

Department of Crop and Soil Sciences
Extension Series No. E09-2
November, 2009

NEW YORK CORN SILAGE HYBRID TESTS – 2009

**William J. Cox, Jerry Cherney, Phil Atkins and Mike Davis
Dep. of Crop and Soil Sciences**

**NYS College of Agriculture and Life Sciences
Cornell University
Ithaca, NY 14853**

NEW YORK CORN SILAGE HYBRID TESTS – 2009

Corn silage hybrids were tested at four locations in New York in 2009. We evaluated 95 to 115-day hybrids in relative maturity (RM) at the Aurora Research Farm (Cayuga Co.) and Sparta Farms (formally named Southview Farms) in Groveland Station (Livingston Co.). Both sites average about 2450 growing degree days (GDD, 86-50° system) from May through September. We evaluated 80 to 100-day hybrids in RM at John Greenwood's farm in Madrid (St. Lawrence Co.) and at the Miner Institute in Chazy (Clinton Co.). Both sites average about 2200 GDD from May through September. All seed companies were invited to enter their hybrids in these tests at 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 24 April and the Groveland Station site on 27 April. The Sackets Harbor site was planted on 30 April and the Madrid site on 4 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 and the Miner Institute sites received about 140 lbs N/acre of sidedressed N at the 4 to 5-leaf (V4 to V5) stage. The Groveland Station and Madrid sites were well-manured dairy sites so they received no sidedressed N. We used preemergence herbicides and hand-weeding to control weeds.

Both rows, trimmed back to an 18-foot length, of each hybrid 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 65-70% moisture range but some hybrids were on the wetter side this year because of the cool growing season.

The Aurora site was harvested on two dates: 95-100 and 101-105 day RM groups on 4 September; and 106-110 day and 111-115 day RM groups on 8 September. All hybrid RM groups were harvested at Groveland Station on 15 September, at Madrid on 21 September, and at the Miner Institute on 22 September.

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 with a gram-scale in the field and refrigerated in a generator-powered freezer (samples were 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° F in a forced air drier to constant moisture and then weighed to determine moisture content of each sample.

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° 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 $([1-\text{NDF residue}/\text{initial NDF}] \times 100)$. 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. Hybrids are considered above-average for calculated milk yield, milk/ton, or silage yield when the hybrid's value is above 100% of the mean value within their RM group across sites (and much-above average with values more than 105%).

RESULTS AND DISCUSSION

Aurora and Groveland Station

Exceptionally cool conditions in June and July characterized the 2009 growing season at both locations with close to 50-75 GDD below normal in both months at each site, which contributed to total GDD during the growing season of about 100 GDD below normal (Table 1). Consequently, the hybrids attained the silking stage about 7 to 10 days later (July 25-July 30) than normal. Also, from 25 May until 1 July the Aurora site received about 8 inches and Groveland Station over 6 inches of precipitation. The exceptionally cool and wet weather from late May until early July probably reduced the yield potential at both sites. Nevertheless, the exceedingly cool conditions in July and early August resulted in stress-free conditions during the tassel/silk period, which contributed to above-average yields at both sites. Silage yields for the 95-100 day RM averaged 25.0 tons/acre at Aurora and 27.9 tons/acre at Groveland Station, the 101-105 day RM group averaged 26.1 and 28.7 tons/acre, the 106-110 day RM group averaged 27.2 and 30.4 tons/acre, and the 111-115 day RM group averaged 29.0 and 30.3 tons/acre, respectively.

Six hybrids at Aurora and five hybrids at Groveland Station had above-average calculated milk yields in the 95-100 day RM group in 2009 (Tables 2 and 3). When averaged across sites, 55R10 from Dyna-Gro Seed had much-above average milk yields; and HiD.F.-3195-Q from Dairyland Seed, 5057VT3 from GROWMARK FS, HL CVR64 from Hyland Seed, and HiD.F.-3000-6 from Dairyland Seed had above-average milk yields. The hybrid, 55R10, had exceptional silage yields, which contributed to its much-above milk yields; whereas HiD.F.-3195Q had above-average milk/ton values and silage yields, which contributed to its above-average milk yields. Also, 88H48GT from Garst had above-average milk yield at Aurora. When averaged across sites, F2F485 from Mycogen had a much above-average milk/ton value, whereas 99 S7 and 994 LRR from LICA had above-average milk/ton values.

