



CORN Silage

The Minnesota Hybrid Corn Silage Evaluation Program was initiated to evaluate corn hybrids intended for use as silage and provide unbiased forage yield and quality information. The program is financed in part by entry fees from private seed companies that enter hybrids for testing.

Test Sites

The 1999 trials were conducted at Rosemount and Waseca. Locations and maturities are categorized as follows:

Southern Zone: Waseca

Early maturity group – Hybrids rated 105 day Relative Maturity (RM) and earlier.

Late maturity group – Hybrids rated later than 105 day RM.

Central Zone: Rosemount

Early maturity group – Hybrids rated earlier than 100 day RM.

Late maturity group – Hybrids rated 100 day RM or later.

Test Procedure

Design: Plots were established at Waseca and Rosemount in randomized block designs with four replications. Hybrids were planted at a 33,000-seeds-per-acre seeding rate with 30-inch row spacing. Standard check hybrids were included to represent the RM groups at each location.

Harvesting: Plots were harvested and herbage sampled for yield and forage quality determination for each RM group. The target maturity was whole-plant moisture content of 60% to 65%. Harvest at Waseca was on September 10 for the Early RM group and September 16 for the Late RM group. Harvest at Rosemount was on September 9 for the Early RM group and September 17 for the Late RM group. After grain maturation, two rows adjacent to those sampled for silage were harvested for grain and yields adjusted to 15.5% moisture.

Test Results

Whole-plant dry matter yields (DM), silage yields, moisture content, grain yields taken after physiological maturity, and crude protein (CP), acid detergent fiber (ADF), neutral detergent fiber (NDF), and in vitro digestive dry matter (IVDDM) concentrations are given for entries in each RM group. Means and least significant difference (LSD) statistical figures are given for each RM group and averaged across locations. Hybrids are ranked by average moisture content, they differ in dry matter, silage and grain yields. ADF and NDF are negative indicators of forage digestibility and intake respectively. Lower ADF and NDF numbers are related to better animal performance. IVDDM is a laboratory test to estimate digestibility in ruminant livestock.

Moisture, yield and quality traits for Early relative maturity corn hybrids at Waseca, 1999.

Brand	Hybrid	Yield ¹				Concentration, Percent ²			
		Moisture, Percent	Grain, bu/a	DM, ton/a	Silage, ton/a	CP	ADF	NDF	IVDDM
Dahlco	DS 348wx	52.4	162	8.8	18.6	6.7	26	44	68
Mycogen	TMF100	55.0	183	10.5	23.3	6.3	25	43	69
Wensman	W5378Bt	59.6	160	9.0	22.2	6.1	23	37	73
Dairyland	Stealth 1406	59.7	171	9.0	22.4	6.3	25	42	70
Dahlco	DS 5101wx	60.0	165	8.5	21.3	6.8	23	38	72
Trelay	7004	60.1	166	9.3	23.3	6.7	23	38	73
Trelay	SP692	60.6	193	10.1	25.5	6.6	23	39	72
Dahlco	DS 8051	60.8	204	9.9	25.2	6.9	24	41	72
Dairyland	Stealth 1507	62.3	173	10.0	26.5	6.6	23	39	73
Dairyland	Stealth 1508	62.6	181	9.8	26.2	6.2	24	41	71
Early RM Averages		59.3	176	9.5	23.4	6.5	24	40	71
LSD (0.05)		4.2	22	1.0	2.2	NS	2	4	3

¹ DM yield is whole-plant yield at 100% dry matter. Silage yield is whole-plant yield at harvest moisture. Grain harvested Oct. 12, 1999, and adjusted to 15.5% moisture. ² See "Test Results" text for description of concentration items.

Moisture, yield and quality traits for Late relative maturity corn hybrids at Waseca, 1999.

Brand	Hybrid	Yield ¹				Concentration, Percent ²			
		Moisture, Percent	Grain, bu/a	DM, ton/a	Silage, ton/a	CP	ADF	NDF	IVDDM
Pioneer	35R57	57.1	203	10.9	25.4	6.5	23	39	71
Wensman	W5359Bt	59.6	186	9.1	22.6	7.1	24	40	70
Golden Harvest	H-2515	60.7	173	10.7	27.2	6.7	21	35	74
Epley	E2480	60.7	190	10.7	27.2	6.9	23	39	73
Epley	E499	60.9	188	9.8	25.0	6.4	23	39	73
Cargill	6481FQ	64.0	175	9.3	25.8	7.1	22	37	73
Garst	24X	64.6	189	10.0	28.2	7.0	25	42	70
Late RM Averages		61.1	186	10.1	25.9	6.8	23	39	72
LSD (0.05)		2.8	ns	1.0	2.4	ns	ns	4	3

¹ DM yield is whole-plant yield at 100% dry matter. Silage yield is whole-plant yield at harvest moisture. Grain harvested Oct. 12, 1999, and adjusted to 15.5% moisture. ² See "Test Results" text for description of concentration items.

Moisture, yield and quality traits for Early relative maturity corn hybrids at Rosemount, 1999.

Brand	Hybrid	Yield ¹				Concentration, Percent ²			
		Moisture, Percent	Grain, bu/a	DM, ton/a	Silage, ton/a	CP	ADF	NDF	IVDDM
PWensman	W5258Bt	60.7	186	9.8	25.0	6.9	22	37	73
Heartland Hybrids	TH289	61.7	164	8.6	22.5	7.0	24	40	72
Dekalb	DK440	61.8	214	9.9	25.9	6.1	23	39	71
Dairyland	Stealth 1499	62.0	185	9.3	24.5	6.8	23	40	72
Dairyland	Stealth 1203	62.1	199	9.8	25.8	6.6	23	38	72
Heartland Hybrids	TH295	62.8	190	10.2	27.3	6.6	26	44	69
Dairyland	Stealth 1297	63.0	183	10.1	27.2	6.7	23	38	73
Kaltenberg	K8098LF	63.2	177	9.9	26.8	6.9	23	39	72
Dairyland	DST 10212	63.5	171	10.2	27.9	6.2	25	42	71
Dekalb	DK477	63.6	189	9.5	26.2	6.5	24	41	71
Dekalb	DK493BtX	64.2	202	10.0	27.9	6.4	23	39	72
Kaltenberg	K8094LF	65.5	165	9.0	26.3	7.2	25	42	70
Early RM Averages		62.8	186	9.7	26.1	6.7	24	40	72
LSD (0.05)		2.2	22	ns	2.5	ns	ns	4	ns

¹ DM yield is whole-plant yield at 100% dry matter. Silage yield is whole-plant yield at harvest moisture. Grain harvested Oct. 12, 1999, and adjusted to 15.5% moisture. ² See "Test Results" text for description of concentration items.

