

# 2018 Corn Silage Field Crop Trials Results



## Minnesota Agricultural Experiment Station and the College of Food, Agricultural and Natural Resource Sciences

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

The program is financed in part by entry fees from private seed companies that choose to enter hybrids for testing, which are listed below. Results are presented from the two corn silage performance trials, Southeast (SE) located in Rochester; and Central (CE) located in Hutchinson. Entries from the southeast and central sites are also evaluated at Waseca in trials designated as Waseca SE and Waseca CE. Trials at each location were split into early and late corn hybrid maturities, to facilitate harvesting the corn silage at 65% whole plant moisture.

### Test Procedures

Plots were established at each test site in a randomized complete block design with four replications.

### Companies Participating in 2018 Hybrid Corn Silage Performance Trials.

AgriGold Hybrids	<a href="http://www.agrigold.com">www.agrigold.com</a>
Blue River Hybrids	<a href="http://www.blueriverorgseed.com">www.blueriverorgseed.com</a>
Dairyland Seed	<a href="http://www.dairylandseed.com">www.dairylandseed.com</a>
Dekalb	<a href="http://www.dekalb.com">www.dekalb.com</a>
Golden Harvest	<a href="http://www.syngenta-us.com/corn/golden-harvest">www.syngenta-us.com/corn/golden-harvest</a>
Latham	<a href="http://www.lathamseeds.com">www.lathamseeds.com</a>
Legacy Seeds, Inc.	<a href="http://www.legacyseeds.com">www.legacyseeds.com</a>
LG Seeds	<a href="http://www.lgseeds.com">www.lgseeds.com</a>
Masters Choice	<a href="http://www.seedcorn.com">www.seedcorn.com</a>
NK	<a href="http://www.syngenta-us.com/corn/nk">www.syngenta-us.com/corn/nk</a>
Prairie Brand Seed	<a href="http://prairiebrand.com">prairiebrand.com</a>
Thunder Seed	<a href="http://thunderseed.com">thunderseed.com</a>
Viking Seed	<a href="http://www.alseed.com">www.alseed.com</a>

Planting and harvesting dates were:

Location	Planting Date	Early Harvest	Late Harvest
Rochester SE	May 18	Sept. 14	Sept. 24
Waseca SE	May 1	Sept. 11	Sept. 12
Hutchinson CE	May 14	Sept. 7	Sept. 7
Waseca CE	May 1	Sept. 10	Sept. 10

Hybrid entries were planted at 35,000 seeds per acre with 30-inch row spacing. Plant nutrients such as manure or inorganic fertilizer and herbicides, to control weeds, were applied according to University of Minnesota recommendations.

Plots were harvested and whole-plant herbage sampled for determination of dry matter content and forage quality. Test sites were normally harvested when the average whole-plant moisture across entries was estimated to be 65%.

### Results Provided

Tables 1-8 summarize hybrid yield and forage quality results from Rochester, Hutchinson and Waseca. Mois-

ture content, whole-plant dry matter (DM) yield and silage yield at harvest moisture are listed. Hybrids are ranked in descending order of milk yield per acre (Milk Yield, lb./acre). Genetic trait information is supplied by companies entered in the hybrid corn silage performance trials.

Whole-plant forage quality traits tested include crude protein (CP), neutral detergent fiber (NDF), 48-hour neutral detergent fiber digestibility (NDFD) and starch concentration. With the exception of NDFD, all forage quality traits are expressed as a percent of dry matter. NDFD is expressed as a percent of NDF.

Milk production potential per ton (lb. milk/ton forage) and per acre (lb. milk/acre) of forage was calculated using the MILK2006 spreadsheet developed by the University of Wisconsin. MILK2006 approximates animal performance based on a standard cow



weight and milk production level (1,350 lb. body weight and 90 lb. /day at 3.8% fat).

Field values for moisture and DM yield at harvest; laboratory values for CP, NDF, NDFD, starch, oil and ash concentration; and book values for NDFCP (1.3%) were used for spreadsheet calculations. For MILK2006 predictions, we assumed that kernel processing occurred. Milk production (lb. milk / ton and lb. milk / acre) values can be used as a quick reference for relative comparison of hybrids within test locations.

### How to Use Results

NDF is a negative indicator of forage intake potential; higher NDF concen-

tration generally implies lower intake potential. NDFD estimates digestibility of the fiber fraction. Starch concentration is positively associated with digestibility because of its high digestibility. Relatively higher NDFD and/or starch concentrations generally imply greater animal performance potential. Milk yield per acre represents the combined effects of silage 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 5% probability level are shown for each parameter. Where the difference between two hybrids for a particular yield or quality trait is greater than the

LSD value, there is a 95% probability that there is a statistically significant difference between the two hybrids for that parameter (i.e., moisture, yield, quality concentration or milk production). A difference less than the LSD value probably is due to environmental factors.

Figures 1-4 summarize the relationship between silage dry matter yield and milk per ton for test sites at Rochester, Waseca and Hutchinson. The figures also highlight those entries at each site that have a combination of high silage dry matter yields and milk production per ton.

### Project Leaders

Craig Sheaffer, Jacob Jungers, Thomas Hoverstad and Wade Ihlenfeld.

**Table 1. Relative maturity (RM), whole-plant moisture (Moist), dry matter and silage yield and quality traits for SE early corn hybrids planted at Rochester, MN (Olmsted County) in 2018.**

