Minnesota Agricultural Experiment Station
University of Minnesota

Corn Silage

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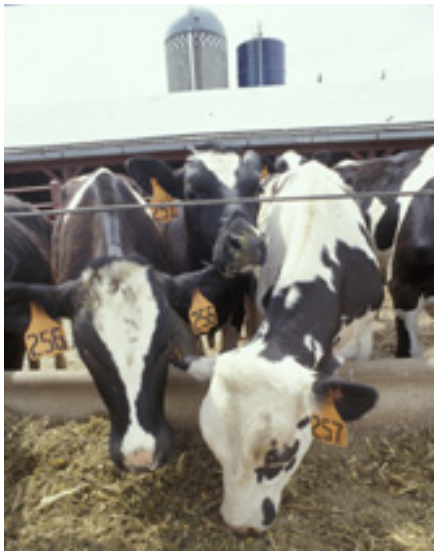
Varietal Trials Results, January 2006



The Minnesota Hybrid Corn Silage Evaluation Program evaluates the silage potential of corn hybrids in Minnesota. The program's goal is to provide unbiased forage yield and quality information for educational and marketing programs.

The program is financed in part by entry fees from private seed companies that chose to enter hybrids for testing; they are listed in this publication. Results presented are from corn silage performance trials in regions of extensive corn silage use: southeastern, central, and west-central Minnesota. The locations are in Minnesota's primary dairy regions.

Test Sites

Silage hybrids entered in the southeast or central region trials were tested at two sites within each region. Hybrids entered in the west-central region were tested at one site. Sites within regions were as follows:

Southeast Dairy Region:
Harmony (Fillmore County)
Potsdam (Olmsted County)

Central Dairy Region:
Paynesville (Stearns County)
Melrose (Stearns County)

West-Central Dairy Region:
Ottertail (Otter Tail County)

Test Procedure

Southeast and Central

Design: Small plots were established at Harmony, Potsdam, Paynesville and Melrose in randomized complete block designs with four replications. Hybrids were planted at 33,000 seeds per acre with 30-inch row spacing on May 4 at the SE sites and May 10 at the Central sites. Plant nutrients as manure or inorganic fertilizer were applied to maximize plant yield. Cultivation and herbicides applied by University of Minnesota recommendation were used to control weeds.

Harvesting: Plots were harvested and whole-plant herbage sampled for yields and forage quality at each site. The harvest date was targeted at test sites when average whole-plant moisture across entries averaged 65%. Harvest dates at Harmony, Potsdam, Paynesville and Melrose were September 12, September 14, September 16 and September 20, respectively.

West-Central

Design: Large plots were established May 2 near Ottertail under center-pivot irrigation in a randomized complete block design with three replications. Hybrids were planted at 34,000 seeds per acre with 30-inch row spacing. Fertilizer was applied at a pre-plant rate of 8,000 gallons dairy manure per acre. Pre-emergent herbicide was applied to control weeds.

Harvesting: Plots were harvested and whole-plant herbage sampled for yield and forage quality on September 17.

Results Provided

Tables summarize hybrid yield and forage quality results from Harmony, Potsdam, Paynesville, Melrose and Ottertail, respectively. Relative maturity (RM), moisture content, whole-plant dry matter (DM) yield and silage yield are listed, and hybrids are ranked in descending order of milk yield per acre (Milk Yield, lb./acre).

Whole-plant forage quality traits listed include crude protein (CP), neutral detergent fiber (NDF), 48-hour *in vitro* digestibility (IVD), 48-hour neutral detergent fiber digestibility (NDFD), and starch concentration. Except for NDFD, all forage quality traits are expressed as a percent of dry matter. NDFD is expressed as a percent of NDF.

Milk production potentials per ton (lb. milk/ton forage) and per acre (lb. milk/acre forage) of forage were calculated using the MILK2000 spreadsheet developed by the University of Wisconsin. MILK2000 approximates animal performance based on a standard cow weight and milk production level (1,350 lb. body weight and 90 lb. milk/day at 3.8% fat). Values based on field calculations for hybrid moisture and DM yield; laboratory values for CP, NDF, NDFD, starch and ash concentration; and book values for NDFCP (1.3%) and ether extract (3.2%) concentration were used for spreadsheet calculations. For MILK2000 predictions, we assumed that kernel processing occurred.