Names and addresses of companies participating in the 1999 hybrid corn silage trials.

Cargill, P.O. Box 5645, Minneapolis, MN 55440

Dahlco Seeds, Inc., 14730 15th St. SW, Cokato, MN 55321

Dairyland Seed Company, Inc., P.O. Box 958, West Bend, WI 53095-0958

Epley Brothers Hybrids, 22494 Yale Avenue, P.O. Box 310, Shell Rock, IA 50670

Garst Seed Company, 2369 330th St., P.O. Box 500, Slater, IA 50244

Heartland Hybrids, P.O. Box J, Dassel, MN 55325

J.C. Robinson Seed Company, 100 J.C. Robinson Boulevard, P.O. Box A, Waterloo, NE 68069

Kaltenberg Seeds, 5506 State Hwy 19, P.O. Box 278, Waunakee, WI 53597

Monsanto, 3100 Sycamore Road, De Kalb, IL 60115

Trelay Seed Company, 11623 Hwy 80, Livingston, WI 53554-9799

Wensman Seed Company, P.O. Box 190, Wadena, MN 56482

Moisture, yield and quality traits for Late relative maturity corn hybrids at Rosemount, 1999.

Brand	Hybrid	Yield ¹				Concentration, Percent ²			
		Moisture, Percent	Grain, bu/a	DM, ton/a	Silage, ton/a	CP	ADF	NDF	IVDDM
Dairyland	Stealth 1203	57.2	189	10.3	24.2	5.9	24	41	70
Wensman	W5308Bt	59.2	189	9.0	22.1	5.8	25	40	72
Mycogen	TMF100	59.5	159	10.6	26.2	5.6	26	43	69
Trelay	5700	60.5	198	10.4	26.2	6.3	26	42	71
Heartland Hybrids	TH301	60.5	174	9.9	25.0	5.4	27	44	70
Kaltenberg	K8104LF	60.6	149	9.3	23.5	6.3	25	42	70
Dairyland	Stealth 1501	60.8	183	10.6	27.1	6.2	25	41	71
Cargill	3711FQ	61.5	172	10.1	26.2	5.9	24	41	70
Heartland Hybrids	TH305	62.9	183	10.8	29.1	6.2	24	41	72
Trelay	SP692	63.3	212	10.7	29.2	6.2	23	37	74
Golden Harvest	H-8250	63.7	201	10.7	29.5	6.2	24	39	73
Late RM Averages		60.9	183	10.2	26.2	6.0	25	41	71
LSD (0.05)		3.4	ns	ns	2.1	0.6	ns	ns	3

¹ DM yield is whole-plant yield at 100% dry matter. Silage yield is whole-plant yield at harvest moisture. Grain harvested Oct. 12, 1999, and adjusted to 15.5% moisture. ² See "Testing Results" text for description of concentration items.

Forage, grass, oilseed and small-grain organizations

These organizations work in many ways in support of the commodities they represent and to provide opportunities to their members. Contact them directly for specific information about their roles and services.

Minnesota Association of Wheat Growers and Minnesota Wheat Research and Promotion Council
2600 Wheat Drive
Red Lake Falls, MN 56750
Phone: 218-253-4311
Fax: 218-253-4320
E-mail: mnwheat@redlakefalls.polaristel.net
Web Address: <http://www.smallgrains.org>

Minnesota Approved Seed Conditioners and Marketing Association
P.O. Box 303
Argyle, MN 56713
Phone: 218-437-6638
Fax: 218-437-6392

Minnesota Canola Council
1306 West County Road E, #109
St. Paul, MN 55112
Phone: 651-638-9883
Fax: 651-638-0756

Minnesota Barley Growers Association and Minnesota Barley Research and Promotion Council
2600 Wheat Drive
Red Lake Falls, MN 56570
Phone: 218-253-4311
Fax: 218-253-4320
E-mail: mnbarley@redlakefalls.polaristel.net

Minnesota Corn Growers Association and Minnesota Corn Research and Promotion Council
738 First Avenue East
Shakopee, MN 55378
Phone: 612-233-0333
Fax: 612-233-0420

Minnesota Crop Improvement Association
1900 Hendon Avenue
St. Paul, MN 55108
Phone: 612-625-7766
Fax: 612-625-3748
E-mail: beilx001@gold.tc.umn.edu
Web Address: <http://www.mncia.org>

Minnesota Forage and Grassland Council
411 Borlaug Hall
1991 Buford Circle
St. Paul, MN 55108
Phone: 651-436-3930
Fax: 651-436-7210
E-mail: mfgc@coafes.umn.edu

Minnesota Seed Producers and Promotion Association
Mac Ehrhardt, Secretary
P.O. Box 127
Albert Lea, MN 56007
Phone: 507-373-3161

Minnesota Soybean Growers Association and Minnesota Soybean Research and Promotion Council
360 Pierce Avenue
Suite #110
North Mankato, MN 56003
Phone: 507-388-1635
Fax: 507-388-6751
Web address: <http://www.mnsoybean.org>

Northern Minnesota Bluegrass Growers Association
31154 430th Avenue
Roseau, MN 56751-8413
Phone 218-463-2119

Grain

Test Locations

Test zones, locations and maturities are as follows,

Southern Zone, Lamberton, Waseca and Plainview

Early Maturity Trial - 105 Relative Maturity (RM) and earlier

Late Maturity Trial - 110 and 115 RM

Central Zone, Morris and Rosemount

Early Maturity Trial - 95 RM and earlier

Late Maturity Trial - 100 through 105 RM

Northern Zone, Staples and Rothsay

All entries 97 RM and earlier

Testing Procedure Entries,

Each corn seed company could enter up to six hybrids per 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 and enter hybrids in each test, for this reason there may be more than six hybrids for a company in a test.

Presentation of Data

Yields are given for individual locations along with yields and harvest moisture contents averaged across locations for 1999.

Hybrids are ranked within a maturity group by moisture content averaged across locations for 1999.

Least Significant Difference

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

How to Use the Results

The best indication of performance next year comes from the performance shown in the multiple location yield column. Yields from individual locations are given, but more emphasis should be given to the multiple location yield data. Ranking of hybrids on the basis of yield from high to low may change from location to location.