No.	Company	Entry	Traits <sup>1</sup>	RM	Moist, %	Yield, Tons/Acre <sup>2</sup>		Quality (concentration), % <sup>3</sup>				Milk Yield <sup>4</sup>	
						DM	Silage	CP	NDF	NDFD	Starch	lb/Ton	lb/Acre
23	Dairyland	EXP-10617	Bt, GLY, LL	106	66.2	13.7	40.6	7.2	47.0	38.8	37.1	2,459	33,645
28	Viking Seed	51-04GS	—	104	59.9	12.1	30.3	6.1	44.0	39.2	41.1	2,610	31,639
1	AgriGold	A633-94STX	Bt, CRW, GLY, LL	103	58.5	12.0	28.8	6.2	42.7	36.7	42.6	2,622	31,503
25	Prairie Brand	HP102SX	Bt, CRW, GLY, LL	102	62.2	13.0	34.6	6.2	49.4	39.0	35.2	2,402	31,296
11	DEKALB	DKC55-53RIB	Bt, CRW, GLY, LL	105	62.8	12.1	32.5	6.6	46.0	40.4	37.8	2,544	30,805
17	Masters Choice	MC5790	—	107	62.6	11.7	31.3	6.5	43.6	39.1	41.0	2,618	30,596
12	DEKALB	DKC56-45RIB	Bt, CRW, GLY, LL	106	60.6	11.8	30.3	6.1	44.2	39.2	40.6	2,562	30,341
10	DEKALB	DKC54-38RIB	Bt, CRW, GLY, LL	104	59.2	11.4	27.9	5.8	44.1	38.0	41.4	2,568	29,504
2	AgriGold	A635-54VT2RIB	Bt, GLY	105	56.6	11.3	26.0	6.0	45.4	39.2	40.4	2,573	29,236
4	Dairyland	HiDF-3702-9	Bt, CRW, GLY, LL	102	63.9	11.9	32.8	6.4	47.6	38.2	38.1	2,450	28,869
18	NK	0440-3010 Brand	Bt, GLY, LL	104	60.0	11.5	28.6	6.0	45.9	39.5	39.1	2,511	28,736
6	Dairyland	HiDF-3103RA	Bt, CRW, GLY, LL	103	62.8	11.7	31.7	7.4	49.0	41.6	34.0	2,448	28,651
21	Dairyland	EXP-10307	Bt, CRW, GLY, LL	103	63.9	11.8	32.5	6.0	49.5	38.2	35.5	2,406	28,113
13	Latham	5742 RR	GLY	107	59.4	11.1	27.5	6.5	46.2	39.7	37.5	2,493	27,892
5	Dairyland	HiDF-3202PE	Bt, GLY, LL	102	60.4	11.6	29.3	6.4	49.7	40.0	35.0	2,398	27,740
9	DEKALB	DKC51-38RIB	Bt, CRW, GLY, LL	101	62.6	10.9	29.2	6.0	46.5	39.5	37.7	2,494	27,268
7	Dairyland	HiDF-3605RA	Bt, CRW, GLY, LL	105	63.1	11.6	31.5	5.7	50.9	38.0	32.7	2,328	27,000
8	Dairyland	HiDF-3407RA	Bt, CRW, GLY, LL	107	63.9	10.9	30.3	6.1	48.3	40.1	35.5	2,454	26,744
15	Masters Choice	MCT4934	Bt, CRW, GLY, LL	99	53.9	10.4	22.6	6.5	45.8	37.9	39.9	2,476	25,778
22	Dairyland	RPM-4318AM	Bt, GLY, LL	104	63.5	11.2	30.8	5.9	50.9	36.0	33.6	2,277	25,761
27	Prairie Brand	HP107SXRA	Bt, CRW, GLY, LL	107	65.5	11.1	32.2	5.7	52.9	38.3	30.7	2,265	25,250
14	LG Seeds	LGS5525VT2RIB	Bt, CRW, GLY, LL	105	57.3	10.9	25.6	5.8	53.3	39.6	30.9	2,254	24,789
16	Masters Choice	MC5454	Bt, CRW, GLY, LL	104	59.2	10.6	26.4	6.4	49.6	37.8	34.7	2,307	24,493
20	Dairyland	RPM-4319AM	Bt, GLY, LL	103	61.8	9.8	25.6	6.4	45.7	37.1	39.9	2,455	24,009
3	AgriGold	A637-55VT2PRO	Bt, GLY	107	64.0	10.2	28.4	7.2	52.6	41.3	31.9	2,340	23,832
24	Dairyland	RPM-562XRR	Bt, GLY, LL	106	65.0	10.1	29.1	6.5	49.8	38.6	34.1	2,353	23,689
19	NK	0624-3220 EZ1 Brand	Bt, GLY, LL	106	59.8	10.2	25.6	6.3	52.6	39.7	32.1	2,286	23,381
26	Prairie Brand	HP104PWE	Bt, Enlist, GLY, LL	104	58.2	8.9	21.4	6.2	54.1	40.0	31.6	2,229	20,025
<b>Mean</b>					<b>61.3</b>	<b>11.3</b>	<b>29.4</b>	<b>6.3</b>	<b>48.1</b>	<b>38.9</b>	<b>36.5</b>	<b>2,435</b>	<b>27,521</b>
<b>LSD 5%</b>					<b>4.3</b>	<b>1.5</b>	<b>4.9</b>	<b>1.1</b>	<b>7.7</b>	<b>2.7</b>	<b>8.2</b>	<b>268</b>	<b>5,739</b>

<sup>1</sup>Bt, CRW, GLY, LL and Lf traits contain genes for European corn borer tolerance, corn rootworm tolerance, glyphosate herbicide tolerance, Liberty (glufosinate-ammonium) herbicide tolerance and leafy trait, respectively.

<sup>2</sup>DM yield is whole-plant corn yield at 100% dry matter; Silage yield is whole-plant corn yield at harvest moisture.

<sup>3</sup>Quality concentration expressed as a % of DM, except NDFD which is expressed as a % of NDF. Refer to Results Provided text for additional information.

<sup>4</sup>Milk production was estimated using spreadsheet MILK2006 developed at the University of Wisconsin. Refer to Results Provided text for additional information.

**Table 2. Relative maturity (RM), whole-plant moisture (Moist), dry matter and silage yield, and quality traits for SE late corn hybrids planted at Rochester, MN (Olmsted County) in 2018.**

No.	Company	Entry	Traits <sup>1</sup>	RM	Moist, %	Yield, Tons/Acre <sup>2</sup>		Quality (concentration), % <sup>3</sup>				Milk Yield <sup>4</sup>	
						DM	Silage	CP	NDF	NDFD	Starch	lb/Ton	lb/Acre
5	Dairyland	DS-7909PE	Bt, GLY, LL	109	51.5	13.5	27.7	6.1	53.7	39.4	35.3	2,323	31,225
26	Viking Seed	48-08GS	—	108	47.0	12.4	23.4	6.3	48.7	40.4	38.8	2,520	31,199
18	Legacy Seeds	L-7236	Bt, CRW, GLY, LL	112	60.7	12.9	32.8	6.6	53.3	42.0	32.2	2,382	30,775
13	Latham	6285 VT2Pro	Bt, GLY	112	49.7	12.5	25.2	6.2	51.3	39.3	36.5	2,378	29,825
10	Golden Harvest	G10T63-3122	Bt, CRW, GLY, LL	109	57.6	12.4	29.2	5.9	50.4	38.4	36.8	2,342	28,917
1	AgriGold	A638-94STX	Bt, CRW, GLY, LL	108	51.3	12.1	24.8	6.7	54.5	41.5	33.4	2,356	28,289
9	DEKALB	DKC58-34RIB	Bt, CRW, GLY, LL	108	55.7	11.4	25.9	6.7	48.1	39.1	38.8	2,476	28,271
23	Dairyland	EXP-11016	Bt, GLY, LL	110	61.4	12.1	31.4	6.6	52.5	40.2	34.6	2,336	28,264
2	AgriGold	A641-06STX	Bt, CRW, GLY, LL	111	60.7	11.3	28.9	6.9	48.4	39.6	38.8	2,484	28,190
22	Dairyland	RPM-4816AM	Bt, GLY, LL	108	58.7	11.9	28.7	7.1	52.9	42.1	32.5	2,347	27,884
27	Viking Seed	O.74-10GS	—	110	54.7	11.8	26.4	6.3	54.5	40.4	33.1	2,305	27,409
19	LG Seeds	LG5565STXRIB	Bt, CRW, GLY, LL	109	59.9	11.4	28.3	6.2	54.3	42.3	31.5	2,355	26,868
16	Legacy Seeds	L-6838	Bt, GLY, LL	108	48.4	10.7	20.9	7.3	51.9	42.6	33.8	2,492	26,657
25	Prairie Brand	HP114SX	Bt, CRW, GLY, LL	114	64.1	12.4	34.4	6.3	57.6	40.6	28.7	2,150	26,614
14	Latham	6224 3120 EZR	Bt, GLY, LL	112	57.0	11.5	26.7	6.4	54.9	40.3	31.4	2,250	26,395
4	Dairyland	HiDF-3808RA	Bt, CRW, GLY, LL	108	55.0	11.3	25.1	6.3	53.0	39.6	34.9	2,304	26,177
20	Masters Choice	MCT6153	Bt, CRW, GLY, LL	111	55.2	12.3	27.4	5.9	57.3	37.4	32.1	2,109	25,752
17	Legacy Seeds	L-6937	Bt, CRW, GLY, LL	109	54.3	11.0	23.9	6.9	53.7	39.2	34.5	2,302	25,284
3	AgriGold	A641-78STXRIB	Bt, CRW, GLY, LL	111	58.9	10.7	25.9	6.0	54.9	39.8	32.9	2,257	24,583
21	Dairyland	EXP-11217	Bt, CRW, GLY, LL	112	61.3	11.2	29.0	5.8	57.0	40.5	28.0	2,170	24,310
11	Golden Harvest	G10S30-5222	Bt, CRW, GLY, LL	110	61.2	11.3	28.8	7.0	58.1	40.1	29.4	2,130	24,232
7	Dairyland	DS-9713RA	Bt, CRW, GLY, LL	110	59.9	10.1	25.2	6.5	51.0	40.1	35.9	2,389	24,097
8	Dairyland	HiDF-3211RA	Bt, CRW, GLY, LL	111	61.1	10.8	27.8	6.2	56.1	40.3	30.2	2,210	23,728
6	Dairyland	HiDF-3510SSX	Bt, CRW, GLY, LL	110	59.6	10.3	25.5	6.3	54.8	41.2	31.7	2,287	23,500
15	Latham	6477 VT2Pro	Bt, GLY	114	60.2	11.4	28.6	6.9	59.8	39.4	27.5	2,055	23,292
12	Latham	6045 VT2Pro	Bt, GLY	110	50.9	11.1	22.7	6.5	63.3	39.4	26.6	1,983	22,071
24	Prairie Brand	HP109SX	Bt, CRW, GLY, LF, LL	109	59.6	12.1	29.8	4.8	68.2	34.1	19.8	1,654	19,823
<b>Mean</b>					<b>56.9</b>	<b>11.6</b>	<b>27.2</b>	<b>6.4</b>	<b>54.6</b>	<b>40.0</b>	<b>32.6</b>	<b>2,272</b>	<b>26,431</b>
<b>LSD 5%</b>					<b>3.4</b>	<b>1.7</b>	<b>4.0</b>	<b>1.0</b>	<b>9.3</b>	<b>3.2</b>	<b>9.7</b>	<b>336</b>	<b>6,282</b>