How To Use Results

NDF is a negative indicator of forage intake potential; higher NDF concentration generally implies lower animal performance potential. IVD provides an estimate of forage dry matter digestibility, and NDFD estimates digestibility of the fiber fraction. Starch concentration is positively associated with digestibility because it is assumed to be 100% digestible. Relatively higher IVD, NDFD and/or starch concentrations generally imply greater animal performance potential. Milk yield per acre represents the combined effects of yield and quality.

Corn hybrids differed in yield, forage quality and milk production potential at all sites. Means and least significant difference (LSD) values at the 10% probability level are shown for each parameter at each site. Where the difference between two hybrids for a particular trait and site is greater than the LSD value, there is a 90% probability that there is a real difference between the two hybrids for that parameter (i.e. moisture, yield, quality concentration or milk production).

Companies participating in 2005 hybrid corn silage trials.

Dairyland Seed Company, Inc., P.O. Box 958, West Bend, WI 53095

Dyna Gro Seed Company, 221 W Lake Lansing Rd., Suite 102, East Lansing, MI 48823

Epley Bros. Hybrids, Inc., P.O. Box 310, Shell Rock, IA 50670

Garst Seed Company, 2369 330th St., Slater, IA 50244

Hyland Seeds, 2 Hyland Drive, Blenheim, Ontario, Canada N0P 1A0

Legacy Seeds, Inc., 210 Pine Street, Waupaca, WI 54981

Monsanto Seed Group, Dekalb Genetics, 3100 Sycamore Road, De Kalb, IL 60115

Nu Tech Seed Co., 307 3rd Street, Alice, ND 58031

Pioneer Hi-Bred, International, 7000 NW 62nd Ave., Johnston, IA 50131

Producers Hybrids, P.O. Box C, Battle Creek, NE 68715

Renk Seed Company, 6800 Wilburn Rd., Sun Prairie, WI 53590

Syngenta Seeds, Inc. (NK), 7500 Olson Memorial Hwy., Golden Valley, MN 55427

Trelay Seeds, 11623 State Road 80N, Livingston, WI 53554

Relative maturity (RM), whole-plant moisture, silage yield and quality traits for corn hybrids planted at Harmony (Fillmore County) in 2005.