Names and addresses of companies participating in the 1999 trials.

Agripro Seeds Inc., Box 250, Brookings, SD 57006

Albert Lea Seed House (Viking Hybrids), Box 127, 1414 W. Main, Albert Lea, MN 56007

Anderson Seeds, Rt. 3, Box 94, St. Peter, MN 56082

Brown Seed Farms Inc., N1279 530th St., Bay City, WI 54723

Cargill Hybrid Seeds, Box 5645, Minneapolis, MN 55440

Dahlco Seeds, 14730 15Th St. SW, Cokato, MN 55321

Dahlman Seed Co., 73504-200th St., Dassel, MN 55325

Dairyland Seed Co., Inc. (Stealth, DST), Box 958, West Bend, WI 53095

Monsanto Co. (Dekalb, Asgrow), 3100 Sycamore Rd., DeKalb, IL 60115

Epley Bros. Hybrids, Inc., 22494 Yale Ave., Shell Rock, IA 50670

Fontanelle Hybrids, Rt. 1, Box 18, Nickerson, NE 68044

Garst Seed Co., 3469 330th St., Box 500, Slater, IA

Interstate Payco Seed Co., Box 338, West Fargo, ND 58078

Hyland Seeds, Blenheim, Ontario, Candada NOP 1A0

J.C. Robinson Seed Co. (Golden Harvest), 100 Robinson Blvd. Waterloo, NE 69069

Jung Farms Inc., 341 So. High St., Randolph, WI 53956

Kaltenberg Seed Farms, Inc., 5506 Hwy 19, Waunakee, WI 53597

Kruger Seed Co., Box A, Hwy 20 East, Dike, IA 50624

KSC/Challenger Seed Co., Box A, Dike, IA 50624

L.G. Seeds Inc., 4001 N. War Memorial Dr., Peoria, IL 61614

Mallard Seed Co. Inc., 311 West Broadway, Plainview MN 55964

Mycogen Plant Sciences, Box 21428 1340 Corporate Center, St. Paul, MN 55121-1428

NC+, Box 4408, Lincoln, NE 68504

NetSeeds Inc., 9001 Hickman Rd, Johnston, IA 50131

Novartis Seeds (NK Brand), Box 959, Minneapolis, MN 55440-0959

Pioneer Hi-Bred International, Inc., 130 SE Willmar Ave, Willmar, MN 56201

Ramy International Ltd, 1329 N Riverfront Dr., Mankato, MN 56001

Renk Seed Co., 6800 Wilburn Rd., Sun Prairie, WI 53590

Renze Hybrids, Inc., RR 3, Box 235, Carroll, IA 51401

Sand Seed Service, Box 648, 4765 Hwy 143, Marcus, IA 51035

Seeds 2000, Box 200 Breckenridge, MN 56520

Terning Seeds Inc., 15365 60th St. SW. Cokato, MN 55321

Top Farm Hybrids, Box 850, Cokato, MN 55321

Trelay, Inc., RR 1, Livingston, WI 53554

United Suppliers, Inc., 30473 260th St., Box 538, Eldora IA 50627

Wensman Seed Co., Box 190, Wadena, MN 56482

However, high-yielding hybrids at one location usually are high-yielding hybrids at another location and the multiple-location average is the best predictor of yield performance next year.

Corn Planting Rate and Date

Bushel Weight, Pounds56
Planting Rate, Seeds/Acre33,000
Planting Date.....April 15 - May 5

Individual trial information, 1999.

Location	Cooperators	Previous Crop	Planting Date	Harvest Dates	Tillage	Soil Tests			Fertilizer Amount ¹ and Time Applied	Herbicides and Application
						PH	P	K		
Lamberton	Steve Quiring Paul Porter	Soybean	Apr 30	Oct 8	Field Cultivator	6.0	39	187	150-0-0 fall	Frontier,PPI
					One pass					Hornet,Clarity,Early Post
Waseca	Tom Hoverstad	Soybean	Apr 28	Oct 10	Fall chisel	6.8	14	195	0-150-0 fall	DoublePlay,PPI
					Spring field cult				140-0-0 spring	Accent Gold,Post
Plainview	Bruce Ihrke	Soybean	Apr 29	Oct 28	Fall chisel	7.0	68	164	140-0-0	Dual,PPI
					Spring field cult					Accent Gold,Post
Morris	George Nelson	Wheat	May 20	Oct 21	Fall chisel	7.9	16	243	120-46-60 fall	Surpass,Pre
					Spring field cult					Hornet,Post
Rosemount	Jerry Holz	Soybean	May 10	Oct 29	Fall chisel	-	-	-	125-0-30 spring	Lasso,Pre
					Spring field cult					Accent + Buctril,Post
Staples	Mel Wiens	Corn	May 17	Oct 19	Plow	-	-	-	210-10-60 spring	Harness + Bladex,Pre
Rothsay	Troy Larson	Wheat	May 14	Oct 20	Fall chisel	-	-	-	80-80-70	DoublePlay,PPI
					Spring field cult					Buctril-atrazine,Post

¹ Pounds of N, P and K, respectively. ² Not available.

Early maturity hybrids, southern locations, 1999.

Source / Brand	Hybrid	RM	Yield, Bushels/Acre at			Average Across Locations	
			Lamberton	Plainview	Waseca	Bu/Acre	% Moisture
97 RM and earlier hybrids							
Dekalb	DK477	97	183	199	198	193	15.0
KSC/Challenger	K9896	93	182	203	195	193	15.2
Viking	7970	96	172	212	181	188	15.5
KSC/Challenger	Ex. 2098	95	163	203	177	181	15.5
Brown	4641	97	195	198	188	193	15.7
Wensman	W 5258 Bt	94	167	216	175	186	15.8
Wensman	MAX 127	97	178	195	188	187	16.0
Jung	2488A	97	171	224	176	190	17.0
Kruger	K-9898+	95	170	220	189	193	17.2
97 RM and earlier averages			176	208	185	190	15.9
98 to 102 RM hybrids							
AgriPro	AP 9313	100	169	194	188	184	15.1
Dahlman	1699	100	195	214	183	197	15.2
Dekalb	DK493BtX	99	194	212	201	202	15.3
Epley	E1160	98	175	205	181	187	15.3
Wensman	W 5308Bt	99	169	212	176	186	15.3
Kaltenberg	K4809	100	178	219	187	194	15.5
Cargill	4021Bt	100	170	210	181	187	15.5
Jung	6655RR	100	158	210	184	184	15.6
NK brand	NX 4217	100	169	205	180	185	15.6
Top Farm	TFsx 2201	101	178	208	189	192	15.7
High-Cycle	HC 7534 RR	100	174	206	176	185	15.7
Wensman	W 5319Bt	101	169	204	189	187	15.7
Trelay	5700	98	177	194	182	184	15.8
Anderson Seeds	6004RR	100	163	207	185	185	15.8
Dekalb	DK520RR	102	197	227	199	208	15.8
Dekalb	DK507	100	185	210	175	190	16.0
Jung	2440WX	99	173	197	191	187	16.1
Dekalb	DK525	102	187	232	220	213	16.1
Mycogen	2525	100	166	207	181	184	16.2
Kruger	K-9902Bt	99	176	199	178	184	16.2
LG Seeds	LG 2484	99	175	199	182	185	16.3