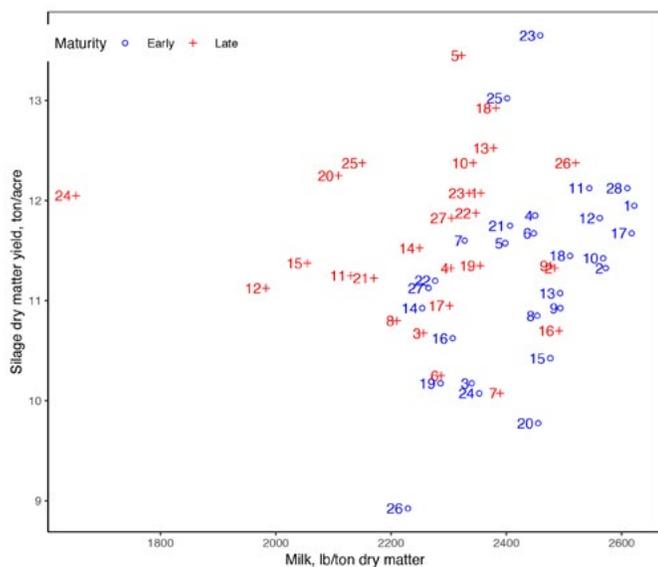
<sup>1</sup>Bt, CRW, GLY, LL and Lf traits contain genes for European corn borer tolerance, corn rootworm tolerance, glyphosate herbicide tolerance, Liberty (glufosinate-ammonium) herbicide tolerance and leafy trait, respectively.

<sup>2</sup>DM yield is whole-plant corn yield at 100% dry matter; Silage yield is whole-plant corn yield at harvest moisture.

<sup>3</sup>Quality concentration expressed as a % of DM, except NDFD which is expressed as a % of NDF. Refer to Results Provided text for additional information.

<sup>4</sup>Milk production was estimated using spreadsheet MILK2006 developed at the University of Wisconsin. Refer to Results Provided text for additional information.

**Figure 1. Relationship between silage dry matter yield and milk per ton for SE early and late corn hybrids planted at Rochester, MN (Olmsted County) in 2018.**



**Table 3. Relative maturity (RM), whole-plant moisture (Moist), dry matter and silage yield and quality traits for SE early corn hybrids planted at Waseca, MN (Waseca County) in 2018.**

No.	Company	Entry	Traits <sup>1</sup>	RM	Moist, %	Yield, Tons/Acre <sup>2</sup>		Quality (concentration), % <sup>3</sup>				Milk Yield <sup>4</sup>	
						DM	Silage	CP	NDF	NDFD	Starch	lb/Ton	lb/Acre
28	Viking Seed	51-04GS	—	104	47.9	12.6	24.4	6.6	42.2	41.4	44.2	2,690	33,981
27	Prairie Brand	HP107SXRA	Bt, CRW, GLY, LL	107	58.2	12.7	30.3	6.2	42.6	38.6	44.0	2,592	32,781
11	DEKALB	DKC55-53RIB	Bt, CRW, GLY, LL	105	55.9	11.7	26.5	7.7	41.0	42.8	45.1	2,755	32,144
23	Dairyland	EXP-10617	Bt, GLY, LL	106	59.5	12.0	29.7	6.8	42.1	40.9	42.9	2,651	31,782
25	Prairie Brand	HP102SX	Bt, CRW, GLY, LL	102	53.3	13.0	28.0	6.3	48.2	39.9	38.0	2,441	31,636
21	Dairyland	EXP-10307	Bt, CRW, GLY, LL	103	56.5	12.7	29.3	6.9	46.0	39.6	40.1	2,475	31,450
5	Dairyland	HiDF-3202PE	Bt, GLY, LL	102	51.4	11.7	24.1	6.8	42.3	40.4	44.4	2,639	30,740
24	Dairyland	RPM-562XRR	Bt, GLY, LL	106	56.9	11.8	27.4	6.9	42.9	39.3	44.1	2,594	30,556
14	LG Seeds	LGS5525VT2RIB	Bt, CRW, GLY, LL	105	50.4	11.4	22.9	6.2	40.7	39.3	45.5	2,686	30,475
12	DEKALB	DKC56-45RIB	Bt, CRW, GLY, LL	106	53.5	11.4	24.6	6.9	41.5	39.6	44.1	2,647	30,137
13	Latham	5742 RR	GLY	107	58.3	11.2	26.9	6.8	40.0	39.4	46.0	2,669	29,915
8	Dairyland	HiDF-3407RA	Bt, CRW, GLY, LL	107	57.9	11.9	28.3	6.4	44.8	38.9	41.7	2,503	29,881
10	DEKALB	DKC54-38RIB	Bt, CRW, GLY, LL	104	55.0	10.8	24.0	6.8	38.2	39.8	47.4	2,755	29,734
7	Dairyland	HiDF-3605RA	Bt, CRW, GLY, LL	105	57.6	11.2	26.5	6.4	43.6	38.8	40.9	2,582	28,979
22	Dairyland	RPM-4318AM	Bt, GLY, LL	104	52.8	11.1	23.6	6.9	40.8	37.0	45.6	2,615	28,908
3	AgriGold	A637-55VT2PRO	Bt, GLY	107	57.1	11.0	25.6	6.9	42.8	39.9	44.4	2,609	28,711
1	AgriGold	A633-94STX	Bt, CRW, GLY, LL	103	55.8	10.5	23.6	7.2	38.8	38.2	47.3	2,727	28,526
17	Masters Choice	MC5790	—	107	58.0	10.7	25.7	7.4	42.1	40.3	44.1	2,617	28,060
18	NK	0440-3010 Brand	Bt, GLY, LL	104	52.7	11.5	24.4	6.3	47.9	41.0	36.7	2,430	27,795
2	AgriGold	A635-54VT2RIB	Bt, GLY	105	51.4	10.2	20.7	5.9	43.2	40.2	42.2	2,648	27,089
6	Dairyland	HiDF-3103RA	Bt, CRW, GLY, LL	103	54.1	10.7	23.4	7.0	47.4	40.2	38.1	2,432	25,970
19	NK	0624-3220 EZ1 Brand	Bt, GLY, LL	106	48.8	10.2	19.9	6.6	44.8	41.6	41.3	2,525	25,784
4	Dairyland	HiDF-3702-9	Bt, CRW, GLY, LL	102	60.6	10.0	25.3	6.1	44.0	39.7	41.5	2,552	25,700
9	DEKALB	DKC51-38RIB	Bt, CRW, GLY, LL	101	58.5	10.1	24.1	6.6	42.5	39.1	43.4	2,562	25,698
20	Dairyland	RPM-4319AM	Bt, GLY, LL	103	57.0	10.3	24.0	7.3	47.0	39.6	38.6	2,418	24,854
15	Masters Choice	MCT4934	Bt, CRW, GLY, LL	99	48.2	9.0	17.4	6.6	41.6	39.2	45.4	2,649	23,775
26	Prairie Brand	HP104PWE	Bt, Enlist, GLY, LL	104	51.5	9.4	19.3	6.6	45.7	41.5	40.7	2,501	23,420
16	Masters Choice	MC5454	Bt, CRW, GLY, LL	104	51.1	9.3	19.0	6.8	47.1	40.1	37.8	2,403	22,287
<b>Mean</b>					<b>54.6</b>	<b>11.1</b>	<b>24.6</b>	<b>6.7</b>	<b>43.3</b>	<b>39.8</b>	<b>42.7</b>	<b>2,584</b>	<b>28,599</b>
<b>LSD 5%</b>					<b>5.2</b>	<b>1.6</b>	<b>3.2</b>	<b>1.0</b>	<b>6.2</b>	<b>3.0</b>	<b>7.3</b>	<b>223</b>	<b>4,679</b>