Brand/Hybrid	RM, Rating	Mois-ture, %	Yield, Ton/Acre[1] DM	Silage	Quality (Concentration)[2] % CP	NDF	IVD	NDFD	Starch	Milk Yield[3] Lb/Ton	Lb/Acre
Pioneer 35Y67	106	65.3	11.9	34.3	7.2	34	82	47	41	3,700	44,100
Pioneer 33N29	113	68.4	11.9	37.7	7.2	36	81	49	39	3,640	43,400
NK N33-H6	101	66.0	11.6	34.0	7.8	36	81	47	38	3,610	41,700
Dyna-Gro DG55P57	102	65.1	11.6	33.2	7.4	38	79	46	35	3,470	40,300
Pioneer 34A86	106	67.8	11.4	35.5	7.9	38	80	48	38	3,510	40,200
Garst 8689IT	100	63.7	10.9	30.1	6.8	35	81	45	41	3,610	39,400
High Cycle 7748	109	69.7	11.6	38.2	7.4	38	79	45	37	3,400	39,400
High Cycle 6B413	107	64.8	11.1	31.4	7.2	35	81	44	41	3,510	38,800
DeKalb DKC 53-11	103	65.9	11.1	32.6	7.6	36	80	45	41	3,480	38,600
Epley E5112	112	69.8	11.0	36.5	7.8	36	81	47	40	3,480	38,400
Dairyland Stealth HiDF-3007	106	70.2	11.0	36.9	8.0	39	80	49	35	3,480	38,300
Garst 8579RR	100	69.5	10.6	34.7	7.5	36	81	48	41	3,600	38,100
Pioneer 35D28	108	68.7	10.7	34.2	6.8	37	80	46	40	3,510	37,600
High Cycle 7560	100	62.7	10.4	27.8	7.1	34	81	45	44	3,620	37,500
DeKalb DKC 52-23	102	63.7	10.0	27.6	7.3	34	82	47	42	3,740	37,500
DeKalb DKC 55-82	105	69.5	10.9	35.6	7.6	38	80	46	37	3,450	37,500
Pioneer 33D63	115	71.0	10.8	37.1	8.3	40	80	51	35	3,460	37,300
DeKalb DKC 54-51	104	68.5	10.9	34.7	7.6	39	79	46	37	3,410	37,300
Epley E1493	105	66.7	10.3	30.8	7.2	34	81	45	43	3,620	37,100
DeKalb DKC 57-30	107	68.5	10.4	32.9	7.4	37	80	45	41	3,500	36,200
Pioneer 34M93	108	67.7	10.7	33.1	7.1	41	78	46	34	3,310	35,400
DeKalb DKC 57-84	107	69.9	10.2	33.7	7.4	37	80	45	38	3,480	35,300
Renk RK684YGCB	106	66.3	9.8	28.9	7.5	36	80	44	40	3,520	34,300
Legacy Seeds L6160 Bt	108	65.9	9.7	28.4	7.5	36	81	46	41	3,520	34,100
Producers Hybrids SS110	110	69.4	10.3	33.6	8.2	43	78	49	30	3,270	33,600
Garst 8590RR	100	68.5	9.7	30.9	7.2	38	80	47	37	3,440	33,400
NK N49-E3	106	69.0	9.8	31.7	7.8	39	79	47	36	3,400	33,400
Renk RK854	111	69.6	9.5	31.2	7.6	39	78	45	34	3,290	31,300
Dairyland Stealth 1611	108	72.2	9.3	33.2	7.4	40	78	45	37	3,270	30,200
Dyna-Gro DG53P30	92	61.1	8.4	21.5	7.1	36	79	41	41	3,400	28,500
Producers Hybrids SS104RR	104	72.9	8.0	29.5	7.2	43	78	48	30	3,180	25,500
Mean		67.7	10.5	32.6	7.4	37	80	46	38	3,480	36,600
LSD (0.10)		2.7	1.6	4.2	0.4	2	2	2	3	200	6,800

[1] DM yield is whole-plant corn yield at 100% dry matter; Silage yield is whole-plant corn yield at harvest moisture.

[2] Quality concentration description expressed as a % of DM, except NDFD which is expressed as a % of NDF. Refer to Results Provided text for additional information.

[3] Milk production was estimated using spreadsheet MILK2000 developed at the University of Wisconsin. Refer to Results Provided text for additional information.

Relative maturity (RM), whole-plant moisture, silage yield and quality traits for corn hybrids planted at Potsdam (Olmsted County) in 2005.

