

North Dakota Corn Hybrid Trial Results for 2023

Clair Keene and Darin Eisinger (NDSU Main Station); Mike Ostlie, Kristin Simons and Tim Indergaard (Carrington Research Extension Center); Bryan Hanson, Lawrence Henry and Richard Duerr (Langdon Research Extension Center); Leandro Bortolon, Jayden Hansen and Austin Kraklau (North Central Research Extension Center, Minot); Heidi Eslinger and Spencer Eslinger (Oakes Irrigation Research Site); John Rickertsen and Michael Wells (Hettinger Research Extension Center).

This publication reports the results of corn hybrid trials that were conducted by NDSU research and Extension personnel throughout North Dakota. The hybrids tested were entered voluntarily by the companies that market them, and the management of these trials was financed partially by the entry fees those companies paid. Websites for the participating companies are provided in Table 1. Additional information and data for a given location may be available at www.ag.ndsu.edu/varietytrials/corn and www.ag.ndsu.edu/cornhybridtesting. When selecting a hybrid, look at its performance at multiple locations and/or across years if possible.

Corn Production and Weather in 2023

In 2023, 4.05 million acres of corn were planted in North Dakota, up substantially from 2.95 million acres in 2022. The average yield for the state was estimated at 143 bushels per acre, up from 131 bushels per acre estimated in 2022. Corn yields, like other crops, were highly variable across the state in 2023 due to higher than normal rainfall in the southwest and pockets of severe to extreme drought in the north central and northeast parts of the state. In southeast North Dakota, which typically reports the highest corn yields, farmer reports ranged from excellent to poor depending on if fields caught timely rain or not.

Most corn acres were planted at about an average pace in 2023 and earlier than in 2022 when planting was widely delayed due to late spring blizzards and rain. Deep snowpack covered much of the state in March and April. This early season moisture delayed planting in some areas but provided critical moisture, especially in the northeast which then experienced an extremely dry growing season. June temperatures were well above average and pushed corn through early vegetative stages. Unusually, temperatures were cooler in July which helped reduce stress in areas that did not receive regular rain. Hot temperatures in early September caused earlier maturing varieties to dry down more quickly than expected in some places while corn that was planted late due to wet conditions took somewhat longer than expected to dry down to harvest moisture.

Experimental Procedures

Hybrids were planted in replicated plots in each location. Plot size, number of replications and experimental design varied by location. Information regarding planting and harvesting dates and other management practices is available from the researchers conducting the trials at each location. Grain yield was adjusted to 15.5% moisture.

Data Analysis

Data were analyzed using analyses of variance (ANOVA). Least significant differences (LSDs) at the 5% and 10% levels were calculated from these analyses and are placed at the bottom of each column of data. These LSD values apply only to the numbers in the column in which they appear. If the difference (for instance, for yield) between two varieties exceeds the LSD value, it means that with 95% or 90% confidence, the higher-yielding variety has a significant yield advantage. Conversely, when the difference between the means of two varieties is less than the LSD value, this indicates these varieties have no statistical difference between them. The coefficient of variation (CV), which also is placed at the bottom of each column, is a measure of the variability for that trait within the trial.

Hybrids are ranked in descending order for yield in each table. Carefully consider grain moisture at harvest in addition to yield. Comparing the yield of hybrids with similar moisture levels allows you to compare the yield of hybrids with similar relative maturities (RMs). The RMs listed in the tables have been provided by the company marketing these hybrids. In some cases, the

industry-provided estimate of RM might not correspond precisely to the moisture levels obtained in trials reported in this publication.

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Table 1. Companies Participating in 2023 NDSU Corn Hybrid Trials.

<u>Company</u>	<u>Abbreviated</u>	<u>Website</u>
Blue River Organic Seed	Blue River	www.alseed.com/blueriver
Champion Seed	Champion	www.plantchampion.com
Crop Science	Dekalb	www.cropscience.bayer.us/corn/dekalb
Dahlman Seed	Dahlman	www.dahlmanseed.com
Dairyland Seed	Dairyland	www.dairylandseed.com
Pioneer Hi-Bred International	Pioneer	www.pioneer.com
Dyna-Gro Seed	Dyna-Gro	www.dynagroseed.com
Golden Harvest	Golden H.	www.goldenharvestseeds.com
Hefty Seed	Hefty	www.heftyseed.com
Integra Fortified Seed	Integra	www.integraseed.com
Innvictis Seed Solutions	Innvictis	www.innvictisseed.com
Latham	Latham	www.lathamseeds.com
Legacy Seeds	Legacy	www.legacyseeds.com
Proseed	Proseed	www.proseed.net
REA Hybrids	REA	www.rea-hybrids.com
Renegade Seed	Renegade	www.mkap.com/seed/renegade
Renk Seed	Renk	www.renkseed.com
Syngenta NK Brand	Syng NK	www.syngenta-us.com/corn/nk
Thunder Seed	Thunder	www.thunderseeds.com
Viking	Viking	www.alseed.com

**Table 2. 2023 Corn - Average of Southern Locations (Ransom, Richland and Sargent Counties), Early Maturing Hybrids (≤ 94).
Authors, C. Keene and D. Eisinger.**

