



2020 Corn Grain Field Crop Trials Results

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

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 - 97 RM and earlier entries.

Late Maturity Trial - 98 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 2020.

Reported yields are adjusted to 15.5% grain moisture. Entries are ranked within a maturity group by moisture content averaged across locations for 2020. The site at Rothsay suffered substantial wind damage near tasseling time and many plants did not produce an ear. Therefore yields from the Rothsay site are not reported this year.

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

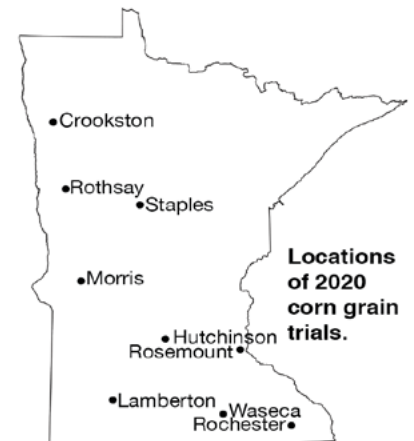
CRW = Corn rootworm resistance

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 determine 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

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Table 1. Companies participating in the 2020 corn grain trials.

Company	Website
AgriGold Hybrids	www.agrigold.com
Anderson Seeds	www.andersonseedsmn.com
Bayer Crop Science	www.dekalbagrowdeltapine.com
Blue River Organic Seed	www.blueriverorgseed.com
Dairyland Seed	www.dairylandseed.com
Enestvedt Seed Company	www.enestvedtseeds.com
Federal Hybrids	www.federalhybrids.com
Hi Fidelity Genetics:	hifidelitygenetics.com
Legacy Seeds	www.legacyseeds.com
Peterson Farms Seed	www.petersonfarmsseed.com
Proseed	www.proseed.net
REA Hybrids	www.rea-hybrids.com
Titan Pro SCI	www.titanprosci.com
Viking Seed	www.alseed.com

Table 2. Individual Trial Information, 2020.

Location	Cooperators	Previous Crop	Planting Date	Harvest Date
Lamberton	Steve Quiring	Soybeans	April 30	Oct 9
Rochester	Ryan Miller/ Lisa Behnken	Soybeans	May 1	Oct 30
Waseca	Tom Hoverstad	Soybeans	April 27	Oct 28
Hutchinson	School Dist # 423	Corn	May 4	Nov 6
Morris	Curt Reese	Soybeans	May 11	Oct 29
Rosemount	Gerry Holz	Soybeans	May 1	Nov 2
Crookston	Mark Hanson	Wheat	May 15	Oct 29
Rothsay	Troy Larson	Sugar beets	May 11	Abandoned
Staples	Ron Nelson	Soybeans	April 29	Nov 4

Corn Grain**Planting Rate and Date**

Bushel Weight, Pounds.....56

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

Planting Date.....April 27-May 15

Table 3. Early maturity entries, southern locations, 2020.