<sup>1</sup>Bt, CRW, GLY, LL and Lf traits contain genes for European corn borer tolerance, corn rootworm tolerance, glyphosate herbicide tolerance, Liberty (glufosinate-ammonium) herbicide tolerance and leafy trait, respectively.

<sup>2</sup>DM yield is whole-plant corn yield at 100% dry matter; Silage yield is whole-plant corn yield at harvest moisture.

<sup>3</sup>Quality concentration expressed as a % of DM, except NDFD which is expressed as a % of NDF. Refer to Results Provided text for additional information.

<sup>4</sup>Milk production was estimated using spreadsheet MILK2006 developed at the University of Wisconsin. Refer to Results Provided text for additional information.

**Table 4. Relative maturity (RM), whole-plant moisture (Moist), dry matter and silage yield and quality traits for SE late corn hybrids planted at Waseca, MN (Waseca County) in 2018.**

No.	Company	Entry	Traits <sup>1</sup>	RM	Moist, %	Yield, Tons/Acre <sup>2</sup>		Quality (concentration), % <sup>3</sup>				Milk Yield <sup>4</sup>	
						DM	Silage	CP	NDF	NDFD	Starch	lb/Ton	lb/Acre
18	Legacy Seeds	L-7236	Bt, CRW, GLY, LL	112	57.8	14.3	34.0	6.5	47.5	39.6	37.8	2,467	35,452
23	Dairyland	EXP-11016	Bt, GLY, LL	110	57.0	12.9	29.9	7.3	40.7	37.4	46.4	2,679	34,404
27	Viking Seed	O.74-10GS	—	110	53.7	13.4	28.9	6.9	43.1	38.2	43.2	2,585	34,390
5	Dairyland	DS-7909PE	Bt, GLY, LL	109	55.5	13.2	29.7	6.9	46.7	39.7	39.1	2,494	33,013
26	Viking Seed	48-08GS	—	108	51.0	11.9	24.4	6.5	40.1	36.4	47.4	2,681	32,119
3	AgriGold	A641-78STXRIB	Bt, CRW, GLY, LL	111	58.6	12.3	30.0	6.9	42.1	37.8	44.3	2,619	32,060
13	Latham	6285 VT2Pro	Bt, GLY	112	53.6	13.1	28.1	6.8	48.2	38.8	37.7	2,447	31,957
12	Latham	6045 VT2Pro	Bt, GLY	110	51.6	12.4	25.5	6.7	44.3	39.6	42.6	2,593	31,944
14	Latham	6224 3120 EZR	Bt, GLY, LL	112	55.6	12.6	28.4	7.0	44.4	38.0	41.9	2,533	31,840
20	Masters Choice	MCT6153	Bt, CRW, GLY, LL	111	48.6	13.4	26.4	6.3	48.4	37.5	38.3	2,376	31,763
2	AgriGold	A641-06STX	Bt, CRW, GLY, LL	111	60.7	12.4	31.3	7.6	47.5	40.6	38.2	2,507	31,023
21	Dairyland	EXP-11217	Bt, CRW, GLY, LL	112	57.9	11.8	27.9	6.8	42.7	39.1	43.4	2,632	30,871
22	Dairyland	RPM-4816AM	Bt, GLY, LL	108	56.3	12.0	27.4	7.1	43.6	38.0	43.2	2,550	30,561
11	Golden Harvest	G10S30-5222	Bt, CRW, GLY, LL	110	58.8	12.6	30.6	6.6	49.3	39.3	36.9	2,417	30,536
8	Dairyland	HiDF-3211RA	Bt, CRW, GLY, LL	111	57.8	11.9	28.4	7.3	45.2	39.2	40.7	2,540	30,452
25	Prairie Brand	HP114SX	Bt, CRW, GLY, LL	114	61.9	12.4	32.4	7.2	49.6	40.3	36.4	2,376	29,523
10	Golden Harvest	G10T63-3122	Bt, CRW, GLY, LL	109	59.2	12.4	30.5	7.2	48.9	39.9	36.3	2,380	29,483
24	Prairie Brand	HP109SX	Bt, CRW, GLY, LF, LL	109	55.4	12.8	28.6	5.8	54.3	40.1	31.6	2,248	28,840
1	AgriGold	A638-94STX	Bt, CRW, GLY, LL	108	53.9	11.0	24.2	7.3	44.0	40.5	42.1	2,636	28,831
17	Legacy Seeds	L-6937	Bt, CRW, GLY, LL	109	49.1	11.7	23.1	6.9	46.6	37.4	39.9	2,450	28,762
19	LG Seeds	LG5565STXRIB	Bt, CRW, GLY, LL	109	57.5	11.8	27.8	6.3	48.7	39.7	36.8	2,436	28,731
7	Dairyland	DS-9713RA	Bt, CRW, GLY, LL	110	57.9	11.5	27.3	7.1	47.7	39.7	38.2	2,457	28,585
16	Legacy Seeds	L-6838	Bt, GLY, LL	108	45.4	11.2	20.8	6.9	43.3	37.7	43.9	2,542	28,447
6	Dairyland	HiDF-3510SSX	Bt, CRW, GLY, LL	110	57.1	12.1	28.1	6.3	51.0	38.9	35.0	2,331	28,145
4	Dairyland	HiDF-3808RA	Bt, CRW, GLY, LL	108	57.1	11.7	27.3	6.8	48.8	38.3	37.6	2,374	28,023
15	Latham	6477 VT2Pro	Bt, GLY	114	60.0	11.7	28.9	7.5	49.3	39.2	35.1	2,357	27,801
9	DEKALB	DKC58-34RIB	Bt, CRW, GLY, LL	108	54.0	10.9	23.5	6.8	45.3	38.6	41.1	2,514	27,309
<b>Mean</b>					<b>55.6</b>	<b>12.3</b>	<b>27.9</b>	<b>6.8</b>	<b>46.3</b>	<b>38.9</b>	<b>39.8</b>	<b>2,490</b>	<b>30,550</b>
<b>LSD 5%</b>					<b>5.2</b>	<b>2.2</b>	<b>4.8</b>	<b>0.8</b>	<b>6.7</b>	<b>2.5</b>	<b>7.6</b>	<b>252</b>	<b>6,849</b>