Company/Brand	Hybrid	RM ¹	Grain Moisture ² (%)	Test Weight ² (lb/bu)	Grain Yield				
					Ransom Lisbon	Richland Abercrombie	Sargent Gwinner	Average ³	2-yr. Avg.
					----- (bu/a) -----				
REA	93F72	93	21.8	56.4	258	192	247	233	--
REA	92B10	92	19.5	58.0	244	197	234	225	212
Legacy	LC403-22	90	20.5	56.5	251	172	219	214	--
Legacy	LC414-21	91	20.2	59.1	248	168	223	213	204
Integra	4023	90	20.4	58.0	235	177	224	212	--
Hefty	H4052	90	20.0	59.1	245	172	217	212	204
Integra	4119VT2	91	20.6	57.3	248	172	214	211	--
Integra	4311VT2	93	20.9	57.7	238	192	203	211	--
Hefty	H4462	94	20.6	57.6	235	183	214	211	--
Check 1 Pioneer	P9494AM	94	20.2	56.6	236	170	226	211	--
REA	88B04	88	18.8	57.8	226	192	205	208	--
Hefty	H4162	91	20.0	57.5	241	166	216	208	--
Legacy	LC-3017	90	20.5	57.0	230	174	218	207	--
Mean			20.3	57.6	244	171	228	214	204
CV (%)					3	6	3		
LSD 0.05					14	20	14		

Planted: Lisbon May 24, Abercrombie May 16, Gwinner May 24. Harvested: Lisbon Oct. 24, Abercrombie Oct. 20, Gwinner Oct. 24.

¹Relative maturity as given by industry.

²Grain moisture and test weight are an average of Ransom, Richland and Sargent county data.

³Combined yield means are calculated using statistical means that are adjusted based on location variability and may not reflect the numerical average.

Table 3. 2023 Corn - Average of Southern Locations (Ransom, Richland and Sargent Counties), Late Maturing Hybrids (≥95).**Authors, C. Keene and D. Eisinger.**

Company/Brand	Hybrid	RM ¹	Grain Moisture ²	Test Weight ²	Grain Yield				2-yr. Avg.
					Ransom Lisbon	Richland Abercrombie	Sargent Gwinner	Average ³	
			(%)	(lb/bu)	------(bu/a)-----				
Proseed	2196 VT2P RIB	96	21.5	56.3	243	181	246	224	212
Dahlman	R49-29VT2PRIB	98	22.0	56.3	254	173	238	222	--
Hefty	H4562	95	20.5	57.6	241	190	235	222	--
REA	95B53	95	21.7	56.8	246	178	236	220	--
Legacy	LC474-23	97	22.5	56.2	249	174	237	220	--
Dairyland	DS-3881AM	98	23.2	57.0	244	181	231	219	--
Dairyland	DS3599Q	95	21.4	57.5	237	193	226	218	--
Dekalb	DKC45-74RIB	95	21.8	56.8	244	186	222	217	--
Legacy	LC461-21	95	21.8	58.8	248	162	239	216	203
Dahlman	R48-239VT2PRIB	95	21.3	57.6	250	171	227	216	206
REA	95A36	95	21.1	57.3	243	175	221	213	201
Dairyland	DS-3601AM	96	21.9	56.8	240	165	226	210	211
Legacy	LC474-20	98	23.2	56.3	244	152	233	210	--
Proseed	2496 PCE	96	22.1	56.8	246	153	226	208	--
Legacy	LC465-23	97	22.4	56.5	242	153	222	205	--
Proseed	2398 TRE	98	23.0	56.8	253	131	226	203	198
Legacy	LC464-21	96	22.6	57.7	230	144	228	200	199
Mean			22.0	57.0	244	171	228	214	203
CV (%)					3	6	3		
LSD 0.05					14	20	14		

Planted: Lisbon May 24, Abercrombie May 16, Gwinner May 24. Harvested: Lisbon Oct. 24, Abercrombie Oct. 20, Gwinner Oct. 24.

¹Relative maturity as given by industry.²Grain moisture and test weight are an average of Ransom, Richland and Sargent county data.³Combined yield means are calculated using statistical means that are adjusted based on location variability and may not reflect the numerical average.

Table 4. 2023 Corn - Average of Central Locations (Cass, Clay, Steele and Traill Counties), Early Maturing Hybrids (≤88).
Authors, C. Keene and D. Eisinger.

Company/Brand	Hybrid	RM ¹	Grain Moisture ²	Test Weight ²	Grain Yield				Avg. ³	2-yr. Avg.
					Cass Prosper	Clay Comstock	Steele Hope	Traill Cummings		
			(%)	(lb/bu)	(bu/a)					
Legacy	LC384-22	88	22.5	56.0	263	224	195	233	232	--
Integra	3884VT2	88	21.8	56.0	247	218	189	240	232	--
Proseed	2488 VT2P RIB	88	19.9	56.1	275	215	193	254	229	--
Legacy	LC363-23	86	21.0	56.0	253	220	193	241	229	--
REA	86B55	86	19.5	57.2	262	222	194	233	229	--
Latham	LH 3775 VT2 P	87	22.9	58.0	258	233	172	242	228	--
Check 1 Pioneer	P8736AM	87	19.9	55.9	270	219	194	237	227	--
Latham	LH 3325 VT2	83	19.2	57.5	242	224	178	233	226	220
Latham	LH 3695 VT2 P	86	20.3	57.1	262	229	171	234	225	218
Dyna-Gro	D26VC64RIB	86	20.1	56.1	267	220	184	227	224	--
REA	88B04	88	20.6	57.0	248	225	162	252	224	--
Legacy	LC364-23	86	19.1	56.5	248	233	174	231	222	--
Integra	3431VT2	84	19.1	57.4	259	229	179	233	221	--
Legacy	LC-2817	86	21.2	56.8	238	223	189	229	221	221
Dyna-Gro	D28VC33RIB	88	20.3	56.4	262	215	182	225	220	223
Legacy	LC354-23	85	20.9	56.4	256	209	180	233	216	--
REA	2B851	85	18.3	57.1	243	216	181	231	215	220
Mean			21.4	56.5	259	232	191	244	232	220
CV (%)			7.4	1.6	6	5	8	3	9	
LSD 0.05			1.4	0.8	24	21	28	14	16	