Brand/Hybrid	RM, Rating	Mois-ture, %	Yield, Ton/Acre[1] DM	Silage	Quality (Concentration)[2] % CP	NDF	IVD	NDFD	Starch	Milk Yield[3] Lb/Ton	Lb/Acre
Garst 8689IT	100	63.9	12.2	33.7	7.3	34	82	47	42	3,710	45,200
Pioneer 35Y67	106	62.5	12.4	33.0	7.6	37	80	47	38	3,530	43,600
DeKalb DKC 55-82	105	65.2	12.3	35.3	8.0	36	81	47	40	3,530	43,300
Pioneer 34A86	106	62.5	11.7	31.2	7.9	36	81	48	40	3,610	42,300
High Cycle 7748	109	65.6	11.8	34.2	7.7	37	81	48	38	3,550	41,800
Dairyland Stealth 1611	108	67.3	11.7	35.7	8.0	37	81	48	38	3,510	41,100
High Cycle 6B413	107	63.2	11.0	29.8	7.8	33	83	48	41	3,730	41,000
DeKalb DKC 57-84	107	64.8	11.4	32.5	7.5	37	80	46	38	3,540	40,500
Pioneer 35D28	108	65.2	12.0	34.3	7.3	39	79	47	38	3,370	40,300
Renk RK854	111	66.6	12.2	36.4	7.6	40	79	46	32	3,270	39,800
DeKalb DKC 53-11	103	62.6	11.4	30.4	7.2	37	80	45	41	3,470	39,500
Pioneer 34M93	108	64.7	11.7	33.0	7.9	41	79	48	35	3,390	39,500
Dyna-Gro DG55P57	102	62.4	11.0	29.3	7.5	38	80	47	37	3,510	38,700
Legacy Seeds L6160 Bt	108	63.2	11.4	30.9	7.3	37	79	45	39	3,380	38,400
DeKalb DKC 57-30	107	63.3	11.1	30.3	7.3	38	79	45	39	3,410	37,900
Garst 8579RR	100	64.5	10.9	30.7	7.1	38	80	47	38	3,450	37,600
Producers Hybrids SS104RR	104	66.9	11.9	35.8	8.1	42	79	49	29	3,150	37,400
Dairyland Stealth HiDF-3007	106	67.2	11.0	33.4	8.0	39	80	49	33	3,400	37,300
Producers Hybrids SS110	110	65.0	11.1	31.6	8.6	41	79	50	31	3,350	37,100
NK N33-H6	101	64.1	11.1	30.9	8.6	39	80	50	31	3,340	37,000
Renk RK684YGCB	106	64.6	10.5	29.5	8.0	37	80	47	38	3,510	36,700
Garst 8590RR	100	65.9	10.7	31.4	7.1	41	79	48	33	3,350	35,800
DeKalb DKC 54-51	104	65.2	10.7	30.8	7.5	39	78	45	35	3,310	35,500
NK N49-E3	106	65.8	10.7	31.1	8.1	41	79	47	33	3,320	35,300
DeKalb DKC 52-23	102	60.2	10.2	25.5	6.8	36	80	44	41	3,440	35,000
Pioneer 33N29	113	67.2	10.5	32.1	7.4	41	79	47	33	3,320	34,900
Epley E1493	105	65.1	10.0	28.7	7.6	37	80	46	39	3,440	34,500
Pioneer 33D63	115	68.2	10.3	32.4	8.4	42	79	50	32	3,340	34,400
Epley E5112	112	66.6	10.4	31.1	7.6	40	78	46	35	3,260	33,800
Dyna-Gro DG53P30	92	58.3	9.7	23.1	7.0	34	81	43	43	3,500	33,800
High Cycle 7560	100	61.5	9.7	25.2	7.2	36	79	44	40	3,430	33,300
Mean		64.5	11.1	31.4	7.6	38	80	47	37	3,430	38,100
LSD (0.10)		1.9	ns	3.7	0.4	3	ns	2	4	230	ns

[1] DM yield is whole-plant corn yield at 100% dry matter; Silage yield is whole-plant corn yield at harvest moisture.

[2] Quality concentration description expressed as a % of DM, except NDFD which is expressed as a % of NDF. Refer to Results Provided text for additional information.

[3] Milk production was estimated using spreadsheet MILK2000 developed at the University of Wisconsin. Refer to Results Provided text for additional information.

Relative maturity (RM), whole-plant moisture, silage yield and quality traits for corn hybrids planted at Paynesville (Stearns County) in 2005.

