

The Minnesota Corn Evaluation Program was conducted by the University of Minnesota Agricultural Experiment Station to provide unbiased information for use by corn growers when they choose which brand of corn to buy and grow. The program was financed in part by entry fees from private seed companies that chose to place their entries for testing.

### **Test Locations**

Test zones, locations and maturities are as follows:

#### *Southern Zone:*

Lamberton, Rochester and Waseca  
*Early Maturity Trial* - 102 Relative Maturity (RM) and earlier entries.  
*Late Maturity Trial* - 103 RM and later entries.

#### *Central Zone:*

Hutchinson, Morris and Rosemount  
*Early Maturity Trial* - 96 RM and earlier entries.  
*Late Maturity Trial* - 97 RM and later entries.

#### *Northern Zone:*

Crookston, Rothsay and Staples

### **Testing Procedure**

**Entries:** Seed corn companies choose their entries for each zone. Entries in each trial were based on the relative maturity (RM) provided by the company. The University of Minnesota Corn Testing Committee could also choose

entries in each test. All locations tested three replications for each entry.

### **Presentation of Data**

Yields are given for individual locations along with yields and harvest moisture contents averaged across locations for 2019.

Reported yields are adjusted to 15.5% grain moisture. Entries are ranked within a maturity group by moisture content averaged across locations for 2019.

### **Identification of Traits**

Genetic modifications of entries will be identified using generic terms to describe the trait without identifying the specific event for genetic modification.

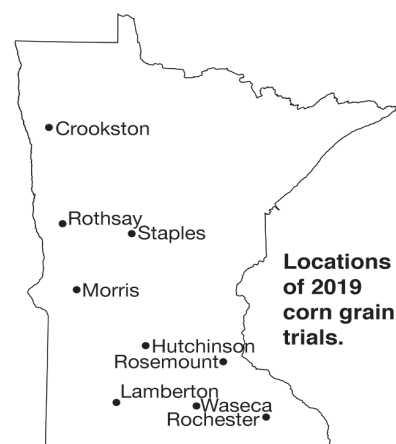
For example Bt will identify genetic modification for corn borer resistance but will not differentiate between the Bt 11 event, the YieldGuard corn borer event or the Herculex corn borer event.

Identifiers will be:

Bt = European corn borer resistance  
 CRW = Corn rootworm resistance  
 Gly = Glyphosate herbicide resistance  
 LL = Liberty herbicide resistance

### **Least Significant Difference**

The LSD (Least Significant Difference) figures at the bottom of the yield columns in the tables are statistical measures of variability in the trials. These values may be used to deter-



mine whether the difference between any two entries is likely to be a real difference or just natural variation.

If the yield difference between two entries is equal to or greater than the LSD, then one can be confident that the two entries probably differ in yield potential. We show LSD values with a 0.2 alpha level, which means that when two entries differ in yield by the LSD value or more one can be 80% confident that the two entries differ in yield potential. The higher-yielding one is the better entry from the yield standpoint. If the yield difference between two entries is less than the LSD, the two entries probably do not differ significantly in yield potential.

### **Authors and Researchers**

Tom Hoverstad, Wade Ihlenfeld, Jeff Coulter, Curt Reese, Steve Quiring and Mark Hanson.

**Table 1. Companies participating in the 2019 corn grain trials.**

AgriGold Hybrids	5381 Akin Rd, St. Francisville, IL 62460	<a href="http://www.agrigold.com">www.agrigold.com</a>
Albert Lea Seed House (Viking Hybrids)	Box 127, 1414 W. Main St., Albert Lea, MN 56007	<a href="http://www.alseed.com">www.alseed.com</a>
Anderson Seeds	37825 County Rd. 63, St. Peter, MN 56082	—
Blue River Hybrids	2326 230th St., Ames, IA 50014	—
Dairyland Seed Co., Inc.	Box 958, West Bend, WI 53095	<a href="http://www.dairylandseed.com">www.dairylandseed.com</a>
Dekalb (Bayer Co.)	505 150th Ave. SE, Kerkhoven, MN 56252	<a href="http://www.dekalb.com">www.dekalb.com</a>
Federal Hybrids	209 3rd St. NE, West Bend, IA 50597	<a href="http://www.federalhybrids.com">www.federalhybrids.com</a>
Legacy Seeds Inc.	PO Box 68, 290 Depot Street, Scandinavia, WI 54977	<a href="http://www.legacyseeds.com">www.legacyseeds.com</a>
Peterson Farms Seed	3104 164th Ave. S.E. , Harwood, ND 58092	<a href="http://www.petersonfarmsseed.com">www.petersonfarmsseed.com</a>
Proseed	705 E Brewster St., Harvey, ND 58341	<a href="http://www.proseed.net">www.proseed.net</a>
REA Hybrids	4745 6th Ave SE Aberdeen, SD 57401	<a href="http://www.rea-hybrids.com">www.rea-hybrids.com</a>
Titan Pro	1301 S. 24th St., Clear Lake, IA 50428	<a href="http://www.titanprosci.com">www.titanprosci.com</a>