Eleven hybrids at Aurora and 13 hybrids at Groveland Station had above-average calculated milk yields in the 101-105 day RM group (Tables 2 and 3). When averaged across sites, N53W-3000GT, an NK brand, 86T82-3000GT from Garst, 553GRB from Doebler's, V4592VTNS from Dyna-Gro, and HiD.F.-3105-Q from Dairyland had much-above milk yields, and HL B337 from Hyland, 5595VT3 from GROWMARK FS, MC 530 from King's Agriseeds, HL SR59 from Hyland, TMF2R521 from Mycogen, and 36V53 from Pioneer had above-average milk yields. At Aurora, 2W587 from Mycogen, N52A-CB/LL/RW, an NK brand, and 35F44 from Pioneer also had above-average milk yield; whereas at Groveland Station 1056 SRR from LICA, DKC52-59 from DELKALB, TA557-00F from T.A. Seeds, and 1804 F/GT from LICA had above-average milk yields. The hybrid, N53W-3000GT had exceptionally high silage yields and above-average milk/ton values at both sites as did 553GRB, 86T82-3000GT, and V4592VTNS. When averaged across sites, HiD.F.-3105Q and HL B337 also had much-above silage yields; whereas 5595VT3 and 36V53 had above-average milk/ton values. When averaged across sites, 558BMB from Doebler's and F2F568 had the highest average milk/ton values.

Five hybrids at Aurora and four hybrids at Groveland Station had above-average calculated milk yields in the 106-110 day RM group (Tables 2 and 3). When averaged across sites, 1084 LHX from LICA, 34A89 from Pioneer, and F2F622 had much-above milk yields. Also, DKC59-64 from DEKALB had above-average milk yields. When averaged across sites, 1084 LHX had much-above silage yields; whereas F2F622 had a much-above milk/ton value, which contributed to their much-above milk yields. The hybrid, 34A89, had much-above silage yield as well as an above-average milk/ton value, which contributed to its much-above milk yield; whereas DKC59-64 had a much-above silage yield, which contributed to its above-average milk yield. In addition, 628HRQ from RPM had above-average silage and milk/ton values at Aurora, which contributed to its above-average milk yield at Aurora. Also, 608BMC from Doebler had much-above milk/ton values at both sites.

Three hybrids at Aurora and three hybrids at Groveland Station had above-average calculated milk yields in the 111-115 day RM group (Tables 2 and 3). When averaged across sites, 6296VT3 from GROWMARK FS and TA689-12F from T.A. Seeds had much-above milk yields; whereas DKC67-87 from

DEKALB and 33F88 from Pioneer had above-average milk yields. When averaged across sites, 6296VT3 had much-above silage yields as did TA689-12, which also had an above-average milk/ton value, contributing to their much-above average milk yields. Also, DKC67-87 had above-average milk yields while 33F88 had an above-average milk/ton value, which contributed to their above-average milk yield. When averaged across sites, F2F 725 had a much-above milk/ton value.

Chazy and Madrid

The 2009 growing season in Northern NY was similar to that in central/western NY for temperatures but somewhat different for precipitation patterns (Table 1). Both sites were exceedingly cool in June and July, which resulted in total GDD about 150 less than normal at both sites. Unlike central NY, however, June was relatively dry; whereas July was exceedingly wet in Northern NY followed by somewhat dry conditions in August. Both sites were spared September frosts, which allowed most hybrids, except for the later hybrids, to attain 70% moisture at harvest time, despite the cool growing season. As in central/western NY, silage yields were high at Madrid, but were somewhat lower than normal at Chazy. The 85-90 day RM group averaged 19.7 at Chazy and 23.0 tons/acre at Madrid, the 91-95 day RM group averaged 20.0 and 24.5, and the 96-100 day RM group averaged 20.5 and 24.8 tons/acre, respectively.