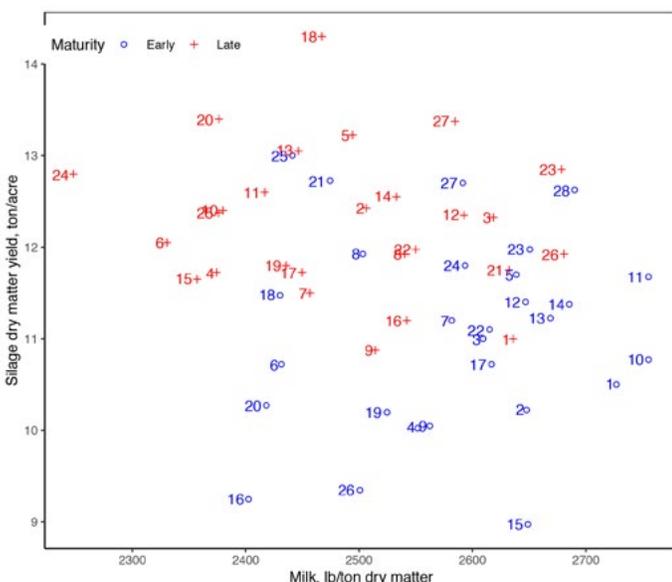
<sup>1</sup>Bt, CRW, GLY, LL and Lf traits contain genes for European corn borer tolerance, corn rootworm tolerance, glyphosate herbicide tolerance, Liberty (glufosinate-ammonium) herbicide tolerance and leafy trait, respectively.

<sup>2</sup>DM yield is whole-plant corn yield at 100% dry matter; Silage yield is whole-plant corn yield at harvest moisture.

<sup>3</sup>Quality concentration expressed as a % of DM, except NDFD which is expressed as a % of NDF. Refer to Results Provided text for additional information.

<sup>4</sup>Milk production was estimated using spreadsheet MILK2006 developed at the University of Wisconsin. Refer to Results Provided text for additional information.

**Figure 2. Relationship between silage dry matter yield and milk per ton for SE early and late corn hybrids planted at Waseca, MN (Waseca County) in 2018.**



**Table 5. Relative maturity (RM), whole-plant moisture (Moist), dry matter and silage yield and quality traits for Central early corn hybrids planted at Hutchinson, MN (McLeod County) in 2018.**

No.	Company	Entry	Traits <sup>1</sup>	RM	Moist, %	Yield, Tons/Acre <sup>2</sup>		Quality (concentration), % <sup>3</sup>				Milk Yield <sup>4</sup>	
						DM	Silage	CP	NDF	NDFD	Starch	lb/Ton	lb/Acre
13	Latham	4937 VT2Pro	Bt, GLY	99	61.8	11.8	30.9	7.0	43.7	42.7	41.3	2,630	30,969
23	Prairie Brand	HP102SX	Bt, CRW, GLY, LL	102	63.8	11.5	31.7	6.5	44.7	43.0	38.6	2,626	30,153
8	Dairyland	HiDF-3202PE	Bt, GLY, LL	102	59.9	11.0	27.4	6.6	42.4	43.0	42.1	2,682	29,548
7	Dairyland	HiDF-3702-9	Bt, CRW, GLY, LL	102	63.7	11.0	30.1	7.1	41.9	42.0	42.6	2,664	29,117
10	DEKALB	DKC50-08RIB	Bt, CRW, GLY, LL	100	61.5	11.0	28.7	7.1	42.5	41.1	42.0	2,632	29,080
14	Latham	5137 VT2 Pro	Bt, GLY	101	61.9	11.0	28.7	6.5	43.3	41.5	41.2	2,628	28,792
25	Thunder Seed	6999 VT2P	Bt, GLY	99	62.2	11.0	29.2	6.6	43.9	42.7	41.1	2,608	28,718
11	DEKALB	DKC51-38RIB	Bt, CRW, GLY, LL	101	63.8	11.1	30.5	6.9	45.2	42.2	38.8	2,562	28,537
6	Dairyland	HiDF-3099RA	Bt, CRW, GLY, LL	99	60.8	10.7	27.3	6.8	44.4	42.8	40.0	2,627	28,121
15	Legacy Seeds	L-5217	Bt, CRW, GLY, LL	102	64.4	10.4	29.1	6.7	41.8	40.1	42.0	2,653	27,874
19	Masters Choice	MCT4572	Bt, GLY, LL	95	55.4	10.1	22.7	7.0	38.0	39.3	48.4	2,744	27,684
16	LG Seeds	LG5505STXRIB	Bt, CRW, GLY, LL	100	64.0	10.4	28.9	7.4	43.9	42.3	39.4	2,632	27,498
17	LG Seeds	LG52C18STXRIB	Bt, CRW, GLY, LL	102	61.5	10.4	27.1	6.5	43.1	41.2	42.1	2,634	27,403
20	Masters Choice	MCT4632	Bt, GLY, LL	96	56.7	10.1	23.2	7.2	40.8	40.3	45.2	2,670	27,013
2	AgriGold	A629-22STXRIB	Bt, CRW, GLY, LL	99	64.1	10.8	30.1	6.5	45.7	40.2	38.5	2,478	26,776
22	Prairie Brand	HP986SXRA	Bt, CRW, GLY, LF, LL	98	61.3	10.2	26.2	6.4	45.6	43.8	37.9	2,606	26,479
18	Masters Choice	MCT3891	GLY	88	51.0	9.7	19.7	7.4	41.3	41.9	44.0	2,730	26,344
1	AgriGold	A628-20VT2RIB	Bt, GLY	98	57.1	10.6	24.7	5.9	46.8	41.5	37.7	2,489	26,337
12	Latham	4795 VT2Pro	Bt, GLY	97	57.7	10.2	24.2	6.7	43.5	40.0	42.3	2,554	26,089
3	AgriGold	A631-38VT2PRO	Bt, GLY	101	60.8	10.6	27.2	6.4	46.8	41.2	37.6	2,454	26,080
5	Dairyland	HiDF-3197RA	Bt, CRW, GLY, LL	97	60.1	10.5	26.3	6.7	47.3	42.0	36.9	2,489	25,970
9	DEKALB	DKC47-54RIB	—	97	58.3	9.9	23.6	6.2	43.5	40.9	42.0	2,599	25,663
27	Thunder Seed	8902 VT2P	Bt, CRW, GLY, LL	102	64.3	9.6	26.8	6.7	42.4	42.0	41.7	2,655	25,557
4	Blue River	33ND10	—	92	56.6	9.6	22.1	7.1	43.8	40.5	42.2	2,579	24,626
24	Thunder Seed	EXHD18-99	Bt, CRW, GLY, LL	99	66.3	9.9	29.5	6.4	47.0	42.1	36.5	2,471	24,492
21	Masters Choice	MCT4934	Bt, CRW, GLY, LL	99	57.4	9.8	22.9	7.0	46.2	40.7	38.5	2,469	24,038
26	Thunder Seed	4900 HDRR	GLY	100	63.0	9.0	24.3	6.2	52.8	41.4	30.4	2,278	20,318
<b>Mean</b>				<b>100</b>	<b>60.7</b>	<b>10.4</b>	<b>26.8</b>	<b>6.7</b>	<b>44.2</b>	<b>41.5</b>	<b>40.4</b>	<b>2,587</b>	<b>27,010</b>
<b>LSD 5%</b>				<b>99</b>	<b>3.0</b>	<b>1.4</b>	<b>3.2</b>	<b>1.0</b>	<b>5.8</b>	<b>2.5</b>	<b>7.0</b>	<b>217</b>	<b>4,662</b>