Source / Brand	Hybrid	RM	Yield, Bushels/Acre at			Average	
			Lamberton	Plainview	Waseca	Across Locations	
						Bu/Acre	% Moisture
Top Farm	TFsx 2100	102	187	203	175	189	16.3
Kruger	K-9802RR	99	171	204	189	188	16.4
Kaltenberg	K5005	100	178	201	173	184	16.4
Mycogen	2544	101	164	182	163	170	16.4
Dairyland Stealth	1401	100	168	207	183	186	16.5
Sands	SOI 9027	100	182	205	184	190	16.5
Anderson Seeds	6002	102	186	200	186	191	16.6
Asgrow	RX481	101	174	198	193	189	16.6
Jung	6540Bt	101	176	204	185	189	16.6
Top Farm	TFsx 105 Bt	102	181	211	203	198	16.6
Golden Harvest	H-7798Bt	102	164	192	169	175	16.7
Jung	2561	102	176	196	175	183	16.7
Dahlman	D102Bt	102	186	208	182	192	16.7
High-Cycle	HC 7529Bt	102	196	204	230	210	16.8
Sands	SOI 9009	100	163	218	196	193	16.9
Anderson Seeds	6002Bt	102	179	196	183	186	16.9
Fontanelle	4218	102	191	183	178	184	16.9
AgriPro	AP 9355 Bt	102	206	205	206	205	17.0
Viking	6901	100	175	200	178	184	17.0
Kruger	K-9903Bt	100	199	202	220	207	17.0
NC+	1799	100	159	209	186	185	17.0
Renk	RK606	100	176	210	208	198	17.0
Epley	E1470 Bt	102	169	197	172	179	17.0
Brown	5341	102	179	223	152	185	17.1
Trelay	5600	98	175	208	202	195	17.2
Mycogen	2566	102	167	202	167	179	17.2
Fontanelle	4008	100	168	189	175	177	17.2
Kaltenberg	K4907	100	194	211	173	192	17.3
AgriPro	AP 9368	102	188	194	160	181	17.4
Dairyland Stealth	1108	102	188	208	182	193	17.5
Pioneer	36R10	101	188	211	203	200	17.6
LG Seeds	LG 2499	101	180	217	201	199	17.7
Kruger	K-9905	102	174	225	177	192	17.8
Wensman	W 5329Bt	102	194	208	200	201	17.8
KSC/Challenger	9905Bt	102	152	197	173	174	18.3
Kruger	K-2002	99	161	196	165	174	18.5
Pioneer	36B08	102	189	205	200	198	18.9
98 to 102 RM averages			178	205	185	189	16.6
103 to 105 RM hybrids							
Kaltenberg	K5788 RR	105	169	207	183	186	15.6
Garst	8707	103	182	216	193	197	15.7
Jung	2510A	103	199	194	209	201	15.8
Top Farm	TFsx 8103 RR	103	154	215	176	182	16.0
Viking	5000	103	171	229	191	197	16.1
Cargill	4220Bt	105	192	215	203	203	16.1
NK brand	N 4640	103	169	199	186	185	16.1
Renk	RK648	103	187	192	206	195	16.2
Cargill	4521Bt	105	180	228	228	212	16.2
Kaltenberg	K5707	105	165	194	202	187	16.2
Viking	Bt 5950	104	184	214	219	206	16.5
NC+	2839	105	189	206	199	198	16.6
Renze	8158Bt	105	184	197	182	188	16.6

Source / Brand	Hybrid	RM	Yield, Bushels/Acre at			Average	
			Lamberton	Plainview	Waseca	Across Locations	
						Bu/Acre	% Moisture
Jung	6616Bt	105	202	206	209	206	16.7
Mallard	BT 2660	103	180	197	185	187	16.7
Dekalb	DK539	103	187	210	192	197	16.8
NK brand	NX 4616	105	193	191	201	195	16.8
Kruger	Ex. 908	105	200	239	209	216	16.8
Renze	5208IP	105	168	217	200	195	16.8
Renk	RK648Bt	105	177	209	217	201	16.8
Kaltenberg	K5454Bt	103	183	213	206	200	16.9
Top Farm	TFsx 7102 Bt	103	180	204	184	189	16.9
Seeds 2000	3105	105	192	208	181	194	16.9
Garst	8608 Bt	105	188	204	222	205	17.0
Renze	6210	105	184	207	191	194	17.0
KSC/Challenger	EX 908A	105	198	212	188	199	17.0
Golden Harvest	H-8067Bt	104	186	203	169	186	17.1
Dairyland Stealth	1504 Bt	104	202	203	202	202	17.1
Jung	2590	105	188	201	207	199	17.1
Dekalb	DK537	103	197	227	217	214	17.1
Renze	6200	105	180	186	183	183	17.1
Dahlman	D106Bt	105	183	203	191	192	17.1
Epley	E 1510Bt	104	189	205	207	200	17.2
Seeds 2000	3103	103	176	194	181	184	17.3
Wensman	W 5359Bt	105	165	196	175	179	17.3
Dekalb	DK545BY	104	181	235	215	210	17.3
Trelay	6005	103	164	214	197	191	17.3
Kruger	9907RR	104	187	206	190	194	17.4
Kaltenberg	K5808	105	193	212	208	204	17.4
Cargill	5212	105	199	232	203	211	17.4
KSC/Challenger	K-2008	105	196	242	220	219	17.4
Jung	2579	104	176	202	190	189	17.5
Top Farm	TFsx 2202	104	163	200	168	177	17.5
Dairyland Stealth	1406	105	190	223	197	203	17.5
Pioneer	36Y96	103	190	206	178	192	17.5
Epley	E 1500	105	169	210	192	190	17.6
Dahlco	X-8054	105	197	233	201	210	17.6
Trelay	7002	105	184	223	190	199	17.8
Sands	SOI 9067	105	180	208	208	199	17.8
KSC/Challenger	K-9806B	103	209	235	211	218	17.8
Dekalb	DK551BY	105	196	236	229	220	17.9
Pioneer	36D14	103	191	226	204	207	18.0
LG Seeds	LG 2512	103	192	207	196	198	18.1
Viking	R 6006	104	193	232	183	202	18.1
LG Seeds	LG 2530	105	199	203	193	198	18.2
Sands	SOI 9058	105	195	225	201	207	18.4
Top Farm	TFsx 106 Bt	105	195	185	193	191	18.5
KSC/Challenger	K-9907Bt	104	180	177	204	187	18.7
Pioneer	35P12	104	207	221	202	210	18.7
KSC/Challenger	Ex. 006	103	185	187	195	189	18.9
Dairyland Stealth	1507	105	213	214	205	211	19.3
103 to 105 RM averages			186	210	198	198	17.2
Southern locations early maturity averages			181	208	191	194	16.8
LSD(0.20)			12	14	16	8	0.5

