



2024 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: Lamberton and Waseca
- Central: Rosemount
- Northern: Crookston

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 2024.

Reported yields are adjusted to 15.5% grain moisture. Entries are ranked within a maturity group by moisture content averaged across locations for 2024.

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.

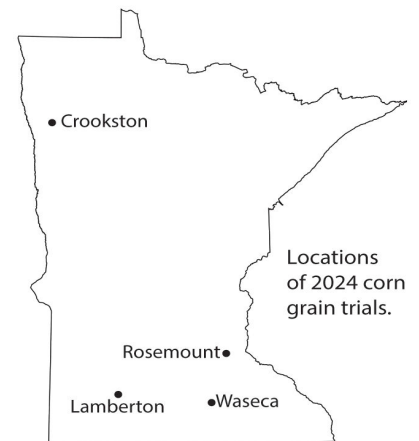
Identifiers will be:

- BT= European corn borer resistance
- CRW= Corn rootworm resistance
- Gly= glyphosate herbicide resistance
- LL= Liberty herbicide resistance
- Enlist= 2,4-D choline + FOPS

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.

Researchers

Tom Hoverstad, Jeff Coulter, Matt Bickell, Travis Volmer and Mike Leiseth

Table 1. Companies participating in the 2024 corn grain trials

Company	Website
Anderson Seeds	andersonseedsmn.com
Blue River Organic Seed	blueriverorgseed.com
Enestvedt Seed Company	enestvedtseeds.com
Legacy Seeds	legacyseeds.com
Viking Seed	alseed.com
Wyffels Hybrids	wyffels.com
ZMO Brand	ZMObrand.com

Corn Grain Planting Rate and Date	
Bushel Weight, Pounds.....	56
Planting Rate, Seeds/Acre....	35,000
Planting Date.....	May 2-May 23

Table 2. Individual trial information - 2024

Location	Cooperators	Previous Crop	Planting Date	Harvest Date
Lamberton	Travis Vollmer	Soybeans	May 15	Oct. 9
Waseca	Tom Hoverstad	Soybeans	May 13	Oct. 23
Rosemount	Darby Martin	Soybeans	June 5	Nov. 11
Crookston	Mike Leiseth	Wheat	June 6	Oct. 21

Table 3. Southern locations - 2024

Source	Entry	Traits	Relative Maturity	Yield, Bushels/Acre at:		Average Across Locations	
				Lamberton	Waseca	Bu/Acre	% Moisture
<i>102 and earlier RM entries:</i>							
Enestvedt Seed Company	E665TRE	Bt, GLY	97	219	165	192	13.4
LEGACY SEEDS	LC471-23 TREC	Bt, GLY	97	201	174	187	13.4
Enestvedt Seed Company	E654		95	244	167	206	13.6
Anderson Seeds	4595PCE	Bt, GLY, LL, Enlist	95	236	167	201	13.9
Wyffels Hybrids	W1869	Bt, CRW, GLY, LL	97	175	156	165	14.2
Anderson Seeds	528TRE	Bt, GLY	102	208	190	199	14.2
LEGACY SEEDS	LC465-23 PCE	Bt, GLY, LL	96	235	164	199	14.5
LEGACY SEEDS	LC481-24 SSP	Bt, CRW, GLY, LL	98	185	166	175	15.0
Anderson Seeds	4501		100	194	161	178	15.1
Anderson Seeds	507R	RR	102	208	147	178	15.2
Enestvedt Seed Company	E535SS RIB	Bt, CRW, GLY, LL	102	212	172	192	15.3
LEGACY SEEDS	LC523-24 DV	Bt, CRW, GLY, LL	102	184	162	173	15.6
Viking Blue River	24-01		101	200	153	176	16.5
102 and earlier RM averages:				208	165	186	14.6
<i>103 and later RM entries:</i>							
Enestvedt Seed Company	E539		103	224	150	187	14.5
Enestvedt Seed Company	E504		104	282	164	223	14.7
Wyffels Hybrids	W3309	Bt, CRW, GLY, LL	103	208	219	213	14.8
Viking Blue River	84-04		104	216	152	184	15.0
Wyffels Hybrids	W3579	Bt, CRW, GLY, LL	105	213	143	178	15.1
LEGACY SEEDS	LC554-23 SSX	Bt, CRW, GLY, LL	105	228	181	205	15.2
Enestvedt Seed Company	E514		103	197	183	190	15.3
LEGACY SEEDS	LC531-24 VT4P	Bt, GLY	103	185	173	179	15.3
Anderson Seeds	4505PCE	Bt, GLY, LL, Enlist	104	226	170	198	16.2
Viking Blue River	75-07		107	238	192	215	16.2
Viking Blue River	72-06		106	236	186	211	16.3
Viking Blue River	84-05		105	198	200	199	16.3
Enestvedt Seed Company	E541		107	247	189	218	17.2
Anderson Seeds	454SRC	Bt, CRW, GLY, LL	104	217	172	195	17.4
LEGACY SEEDS	LC572-22 SSX	Bt, CRW, GLY, LL	107	213	175	194	17.4
Enestvedt Seed Company	E523		108	235	200	217	17.4
Viking Blue River	85-09		109	256	205	231	18.0
Wyffels Hybrids	W6505	Bt, GLY	110	272	211	241	20.0
103 and later averages:				227	181	204	16
Southern locations averages:				219	175	197	15.6
LSD (0.20)				25	32	20	0.8