<sup>1</sup>Bt, CRW, GLY, LL and Lf traits contain genes for European corn borer tolerance, corn rootworm tolerance, glyphosate herbicide tolerance, Liberty (glufosinate-ammonium) herbicide tolerance and leafy trait, respectively.

<sup>2</sup>DM yield is whole-plant corn yield at 100% dry matter; Silage yield is whole-plant corn yield at harvest moisture.

<sup>3</sup>Quality concentration expressed as a % of DM, except NDFD which is expressed as a % of NDF. Refer to Results Provided text for additional information.

<sup>4</sup>Milk production was estimated using spreadsheet MILK2006 developed at the University of Wisconsin. Refer to Results Provided text for additional information.

**Table 6. Relative maturity (RM), whole-plant moisture (Moist), dry matter and silage yield and quality traits for Central late corn hybrids planted at Hutchinson, MN (McLeod County) in 2018.**

No.	Company	Entry	Traits <sup>1</sup>	RM	Moist, %	Yield, Tons/Acre <sup>2</sup>		Quality (concentration), % <sup>3</sup>				Milk Yield <sup>4</sup>	
						DM	Silage	CP	NDF	NDFD	Starch	lb/Ton	lb/Acre
7	Dairyland	DS-7909PE	Bt, GLY, LL	109	63.4	11.8	32.3	6.3	43.6	42.9	40.3	2,633	31,286
19	Dairyland	EXP-11217	Bt, CRW, GLY, LL	112	66.2	11.7	34.6	6.7	44.6	42.0	38.2	2,578	30,296
9	DEKALB	DKC55-53RIB	Bt, CRW, GLY, LL	105	63.7	11.0	30.1	7.2	42.0	44.5	41.7	2,738	30,021
11	Golden Harvest	G04S19-3010	Bt, GLY, LL	104	60.2	11.2	28.0	7.1	42.3	41.1	41.0	2,615	29,315
5	Dairyland	HIDF-3407RA	Bt, CRW, GLY, LL	107	66.5	11.6	34.5	6.3	47.3	40.3	35.7	2,427	28,091
25	Prairie Brand	HP107SXRA	Bt, CRW, GLY, LL	107	66.7	11.1	33.2	6.2	47.5	41.3	35.6	2,467	27,393
1	AgriGold	A633-94STX	Bt, CRW, GLY, LL	103	63.9	10.0	27.7	7.0	40.2	40.6	44.1	2,698	27,255
2	Blue River	51T59	—	103	64.7	11.1	31.6	6.8	47.0	41.4	36.0	2,427	27,093
14	Latham	5495 3122 EZR	Bt, CRW, GLY, LL	104	62.8	10.4	28.0	6.6	44.0	40.7	39.6	2,570	26,756
22	Dairyland	RPM-4318AM	Bt, GLY, LL	104	62.7	11.4	30.6	6.5	47.5	37.7	37.7	2,350	26,668
8	DEKALB	DKC54-38RIB	Bt, CRW, GLY, LL	104	62.0	10.2	27.1	7.3	42.3	40.9	41.8	2,616	26,559
10	DEKALB	DKC56-45RIB	Bt, CRW, GLY, LL	106	64.2	10.3	29.0	6.6	45.9	42.3	38.1	2,547	26,539
6	Dairyland	HIDF-3808RA	Bt, CRW, GLY, LL	108	67.2	10.9	32.9	6.5	49.7	42.9	32.9	2,413	26,414
4	Dairyland	HIDF-3605RA	Bt, CRW, GLY, LL	105	65.2	10.6	30.5	6.4	48.1	41.1	34.9	2,450	26,085
13	Latham	EX 103 VT2Pro	Bt, GLY	103	61.6	11.0	28.6	6.3	49.8	41.0	33.4	2,366	26,047
17	NK	0440-3010 Brand	Bt, GLY, LL	104	60.0	10.4	26.0	5.8	46.7	40.5	37.8	2,481	25,962
27	Viking Seed	51-04GS	—	104	59.8	10.4	25.9	5.2	48.4	42.6	36.1	2,488	25,762
23	Dairyland	RPM-562XRR	Bt, GLY, LL	106	67.0	10.5	31.9	7.6	48.2	43.0	33.9	2,441	25,504
26	Prairie Brand	HP109SX	Bt, CRW, GLY, LF, LL	109	66.3	10.8	32.1	5.9	51.6	44.1	29.9	2,373	25,484
12	Golden Harvest	G06Z97-5122	Bt, CRW, GLY, LL	106	62.4	9.7	25.9	7.8	43.5	41.4	40.0	2,610	25,386
3	Dairyland	HIDF-3103RA	Bt, CRW, GLY, LL	103	64.4	9.8	27.6	6.6	45.5	42.5	38.1	2,535	24,745
18	NK	0624-3220 EZ1 Brand	Bt, GLY, LL	106	61.0	10.0	25.5	6.3	46.2	40.9	38.6	2,469	24,669
21	Dairyland	EXP-10307	Bt, CRW, GLY, LL	103	67.2	10.1	31.0	7.0	51.8	43.8	30.1	2,364	23,968
20	Dairyland	RPM-4319AM	Bt, GLY, LL	103	61.5	9.6	24.8	7.3	45.7	39.9	39.0	2,478	23,711
15	Legacy Seeds	L-5350	Bt, CRW, GLY, LL	104	61.3	9.9	25.7	6.3	48.4	40.3	35.5	2,374	23,574
24	Prairie Brand	HP104PWE	Bt, Enlist, GLY, LL	104	56.8	8.8	20.4	6.6	43.6	40.4	41.1	2,569	22,788
16	Masters Choice	MC5454	Bt, CRW, GLY, LL	104	58.1	9.0	21.3	6.1	50.3	41.2	33.2	2,348	21,253
<b>Mean</b>					<b>63.2</b>	<b>10.5</b>	<b>28.8</b>	<b>6.6</b>	<b>46.3</b>	<b>41.5</b>	<b>37.2</b>	<b>2,497</b>	<b>26,245</b>
<b>LSD 5%</b>					<b>3.6</b>	<b>2.1</b>	<b>6.2</b>	<b>1.8</b>	<b>7.0</b>	<b>3.4</b>	<b>8.0</b>	<b>246</b>	<b>6,902</b>