See footnotes below table 5.

Table 5. 2023 Corn - Average of Central Locations (Cass, Clay, Steele and Traill Counties), Late Maturing Hybrids (≥89).
Authors, C. Keene and D. Eisinger.

Company/Brand	Hybrid	RM ¹	Grain Moisture ²	Test Weight ²	Grain Yield				Avg. ³	2-yr. Avg.
					Cass Prosper	Clay Comstock	Steele Hope	Traill Cummings		
			(%)	(lb/bu)	(bu/a)					
REA	93F72	93	25.3	54.8	287	246	234	276	265	--
Legacy	LC461-21	95	22.9	57.2	282	247	211	266	251	240
REA	92B10	92	21.2	56.8	275	234	208	255	248	246
Latham	LH 4454 VT2 P	94	25.4	56.2	274	225	230	254	243	--
Latham	LH 3937 VT2 P	89	22.0	56.3	252	240	215	251	242	238
Latham	LH 4335 VT2 P	93	21.6	56.9	266	237	194	253	242	--
Dairyland	DS-3159AM	91	21.4	55.4	267	218	213	260	242	--
Integra	4119VT2	91	22.4	55.9	263	233	202	238	239	--
Dairyland	DS-3477AM	94	21.6	55.2	266	234	206	245	238	238
Proseed	2392 VT2P RIB	92	23.0	58.2	238	234	210	244	236	233
Legacy	LC403-22	90	22.7	55.1	260	239	190	243	235	235
Dairyland	DS-2919AM	89	21.0	57.0	275	220	208	244	235	235
Legacy	LC414-21	91	22.9	58.0	265	209	209	249	231	--
Latham	LH 4438 SS PRO	94	21.8	55.9	262	237	175	248	230	--
Legacy	LC-3017	90	22.2	55.9	262	223	202	249	228	226
Proseed	2390 VT2P RIB	90	21.8	55.8	253	231	180	239	225	--
Mean			21.4	56.5	259	232	191	244	232	236
CV (%)			7.4	1.6	6	5	8	3	9	
LSD 0.05			1.4	0.8	24	21	28	14	16	

Planted: Comstock May 25, Prosper May 24, Hope May 18, Cummings May 22.

Harvested: Comstock Oct. 12, Prosper Oct. 17, Hope Oct. 20, Cummings Nov. 3.

¹Relative maturity as given by industry.

²Grain moisture and test weight are an average of Cass, Steele and Traill county data.

³Combined yield means are calculated using statistical means that are adjusted based on location variability and may not reflect the numerical average.

Table 6. 2023 Corn - Central Zone, Conventional and GMO Early Maturing Hybrids (≤89), Prosper (Cass County).

Authors, C. Keene and D. Eisinger.

Company/Brand	Hybrid ¹	RM	Grain	Test	Grain Yield
			Moisture	Weight	Prosper
			(%)	(lb/bu)	(bu/a)
Check 1 Pioneer	P8736AM	87	18.2	57.4	271
Latham	LH 3695 VT2 P	86	19.7	57.3	267
Dyna-Gro	D26VC64RIB	86	19.4	56.7	267
Proseed	2488 VT2P RIB	88	18.2	57.4	266
Latham	LH 3937 VT2 P	89	19.5	57.1	265
Dyna-Gro	D28VC33RIB	88	20.0	57.3	264
Legacy	LC384-22	88	21.0	57.3	264
Legacy	LC363-23	86	20.3	57.2	262
Dairyland	DS-2919AM	89	20.4	57.4	261
REA	86B55	86	20.1	57.7	256
Latham	LH 3775 VT2 P	87	20.8	58.4	256
Integra	3431VT2	84	18.5	57.7	255
Check 3 Dekalb	DKC35-34	85	20.9	57.4	255
Legacy	LC354-23	85	22.4	57.4	254
Legacy	LC364-23	86	18.1	57.4	248
REA	88B04	88	19.9	57.6	247
Blue River	BR 24-82	82	20.1	55.6	246
Integra	3884VT2	88	20.5	57.1	245
Check 2 Midwest	82-22	82	18.9	57.3	244
Latham	LH 3325 VT2 P	83	17.2	58.5	244
Legacy	LC-2817	86	18.8	57.5	242
Legacy	LC-2817	86	19.8	57.5	242
REA	2B851	85	17.7	58.1	241
Blue River	BR 45-88	88	19.8	58.2	235
Mean			19.9	57.2	259
CV (%)			8.2	1.5	7
LSD 0.05			2.3	1.2	25

Planted: May 24. Harvested: Oct. 17.