Source	Entry	Traits	Relative Maturity	Yield, Bushels/Acre at:			Average Across Locations	
				Lamberton	Rochester	Waseca	Bu/Acre	% Moisture
98 and earlier RM entries								
Dairyland Seed	DS-3366AM	Bt, GLY, LL	93	236	242	259	245	15.8
Anderson Seeds	7995	—	95	232	274	254	253	16.5
Viking	O.45-97	—	97	188	257	244	230	16.7
Anderson Seeds	795R	GLY	95	230	265	250	249	16.7
Viking	44-98	—	98	246	258	267	257	16.8
Anderson Seeds	786VT2P	Bt, GLY	95	238	259	253	250	16.9
Anderson Seeds	609VT2P	Bt, GLY	98	223	264	250	246	16.9
Dairyland Seed	DS-3550AM	Bt, GLY, LL	95	238	278	249	255	17.0
Anderson Seeds	6898	—	98	263	256	259	259	17.1
Titan Pro SCI	86-96 2P	Bt, GLY	96	245	274	261	260	17.1
Anderson Seeds	7865	—	95	244	252	239	245	17.2
Viking	52-96	—	96	236	268	278	260	17.3
Anderson Seeds	6909	—	98	240	255	254	250	17.3
Federal Hybrids	4800 CONV	—	98	245	261	250	252	17.3
Titan Pro SCI	82-95 2P	Bt, GLY	95	232	258	243	244	17.4
Anderson Seeds	609R	GLY	98	242	271	295	269	17.9
DEKALB	DKC47-54RIB	Bt, CRW, GLY, LL	97	240	244	229	238	18.2
Anderson Seeds	745SRC	Bt, CRW, GLY, LL	97	239	248	237	241	18.2
Dairyland Seed	DS-3810Q	Bt, CRW, GLY, LL	98	242	270	266	259	18.6
Blue River Organic Seed	42C87	—	98	227	283	257	256	19.3
98 and earlier RM Averages:				236	262	255	251	17.3
99 to 102 RM entries								
Titan Pro SCI	92-99 2P	Bt, GLY	99	238	251	235	241	16.7
Viking	52-00	—	100	256	269	296	274	17.2
Anderson Seeds	611VT2P	Bt, GLY	100	234	252	244	243	17.3
DEKALB	DKC51-38RIB	Bt, CRW, GLY, LL	101	249	266	255	257	17.4
Viking	99-00	—	100	234	278	248	253	17.5
Anderson Seeds	611R	GLY	100	220	230	259	237	17.6
Anderson Seeds	6811	—	100	245	266	246	252	17.8
AgriGold	A630-10STX	Bt, CRW, GLY, LL	100	238	268	261	256	17.8
DEKALB	DKC49-44RIB	Bt, CRW, GLY, LL	99	243	253	234	244	17.8
LEGACY SEEDS	LC-4248 SSX	Bt, CRW, GLY, LL	100	233	254	243	243	18.0
Anderson Seeds	611SRC	Bt, CRW, GLY, LL	100	220	287	256	254	18.1
AgriGold	A630-31VT2RIBD1	Bt, GLY	101	241	273	242	252	18.2
Titan Pro SCI	22-00 2P	Bt, GLY	100	246	272	241	253	18.2
DEKALB	DKC52-18RIB	Bt, CRW, GLY, LL	102	240	250	243	244	18.2
Dairyland Seed	DS-4018AM	Bt, GLY, LL	100	248	256	297	267	18.4
Dairyland Seed	DS-4014Q	Bt, CRW, GLY, LL	100	262	280	259	267	18.7
Federal Hybrids	5280 CONV	—	102	233	287	242	254	18.9
Viking	55-02	—	100	225	277	246	249	19.2
Anderson Seeds	6581	—	101	238	218	254	236	19.5
AgriGold	A629-93	—	99	230	247	225	234	19.5
Viking	46-02	—	100	180	244	234	219	19.6
Titan Pro SCI	26-00	—	100	227	262	256	248	20.2
AgriGold	A632-35-5222EZ	Bt, CRW, GLY, LL	102	245	259	222	242	20.2
Blue River Organic Seed	48G35	—	102	246	272	261	260	22.6
99 to 103 RM Averages:				236	261	250	249	18.5
Southern locations, early maturity averages:				236	262	252	250	18.0
LSD (0.20)				16	17	23	11	0.5

Table 4. Late maturity entries, southern locations, 2020.