**Table 2. Individual trial information, 2019.**

Location	Cooperators	Previous Crop	Planting Date	Harvest Date
Lamberton	Steve Quiring	Soybean	May 16	October 29
Rochester	Fritz Brietenbach	Soybean	May 14	October 31
Waseca	Tom Hoverstad	Soybean	May 7	November 1
Hutchinson	Paul Wright	Soybean	May 16	November 14
Morris	Curt Reese	Corn	May 15	October 30
Rosemount	Gerry Holz	Soybean	May 14	November 22
Crookston	Mark Hanson	Wheat	May 15	November 8
Rothsay	Troy Larson	Soybean	May 15	November 8
Staples	Ron Nelson	Soybean	May 10	November 19

**Corn Grain****Planting Rate and Date**

Bushel Weight, Pounds.....56

Planting Rate, Seeds/Acre....35,000

Planting Date.....May 7-16

Table 7. Northern locations, 2019.

Source	Entry	Traits	Relative Maturity	Yield, Bushels/Acre at:			Average Across Locations <sup>1</sup>	
				Crookston	Rothsay	Staples	Bu/Acre	% Moisture
<b>86 and Earlier RM Entries:</b>								
Rea Hybrids	1B780	Bt, GLY	78	143	217	173	178	21.6
LEGACY SEEDS	L-2347 VT2P	Bt, GLY	83	176	228	204	203	22.4
Peterson Farms Seed	73S84	Bt, GLY	84	168	223	214	202	22.5
Rea Hybrids	2B861	Bt, GLY	86	162	250	234	215	22.7
Dairyland	EXP- 08508	Gly	83	140	212	181	178	22.8
Viking	68-86	—	86	165	244	232	214	23.0
Rea Hybrids	2B862	Bt, GLY	86	138	216	191	182	23.1
Dairyland	DS-6686	Gly	86	173	244	235	217	23.2
Viking	O.58-85	—	85	135	206	210	184	23.2
Blue River Organic Seed	21B11	—	85	140	232	212	195	23.8
<b>86 and Earlier RM Entry Averages:</b>				<b>154</b>	<b>227</b>	<b>208</b>	<b>197</b>	<b>22.8</b>
<b>87 to 91 RM Entries:</b>								
Dairyland	DS-3030AM	Bt, GLY, LL	90	143	252	222	206	22.0
Proseed	1787	Bt, GLY	87	151	220	205	192	22.4
LEGACY SEEDS	L-2918 VT2P	Bt, GLY	89	150	241	245	212	23.4
Rea Hybrids	3B902	Bt, GLY	90	163	250	241	218	23.5
Rea Hybrids	3A891	Bt, CRW, GLY, LL	89	149	258	248	218	23.5
Dairyland	DS-2989Z	Bt, GLY, LL	89	149	239	201	196	23.5
Blue River Organic Seed	26B78	—	88	160	229	166	185	23.6
Viking	O.98-91	—	91	150	244	218	204	23.7
Rea Hybrids	3B912	Bt, GLY	91	182	263	234	226	23.7
LEGACY SEEDS	L-3048 VT2P	Bt, GLY	90	162	243	238	214	23.8
Titan Pro SCI	86-91	—	91	161	250	228	213	23.8
Proseed	1591	Bt, GLY	91	160	231	226	206	23.9
Viking	71-90	—	90	144	217	158	173	24.2
Proseed	1790	Bt, GLY	90	138	255	226	206	24.3
Rea Hybrids	2B872	Bt, GLY	87	139	230	212	194	24.5
<b>87 to 91 RM Entry Averages:</b>				<b>153</b>	<b>241</b>	<b>218</b>	<b>204</b>	<b>23.6</b>
<b>92 and Later RM Entries:</b>								
Dairyland	DS-3370AM	Bt, GLY, LL	93	168	256	241	222	23.3
Rea Hybrids	3B923	Bt, GLY	92	161	267	225	217	24.1
Viking	42-92	—	92	152	242	222	205	24.2
LEGACY SEEDS	L-3419 VT2P	Bt, GLY	94	135	252	211	199	24.2
DEKALB	DKC44-80RIB	Bt, GLY	94	148	281	208	212	24.5
DEKALB	DKC42-04RIB	Bt, CRW, GLY, LL	92	148	252	229	210	25.0
Dairyland	DS-3550AM	Bt, GLY, LL	95	150	244	195	196	25.1
Proseed	1794	Bt, GLY	94	146	251	234	210	25.2
Titan Pro SCI	90-94 2P	Bt, GLY	94	144	244	224	204	25.3
Titan Pro SCI	91-95	—	95	173	254	227	218	25.7
Titan Pro SCI	82-95 2P	Bt, GLY	95	160	245	234	213	27.2
<b>92 and Later RM Entry Averages:</b>				<b>153</b>	<b>253</b>	<b>223</b>	<b>210</b>	<b>24.9</b>
<b>Northern Locations Averages:</b>				<b>153</b>	<b>241</b>	<b>217</b>	<b>204</b>	<b>23.8</b>
<b>LSD (0.20)</b>				<b>15</b>	<b>14</b>	<b>22</b>	<b>10</b>	<b>0.9</b>