¹Conventional hybrids are indicated in bold.

Table 7. 2023 Corn - Central Zone, Conventional and GMO Late Maturing Hybrids (≥89), Prosper (Cass County).

Authors, C. Keene and D. Eisinger.

Company/Brand	Hybrid ¹	RM	Grain	Test	Grain Yield	
			Moisture	Weight	Prosper	2-yr. Avg.
			(%)	(lb/bu)	----- (bu/a) -----	
REA	92B10	92	19.3	57.7	284	--
REA	93F72	93	21.7	56.2	283	--
Legacy	LC461-21	95	21.1	57.4	279	--
Dairyland	DS-3159AM	91	19.1	57.0	275	--
Latham	LH 4454 VT2 P	94	21.5	57.0	270	--
Legacy	LC-3017	90	20.3	57.3	270	--
Renegade	R1-2197	97	20.6	57.4	268	272
Legacy	LC394-23	89	21.0	56.8	268	--
Dairyland	DS-3477AM	94	19.1	56.6	268	--
Viking	VK 42-92	92	21.0	56.6	267	--
Renegade	R1-2194	94	20.0	57.9	266	--
Latham	LH 3937 VT2 P	89	19.5	57.1	265	--
Legacy	LC414-21	91	20.9	57.5	265	--
Legacy	LC403-22	90	21.0	56.5	262	--
Latham	LH 4335 VT2 P	93	20.4	57.1	261	--
Dairyland	DS-2919AM	89	20.4	57.4	261	--
Integra	4119VT2	91	20.1	57.1	261	--
Legacy	LC-3017	90	19.8	57.5	261	--
Blue River	BR 62-93UP	93	19.3	57.8	261	--
Viking	VK 80-89	89	20.1	56.3	258	--
Latham	LH 4438 SS PRO	94	19.8	55.9	257	--
Proseed	2390 VT2P RIB	90	20.3	56.5	256	--
Renegade	R1-1592	92	18.9	57.3	255	260
Check 4 Pioneer	P9492AM	94	20.8	56.9	250	--
Check 5 Dekalb	DKC45-74RIB	95	19.7	56.8	245	--
Proseed	2392 VT2P RIB	92	20.3	58.6	241	--
Mean			19.9	57.2	259	260
CV (%)			8.2	1.5	7	
LSD 0.05			2.3	1.2	25	

Planted: May 24. Harvested: Oct. 17.

¹Conventional hybrids are indicated in bold.

Table 8. 2023 Corn - Average of Northern Locations (Grand Forks, Marshall and Ramsey Counties), Early Maturing Hybrids (≤83).

Authors, C. Keene and D. Eisinger.

Company/Brand	Hybrid	RM ¹	Grain Moisture ²	Test Weight ²	Grain Yield					
					Grand Forks		Marshall	Ramsey	Average ³	2-yr. Avg.
					Thompson	Gilby				
----- (bu/a) -----										
Latham	LH 3325 VT2 P	83	20.2	54.9	209	99	177	106	148	--
Integra	3114VT2	81	19.1	55.8	196	99	184	99	145	--
Thunder	T6983 VT2P	83	19.8	54.8	214	84	172	106	144	--
Legacy	LC-2347	83	20.9	54.6	202	92	168	107	142	168
REA	80B57	80	20.5	55.0	207	83	168	104	141	164
Thunder	T6181 VT2P	81	20.2	55.4	197	85	160	111	138	--
REA	83B33	83	19.5	54.9	187	87	171	97	136	--
Legacy	LC275-21	77	22.4	55.2	193	92	163	88	134	153
Legacy	LC311-20	81	20.3	54.8	191	91	160	84	131	159
Proseed	2181 VT2P RIB	81	19.8	55.3	187	81	164	93	131	--
Thunder	T6278 VT2P	78	17.9	55.3	175	84	166	100	131	--
Check 2 Midwest	82-22	82	18.6	56.5	205	--	--	--	--	--
Blue River	BR 24-82	82	19.0	53.9	197	--	--	--	--	--
Legacy	LC311-20	80	18.7	56.6	194	--	--	--	--	--
Mean			20.1	55.1	202	88	168	102	138	
CV (%)					3	7	5	6		
LSD 0.05					11	12	18	14		

Planted: Thompson May 15, Gilby May 18, Doyon May 23, Oslo May 22.

Harvested: Thompson Nov. 13, Gilby Nov. 3, Doyon Oct. 20, Oslo Oct. 13.

¹Relative maturity as given by industry.

²Grain moisture and test weight are an average of Grand Forks, Gilby, Marshall and Ramsey county data.

³Combined yield means are calculated using statistical means that are adjusted based on location variability and may not reflect the numerical average.

Conventional Hybrids in bold.