Four hybrids at Chazy and three hybrids at Madrid had above-average calculated milk yields in the 80-89 day RM group (Tables 4 and 5). When averaged across sites, TA290-11 from T.A. Seeds, 1890 F from LICA, and HL SR35 from Hyland had much above-average milk yields. Also, HL B29R from Hyland had above-average milk yields when averaged across sites. The hybrid, TA290-11, had much-above silage yields and above-average milk/ton values, which contributed to its much-above milk yields; whereas 1890 F and HL SR35 had much-above silage yields. When averaged across sites, F2F297 had a much-above milk/ton value.

Eight hybrids at Chazy and seven hybrids at Madrid had above-average milk yields in the 91-95 day RM group (Tables 4 and 5). When averaged across sites, HL S047 from Hyland, 946 LRR from LICA, 478SL from Doebler's, V3593VT3 from Dyna-Gro, and 515HXR from RPM had much above-average milk yields. Also, 89B87CB/LL from Garst and HL BSR40 from Hyland had above-average milk yields at both sites. The hybrids, HL S047, 946 LRR, and V3593VT3 had much-above-average silage yields and above-average milk/ton values, which contributed to their much-above-average milk yields. The hybrids, 478SL and 515HXR, had much-above silage yields; whereas HL BSR40 had an above-average milk/ton value, which contributed to their above-average milk yields. The Pioneer hybrids, 38M60, 38N88, 38P43, and 38H08 as well as DKC45-79 from DEKALB had above-average milk yields at Chazy. When averaged across sites, 491BMB from Doebler's had a much-above average milk/ton value.

Four hybrids at Chazy and four hybrids at Madrid had above-average calculated milk yields in the 96-100 day RM group (Tables 4 and 5). When averaged across sites, TA489-00F from T.A. Seeds had much-above average milk yields; whereas TA510-11 from T.A. Seeds, F2F485 from Mycogen, and TA476-11 from T.A. Seeds had above-average milk yields. The hybrid, TA489-00F, had a much-above average silage yield and an above-average milk/ton value; whereas TA510-11 had an above-average silage yield and milk/ton value. In contrast, F2F485 had a much-above milk/ton value. The hybrid, DKC50-44 from DEKALB, also had above-average milk yield at Madrid mainly because of an above average milk/ton value.

CONCLUSION

The 2009 growing season in New York was one of the cooler growing seasons in recent memory. Also, wet late spring and/or early summer soil conditions in some regions retarded crop growth and development and resulted in a loss of soil nitrogen to the crop, especially on soils with drainage restrictions. Fortunately, the first 25 days of May were dry and the first killing frost didn't occur until early October in most regions, which allowed for timely planting and a corn crop that matured in most regions.

The results of this study will be incorporated into the recommended corn silage tables in our annual Cornell Guide for Integrated Field Crop Management. We only list hybrids that have above-average relative calculated milk yields in their hybrid RM group (i.e. 96-100, 101-105 day RM, etc.). We also list the relative silage yields and milk/ton values for the recommended hybrids. Look for the updated recommended hybrids first in our December 2009 newsletter, **What's Cropping Up?** (soon at our web site: www.fieldcrops.org). We urge all seed companies to participate in our corn silage testing program in 2010 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 the four experimental sites for the 2009 Cornell corn silage hybrid trials.

Month	Precipitation				GDD (86-50 F)			
	Aurora	Sparta Farms*	Chazy	Madrid**	Aurora	Sparta Farms*	Chazy	Madrid**
May	3.77	2.76	3.17	4.69	330	366	255	260
June	4.75	4.11	2.49	1.87	454	465	416	398
July	2.43	3.40	3.81	5.93	555	551	522	517
August	3.64	3.35	2.30	2.81	642	634	580	569
Sept.	2.61	0.69	2.20	3.24	364	394	293	318
Seasonal	17.20	14.31	13.97	18.54	2345	2410	2066	2062

* Weather data from Dansville.
** Weather data from Canton

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 2009.