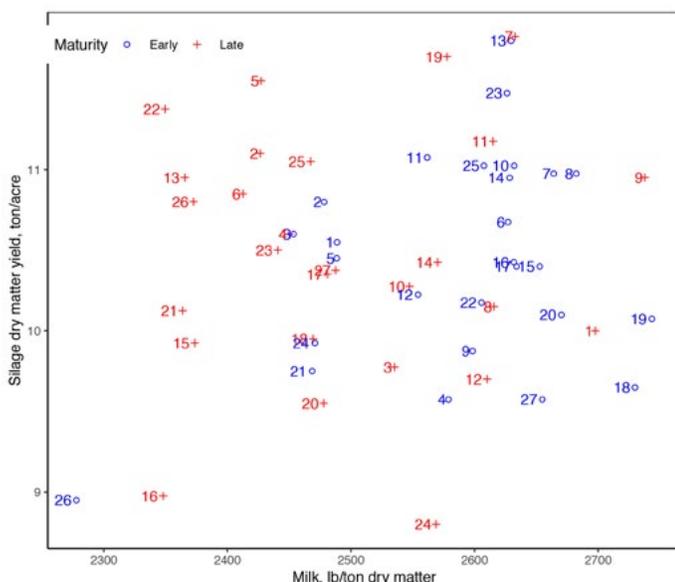
<sup>1</sup>Bt, CRW, GLY, LL and Lf traits contain genes for European corn borer tolerance, corn rootworm tolerance, glyphosate herbicide tolerance, Liberty (glufosinate-ammonium) herbicide tolerance and leafy trait, respectively.

<sup>2</sup>DM yield is whole-plant corn yield at 100% dry matter; Silage yield is whole-plant corn yield at harvest moisture.

<sup>3</sup>Quality concentration expressed as a % of DM, except NDFD which is expressed as a % of NDF. Refer to Results Provided text for additional information.

<sup>4</sup>Milk production was estimated using spreadsheet MILK2006 developed at the University of Wisconsin. Refer to Results Provided text for additional information.

**Figure 3. Relationship between silage dry matter yield and milk per ton for Central early and late corn hybrids planted at Hutchinson, MN (McLeod County) in 2018.**



**Table 7. Relative maturity (RM), whole-plant moisture (Moist), dry matter and silage yield and quality traits for Central early corn hybrids planted at Waseca, MN (Waseca County) in 2018.**

No.	Company	Entry	Traits <sup>1</sup>	RM	Moist, %	Yield, Tons/Acre <sup>2</sup>		Quality (concentration), % <sup>3</sup>				Milk Yield <sup>4</sup>	
						DM	Silage	CP	NDF	NDFD	Starch	lb/Ton	lb/Acre
8	Dairyland	HiDF-3202PE	Bt, GLY, LL	102	49.7	12.9	25.8	7.1	41.5	38.4	45.7	2,649	34,323
31	Viking Seed	O.79-00	—	100	45.0	12.3	22.5	6.3	41.8	37.9	44.7	2,559	31,513
23	Prairie Brand	HP102SX	Bt, CRW, GLY, LL	102	57.1	12.4	28.9	6.9	44.2	40.1	41.1	2,524	31,325
19	Masters Choice	MCT4572	Bt, GLY, LL	95	48.2	12.0	23.2	7.4	40.1	36.8	47.6	2,612	31,297
10	DEKALB	DKC50-08RIB	Bt, CRW, GLY, LL	100	52.1	11.9	24.9	6.6	43.3	39.9	42.5	2,600	31,044
13	Latham	4937 VT2Pro	Bt, GLY	99	54.6	11.6	25.5	6.3	42.7	37.0	44.4	2,535	29,327
11	DEKALB	DKC51-38RIB	Bt, CRW, GLY, LL	101	56.5	11.3	26.0	6.7	40.0	37.2	46.7	2,584	29,125
26	Thunder Seed	4900 HDRR	GLY	100	56.1	12.2	27.8	8.5	49.6	40.7	34.4	2,390	29,098
16	LG Seeds	LG5505STXRIB	Bt, CRW, GLY, LL	100	58.0	11.1	26.4	7.7	43.0	39.7	43.3	2,620	29,068
17	LG Seeds	LG52C18STXRIB	Bt, CRW, GLY, LL	102	53.1	10.8	23.0	6.2	40.9	37.9	46.2	2,636	28,397
22	Prairie Brand	HP986SXRA	Bt, CRW, GLY, LF, LL	98	50.0	11.0	22.0	6.9	44.7	39.2	43.4	2,569	28,247
24	Thunder Seed	EXHD18-99	Bt, CRW, GLY, LL	99	56.3	11.6	26.6	7.2	46.4	38.1	40.8	2,421	28,140
1	AgriGold	A628-20VT2RIB	Bt, GLY	98	47.7	11.4	22.0	6.1	44.9	38.6	41.3	2,465	28,131
20	Masters Choice	MCT4632	Bt, GLY, LL	96	49.0	10.6	20.9	7.6	39.6	38.2	48.4	2,642	28,063
4	Blue River	33ND10	—	92	51.7	11.0	22.7	7.9	45.0	39.3	42.8	2,553	28,061
25	Thunder Seed	6999 VT2P	Bt, GLY	99	54.3	11.1	24.2	6.9	46.6	39.9	41.3	2,490	27,718
14	Latham	5137 VT2 Pro	Bt, GLY	101	55.5	11.1	25.0	6.4	45.2	39.2	40.1	2,458	27,284
15	Legacy Seeds	L-5217	Bt, CRW, GLY, LL	102	57.9	10.7	25.6	6.5	42.7	39.0	42.8	2,543	27,247
2	AgriGold	A629-22STXRIB	Bt, CRW, GLY, LL	99	57.9	10.6	25.4	7.1	43.8	39.9	41.9	2,546	27,144
29	Viking Seed	42-92	—	92	44.1	10.7	19.1	6.8	43.0	37.5	45.2	2,552	27,104
7	Dairyland	HiDF-3702-9	Bt, CRW, GLY, LL	102	56.8	11.6	27.0	6.0	49.6	38.8	37.8	2,306	26,978
3	AgriGold	A631-38VT2PRO	Bt, GLY	101	55.0	10.7	23.6	6.7	43.2	38.5	42.9	2,520	26,819
5	Dairyland	HiDF-3197RA	Bt, CRW, GLY, LL	97	46.7	11.1	20.7	6.6	46.0	38.3	41.3	2,425	26,793
12	Latham	4795 VT2Pro	Bt, GLY	97	52.2	10.2	21.2	6.2	41.4	37.7	46.2	2,544	25,789
6	Dairyland	HiDF-3099RA	Bt, CRW, GLY, LL	99	54.4	10.8	23.5	6.0	46.1	38.2	39.8	2,384	25,604
27	Thunder Seed	8902 VT2P	Bt, CRW, GLY, LL	102	58.7	9.8	23.8	6.6	42.9	38.8	42.5	2,550	25,032
21	Masters Choice	MCT4934	Bt, CRW, GLY, LL	99	49.5	9.6	19.0	7.7	43.5	36.9	45.6	2,536	24,486
18	Masters Choice	MCT3891	GLY	88	42.2	9.3	16.1	7.2	43.9	39.2	43.7	2,596	24,083
<b>Mean</b>					<b>52.5</b>	<b>11.1</b>	<b>23.6</b>	<b>6.8</b>	<b>43.8</b>	<b>38.6</b>	<b>43.0</b>	<b>2,529</b>	<b>28,116</b>
<b>LSD 5%</b>					<b>3.9</b>	<b>1.4</b>	<b>2.9</b>	<b>0.9</b>	<b>5.4</b>	<b>2.6</b>	<b>6.2</b>	<b>187.8</b>	<b>4,668</b>

<sup>1</sup>Bt, CRW, GLY LL, and Lf traits contain genes for European corn borer tolerance, corn rootworm tolerance, glyphosate herbicide tolerance, Liberty (glufosinate-ammonium) herbicide tolerance and leafy trait, respectively.