Table 9. 2023 Corn - Average of Northern Locations (Grand Forks, Marshall and Ramsey Counties), Late Maturing Hybrids (≥84).**Authors, C. Keene and D. Eisinger.**

Company/Brand	Hybrid	RM ¹	Grain Moisture ²	Test Weight ²	Grain Yield					
					Grand Forks		Marshall	Ramsey	Average ³	2-yr. Avg.
					Thompson	Gilby	Oslo	Doyon		
			(%)	(lb/bu)	------(bu/a)-----					
Legacy	LC-2817	86	20.9	54.8	205	89	189	120	151	169
Legacy	LC384-22	88	23.2	53.3	212	97	179	100	147	--
REA	88B04	88	21.6	54.4	206	91	189	99	147	--
Latham	LH 3695 VT2 P	86	21.6	55.0	215	85	171	111	146	164
Legacy	LC364-23	86	20.4	54.5	204	97	180	100	145	--
Latham	LH 3775 VT2 P	87	23.4	54.2	208	94	178	98	144	--
Integra	3431VT2	84	20.0	54.8	204	89	180	102	144	--
Legacy	LC363-23	86	21.6	53.1	210	84	187	94	144	--
Dairyland	DS-2531AM	85	20.6	52.7	204	81	193	94	143	165
Proseed	2485 PCE	85	20.8	53.9	205	100	169	93	142	--
Legacy	LC354-23	85	20.8	54.7	207	94	167	96	141	--
REA	86B55	86	19.5	55.0	201	89	168	103	140	--
Dairyland	DS-2612AM	86	21.3	53.5	215	91	147	103	139	--
Dairyland	DS-2476AM	84	19.4	54.9	193	87	170	105	139	--
REA	2B851	85	20.0	53.7	205	87	166	93	138	161
Check 1 Channel	184-04	84	20.3	53.4	202	77	172	93	136	--
Proseed	2486 (3110)	86	22.0	53.1	210	88	152	84	133	--
Thunder	T6485 PC	85	21.2	54.2	207	100	128	95	133	--
Thunder	T6185 VT2P	85	22.1	53.5	195	82	132	106	129	--
Mean			21.1	54.1	202	88	168	102	141	165
CV (%)					3	7	5	6		
LSD 0.05					11	12	18	14		

Planted: Thompson May 15, Gilby May 18, Doyon May 23, Oslo May 22.

Harvested: Thompson Nov. 13, Gilby Nov. 3, Doyon Oct. 20, Oslo Oct. 13.

¹Relative maturity as given by industry.²Grain moisture and test weight are an average of Grand Forks, Marshall and Ramsey county data.³Combined yield means are calculated using statistical means that are adjusted based on location variability and may not reflect the numerical average.

Table 10. 2023 Corn - Dryland - Carrington - Authors, M. Ostlie, K. Simons and T. Indergaard.

Company/Brand	Hybrid	RM ¹	Grain	Test	Grain Yield	
			Moisture	Weight	2023	2-yr. Avg.
			(%)	(lb/bu)	----- (bu/a) -----	
Dyna-Gro	D31VC23RIB	91	14.8	58.8	230	198
Legacy	LC403-22	90	15.1	55.2	225	194
Golden H.	G90B11-AA	90	15.1	56.5	221	--
Legacy	LC414-21	91	15.0	58.1	218	193
Champion	37A24	87	14.8	55.6	216	--
Legacy	LC363-23	85	15.1	55.6	215	--
Proseed	2486	86	14.8	55.4	211	--
Golden H.	G85B04-AA	85	15.0	56.0	210	--
REA	86A94	86	14.4	57.1	205	176
Legacy	LC-3017	90	15.5	56.5	203	185
Thunder	T6389 VT2P	89	14.3	56.4	203	183
Golden H.	G82B12-AA	82	14.5	56.9	202	--
Dairyland	DS-2476AM	84	14.1	55.8	192	--
Legacy	LC354-23	85	14.3	54.9	192	--
Legacy	LC364-23	86	14.5	55.8	192	--
Thunder	T6490 VT2P	90	14.8	56.3	191	--
Dyna-Gro	D26VC64RIB	86	14.9	56.2	191	--
REA	88B04	88	14.7	56.3	191	--
Integra	3884 VT2P RIB	88	14.6	55.7	188	--
Champion	40A21	90	14.9	55.8	187	172
Dyna-Gro	D23VC83RIB	83	14.3	55.9	184	171
Legacy	LC-2817	86	14.5	56.9	182	163
Legacy	LC384-22	88	14.8	55.7	182	--
Integra	3431 VT2P RIB	84	14.3	57.2	181	171
Dairyland	DS-2612AM	86	14.8	56.1	181	--
Thunder	T6485 PC	85	14.6	54.4	180	--
Champion	35A24	85	14.6	58.0	179	--
REA	83B33	83	14.4	56.6	179	160
Integra	3537 VT2P RIB	85	14.5	56.4	178	166
REA	86B55	86	14.8	56.7	177	--
Proseed	1984VT2P	84	14.3	56.8	175	165
Champion	33A20	83	14.6	57.0	172	164
Champion	36A24	86	14.4	56.9	167	--
Thunder	T6185 VT2P	85	14.1	55.9	166	155
Integra	3144 VT2P RIB	81	14.4	56.5	163	--
Dyna-Gro	D20VC24RIB	80	14.4	55.9	162	--
Mean			14.6	56.3	191	174
CV %			2.6	1.0	11	--
LSD 0.05			0.5	0.8	29	--
LSD 0.10			0.5	0.7	25	--

Planted: May 12. Harvested: Nov. 20. Previous crop: soybean.