Late maturity hybrids, southern locations, 1999.

Source / Brand	Hybrid	RM	Yield, Bushels/Acre at			Average	
			Lamberton	Plainview	Waseca	Across Locations	
						Bu/Acre	% Moisture
Later than 105 RM hybrids							
Wensman	W 5378Bt	106	165	213	187	188	15.7
NetSeeds	NET 1040	108	183	203	210	199	16.4
Mallard	BT 2700	106	196	203	221	207	16.6
Kaltenberg	K6006 IMI	106	146	196	166	169	16.8
Dairyland Stealth	1506 Bt	106	171	214	207	197	17.0
Anderson Seeds	4028	106	183	226	206	205	17.1
United Suppliers	US C1079RR	107	187	228	176	197	17.4
Renze	6229	106	151	191	197	180	17.5
Asgrow	RX601YG	110	194	245	203	214	17.6
NC+	3289	110	171	204	226	200	17.6
Viking	4004	107	187	210	157	185	17.7
Renk	RK706Bt	109	158	185	175	173	17.7
Renk	RK706	107	156	196	183	178	17.7
Top Farm	TFsx 2111	110	173	208	203	195	17.8
Mycogen	2657	106	195	239	220	218	17.8
Viking	4020	107	177	205	198	193	17.9
Anderson Seeds	4000A	106	168	200	190	186	17.9
Anderson Seeds	4000Bt	106	167	192	177	179	18.0
Renze	8248Bt	108	181	194	175	183	18.1
Mycogen	2652	106	183	217	204	201	18.2
Prairie Gold	PG 1589	109	173	222	170	188	18.2
Brown	6341	107	180	217	190	196	18.2
Pioneer	34G82	106	178	260	225	221	18.2
United Suppliers	US C1069Bt	106	164	194	195	184	18.4
Mallard	UC 2682	106	190	213	188	197	18.5
Top Farm	TFsx 2104 Bt	106	167	181	172	173	18.6
Epley	E 2480	110	193	232	175	200	19.1
Renze	6260	109	197	202	196	198	19.2
Golden Harvest	H-9095Bt	112	192	236	244	224	19.2
Top Farm	TFsx 2107	107	191	207	194	197	19.3
Renk	RK778	109	194	232	194	207	19.5
NK Brand	NX 5867	110	203	234	216	218	19.5
United Suppliers	US C1099	109	204	225	209	212	19.5
Renze	6239	108	163	226	188	192	19.6
Prairie Gold	PG 1586	107	188	213	177	193	19.6
Golden Harvest	H-8890Bt	111	202	236	222	220	19.8
Garst	8600 BLT	106	163	204	208	191	20.7
Southern locations late maturity averages			179	214	196	196	18.2
LSD(0.20)			12	15	26	11	0.6

Early maturity hybrids, central locations, 1999.

Source / Brand	Hybrid	RM	Yield, Bushels/Acre at		Average	
			Morris	Rosemount	Across Bu/A	Locations % Moisture
92 and earlier RM hybrids						
Dekalb	DK405	90	189	198	194	16.0
Dahlco	X-8891	90	176	189	182	16.9
Jung	2370	89	178	184	181	17.0
Dairyland Stealth	1289	90	182	184	183	17.0
Dekalb	DK389BTY	88	178	177	177	17.3
Epley	E1122	92	180	183	182	17.4
Pioneer	38K06	92	177	183	180	17.5
Dahlman	1488	90	184	178	181	17.5
Dahlman	1490	90	202	172	187	17.9
Cargill	2777	90	192	183	188	17.9
Cargill	2610	90	161	175	168	18.0
Dekalb	DK427	92	196	204	200	18.2
Prairie Gold	PG 1355	92	160	168	164	18.2
Wensman	5088Bt	85	176	184	180	18.3
Wensman	W 5178Bt	91	168	172	170	18.8
Wensman	MAX 78	90	173	176	174	18.9
LG Seeds	LG 2411	91	199	186	193	19.1
92 RM and earlier averages			181	182	181	17.7
93 to 97 RM hybrids						
Wensman	W 5258 Bt	94	197	193	195	17.4
Mallard	UC 414	95	166	192	179	17.5
Payco	457	95	185	192	189	17.6
Dahlman	1599	95	186	203	195	17.7
Kaltenberg	K4508	96	195	191	193	17.7
Anderson Seeds	7525	95	194	185	189	17.8
Garst	N7870	95	176	180	178	17.8
Seeds 2000	2951	95	190	184	187	17.8
Dekalb	DK477	97	211	199	205	17.8
LG Seeds	LG 2421	93	189	166	178	18.0
Top Farm	TFsx 2196	96	184	172	178	18.1
Garst	8830	94	187	194	191	18.1
Trelay	4002	95	192	185	189	18.2
Renk	RK546	95	208	201	205	18.3
Terning	TS 8266	96	197	211	204	18.3
KSC/Challenger	K9896	93	198	204	201	18.4
Epley	E1130	95	202	201	201	18.4
Wensman	MAX 007	93	187	196	192	18.5
Dahlco	X-8931	93	182	176	179	18.5
Garst	8820	95	181	179	180	18.5
Dekalb	DK440	94	214	206	210	18.6
LG Seeds	LG 2442	95	183	202	193	18.6
Kaltenberg	K4707	96	192	191	192	18.7
Kaltenberg	K4606	95	204	204	204	18.7
Pioneer	38W36	93	188	178	183	18.7
Kaltenberg	K3904	93	192	181	186	18.8
Brown	4680	97	194	186	190	18.8
Hyland	HL 2507	95	181	190	186	18.8
NK Brand	N 3030Bt	95	176	197	187	18.8
Dahlco	2394	94	211	204	208	18.8
Pioneer	38P06	95	186	197	192	18.9