Brand/Company	Hybrid	Silage	Moisture	NDF	30 hr	CP	Starch	Milk/ton	Milk
		Yield tons @65	%DM	%DM	NDFD %	%DM	%DM	lbs/ton	Yield lbs/acre
95 to 100-d RM									
Dyna-Gro	55R10	27.1	71.1	44.7	58.4	7.6	30.0	3272	31147
Dairyland	HiD.F.-3000-6	26.5	66.9	44.8	57.3	7.6	31.3	3244	30035
GROWMARK FS	5057VT3	26.1	68.6	44.6	57.0	7.6	31.1	3243	29576
Dairyland	HiD.F.-3195-Q	25.0	68.1	43.3	60.5	7.9	32.7	3371	29506
Hyland	HL CVR64	25.7	67.3	43.3	57.0	8.1	32.9	3278	29459
Garst	88H48GT	25.6	66.7	43.6	56.0	7.5	33.0	3248	29193
LICA	99 S7	24.0	68.5	44.5	62.7	7.6	30.9	3391	28473
Mycogen	F2F485	21.7	70.3	42.2	69.4	8.1	32.1	3591	27316
LICA	994 LRR	22.3	69.8	43.2	62.5	8.2	32.1	3414	26628
Hyland	HL SVT50	22.6	69.9	45.9	60.7	8.0	29.2	3315	26170
101 to 105-d RM									
NK	N53W-3000GT	30.3	68.7	43.2	59.2	7.4	32.8	3336	35392
Dyna-Gro	V4592VTNS	28.6	69.5	43.1	61.3	8.5	31.3	3396	34038
Doebler's	553GRB	28.8	68.6	42.2	58.8	7.5	33.2	3358	33827
GROWMARK FS	5595VT3	28.6	67.1	42.4	57.6	7.6	33.9	3316	33177
Mycogen	2W587	26.1	69.0	42.7	62.7	8.1	32.5	3431	31366
Garst	86T82-3000GT	27.0	69.3	44.3	59.2	7.3	30.8	3291	31149
NK	N52A-CB/LL/RW	27.3	68.7	44.6	57.9	7.7	30.5	3262	31148
Pioneer	36V53	26.4	69.9	44.0	60.1	8.0	31.4	3321	30615
King's Agriseeds	MC 530	26.3	70.3	44.6	60.8	7.7	30.5	3325	30413
Hyland	HL B337	27.4	69.4	45.8	56.5	7.5	29.7	3164	30300
Pioneer	35F44	26.1	69.7	43.5	59.6	7.6	32.0	3315	30266
Dairyland	HiD.F.-3105-Q	27.4	71.4	46.8	53.6	7.5	28.3	3092	29712
Mycogen	TMF2R521	25.2	67.8	42.7	57.8	7.8	33.1	3318	29188
Mycogen	F2F568	23.3	72.6	45.6	73.1	7.6	27.9	3580	29128
T.A. Seeds	TA557-00F	25.0	67.0	45.3	60.6	8.1	29.9	3318	29082
LICA	1804 F/GT	25.0	69.9	44.9	60.3	7.7	30.8	3301	28889
LICA	1805 F/GT	25.5	71.6	46.6	58.1	7.8	28.7	3209	28616
DEKALB	DKC52-59	24.8	70.6	45.0	58.2	7.9	31.5	3252	28183
DEKALB	DKC55-07	24.2	70.0	42.9	58.4	8.0	33.1	3316	28122
Hyland	HL SR59	25.2	71.2	47.2	57.9	7.3	28.0	3169	27974
Pioneer	36Y26	23.9	67.9	43.2	57.0	8.1	32.8	3262	27236
Doebler's	558BMB	21.4	71.2	43.0	74.5	8.1	29.6	3612	27113
LICA	1056 SRR	24.4	70.5	48.4	58.6	7.5	26.3	3153	26964
T.A. Seeds	TA532-11	20.3	70.6	42.5	59.3	7.8	33.0	3357	23782