¹Relative maturity as given by industry.

Table 11. 2023 Corn - Dryland, Conventional - Carrington - Authors, M. Ostlie, K. Simons and T. Indergaard.

Company/Brand	Hybrid	RM ¹	Grain	Test	Grain Yield ²
			Moisture	Weight	2023
			(%)	(lb/bu)	(bu/a)
Champion	38A23	88	16.7	56.9	200
Proseed	1790	90	16.7	57.0	200
Champion	41A20	91	16.5	56.7	191
Champion	31A23	81	14.9	56.4	190
Champion	36A20	86	15.2	56.8	189
Champion	34A23	84	14.9	56.7	185
Proseed	2388	88	16.6	56.6	176
	RR Check 1		15.4	57.0	200
Mean			15.9	56.8	194
CV %			2.4	1.0	5
LSD 0.05			0.6	0.8	22
LSD 0.10			0.5	0.7	8

Planted: May 12. Harvested: Nov. 20. Previous crop: soybean.

¹Relative maturity as given by industry.²Best linear unbiased estimate.**Table 12. 2023 Corn - Irrigated - Carrington - Authors, M. Ostlie, K. Simons and T. Indergaard.**

Company/Brand	Hybrid	RM ¹	Grain	Test	Grain Yield	
			Moisture	Weight	2023	2-yr. Avg.
			(%)	(lb/bu)	----- (bu/a) -----	
Legacy	LC403-22	90	19.0	56.4	322	255
Renk	RK296AA	89	18.4	56.1	321	--
Dairyland	DS-2919AM	89	17.0	58.2	285	237
Legacy	LC414-21	91	17.8	59.1	284	239
Legacy	LC363-23	85	17.3	56.2	283	--
Renk	RK300RR	90	18.5	58.0	280	229
Renk	RK297VT2P	89	17.2	57.3	279	242
REA	88B04	88	17.2	57.4	266	--
Legacy	LC384-22	88	17.9	57.0	265	--
Dairyland	DS-2612AM	86	16.7	56.4	263	--
Integra	3884 VT2P RIB	88	17.6	56.7	253	--
Legacy	LC-2817	86	17.1	57.8	253	218
Legacy	LC-3017	90	18.5	57.5	251	212
Dyna-Gro	D26VC64RIB	86	17.3	56.8	245	--
Legacy	LC354-23	85	16.2	56.3	244	--
Integra	3431 VT2P RIB	84	16.6	57.9	237	206
REA	86B55	86	16.3	58.3	235	--
Dyna-Gro	D28VC33RIB	88	17.4	57.3	231	201
Dyna-Gro	D23VC83RIB	83	16.5	57.4	231	198
Legacy	LC364-23	86	16.6	57.5	226	--
REA	83B33	83	16.4	57.9	223	195
Dyna-Gro	D20VC24RIB	80	15.6	57.5	223	--
Renk	RK261VT2P	86	16.5	57.4	213	--
REA	86A94	86	16.1	57.7	212	193
Mean			17.2	57.3	255	219
CV %			1.9	0.9	7	--
LSD 0.05			0.5	0.7	26	--
LSD 0.10			0.4	0.6	22	--

Planted: May 12. Harvested: Nov. 6. Previous crop: field pea.

¹Relative maturity as given by industry.

Table 13. 2023 Corn - Fingal (Carrington REC) - Authors, M. Ostlie, K. Simons and T. Indergaard.

Company/Brand	Hybrid	RM ¹	Grain Moisture	Test Weight	Grain Yield	
					2023	2-yr. Avg.
			(%)	(lb/bu)	----- (bu/a) -----	
Renk	RK444VT2P	93	19.0	58.4	260	217
REA	95B53	95	18.3	58.2	257	--
REA	93F72	93	18.6	57.1	250	--
Champion	46A24	96	19.7	58.8	250	--
Dairyland	DS-3159AM	91	19.5	56.6	249	--
Dyna-Gro	D34VC93RIB	94	18.7	58.6	242	209
Thunder	T6294 VT2P	94	19.0	60.2	239	208
Dairyland	DS-3601AM	96	18.7	57.8	238	208
Renk	RK571PWE	96	20.1	58.5	237	--
Dyna-Gro	D31VC23RIB	91	18.5	61.0	235	197
Legacy	LC403-22	90	19.0	58.0	234	198
Proseed	2496 PCE	96	19.6	58.2	231	--
Legacy	LC465-23	96	20.1	57.8	230	--
Proseed	2392 VT2P	92	18.4	60.3	230	189
REA	4B958	95	18.9	59.1	229	208
Renk	RK561DGV2P	95	18.9	59.3	227	212
Legacy	LC464-21	96	19.6	58.5	225	196
Renk	RK485DGV2P	94	19.4	60.2	223	194
Dyna-Gro	D28VC33RIB	88	18.0	58.5	223	194
Champion	42A24	92	18.8	59.1	223	--
Dairyland	DS-3599Q	95	19.0	57.9	222	--
Thunder	T6992 VT2P	92	18.6	58.9	221	207
Thunder	T6490 VT2P	90	18.2	58.4	221	--
Legacy	LC414-21	91	17.8	60.9	221	188
Legacy	LC461-21	95	19.7	59.1	221	189
Dairyland	DS-3881AM	98	20.3	58.3	220	--
Dairyland	DS-3477AM	94	18.8	57.9	217	192
Champion	37A24	87	18.5	58.6	216	--
Legacy	LC-3017	90	18.6	58.7	215	185
Thunder	T6390 AA	90	18.6	58.1	215	--
Renk	RK400VT2P	91	18.8	60.1	213	184
REA	88B04	88	17.9	58.4	210	--
Champion	36A24	86	16.8	57.1	206	--
Proseed	2390 VT2P	90	18.0	57.7	205	--
Legacy	LC384-22	88	18.1	57.8	203	--
REA	92B10	92	18.5	58.8	200	193
Mean			18.8	58.6	219	197
CV %			3.5	1.3	5	--
LSD 0.05			0.9	1.1	26	--
LSD 0.10			0.8	0.9	9	--