Brand/Hybrid	RM, Rating	Mois-ture, %	Yield, Ton/Acre[1] DM	Silage	Quality (Concentration)[2] % CP	NDF	IVD	NDFD	Starch	Milk Yield[3] Lb/Ton	Lb/Acre
DeKalb DKC 54-51	104	68.3	12.0	37.9	8.1	40	80	49	32	3,400	40,800
Garst 8689 IT	104	67.4	11.3	34.5	7.9	39	80	49	32	3,400	38,300
DeKalb DKC 50-20	100	65.0	10.8	30.7	7.5	36	80	45	39	3,500	37,600
Dairyland Stealth 5007	103	68.5	10.6	33.7	8.8	40	80	51	32	3,510	37,300
Garst 8922 YG1	90	63.8	10.5	28.9	7.9	36	81	46	38	3,490	36,500
Renk RK632YGCB	102	63.6	10.2	27.8	8.5	35	82	48	40	3,560	36,100
Legacy Seeds L4199 Bt	101	64.3	10.5	29.4	7.9	38	79	45	36	3,400	35,800
NK N49-E3	106	68.4	10.6	33.4	8.7	41	79	50	31	3,390	35,800
Dyna-Gro CX05798	98	64.8	11.0	31.2	8.1	41	78	46	31	3,250	35,700
DeKalb DKC 42-95	92	65.2	10.2	29.3	7.8	38	79	46	36	3,410	34,900
Legacy Seeds L4237	100	66.3	9.9	29.4	8.3	36	82	50	35	3,500	34,800
Garst 8748 YG1	101	68.8	10.2	32.6	8.5	38	80	49	32	3,390	34,500
Pioneer 35Y67	106	68.0	10.1	31.4	8.8	40	81	51	28	3,420	34,400
Renk RK684	104	68.2	10.3	32.4	9.0	40	79	48	29	3,330	34,400
DeKalb DKC 48-52	98	63.6	9.8	26.9	7.4	36	80	44	38	3,420	33,500
DeKalb DKC 47-10	97	62.4	9.4	24.9	7.9	35	81	46	41	3,550	33,300
Producers Hybrids SS96RR	96	64.7	10.1	28.6	7.7	41	77	45	33	3,250	32,900
Pioneer 34M93	108	68.3	10.5	33.1	8.2	45	76	48	28	3,120	32,700
Pioneer 35D28	108	68.0	10.5	32.8	7.9	44	76	47	31	3,110	32,700
High Cycle 7560	100	66.0	9.6	28.0	8.2	38	80	47	35	3,400	32,500
Pioneer 34A86	106	68.6	10.1	32.0	8.6	45	77	48	27	3,130	31,500
Producers Hybrids 5152RR	91	64.5	9.1	25.5	7.8	36	80	45	38	3,470	31,400
Hyland Seeds HL SR59	101	68.2	11.0	34.4	8.4	45	77	49	23	2,860	31,400
Hyland Seeds HL S058	101	68.5	10.1	32.0	8.7	43	79	50	25	3,090	31,200
Legacy Seeds L4987	108	69.8	9.9	32.6	9.0	44	78	50	25	3,150	31,100
Pioneer 37A92	97	63.5	9.1	24.8	8.8	37	80	46	34	3,380	30,600
Renk RK452LLYGCB	94	59.6	9.3	22.9	8.1	39	79	45	35	3,270	30,200
Legacy Seeds L3877 Bt/LL	95	58.3	9.3	22.2	8.1	38	79	44	36	3,240	30,000
Dairyland Stealth 1705	101	69.8	9.6	31.7	8.4	44	77	48	25	3,130	30,000
Garst 8769 Bt	99	61.3	8.9	23.0	7.8	39	80	47	34	3,330	29,700
Hyland Seeds HL S047	100	65.3	9.0	26.0	8.5	40	79	46	34	3,270	29,500
Legacy Seeds L3077 Bt	95	67.9	9.2	28.6	7.6	41	77	44	32	3,190	29,400
Garst 8881 RR	95	64.3	8.6	24.1	7.8	38	79	45	35	3,360	29,000
NK N33-H6	101	67.2	9.5	28.8	8.7	42	77	46	28	3,050	28,800
Hyland Seeds HL S067	103	68.5	9.5	30.1	8.9	45	76	47	26	3,020	28,600
Dairyland Stealth 1602	98	67.6	9.0	27.9	8.9	43	77	48	29	3,160	28,500
Dyna-Gro 55F16	101	66.4	9.0	26.7	8.2	42	77	44	30	3,110	27,900
Dairyland Stealth HiDF-4200	101	69.1	8.3	26.9	8.9	40	78	46	34	3,280	27,300
Hyland Seeds HL 2676	101	69.2	7.4	23.9	8.9	43	78	48	31	3,220	23,800
Mean		66.2	9.8	29.3	8.3	40	79	47	32	3,290	32,400
LSD (0.10)		2.4	1.5	4.1	0.6	3	2	2	4	220	5,900

[1] DM yield is whole-plant corn yield at 100% dry matter; Silage yield is whole-plant corn yield at harvest moisture.