Brand/Company	Hybrid	Silage	Moisture	NDF	NDFD	CP	Starch	Milk/ton	Milk
		Yield							Yield
		tons							
		@65	%DM	%DM	%	%DM	%DM	lbs/ton	lbs/acre
106 to 110-d RM									
DEKALB	DKC59-64	29.3	68.1	42.0	55.5	7.1	33.0	3259	33399
Pioneer	34A89	29.1	68.0	42.1	55.3	7.4	32.1	3264	33268
Mycogen	F2F622	26.4	68.8	45.2	70.9	7.6	29.1	3567	32891
RPM	628HRQ	27.8	67.4	42.3	61.4	8.0	31.7	3376	32688
Dyna-Gro	V4884HTXRNS	26.7	69.4	42.8	58.9	8.0	31.9	3346	31246
LICA	1084 LHX	27.5	69.9	47.4	60.7	7.7	27.8	3249	31217
T.A. Seeds	TA607-20	25.8	68.1	43.3	57.1	7.7	31.7	3288	29576
DEKALB	DKC57-50	24.7	68.5	45.1	56.3	7.3	31.0	3204	27692
Doebler's	608BMC	19.8	72.2	43.0	66.4	7.7	31.4	3511	24317
111 to 115-d RM									
GROWMARK FS	6296VT3	34.4	68.5	43.3	56.8	7.8	31.7	3272	39311
T.A. Seeds	TA780-13V	29.3	70.1	44.4	59.4	7.4	30.4	3304	33950
T.A. Seeds	TA689-12F	29.3	67.8	45.0	59.6	7.5	30.7	3303	33844
DEKALB	DKC61-69	28.9	69.1	42.8	56.1	7.6	32.9	3265	33001
DEKALB	DKC67-87	29.0	69.1	45.2	57.1	7.4	29.3	3210	32534
Mycogen	F2F725	26.1	73.0	43.7	69.0	7.7	29.6	3510	32103
Pioneer	33F88	27.3	69.3	43.5	59.8	7.8	30.7	3325	31724
Pioneer	33D14	28.1	69.4	45.2	57.1	7.5	29.5	3213	31502
Dyna-Gro	57V40	26.1	68.2	43.5	55.4	7.5	32.0	3242	29521
LSD 0.10		2.77	1.50	1.83	3.76	0.35	1.89	109	3268
Overall Mean		26.2	69.3	44.1	59.9	7.7	31.0	3318	30326

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 (formally named Southview Farms) in Groveland Station, NY in 2009.

