	23264
Syngenta	NK N53W-3000GT	19.3	65.6	39.6	64.5	7.3	33.7	3425	23188
Dairyland Seed	HiDF3702-9	19.2	68.3	40.3	63.5	7.5	32.3	3383	22739
TA Seeds	TA545-20	17.4	66.2	39.2	65.8	7.5	34.4	3498	21340
Syngenta	NK N45P-4011	17.3	65.7	37.2	64.3	7.5	35.6	3476	21066
Mycogen	TMF2L533	18.2	66.5	45.0	64.4	7.2	28.9	3304	21019
Pioneer	P0448AMX-R	17.8	65.8	40.3	61.6	7.8	32.3	3347	20688
Dekalb	DKC52-04 GENVT3P	16.3	63.7	37.0	63.8	7.9	36.1	3574	20385
Dekalb	DKC53-45 GENSS	16.4	66.5	38.4	67.3	7.6	35.2	3536	20352
FS InVISION	FS 5429VP3	17.1	66.9	39.8	63.5	8.2	31.8	3386	20350
Healthy Herd	HHG 41C12	17.0	66.1	42.8	65.9	7.9	30.8	3399	20193
TA Seeds	TA557-00F	16.7	64.9	40.7	65.1	8.0	31.5	3428	20115
TA Seeds	TA550-20ND	16.2	67.1	40.1	64.0	8.4	31.4	3431	19434
	Average	**17.6**	**66.0**	**39.8**	**64.5**	**7.7**	**33.0**	**3434**	**21087**
					106-111-d RM				
TA Seeds	TA657-13VP	14.4	67.7	43.3	62.9	7.8	29.7	3318	16734
	LSD 0.10	**2.35**	**1.96**	**2.43**	**2.38**	**0.5**	**2.61**	**124**	**3034**
	Overall Mean	**17.4**	**63.9**	**39.2**	**64.2**	**7.9**	**34.3**	**3476**	**21200**