Planted: May 24. Harvested: Nov. 8. Previous crop: soybean.

¹Relative maturity as given by industry.

Table 14. 2023 Corn - Dryland- Oakes (Carrington REC) - Authors, H. Eslinger and S. Eslinger.

Company/Brand	Hybrid	RM ¹	Grain	Test	Grain Yield	
			Moisture	Weight	2023	2-yr. Avg.
			(%)	(lb/bu)	----- (bu/a) -----	
Legacy	LC474-23	97	20.5	53.1	244	--
Thunder	T6498 PC	98	21.1	53.3	242	--
Legacy	LC464-21	96	20.8	54.7	235	204
Proseed	2398 TRE	98	20.3	53.3	234	208
Thunder	T6497 TRE	97	20.6	53.6	231	--
Legacy	LC461-21	95	19.9	56.0	224	203
Thunder	T6396 VT2P	96	19.3	54.4	215	211
Dyna-Gro	D33QZ83EZ	93	19.6	55.1	214	200
Renk	RK444VT2P	93	19.2	54.4	214	208
REA	93F72	93	19.4	52.8	213	--
Dyna-Gro	D38VC80RIB	98	20.3	53.4	210	207
REA	92B10	92	18.6	55.5	209	201
Legacy	LC465-23	96	21.1	52.8	205	--
Dairyland	DS-3601AM	96	20.8	53.1	204	201
Renk	RK485DGVT2P	94	20.6	55.1	203	191
Renk	RK561DGVT2P	95	20.1	53.9	194	188
Legacy	LC474-20 TRE	97	20.4	52.7	194	--
Renk	RK400VT2P	91	19.1	56.0	193	193
Golden H.	G90B11-AA	90	18.3	55.7	193	--
Proseed	2496 PCE	96	21.0	53.0	185	--
Dairyland	DS-3599Q	95	20.7	53.7	181	--
Proseed	2196 VT2P	96	20.6	53.2	179	188
Thunder	T6294 VT2P	94	19.7	55.5	168	--
Renk	RK571PWE	96	21.0	52.8	165	--
REA	96A79	96	19.6	53.9	164	--
Golden H.	G97B68-DV	97	19.5	54.4	160	--
Dyna-Gro	D34VC93RIB	94	19.3	54.6	157	178
Mean			20.1	54.1	201	199
CV %			4.1	1.3	19	--
LSD 0.05			1.2	1.0	54	--
LSD 0.10			1.0	0.9	46	--

Planted: May 21. Harvested: Nov. 4. Previous crop: corn.

¹Relative maturity as given by industry.

Table 15. 2023 Corn - Irrigated - Oakes (Carrington REC) - Authors, H. Eslinger and S. Eslinger.

Company/Brand	Hybrid	RM ¹	Grain	Test	Grain Yield	
			Moisture	Weight	2023	2-yr. Avg.
			(%)	(lb/bu)	----- (bu/a) -----	
Renk	RK571PWE	96	19.9	54.6	330	--
Legacy	LC474-23	97	19.3	54.6	325	--
Thunder	T6498 PC	98	19.9	54.3	323	--
REA	95B53	95	18.4	55.5	318	--
Legacy	LC474-20 TRE	97	19.3	54.4	317	--
Legacy	LC465-23	96	20.1	54.1	315	--
Dairyland	DS-3900AM	99	20.2	55.4	311	--
Legacy	LC461-21	95	18.7	56.9	310	266
Renk	RK485DGV2P	94	19.2	56.5	308	272
Dairyland	DS-3601AM	96	18.9	55.0	306	279
REA	98A15	98	20.6	55.0	301	--
Dairyland	DS-3881AM	98	20.9	54.0	299	--
REA	96A79	96	18.3	55.6	299	--
Thunder	T6298 VT2P	98	20.0	54.4	298	265
REA	93F72	93	18.6	53.5	298	--
Legacy	LC464-21	96	20.0	54.9	297	273
Thunder	T6497 TRE	97	19.6	55.4	297	--
Renk	RK400VT2P	91	18.3	57.6	293	246
Renk	RK444VT2P	93	18.7	55.2	289	257
Thunder	T6397 AA	97	20.1	54.9	289	274
Dyna-Gro	D33QZ83EZ	93	17.7	56.4	288	255
Renk	RK561DGV2P	95	18.7	55.6	288	266
Dyna-Gro	D34VC93RIB	94	18.2	55.9	286	257
Dyna-Gro	D31VC23RIB	91	17.9	57.3	275	--
REA	92B10	92	17.0	56.1	258	247
Mean			19.1	55.3	301	263
CV %			3.4	0.8	5	--
LSD 0.05			0.9	0.6	21	--
LSD 0.10			0.8	0.5	17	--

Planted: May 23. Harvested: Nov. 3. Previous crop: soybean.