Source	Entry	Traits	Relative Maturity	Yield, Bushels/Acre at:			Average Across Locations	
				Lamberton	Rochester	Waseca	Bu/Acre	% Moisture
103 to 105 RM entries								
Titan Pro SCI	84-03 2P	Bt, GLY	103	228	260	236	244	18.2
LEGACY SEEDS	LC-5217 VT2P	Bt, GLY	103	224	247	248	242	18.4
Enestvedt Seed Company	E539	—	103	236	284	251	257	18.5
AgriGold	A634-93	—	104	239	259	230	243	19.5
Dairyland Seed	DS-4580Q	Bt, CRW, GLY, LL	105	238	253	260	250	19.6
LEGACY SEEDS	LC-5319 SSX	Bt, CRW, GLY, LL	104	236	289	269	264	19.6
Dairyland Seed	DS-4310Q	Bt, CRW, GLY, LL	103	240	255	247	247	19.7
Titan Pro SCI	82-04 2P	Bt, GLY	104	237	263	248	249	19.8
Viking	84-05	—	105	254	273	257	262	19.8
Viking	42-05	—	105	227	268	252	249	19.9
DEKALB	DKC54-64RIB	Bt, CRW, GLY, LL	104	218	259	261	245	20.0
Titan Pro SCI	26-03 5222	—	103	227	221	260	236	20.1
Dairyland Seed	DS-4440AM	Bt, GLY, LL	104	243	261	256	253	20.3
Titan Pro SCI	20-05	—	105	221	248	242	237	20.7
AgriGold	A633-14VT2PRO	Bt, GLY	103	260	290	283	278	20.7
LEGACY SEEDS	LC551-20 SSX	Bt, CRW, GLY, LL	105	229	262	264	251	20.8
Hi Fidelity Genetics	HFG1041	—	104	227	264	233	241	21.2
AgriGold	A635-54VT2RIB	Bt, GLY	105	240	268	272	260	21.2
Blue River Organic Seed	54C27	—	105	249	245	242	245	21.6
Titan Pro SCI	24-04	—	104	231	268	243	247	22.1
104 to 105 RM Averages:				235	262	253	250	20.1
Later than 105 RM entries								
Federal Hybrids	5700 VT2 Pro	Bt, GLY	107	228	238	257	239	18.5
Hi Fidelity Genetics	HFG1071	—	107	237	261	265	255	19.1
Titan Pro SCI	96-06 2P	Bt, GLY	106	236	250	262	247	19.3
Enestvedt Seed Company	E598	—	106	257	259	243	253	19.6
AgriGold	A636-11STXRIB	Bt, CRW, GLY, LL	106	235	289	270	264	20.0
LEGACY SEEDS	LC-5819 SSX	Bt, CRW, GLY, LL	107	227	271	229	242	20.9
Viking	48-08	—	108	239	266	265	255	21.0
Hi Fidelity Genetics	HFG1081	—	108	234	260	261	252	21.3
DEKALB	DKC58-64RIB	Bt, CRW, GLY, LL	108	224	279	269	257	21.9
AgriGold	A637-56VT2PRO	Bt, GLY	107	207	234	242	228	22.1
AgriGold	A638-74VT2RIB	Bt, GLY	108	256	277	279	271	23.2
Dairyland Seed	DS-4840AM	Bt, GLY, LL	108	245	266	264	258	23.3
Blue River Organic Seed	62G22	—	110	236	260	223	240	23.5
Dairyland Seed	DS-4878AM	Bt, GLY, LL	108	256	272	272	266	24.2
Later than 105 RM averages:				237	263	257	252	21.3
Southern Locations, Late Maturity Averages:				236	262	255	251	20.6
LSD (0.20)				18	22	22	12	0.6

Table 5. Early maturity entries, central locations, 2020.

Source	Entry	Traits	Relative Maturity	Yield, Bushels/Acre at:			Average Across Locations	
				Hutchinson	Morris	Rosemount	Bu/Acre	% Moisture
94 and earlier RM entries								
Titan Pro SCI	20-92	—	92	185	229	241	218	13.6
LEGACY SEEDS	LC441-20 VT2P	Bt, GLY	94	196	188	236	207	14.0
DEKALB	DKC41-99RIB	Bt, GLY	91	204	203	235	214	14.1
Peterson Farms Seed	79N94	Bt, GLY	94	173	208	241	207	14.2
Viking	42-92	—	92	197	233	248	226	14.2
Dairyland Seed	DS-3366AM	Bt, GLY, LL	93	203	230	263	232	14.3
Anderson Seeds	7422	—	92	174	220	231	208	14.4
Anderson Seeds	742R	GLY	92	203	222	246	224	14.4
Hi Fidelity Genetics	HFG0921	—	92	183	231	220	211	14.4
Federal Hybrids	4300 VT2 Pro	Bt, GLY	93	218	218	258	231	14.5
Blue River Organic Seed	30K84	—	90	155	184	208	182	14.8
94 RM and earlier averages:				190	215	239	215	14.3
95 to 97 RM entries								
Viking	O.45-97	—	97	239	255	244	246	14.2
DEKALB	DKC45-94RIB	Bt, CRW, GLY, LL	95	168	235	259	221	14.3
AgriGold	A627-83VT2RIB	Bt, GLY	97	175	242	229	215	14.4
Dairyland Seed	DS-3715AM	Bt, GLY, LL	97	186	232	263	227	14.5
Anderson Seeds	7995	—	95	199	228	246	224	14.6
Titan Pro SCI	86-96 2P	Bt, GLY	96	205	228	245	226	14.6
Anderson Seeds	786VT2P	Bt, GLY	95	224	219	251	231	14.7
Titan Pro SCI	82-95 2P	Bt, GLY	95	192	235	247	225	14.7
DEKALB	DKC47-54RIB	Bt, CRW, GLY, LL	97	162	237	251	217	14.7
Anderson Seeds	7865	—	95	189	243	247	226	14.7
Titan Pro SCI	91-95	—	95	198	244	240	227	14.8
Viking	52-96	—	96	200	237	256	231	14.8
Anderson Seeds	795R	GLY	95	203	236	240	226	14.9
AgriGold	A626-08STX	Bt, CRW, GLY, LL	96	196	212	226	211	15.0
Dairyland Seed	DS-3550AM	Bt, GLY, LL	95	195	256	277	243	15.0
Anderson Seeds	745SRC	Bt, CRW, GLY, LL	97	188	227	241	219	15.0
LEGACY SEEDS	LC-3718 DGVT2P	Bt, GLY	97	168	242	270	226	15.0
Blue River Organic Seed	38G54	—	96	183	234	256	224	15.1
LEGACY SEEDS	LC-3517 VT2P	Bt, GLY	95	196	230	252	226	15.1
Viking	46-96	—	96	233	227	253	238	15.1
Titan Pro SCI	85-96	—	96	227	257	238	241	15.1
Hi Fidelity Genetics	HFG0951	—	95	207	216	253	225	15.3
Blue River Organic Seed	33A16	—	92	186	229	233	216	15.4
95 to 97 RM averages:				196	235	249	227	14.8
Central locations, early maturity averages:				194	228	245	223	14.6
LSD (0.20)				27	21	17	12	0.3