Source / Brand	Hybrid	RM	Yield, Bushels/Acre at		Average	
			Morris	Rosemount	Across	Locations
					Bu/A	% Moisture
Hyland	HL 2505	95	186	204	195	19.0
Renk	RK569	97	206	187	197	19.0
Wensman	MAX 127	97	205	199	202	19.1
Mycogen	2424	95	176	175	175	19.2
Jung	2436	94	193	194	193	19.2
Brown	4641	97	198	200	199	19.2
Dairyland Stealth	1499	95	187	184	186	19.4
Garst	N7801	97	190	208	199	19.4
LG Seeds	LG 2473	96	182	191	187	19.6
Top Farm	TFsx 795 Bt	95	182	172	177	19.7
KSC/Challenger	Ex. 2098	95	191	201	196	19.8
Dairyland Stealth	1297	95	186	201	194	20.1
Kruger	K-9898+	95	206	194	200	20.2
Jung	2488A	97	187	203	195	20.2
Hyland	HL 2521	95	194	175	185	20.7
Hyland	HL 2614	95	192	197	195	21.3
93 to 97 RM averages			191	192	192	18.8
98 and later RM hybrids						
Anderson Seeds	6076	98	190	203	196	18.3
Epley	E1160	98	194	190	192	18.6
Top Farm	TFsx 2101	99	188	190	189	18.8
Wensman	W 5308Bt	99	189	205	197	19.0
Pioneer	36F30	99	219	200	210	19.2
Garst	8766	99	203	188	196	19.3
Dekalb	DK493BtX	99	213	213	213	19.4
Pioneer	37R71	98	188	194	191	19.6
Kruger	K-9802RR	99	195	198	197	20.1
Trelay	5700	98	215	214	215	20.4
Trelay	5003	98	184	186	185	20.5
Trelay	5600	98	198	212	205	20.6
Kruger	K-9902Bt	99	187	195	191	21.1
LG Seeds	LG 2484	99	182	190	186	21.9
Kruger	K-2002	99	186	204	195	22.9
98 RM and later averages			196	199	197	20.0
Central locations early maturity averages			190	191	190	18.8
LSD(0.20)			13	12	9	0.4

Late maturity hybrids, central locations, 1999.

Source / Brand	Hybrid	RM	Yield, Bushels/Acre at		Average	
			Morris	Rosemount	Across Bu/A	Locations % Moisture
102 and earlier RM hybrids						
Kaltenberg	K4809	100	179	194	187	18.8
Dairyland Stealth	1496	100	184	202	193	18.9
Terning	TS 8311	102	170	125	147	19.0
Mallard	UC 585	100	181	201	191	19.2
Cargill	4021Bt	100	191	211	201	19.3
Dahlman	1699	100	170	200	185	19.3
Top Farm	TFsx 2201	101	203	192	198	19.4
Mallard	UC 595-A	100	198	191	195	19.4
AgriPro	AP 9313	100	192	201	196	19.5
Kaltenberg	K5005	100	186	175	180	19.7
Kaltenberg	K4907	100	186	212	199	19.8
Renk	RK659	100	165	167	166	19.9
Dekalb	DK507	100	194	192	193	20.2
Kruger	K-9903Bt	100	189	219	204	20.3
Renk	RK606	100	195	195	195	20.3
Seeds 2000	3102RR	100	169	189	179	20.3
Terning	TS 8322	102	177	168	173	20.4
Terning	TS 8303	100	208	208	208	20.5
Mycogen	2544	101	159	167	163	20.6
Mycogen	2525	100	181	193	187	20.7
Prairie Gold	PG 1532	102	180	177	178	20.7
Renk	RK681	102	178	173	175	20.8
Prairie Gold	PG 529 Bt	100	164	186	175	20.8
AgriPro	AP 9355 Bt	102	193	209	201	20.9
Pioneer	36R10	101	198	208	203	21.0
Dahlman	D102Bt	102	172	207	189	21.0
Wensman	W 5319Bt	101	184	198	191	21.1
Wensman	W 5329Bt	102	179	173	176	21.1
Brown	5341	102	178	175	177	21.3
Top Farm	TFsx 2100	102	182	193	188	21.3
Epley	E1470 Bt	102	189	204	196	21.3
Dairyland Stealth	1402	100	187	181	184	21.4
Golden Harvest	H-7773Bt	102	192	180	186	21.6
KSC/Challenger	Ex. 003	100	196	204	200	21.7
Dekalb	DK520RR	102	208	193	200	21.8
Dahlco	2501	101	201	188	195	22.3
Dairyland Stealth	1404	102	190	190	190	22.5
Hyland	HL 2626	100	184	174	179	22.7
Golden Harvest	H-7798Bt	102	191	183	187	22.8
Jung	2561	102	176	179	178	23.2
Garst	N8701Bt	102	179	167	173	23.7
United Suppliers	US C1029Bt	102	189	200	195	27.5
102 RM and earlier hybrid averages			185	189	187	20.9
103 and later RM hybrids						
Epley	E 1485 RR	104	203	191	197	18.5
Top Farm	TFsx 8103 RR	103	186	207	196	19.0
Jung	2510A	103	206	205	205	19.6
NK Brand	NX 4616	105	191	183	187	19.7
Terning	TS 8333	103	188	184	186	20.0
Garst	8707	103	192	202	197	20.3

Source / Brand	Hybrid	RM	Yield, Bushels/Acre at		Average	
			Morris	Rosemount	Across	Locations
					Bu/A	% Moisture
Kaltenberg	K5454Bt	103	178	224	201	20.4
Renk	RK648	103	187	215	201	20.7
Garst	8608 Bt	105	197	205	201	20.9
Cargill	4521Bt	105	197	217	207	22.2
Epley	E 1500	105	193	204	198	22.3
Golden Harvest	H-8063Bt	104	188	204	196	22.5
Golden Harvest	H-8067Bt	104	187	192	190	22.7
United Suppliers	US E1050	105	209	196	202	22.7
NetSeeds	NET 1056	105	191	209	200	23.8
Jung	2579	104	182	173	177	24.2
Terning	TS 8341 Bt	104	200	206	203	27.4
103 RM and later hybrid averages			193	201	197	21.6
Central locations late maturity averages			187	193	190	21.1
LSD(0.20)			13	14	10	0.9

Northern Locations, 1999.