¹Relative maturity as given by industry.

Table 16. 2023 Corn - Langdon - Authors, B. Hanson, L. Henry and R. Duerr.

Company/Brand	Hybrid	RM ¹	Grain Moisture	Test Weight	Grain Yield	
					2023	2-yr. Avg.
			(%)	(lb/bu)	----- (bu/a) -----	
REA	80B57	80	30.8	53.1	147	--
Integra	3114VT2	81	30.6	54.0	141	--
Innvictis	A7988VT2PRIB	79	27.8	52.6	140	145
Thunder	T6977 VT2P	77	29.1	51.9	138	146
Legacy	LC304-21	80	32.8	53.0	137	131
Integra	3009VT2	80	26.8	53.5	137	148
Pioneer	P7389AM	73	23.0	53.8	135	--
Proseed	1974 RR	74	26.8	56.3	135	148
Innvictis	A7883VT2PRIB	78	26.7	56.8	133	--
Legacy	LC311-20	81	31.5	53.6	133	140
Pioneer	P7861AM	78	25.3	54.4	131	130
Pioneer	P7417AM	74	21.6	53.8	127	139
Thunder	T4477 GT	77	31.9	52.2	127	--
REA	73B59	73	24.1	56.0	127	--
Thunder	T6278 VT2P	78	30.4	51.7	126	144
Thunder	T4072 RR	72	24.6	55.8	121	135
Pioneer	P6910AM	69	20.9	55.4	120	--
Legacy	LC275-21	77	41.1	54.4	116	114
Trial Mean			28.1	54.0	132	--
C.V. %			6.6	1.7	7	--
LSD 5%			3.2	1.6	16	--
LSD 10%			2.6	1.3	13	--

Planted: May 16. Harvested: Oct. 15. Previous crop: soybean.

¹Relative maturity as given by industry.

Table 17. 2023 Corn - Minot (North Central REC) - Authors, L. Bortolon, J. Hansen and A. Kraklau.

Company/Brand	Hybrid	RM ¹	Grain Moisture	Test Weight	Grain Yield	
					2023	2-yr. Avg.
			(%)	(lb/bu)	----- (bu/a) -----	
Integra	3114 VT2P RIB	81	26.0	56.9	158	--
Golden H.	G82B12-AA	82	24.0	54.0	152	--
Syng NK	NK8519-V	85	26.0	52.4	152	172
Thunder	T6181 VT2P	81	26.0	55.6	150	165
Latham	LH 3695 VT2 PRO	86	28.0	54.1	149	--
REA	80B57	80	25.7	55.9	149	--
REA	86B55	86	25.6	56.0	149	
Golden H.	G80Q01-V	80	26.3	56.2	148	--
Thunder	T6983 VT2P	83	24.7	54.7	148	--
Latham	LH 3325 VT2 PRO	83	25.0	54.6	143	161
Syng NK	NK8005-V	80	24.0	55.2	140	--
Syng NK	NK8232-AA	82	26.7	53.8	140	--
REA	83B33	83	24.7	55.2	139	159
Thunder	TG278 VT2P	78	24.0	55.6	139	--
Integra	3431 VT2P RIB	84	22.3	54.1	139	140
Integra	3537 VT2P RIB	85	24.6	54.0	139	--
Proseed	2078 PCE	78	24.0	53.4	137	--
Proseed	2181 VT2P	81	25.7	55.3	137	161
Proseed	1984 VT2P	84	24.3	56.1	136	164
REA	73B59	73	23.0	58.1	134	--
Latham	LH 3035 VT2 PRO	80	24.0	56.3	132	162
Latham	LH 2977 VT2 PRO	77	23.0	55.3	122	148
Integra	3009 VT2P RIB	80	25.6	55.3	110	133
Mean			25.0	55.1	141	157
CV %			7.5	1.9	9	--
LSD 0.05			3.1	1.7	21	--
LSD 0.10			2.6	1.4	18	--

Planted: June 6. Harvested: Oct. 31. Previous Crop: fallow.

¹Relative maturity as given by industry.**Table 18. 2023 Corn - Hettinger - Authors, J. Rickertsen and M. Wells.**

Company/Brand	Hybrid	RM ¹	Grain Moisture	Test Weight	Grain Yield	
					2023	2-yr. Avg.
			(%)	(lb/bu)	----- (bu/a) -----	
Thunder	T6485 PC	85	19.4	56.0	151	--
Integra	3114	81	18.6	55.7	131	--
Integra	3431	84	18.8	56.8	130	--
Thunder	T6185 VT2P	85	19.1	55.5	126	--
Thunder	T6983 VTP2P	83	17.9	56.6	123	--
Integra	3009	80	16.0	57.0	113	92
Mean			18.3	56.3	129	92
CV %			5.3	2.1	7	--
LSD 0.05			1.5	1.7	13	--
LSD 0.10			1.2	1.4	11	--

Planted: May 17. Harvested: Nov. 28. Previous crop: winter wheat.

¹Relative maturity as given by industry.