[2] Quality concentration description expressed as a % of DM, except NDFD which is expressed as a % of NDF. Refer to Results Provided text for additional information.

[3] Milk production was estimated using spreadsheet MILK2000 developed at the University of Wisconsin. Refer to Results Provided text for additional information.

Relative maturity (RM), whole-plant moisture, silage yield and quality traits for corn hybrids planted at Melrose (Stearns County) in 2005.

Brand/Hybrid	RM, Rating	Mois-ture, %	Yield, Ton/Acre[1] DM	Silage	Quality (Concentration)[2] % CP	NDF	IVD	NDFD	Starch	Milk Yield[3] Lb/Ton	Lb/Acre
Legacy Seeds L4199 Bt	101	65.2	9.1	26.1	9.2	38	84	57	34	3,540	32,200
Garst 8748 YG1	101	70.0	8.5	28.4	10.0	36	86	62	34	3,710	31,700
Hyland Seeds HL 2676	101	68.9	8.1	26.1	9.7	38	84	59	35	3,610	29,300
DeKalb DKC 54-51	104	69.2	8.0	26.1	9.1	37	85	58	34	3,530	28,400
DeKalb DKC 50-20	100	70.2	7.2	24.0	10.1	33	88	63	39	3,930	28,100
Pioneer 34M93	108	71.9	8.1	28.8	9.2	41	83	57	31	3,430	27,700
Pioneer 34A86	106	70.6	8.0	27.3	10.3	40	84	61	28	3,410	27,400
Pioneer 35D28	108	71.7	8.5	29.9	9.4	44	81	57	27	3,230	27,300
Dairyland Stealth HiDF-4200	101	70.3	7.1	24.0	10.3	37	86	62	35	3,790	27,000
Renk RK632YGCB	102	68.8	7.4	23.6	10.8	38	86	63	31	3,650	26,900
Garst 8689 IT	104	69.4	7.8	25.3	8.0	37	84	58	32	3,460	26,800
Dyna-Gro 55F16	101	69.3	7.3	23.7	9.9	38	85	59	33	3,630	26,500
High Cycle 7560	100	69.8	7.4	24.5	10.7	40	84	61	34	3,580	26,500
Hyland Seeds HL S067	103	68.3	7.6	23.8	10.0	43	83	59	28	3,480	26,300
DeKalb DKC 48-52	98	65.8	7.3	21.2	9.2	37	84	56	35	3,580	26,000
Pioneer 37A92	97	65.7	6.4	18.6	10.8	33	88	63	37	3,930	25,100
Hyland Seeds HL S058	101	70.5	7.2	24.2	11.2	48	83	64	22	3,410	24,400
Dairyland Stealth 5007	103	73.9	6.9	26.3	10.4	42	83	61	35	3,540	24,300
DeKalb DKC 47-10	97	68.4	6.7	21.0	9.8	36	86	61	34	3,640	24,200
Legacy Seeds L3877 Bt/LL	95	65.7	6.5	18.8	10.1	36	86	60	34	3,750	24,200
Pioneer 35Y67	106	74.1	7.3	28.2	10.0	42	83	60	26	3,280	24,000
Renk RK684	104	72.9	6.8	25.0	11.5	43	84	63	27	3,540	24,000
Garst 8769 Bt	99	66.7	6.9	20.6	9.9	40	83	58	34	3,460	23,800
Producers Hybrids SS96RR	96	69.8	6.7	22.2	10.7	43	83	61	26	3,490	23,400
Hyland Seeds HL SR59	101	73.5	7.0	26.2	11.1	48	83	64	26	3,370	23,400
Legacy Seeds L4987	108	71.1	7.2	25.0	10.4	47	81	60	23	3,230	23,400
DeKalb DKC 42-95	92	70.6	6.6	22.4	9.8	38	85	60	30	3,550	23,300
Hyland Seeds HL S047	100	67.1	6.5	19.6	10.3	38	85	60	33	3,610	23,300
Garst 8922 YG1	90	72.0	7.1	25.2	9.9	41	83	59	26	3,290	23,200
Producers Hybrids 5152RR	91	69.8	6.3	20.8	9.8	37	85	61	31	3,590	22,500
Legacy Seeds L3077 Bt	95	71.0	6.3	21.6	9.2	38	84	58	34	3,580	22,500
Legacy Seeds L4237	100	71.8	6.4	22.7	9.4	39	84	59	31	3,490	22,300
Dairyland Stealth 1705	101	71.0	6.7	23.1	9.8	44	82	58	27	3,290	22,100
Renk RK452LLYGCB	94	67.6	6.3	19.3	11.1	40	84	61	28	3,510	22,000
NK N33-H6	101	71.3	6.3	21.8	10.9	41	83	59	27	3,480	21,800
Dyna-Gro CX05798	98	71.3	6.3	22.1	10.4	44	83	61	29	3,440	21,800
NK N49-E3	106	75.8	6.1	25.3	11.4	44	84	65	28	3,530	21,600
Dairyland Stealth 1602	98	71.0	5.9	20.2	11.2	45	82	61	24	3,360	19,600
Garst 8881 RR	95	69.4	5.7	18.4	9.1	38	83	56	32	3,440	19,400
Mean		70.0	7.0	23.6	10.1	40	84	60	31	3,520	24,800
LSD (0.10)		2.7	1.2	3.6	0.8	4	2	4	4	270	5,200