Source / Brand	Hybrid	RM	Yield, Bushels/Acre at		Average	
			Rothsay	Staples	Across	Locations
					Bu/A	% Moisture
77 and earlier RM hybrids						
NK Brand	NX 1107	75	149	163	156	20.2
Dairyland Stealth	1275	75	160	14	153	24.2
Proseed	EPW 76	76	149	157	153	24.6
77 RM and earlier hybrid average			153	156	154	23.0
78 to 82 RM hybrids						
Pioneer	39A26	80	169	141	155	21.1
Cargill	1877	80	146	154	150	21.6
Proseed	EK 4828	82	153	142	147	21.6
Dairyland Stealth	1480	80	169	166	168	21.6
Top Farm	TFsx 2182	82	150	167	158	21.6
NK Brand	NX 2127	80	161	196	179	21.8
Mycogen	2141	81	151	143	147	22.1
Wensman	5018Bt	81	148	182	165	22.1
Jung	2225	79	162	167	164	22.1
Renk	RK133	80	150	167	159	22.1
Prairie Gold	PG 1313	80	148	163	156	22.5
Renk	RK221	82	155	155	155	22.7
Brown	1688	79	167	160	163	23.5
Hyland	HL 2202	80	132	153	142	23.6
Trelay	1007	80	148	155	152	23.9
Dahlco	X-8851	80	157	158	158	27.0
Hyland	HL 2333	80	129	166	148	28.2
78 to 82 RM hybrid averages			153	161	157	22.9
83 to 87 RM hybrids						
Dekalb	DK355	85	161	186	174	21.6
Pioneer	39D81	85	176	175	176	21.9
Garst	8972IT	87	168	193	180	22.0
Brown	1967	83	166	177	172	22.2
Top Farm	TFsx 2184	84	165	173	169	22.2
Renk	RK232	85	153	201	177	22.4

Source / Brand	Hybrid	RM	Yield, Bushels/Acre at		Average	
			Rothsay	Staples	Across	Locations
					Bu/A	% Moisture
NK Brand	N 17-C5	85	156	180	168	22.5
Garst	8966	87	150	174	162	22.6
Terning	TS 8121	85	155	169	162	23.0
Wensman	5088Bt	85	169	195	182	23.0
Top Farm	TFsx 2187	87	158	162	160	23.1
Proseed	185	85	134	142	138	23.2
Golden Harvest	H-6229	84	162	145	154	23.2
Mycogen	2242	86	154	163	159	23.4
LG Seeds	LG 2367	85	163	187	175	23.4
Hyland	HL 2303	85	123	144	133	23.6
Mallard	UC 382-B	85	169	147	158	23.6
Dairyland Stealth	1485	85	161	165	163	23.7
Garst	N6902	87	155	148	152	23.7
Wensman	5048Bt	84	165	155	160	23.8
Dekalb	DK334BtY	83	168	144	156	23.9
Garst	8975	87	128	170	149	24.0
Dahlman	1300	85	154	139	147	24.1
Kaltenberg	K2909	85	161	181	171	24.2
Renk	RK277	85	169	158	164	24.3
Dahlco	2287	87	157	153	155	24.4
Trelay	2008	87	158	175	166	25.0
Brown	2041	86	130	168	149	25.3
Mallard	UC 386-A	85	161	187	174	25.8
Jung	2285	85	158	185	171	25.9
Hyland	HL 2324	85	156	149	152	27.5
83 to 87 RM hybrid averages			157	167	162	23.6
88 to 92 RM hybrids						
Dekalb	DK405	90	173	191	182	22.3
Kaltenberg	K3404	89	164	156	160	23.1
NK Brand	N2555Bt	90	173	199	186	23.1
Kruger	Ex.902	89	170	180	175	23.1
NK Brand	NX 2527	90	168	191	179	23.2
Kaltenberg	K3303	88	155	186	171	23.3
Jung	2370	89	165	186	176	23.4
NK Brand	N24B9	90	172	170	171	23.4
Kruger	K-2091	88	151	175	163	23.5
Dahlman	1488	90	164	188	176	23.5
Hyland	HL 2240	90	155	170	162	23.7
Top Farm	TFsx 2191	91	156	179	168	23.9
Golden Harvest	H-6726	93	167	186	176	24.0
Terning	TS 8202	90	146	188	167	24.1
Kaltenberg	K3808	92	157	167	162	24.2
Dekalb	DK389BtY	88	140	186	163	24.2
Pioneer	39F06	88	176	187	182	24.3
Mallard	UC389-A	90	159	175	167	24.3
Mycogen	2250IMI	89	175	188	181	24.4
Pioneer	38K06	92	162	207	184	24.6
Cargill	2777	90	167	166	167	24.6
Renk	RK386	90	145	185	165	24.8
Kaltenberg	K4303	92	161	182	172	24.9
Terning	TS 8212	91	154	202	178	24.9
Seeds 2000	2901	90	165	189	177	25.1