Brand/Company	Hybrid	Silage Yield	Moisture	NDF	NDFD	CP	Starch	Milk/ton	Milk Yield
		tons @65	%DM	%DM	%	%DM	%DM	lbs/ton	lbs/acre
95 to 100-d RM									
Dyna-Gro	55R10	31.6	69.5	41.0	58.6	8.3	33.1	3390	37460
Dairyland	HiD.F.-3195-Q	29.0	64.3	41.3	59.9	8.2	35.1	3422	34695
GROWMARK FS	5057VT3	29.0	66.3	41.9	57.6	7.6	34.0	3338	33805
Hyland	HL CVR64	29.3	64.1	42.2	56.0	8.2	34.1	3276	33536
Dairyland	HiD.F.-3000-6	28.8	67.0	41.5	56.6	8.0	34.9	3319	33388
LICA	99 S7	27.3	66.7	42.9	59.2	8.2	32.3	3355	32076
Hyland	HL SVT50	27.1	68.8	43.2	58.0	8.1	33.0	3309	31300
LICA	994 LRR	24.3	65.4	41.0	61.1	8.6	34.2	3447	29348
Garst	88H48GT	24.9	64.9	41.3	52.9	7.4	37.1	3247	28282
Mycogen	F2F485	19.9	65.0	41.0	73.2	8.8	33.5	3663	25449
101 to 105-d RM									
NK	N53W-3000GT	32.2	66.3	40.1	57.1	7.7	35.8	3393	38299
Dairyland	HiD.F.-3105-Q	33.7	71.1	44.1	53.5	8.3	29.6	3175	37443
Garst	86T82-3000GT	31.0	66.5	39.6	57.5	7.6	36.5	3419	37058
Hyland	HL SR59	31.5	69.7	43.4	57.0	8.0	31.3	3272	36079
LICA	1056 SRR	31.1	69.0	42.3	57.1	8.2	31.9	3306	35891
Hyland	HL B337	31.3	69.8	41.4	54.7	8.0	31.7	3245	35602
King's Agriseeds	MC 530	30.3	70.7	42.1	55.9	7.9	34.1	3302	35023
Mycogen	TMF2R521	30.1	68.1	41.5	55.2	7.8	34.8	3301	34740
DEKALB	DKC52-59	29.2	65.1	40.4	57.8	7.7	36.7	3389	34697
Doebler's	553GRB	29.2	67.6	41.1	56.9	7.7	34.5	3353	34332
T.A. Seeds	TA557-00F	29.6	65.3	43.7	58.1	8.4	31.8	3288	34057
Dyna-Gro	V4592VTNS	28.3	69.5	39.8	58.7	9.0	33.7	3423	33978
LICA	1804 F/GT	28.4	68.5	41.6	60.0	8.0	34.0	3413	33965
Pioneer	36V53	28.2	67.5	41.8	59.2	8.1	34.1	3372	33254
GROWMARK FS	5595VT3	27.7	68.6	40.5	57.0	7.8	35.6	3356	32570
LICA	1805 F/GT	27.1	67.6	42.2	57.8	8.1	31.7	3331	31637
Mycogen	2W587	26.4	68.5	41.6	57.3	8.4	34.8	3343	30922
Doebler's	558BMB	24.1	70.3	41.5	71.7	8.1	31.3	3661	30838
Mycogen	F2F568	24.3	71.1	43.0	69.4	8.7	30.0	3581	30413
Pioneer	36Y26	25.4	68.0	40.6	58.5	8.6	35.1	3377	29949
DEKALB	DKC55-07	25.5	68.0	39.7	56.8	8.2	35.8	3361	29910
NK	N52A-CB/LL/RW	26.0	70.6	41.9	54.7	8.3	32.8	3262	29624
Pioneer	35F44	25.1	70.8	41.8	58.4	8.0	33.8	3354	29423
T.A. Seeds	TA532-11	24.2	68.9	38.8	58.2	8.1	36.8	3433	29162

Brand/Company	Hybrid	Silage Yield tons @65	Moisture %DM	NDF %DM	NDFD %	CP %DM	Starch %DM	Milk/ton lbs/ton	Milk Yield lbs/acre
106 to 110-d RM									
LICA	1084 LHX	35.0	70.7	45.8	56.9	8.2	29.0	3200	39213
Pioneer	34A89	32.2	68.7	41.5	55.3	8.3	33.2	3295	37090
Mycogen	F2F622	29.2	71.8	44.8	69.0	8.4	27.7	3518	35890
T.A. Seeds	TA607-20	30.5	69.0	43.7	57.2	8.0	31.5	3277	35012
DEKALB	DKC59-64	30.8	70.1	43.9	54.2	7.8	31.8	3168	34136
RPM	628HRQ	28.6	70.1	43.4	54.6	8.5	31.8	3229	32304
Dyna-Gro	V4884HTXRNS	27.9	73.7	43.4	57.4	8.4	31.2	3279	32049
DEKALB	DKC57-50	28.1	68.0	43.2	52.9	7.5	33.7	3182	31283
Doebler's	608BMC	22.4	72.8	42.7	68.5	8.4	30.1	3576	28065
111 to 115-d RM									
T.A. Seeds	TA689-12F	33.0	70.6	45.9	57.8	8.6	27.5	3219	37201
DEKALB	DKC67-87	32.6	70.4	44.0	55.5	8.1	30.5	3210	36713
Pioneer	33F88	31.1	72.0	43.2	55.5	8.2	30.4	3226	35119
DEKALB	DKC61-69	29.2	71.5	42.2	55.9	8.3	32.1	3267	33335
Dyna-Gro	57V40	28.6	70.8	42.3	56.1	8.3	32.4	3294	32996
GROWMARK FS	6296VT3	29.8	73.0	44.3	53.5	8.5	29.9	3152	32927
T.A. Seeds	TA780-13V	28.9	72.5	43.6	56.1	8.2	29.5	3219	32538
Pioneer	33D14	28.9	70.9	44.8	53.1	8.2	28.8	3126	31670
Mycogen	F2F725	21.3	75.1	45.4	69.2	8.8	24.6	3375	25113
LSD 0.10		2.92	2.42	1.99	1.41	0.30	2.07	83	3705
Overall Mean		28.4	69.1	42.3	58.3	8.2	32.6	3332	33093