Table 4. Central location - 2024

Source	Entry	Traits	Relative Maturity	Rosemount	
				Bu/Acre	% Moisture
<i>99 and earlier RM entries:</i>					
Anderson Seeds	786R	GLY	95	126	15.8
Viking Blue River	52-96		96	131	16.0
LEGACY SEEDS	LC471-23 TREC	Bt, GLY	97	115	16.2
Anderson Seeds	6398		98	137	16.7
LEGACY SEEDS	LC481-24 SSP	Bt, CRW, GLY, LL	98	130	16.9
Enestvedt Seed Company	E665TRE	Bt, GLY	97	140	17.1
ZMO Brand	FNC21-1286		95	65	17.5
Anderson Seeds	728TRE	Bt, GLY	98	144	17.6
Anderson Seeds	746SRC	Bt, CRW, GLY, LL	98	122	17.7
Viking Blue River	73-97		97	152	17.8
Enestvedt Seed Company	E654		95	131	18.0
LEGACY SEEDS	LC465-23 PCE	Bt, GLY, LL	96	118	18.2
Viking Blue River	24-99		99	146	18.2
99 RM and earlier averages:				128	17.2
<i>100 and later RM entries:</i>					
LEGACY SEEDS	LC554-23 SSX	Bt, CRW, GLY, LL	105	128	18.0
Anderson Seeds	624SSP	Bt, CRW, GLY, LL	101	137	18.2
LEGACY SEEDS	LC534-23 TREC	Bt, GLY	103	130	18.4
Enestvedt Seed Company	E539		103	145	18.5
Anderson Seeds	5072		102	152	18.9
Enestvedt Seed Company	E514		103	122	19.0
LEGACY SEEDS	LC544-22 PCE	Bt, GLY, LL	104	128	19.6
Anderson Seeds	4501PCE	Bt, GLY, LL, Enlist	100	129	19.9
Viking Blue River	24-01		101	117	20.0
LEGACY SEEDS	LC523-24 DV	Bt, CRW, GLY, LL	102	135	20.7
100 and later RM Averages:				132	19.1
Central location averages:				130	18.0
LSD (0.20)				19	0.5

Table 5. Northern location - 2024

Source	Entry	Traits	Relative Maturity	Crookston	
				Bu/Acre	% Moisture
LEGACY SEEDS	LC361-24 VT2P	Bt, GLY	86	187	15.6
LEGACY SEEDS	LC404-24 VT2P	Bt, GLY	90	198	18.8
Enestvedt Seed Company	E654		95	192	21.4
LEGACY SEEDS	LC381-23 VT2P	Bt, GLY	88	200	21.9
LEGACY SEEDS	LC411-23 VT2P	Bt, GLY	91	204	22.4
Enestvedt Seed Company	E612		92	205	23.1
Viking Blue River	62-93		93	173	23.9
LEGACY SEEDS	LC394-24 PCE	Bt, GLY, LL	89	197	25.6
Enestvedt Seed Company	E665TRE	Bt, GLY	97	208	27.4
Viking Blue River	42-92		92	174	27.4
Northern location averages:				194	22.7
LSD(0.20)				ns	5.0