[1] DM yield is whole-plant corn yield at 100% dry matter; Silage yield is whole-plant corn yield at harvest moisture.

[2] Quality concentration description expressed as a % of DM, except NDFD which is expressed as a % of NDF. Refer to Results Provided text for additional information.

[3] Milk production was estimated using spreadsheet MILK2000 developed at the University of Wisconsin. Refer to Results Provided text for additional information.

Relative maturity (RM), whole-plant moisture, silage yield and quality traits for corn hybrids planted at Ottertail (Otter Tail County) in 2005.

Brand/Hybrid	RM, Rating	Mois-ture, %	Yield, Ton/Acre[1] DM	Yield, Ton/Acre[1] Silage	Quality (Concentration)[2] % CP	NDF	IVD	NDFD	Starch	Milk Yield[3] Lb/Ton	Milk Yield[3] Lb/Acre
Pioneer 38H69	100	66.6	6.3	19.0	7.7	39	81	52	35	3,520	22,300
Dekalb DKC 42-95	92	63.9	6.1	17.0	7.1	37	81	50	40	3,610	22,100
Pioneer 37R70	99	64.9	6.1	17.4	8.0	38	82	51	36	3,570	21,800
Dyna Gro CX05798	98	62.8	6.7	17.9	7.2	42	79	49	33	3,260	21,700
Hyland HLS058	101	66.7	6.7	20.0	7.8	42	79	50	31	3,250	21,700
Pioneer 38W22	92	62.8	6.1	16.4	7.5	38	81	51	35	3,490	21,300
Nu Tech QFO193	93	63.8	6.6	18.3	7.1	43	77	48	32	3,170	21,000
Pioneer 37A92	97	62.6	5.8	15.5	7.9	37	82	52	37	3,580	20,800
Dekalb DKC 40-05	90	63.7	6.0	16.5	7.2	40	79	48	35	3,380	20,200
Nu Tech QFO100	100	69.7	6.4	21.0	7.4	44	79	52	27	3,130	19,900
Dyna Gro 55F53	102	67.0	6.3	19.0	7.2	43	77	45	33	3,120	19,600
NK Seeds N33-H6	93	68.6	6.3	20.2	7.3	44	78	50	27	3,090	19,600
Hyland HLS009	73	52.7	6.0	12.7	7.4	39	80	48	35	3,220	19,300
Mean		64.3	6.3	17.8	7.4	40	80	50	33	3,340	20,900
LSD (0.10)		2.0	ns	2.2	0.4	3	2	2	3	180	ns

[1] DM yield is whole-plant corn yield at 100% dry matter; Silage yield is whole-plant corn yield at harvest moisture.

[2] Quality concentration description expressed as a % of DM, except NDFD which is expressed as a % of NDF. Refer to Results Provided text for additional information.

[3] Milk production was estimated using spreadsheet MILK2000 developed at the University of Wisconsin. Refer to Results Provided text for additional information.