Table 4. Silage yield (adjusted to 65% moisture), moisture at harvest, quality characteristics, milk/ton, and calculated milk yields of corn hybrids at the Miner Institute in Chazy, NY in 2009.

Brand/Company	Hybrid	Silage Yield	Moisture	NDF	NDFD	CP	Starch	Milk/ton	Milk Yield
		Tons @65	%DM	%DM	%	%DM	%DM	lbs/ton	lbs/acre
85 to 90-d RM									
Hyland	HL B29R	22.3	66.8	40.5	56.0	7.9	32.4	3314	25832
Hyland	HL SR35	21.2	70.7	43.0	60.4	7.9	28.6	3224	23975
LICA	1890 F	20.5	70.9	42.0	58.7	8.1	30.5	3299	23618
T.A. Seeds	TA290-11	20.2	69.2	40.9	57.2	7.5	32.9	3322	23541
DEKALB	DKC38-89	19.2	68.7	38.5	57.9	7.9	34.6	3400	22816
Hyland	HL R228	18.3	65.1	38.6	58.1	7.4	36.2	3439	22077
Mycogen	F2F297	16.3	67.6	37.1	72.9	7.9	34.8	3702	21107
King's Agriseeds	MC 468	16.8	67.3	39.7	60.2	8.4	32.5	3426	20077
91 to 95-d RM									
LICA	946 LRR	21.5	70.7	42.7	62.3	8.0	29.9	3328	25064
Pioneer	38M60	21.4	67.4	39.4	57.6	7.7	32.9	3342	25013
Hyland	HL S047	21.0	70.1	41.8	58.7	7.9	31.4	3306	24234
Pioneer	38N88	20.4	67.7	39.5	57.1	7.6	33.5	3354	23941
Garst	89B87CB/LL	20.0	68.3	40.3	58.8	7.5	34.0	3404	23757
Pioneer	38P43	20.8	67.7	41.1	56.5	7.8	31.9	3259	23689
Pioneer	38H08	20.3	68.5	41.2	59.4	7.5	32.1	3300	23422
DEKALB	DKC 45-79	20.0	71.5	40.9	58.1	7.8	31.9	3295	23013
Dyna-Gro	V3593VT3	20.2	71.4	41.8	59.3	7.4	30.2	3221	22741
RPM	515HXR	20.5	72.1	43.2	59.3	7.7	28.6	3175	22709
Doebler's	478SL	20.8	71.6	41.8	59.7	7.8	28.3	3117	22680
Hyland	HL BSR40	19.4	71.0	40.9	61.8	8.1	30.9	3335	22669
NK	N29R-CB/LL	19.5	68.7	39.5	57.1	7.8	32.6	3308	22519
Mycogen	TMF2L418	18.0	71.3	40.8	60.1	8.4	29.2	3191	20064
Doebler's	491BMB	16.4	72.0	38.7	75.6	7.9	30.5	3484	19970
LICA	994 LRR	17.0	71.2	40.8	61.7	8.3	30.0	3292	19658
96 to 100-d RM									
T.A. Seeds	TA489-00F	21.7	70.5	41.9	59.7	8.0	29.1	3203	24312
Mycogen	F2F485	19.5	71.9	39.7	75.3	8.6	30.0	3549	24153
T.A. Seeds	TA476-11	21.2	70.1	42.2	55.0	7.6	30.9	3201	23796
T.A. Seeds	TA510-11	20.2	70.6	39.5	58.9	7.7	32.4	3317	23457
DEKALB	DKC48-37	19.4	69.5	40.5	55.7	7.5	32.8	3266	22113
DEKALB	DKC50-44	19.7	71.4	41.2	57.1	7.5	30.4	3166	21841
LSD 0.10		2.09	1.08	1.59	1.99	0.30	1.37	90	2551
Overall Mean		19.8	69.7	40.7	60.2	7.8	31.5	3318	22929

Table 5. Silage yield (adjusted to 65% moisture), moisture at harvest, quality characteristics, milk/ton, and calculated milk yields of corn hybrids at John Greenwood's farm in Madrid, NY in 2009.