Table 6. Late maturity entries, central locations, 2020.

Source	Entry	Traits	Relative Maturity	Yield, Bushels/Acre at:			Average Across Locations	
				Hutchinson	Morris	Rosemount	Bu/Acre	% Moisture
98 to 100 RM entries								
Titan Pro SCI	92-99 2P	Bt, GLY	99	215	223	235	224	14.6
Viking	44-98	—	98	213	208	244	222	14.9
Anderson Seeds	6898	—	98	217	213	245	225	15.0
Anderson Seeds	609VT2P	Bt, GLY	98	209	227	245	227	15.0
Anderson Seeds	609R	GLY	98	208	217	262	229	15.2
Anderson Seeds	6909	—	98	217	209	236	221	15.3
Anderson Seeds	611VT2P	Bt, GLY	100	199	220	257	225	15.3
LEGACY SEEDS	LC484-20 SSX	Bt, CRW, GLY, LL	98	208	184	233	208	15.4
Titan Pro SCI	22-00 2P	Bt, GLY	100	211	207	261	226	15.7
LEGACY SEEDS	LC-4248 SSX	Bt, CRW, GLY, LL	100	211	218	268	232	15.7
DEKALB	DKC49-44RIB	Bt, CRW, GLY, LL	99	203	212	238	218	15.8
AgriGold	A629-93	—	99	180	188	269	213	15.9
AgriGold	A630-10STX	Bt, CRW, GLY, LL	100	217	238	261	239	15.9
Dairyland Seed	DS-3810Q	Bt, CRW, GLY, LL	98	205	211	241	219	15.9
AgriGold	A628-16VT2RIB	Bt, GLY	98	196	217	252	222	15.9
Anderson Seeds	611R	GLY	100	206	205	238	216	16.0
Anderson Seeds	6811	—	100	201	237	254	231	16.1
Dairyland Seed	DS-4014Q	Bt, CRW, GLY, LL	100	205	232	255	230	16.1
Blue River Organic Seed	42C87	—	98	206	208	240	218	16.2
Anderson Seeds	611SRC	Bt, CRW, GLY, LL	100	216	186	246	216	16.6
Titan Pro SCI	26-00	—	100	190	230	255	225	17.2
Hi Fidelity Genetics	HFG1001	—	100	208	204	219	210	17.8
98 to 100 RM and earlier averages:				206	213	248	223	15.8
Later than 100 RM entries								
Peterson Farms Seed	73P01	Bt, GLY	101	220	220	259	233	15.2
DEKALB	DKC51-38RIB	Bt, CRW, GLY, LL	101	202	207	253	221	15.4
LEGACY SEEDS	LC-5217 VT2P	Bt, GLY	103	213	223	249	228	15.5
AgriGold	A630-31VT2RIBD1	Bt, GLY	101	213	218	246	226	15.5
Peterson Farms Seed	78B03	Bt, GLY	103	211	214	274	233	15.5
Titan Pro SCI	84-01	—	101	209	216	260	228	15.7
Titan Pro SCI	84-03 2P	Bt, GLY	103	228	219	254	234	16.0
DEKALB	DKC52-18RIB	Bt, CRW, GLY, LL	102	211	203	261	225	16.2
DEKALB	DKC54-64RIB	Bt, CRW, GLY, LL	104	222	220	249	230	16.3
Dairyland Seed	DS-4310Q	Bt, CRW, GLY, LL	103	180	254	264	233	16.4
AgriGold	A634-93	—	104	152	179	237	189	16.6
Dairyland Seed	DS-4580Q	Bt, CRW, GLY, LL	105	223	215	245	228	16.9
Titan Pro SCI	20-05	—	105	198	193	237	210	17.2
AgriGold	A633-14VT2PRO	Bt, GLY	103	228	225	268	240	17.3
Dairyland Seed	DS-4329AM	Bt, GLY, LL	103	195	210	279	228	17.5
Anderson Seeds	6581	—	101	212	196	236	215	17.6
Titan Pro SCI	91-02	—	102	207	184	228	206	17.6
Titan Pro SCI	24-04	—	104	217	246	245	236	17.8
AgriGold	A632-35-5222EZ	Bt, CRW, GLY, LL	102	167	216	228	204	18.3
Titan Pro SCI	26-03 5222	—	103	169	202	215	195	18.7
Later than 100 RM averages:				204	213	249	222	16.7
Central locations, late maturity averages:				205	213	249	222	16.2
LSD (0.20)				27	22	19	13	0.5