<sup>2</sup>DM yield is whole-plant corn yield at 100% dry matter; Silage yield is whole-plant corn yield at harvest moisture.

<sup>3</sup>Quality concentration expressed as a % of DM, except NDFD which is expressed as a % of NDF. Refer to Results Provided text for additional information.

<sup>4</sup>Milk production was estimated using spreadsheet MILK2006 developed at the University of Wisconsin. Refer to Results Provided text for additional information.

**Table 8. Relative maturity (RM), whole-plant moisture (Moist), dry matter and silage yield and quality traits for Central late corn hybrids planted at Waseca, MN (Waseca County) in 2018.**

No.	Company	Entry	Traits <sup>1</sup>	RM	Moist, %	Yield, Tons/Acre <sup>2</sup>		Quality (concentration), % <sup>3</sup>				Milk Yield <sup>4</sup>	
						DM	Silage	CP	NDF	NDFD	Starch	lb/Ton	lb/Acre
6	Dairyland	HiDF-3808RA	Bt, CRW, GLY, LL	108	57.5	13.3	31.3	6.9	45.2	40.6	39.8	2,508	33,421
10	DEKALB	DKC56-45RIB	Bt, CRW, GLY, LL	106	54.9	13.2	29.2	7.4	46.1	39.3	40.9	2,492	32,876
27	Viking Seed	51-04GS	—	104	46.6	13.0	24.3	7.4	46.4	38.5	41.8	2,512	32,535
23	Dairyland	RPM-562XRR	Bt, GLY, LL	106	57.0	13.1	30.3	7.2	45.9	37.8	41.7	2,459	32,252
26	Prairie Brand	HP109SX	Bt, CRW, GLY, LF, LL	109	55.7	13.6	30.7	6.1	49.1	36.9	38.1	2,336	31,826
11	Golden Harvest	G04S19-3010	Bt, GLY, LL	104	51.0	12.7	26.2	6.4	45.2	37.4	42.2	2,482	31,504
7	Dairyland	DS-7909PE	Bt, GLY, LL	109	55.1	13.4	29.7	7.1	49.0	36.7	37.6	2,350	31,350
1	AgriGold	A633-94STX	Bt, CRW, GLY, LL	103	54.7	12.2	26.7	7.7	45.3	41.9	41.9	2,579	31,259
17	NK	0440-3010 Brand	Bt, GLY, LL	104	52.5	12.8	27.1	7.0	46.3	37.7	39.9	2,434	31,013
13	Latham	EX 103 VT2Pro	Bt, GLY	103	50.1	12.3	24.7	7.5	46.1	40.0	39.4	2,496	30,680
19	Dairyland	EXP-11217	Bt, CRW, GLY, LL	112	58.5	12.7	30.6	6.8	46.3	37.7	40.2	2,428	30,596
21	Dairyland	EXP-10307	Bt, CRW, GLY, LL	103	58.8	11.9	28.9	6.7	42.1	36.6	44.9	2,538	30,236
4	Dairyland	HiDF-3605RA	Bt, CRW, GLY, LL	105	56.2	12.0	27.4	6.8	47.1	40.0	39.3	2,514	29,961
25	Prairie Brand	HP107SXRA	Bt, CRW, GLY, LL	107	57.3	12.1	28.4	7.2	46.8	38.4	40.6	2,437	29,662
9	DEKALB	DKC55-53RIB	Bt, CRW, GLY, LL	105	55.0	11.3	25.1	7.2	43.9	38.2	42.8	2,548	28,513
2	Blue River	51T59	—	103	52.5	11.8	24.9	7.1	47.6	39.4	37.9	2,401	28,386
18	NK	0624-3220 EZ1 Brand	Bt, GLY, LL	106	49.7	11.5	22.9	6.2	43.2	37.6	43.6	2,469	28,320
22	Dairyland	RPM-4318AM	Bt, GLY, LL	104	52.5	11.3	24.0	6.2	46.3	40.2	39.2	2,478	28,112
5	Dairyland	HiDF-3407RA	Bt, CRW, GLY, LL	107	58.5	12.3	29.6	7.5	50.3	34.7	38.6	2,252	27,727
12	Golden Harvest	G06Z97-5122	Bt, CRW, GLY, LL	106	52.2	11.1	23.2	6.5	46.6	36.7	41.0	2,438	27,093
8	DEKALB	DKC54-38RIB	Bt, CRW, GLY, LL	104	57.4	10.8	25.2	6.6	45.4	38.9	40.9	2,498	27,039
20	Dairyland	RPM-4319AM	Bt, GLY, LL	103	54.6	10.4	22.9	7.2	43.6	37.5	43.5	2,543	26,703
15	Legacy Seeds	L-5350	Bt, CRW, GLY, LL	104	55.0	11.0	24.5	7.0	50.3	41.0	33.4	2,327	25,572
3	Dairyland	HiDF-3103RA	Bt, CRW, GLY, LL	103	51.2	10.5	21.5	6.8	46.0	37.3	40.8	2,413	25,443
14	Latham	5495 3122 EZR	Bt, CRW, GLY, LL	104	58.2	10.2	24.3	6.5	46.3	38.0	40.2	2,446	24,884
24	Prairie Brand	HP104PWE	Bt, Enlist, GLY, LL	104	50.2	9.5	19.1	7.3	42.3	39.2	44.7	2,628	24,846
16	Masters Choice	MC5454	Bt, CRW, GLY, LL	104	53.5	9.2	19.7	7.0	47.4	38.0	38.3	2,390	22,167
<b>Mean</b>					<b>54.3</b>	<b>11.8</b>	<b>26.0</b>	<b>6.9</b>	<b>46.1</b>	<b>38.4</b>	<b>40.5</b>	<b>2,459</b>	<b>29,036</b>
<b>LSD 5%</b>					<b>3.9</b>	<b>1.7</b>	<b>3.9</b>	<b>1.0</b>	<b>7.3</b>	<b>3.4</b>	<b>7.9</b>	<b>280.2</b>	<b>5,799</b>

<sup>1</sup>Bt, CRW, GLY, LL and Lf traits contain genes for European corn borer tolerance, corn rootworm tolerance, glyphosate herbicide tolerance, Liberty (glufosinate-ammonium) herbicide tolerance and leafy trait, respectively.

<sup>2</sup>DM yield is whole-plant corn yield at 100% dry matter; Silage yield is whole-plant corn yield at harvest moisture.

<sup>3</sup>Quality concentration expressed as a % of DM, except NDFD which is expressed as a % of NDF. Refer to Results Provided text for additional information.

<sup>4</sup>Milk production was estimated using spreadsheet MILK2006 developed at the University of Wisconsin. Refer to Results Provided text for additional information.

**Figure 4. Relationship between silage dry matter yield and milk per ton for Central early and late corn hybrids planted at Waseca, MN (Waseca County) in 2018.**