Brand/Company	Hybrid	Silage Yield	Moisture	NDF	NDFD	CP	Starch	Milk/ton	Milk Yield
		Tons @65	%DM	%DM	%	%DM	%DM	lbs/ton	lbs/acre
85 to 90-d RM									
T.A. Seeds	TA290-11	26.6	68.8	38.5	54.4	8.5	33.1	3347	31228
LICA	1890 F	26.3	70.2	41.7	56.8	8.7	29.4	3263	30016
Hyland	HL SR35	25.4	70.5	42.5	56.8	8.8	28.5	3249	28950
Hyland	HL B29R	23.1	67.9	40.5	52.3	8.5	29.2	3056	24689
DEKALB	DKC38-89	20.7	70.8	40.4	55.2	8.7	29.9	3206	23298
Mycogen	F2F297	18.8	70.6	38.9	68.3	8.6	29.8	3400	22336
King's Agriseeds	MC 468	19.2	66.7	42.1	56.7	9.0	29.5	3266	21999
Hyland	HL R228	19.5	69.2	42.6	54.9	8.7	28.7	3205	21902
91 to 95-d RM									
Hyland	HL S047	27.0	70.2	41.1	58.5	8.9	29.9	3324	31430
Dyna-Gro	V3593VT3	26.5	71.4	40.8	58.6	8.0	32.7	3366	31154
Doebler's	478SL	28.0	71.1	42.0	56.7	8.5	28.2	3169	31114
RPM	515HXR	28.0	72.3	41.9	54.2	7.8	29.7	3166	31007
LICA	946 LRR	26.2	71.5	43.4	58.5	8.7	26.8	3191	29164
Garst	89B87CB/LL	25.3	69.6	41.2	53.0	8.3	30.1	3156	27950
Hyland	HL BSR40	24.0	70.9	41.9	58.5	8.9	29.2	3296	27735
LICA	994 LRR	23.2	71.7	40.7	58.4	9.3	28.9	3272	26560
Mycogen	TMF2L418	22.7	71.0	40.8	57.6	8.6	29.7	3276	26090
Pioneer	38P43	23.6	67.9	42.7	54.2	8.2	28.9	3159	26066
DEKALB	DKC45-79	23.4	72.0	40.5	54.6	8.2	29.9	3158	25804
NK	N29R-CB/LL	23.3	69.2	40.3	52.0	8.3	30.4	3140	25620
Pioneer	38H08	23.2	68.1	40.4	53.1	8.2	29.5	3047	24728
Doebler's	491BMB	19.8	73.2	39.5	72.5	8.2	29.2	3475	24119
Pioneer	38M60	22.1	67.5	42.1	52.7	8.1	28.5	3056	23688
Pioneer	38N88	20.6	67.7	39.9	53.3	8.6	29.0	3045	21957
96 to 100-d RM									
T.A. Seeds	TA489-00F	26.6	70.0	40.9	8.0	8.6	30.3	3313	30911
T.A. Seeds	TA510-11	25.7	70.9	40.8	53.8	8.3	30.4	3208	28871
DEKALB	DKC50-44	24.9	72.1	40.6	56.6	8.0	31.4	3279	28643
T.A. Seeds	TA476-11	24.9	69.9	41.9	53.7	8.3	30.9	3234	28233
Mycogen	F2F485	22.6	71.7	40.2	73.0	8.6	28.9	3521	27798
DEKALB	DKC48-37	21.7	71.2	41.7	52.3	8.1	30.3	3158	24007
LSD 0.10		3.37	1.60	1.53	1.52	0.32	1.84	110	4176
Overall Mean		23.8	70.2	41.1	57.0	8.5	29.7	3234	26902