Table 7. Northern locations, 2020.

Source	Entry	Traits	Relative Maturity	Yield, Bushels/Acre at:		Average Across Locations	
				Crookston	Staples	Bu/Acre	% Moisture
86 and earlier RM entries							
REA Hybrids	1B821	Bt, GLY	82	163	207	185	12.9
REA Hybrids	2B851	Bt, GLY	85	156	204	180	12.9
LEGACY SEEDS	LC-2347 VT2P	Bt, GLY	83	184	212	198	13.0
LEGACY SEEDS	LC351-20 VT2P	Bt, GLY	85	173	213	193	13.1
Proseed	1984VT2P	Bt, GLY	84	183	201	192	13.1
Peterson Farms Seed	73S84	Bt, GLY	84	176	223	199	13.4
LEGACY SEEDS	LC311-20 VT2P	Bt, GLY	81	142	210	176	13.4
AgriGold	A615-64VT2RIB	Bt, GLY	85	156	227	191	14.3
Viking	68-86	—	86	164	207	185	14.4
Blue River Organic Seed	22K32	—	86	143	193	168	15.3
AgriGold	A615-06	—	85	185	239	212	15.8
86 and earlier RM entry averages:				166	212	189	13.8
87 to 91 RM entries							
REA Hybrids	3B903	Bt, GLY	90	183	255	219	13.5
AgriGold	A617-78VT2RIB	Bt, GLY	87	168	221	195	14.1
Proseed	1787VT2P	Bt, GLY	87	163	212	187	14.2
Peterson Farms Seed	73K90	Bt, GLY	90	153	220	187	14.3
DEKALB	DKC41-99RIB	Bt, GLY	91	180	225	203	14.4
REA Hybrids	3B912	Bt, GLY	91	186	259	222	14.4
Proseed	1790VT2P	Bt, GLY	90	164	221	192	14.6
Dairyland Seed	DS-3162Q	Bt, CRW, GLY, LL	91	143	267	205	14.7
LEGACY SEEDS	LC413-20 3110	Bt, GLY, LL	91	166	241	204	14.7
Dairyland Seed	DS-3193AM	Bt, GLY, LL	91	172	233	203	15.0
AgriGold	A619-75-3120EZ	Bt, GLY	89	144	219	181	15.6
Viking	80-89	—	89	150	224	187	15.8
Blue River Organic Seed	26B78	—	88	154	191	172	17.0
87 to 91 RM entry averages:				164	230	197	14.8
92 and later RM entries							
AgriGold	A624-06VT2RIB	Bt, GLY	94	146	234	190	14.3
AgriGold	A622-65	—	92	184	224	204	15.1
Viking	42-92	—	92	170	218	194	15.2
AgriGold	A626-08STX	Bt, CRW, GLY, LL	96	158	226	192	15.2
Dairyland Seed	DS-3345AM	Bt, GLY, LL	93	168	233	200	15.2
Dairyland Seed	DS-3366AM	Bt, GLY, LL	93	177	241	209	15.7
REA Hybrids	3B923	Bt, GLY	92	173	221	197	15.8
AgriGold	A625-78VT2RIB	Bt, GLY	95	183	224	203	15.8
DEKALB	DKC45-94RIB	Bt, CRW, GLY, LL	95	153	252	202	16.4
LEGACY SEEDS	LC431-20 S5X	Bt, CRW, GLY, LL	93	148	252	200	16.4
Dairyland Seed	DS-3550AM	Bt, GLY, LL	95	157	253	205	16.6
92 and Later RM entry averages:				165	234	200	15.6
Northern locations averages:				165	226	195	14.7
LSD (0.20)				16	26	15	0.8