Source / Brand	Hybrid	RM	Yield, Bushels/Acre at		Average	
			Rothsay	Staples	Across	Locations
					Bu/A	% Moisture
Hyland	HL B275	90	130	192	161	25.2
United Suppliers	US C909	90	156	166	161	25.2
Cargill	2610	90	143	158	151	25.2
Top Farm	TFsx 2188	88	153	183	168	25.3
Garst	N8965	90	164	171	167	25.9
Wensman	W 5178Bt	91	144	155	150	26.2
Trelay	3700	90	155	181	168	26.4
Dahlman	1490	90	195	189	192	26.4
Wensman	MAX 78	90	154	207	180	27.1
Proseed	ET 92	92	149	183	166	27.2
Hyland	HL 2391	90	162	167	164	27.5
KSC/Challenger	K-2094	91	175	209	192	27.8
Dahlco	X-8902	90	165	162	164	28.0
88 to 92 RM hybrid averages			160	182	171	24.8
93 and later RM hybrids						
Wensman	W 5258 Bt	94	151	211	181	24.2
KSC/Challenger	K9896	93	172	215	193	25.0
Proseed	ES 4938	93	171	204	188	25.2
Kaltenberg	K4508	96	137	188	162	25.2
Jung	2436	94	150	187	169	25.6
Brown	3680	94	146	191	169	25.8
Proseed	ES 4968	96	163	190	177	25.9
Pioneer	38W36	93	174	203	188	25.9
Seeds 2000	2951	95	166	177	172	26.1
Golden Harvest	H-7076Bt	96	131	182	156	26.2
Kaltenberg	K4606	95	152	180	166	26.2
Pioneer	38P06	95	149	190	170	26.4
Mycogen	2424	95	155	185	170	26.8
United Suppliers	US C969	96	173	191	182	27.2
Wensman	MAX 007	93	167	201	184	27.2
KSC/Challenger	Ex. 2098	95	150	182	166	27.3
Kruger	K-9898+	95	159	201	180	27.5
Dairyland Stealth	1099 RR	97	171	160	165	27.6
Kaltenberg	K3904	93	175	174	175	27.9
Dairyland Stealth	1499	95	163	189	176	28.7
Kruger	K-9802RR	99	162	178	170	28.8
Dairyland Stealth	1501	95	149	164	157	32.4
93 RM and later hybrid averages			158	188	173	26.8
Northern locations averages			158	175	166	24.5
LSD(0.20)			20	21	15	1.3

Sources of Registered and Certified Seed

Following are sources of Registered and Certified seed of crop varieties grown for certification in Minnesota in 1999. Fields of these seed growers were inspected by Minnesota Crop Improvement Association (MCIA).

To be eligible for final certification the seed produced on these fields must be sampled, tested and inspected by MCIA after conditioning. The term "certified" is broadly applied to three classes of seed, Foundation, Registered and Certified. Registered seed is grown from Foundation seed and Certified seed is usually grown from Registered seed, though Certified seed of some varieties is grown directly from the Foundation seed class.

Certified seed transported across state lines must comply with the stipulations of the Federal Seed Act and with seed laws and regulations of the state into which it is transported. Seed tagged with MCIA certification tags or for which an MCIA bulk

certification certificate has been issued has been grown, conditioned, sampled and tested according to MCIA regulations and meets applicable requirements of the Minnesota Department of Agriculture.

Should you ever suspect misrepresentation, mislabeling or violation of regulations under which certified seed classes are produced and marketed, contact Minnesota Crop Improvement Association, 1900 Hendon Avenue, St. Paul, MN 55108.

Prospective buyers of seed from growers in the list that follows should contact growers directly for information about seed quantity and price.

This listing is provided as a service to prospective seed buyers. It is not to be construed as an offer for sale by the grower and is not to be considered as public advertising or as the posting of public notice in any manner. Growers who wish to promote and sell seed in Minnesota must com-

ply with all current state regulations governing the sale of seed.

Notice to Seed Buyers

While MCIA cannot assume financial responsibility for the performance of seed listed in this directory or for disagreements over sales that may arise from this list any complaint about certified seed addressed to MCIA will be investigated. Should a claim over seed performance involving MCIA arise, it must be addressed as provided in Minnesota Department of Agriculture Rules for Arbitration of Seed Performance Disputes. It is the responsibility of the seller of certified seed to supply seed representative of the samples submitted and approved for certification by MCIA. Purchasers of seed should insist on certification being complete, with certified seed tags attached to bags or a bulk sale certificate issued for bulk seed lots.

Listing lines show county, grower, town, phone number and class of seed, R for Registered, C for Certified.

Listing lines show county, grower, town, phone number and class of seed, R for Registered, C for Certified.

Robust

Carlton	Korhonen, Art, Kettle River	218-273-4931	C
Clay	Heartland Seeds, Moorhead	218-585-4621	C
Clay	Olek, Bradley, Felton	218-494-3440	C
Clay	Olek, Vernard, Felton	218-494-3440	C
Douglas	Sward Seed Farm, Nelson	320-762-0143	R
Freeborn	Albert Lea Seed House, Inc., Albert Lea	507-373-3161	C
Grant	Adams Seed, Wendell	218-458-2151	C
Kandiyohi	Behm Seed Company, Atwater	320-974-3003	C R
Mahnomen	Pazdernik Farms, Inc., Waubun	218-473-2232	C
Marshall	Anderson, Harvey & Luther, Stephen	218-455-3305	R
Marshall	Double A Farms, Viking	218-523-4246	C
Marshall	Sczepanski, Thomas, Stephen	218-478-2462	R
Meeker	Peterson, Melvin, Atwater	320-877-7585	C
Meeker	Peterson, Russell M., Grove City	320-877-7793	C
Meeker	Wigen, Marlow E., Litchfield	320-693-8182	C
Mille Lacs	Schimming, Mike & Walter, Princeton	612-389-2679	C
Murray	Blankers, Jerry, Lake Wilson	507-879-3103	C
Norman	Chisholm, Keith P., Gary	218-356-8674	C
Otter Tail	Crop Production Services, Perham	218-346-2355	C
Otter Tail	Wehking, Delmar, Parkers Prairie	218-338-2161	C
Polk	Clementson, Jon, Erskine	218-687-2345	C
Polk	Gullekson, Ray, Brent & Brian, Beltrami	218-926-5642	C
Polk	Larson Farms, Inc., Ralph, East Grand Forks	218-773-1463	C
Polk	Mat - Co., Inc., Fosston,	218-435-6667	C
Red Lake	Swenson Seed Farm, Brooks	218-796-5285	C
Roseau	Cenex Harvest States Elevator, Badger	218-528-3205	C
Roseau	Habstritt Farms, Inc., Roseau	218-463-1193	C
Stearns	Jokeland Farms, Holdingford	320-746-2147	C
Stearns	Nietfeld Farm, Inc., Melrose	320-987-3442	C
Todd	Brekke, Floyd, Eagle Bend	218-738-2672	C
Todd	Faust, Kevin, Long Prairie	320-732-3361	C
Washington	Wagner, W.V., Hastings	651-437-5718	C
Wilkin	Haugrud Seed Plant, Rothsay	218-493-4275	C R
Wilkin	Knapp Seed Farm, Inc., Foxhome	218-739-3366	C

Royal

Freeborn	Albert Lea Seed House, Inc., Albert Lea	507-373-3161	C
Pipestone	Skyline Production System, Woodstock	507-777-4262	R
Pipestone	Zeinstr, Michael, Holland	507-347-3342	C
Rice	Werner Farm Seeds, Dundas	507-645-7995	R
Stearns	Middendorf Seed Farm, Sauk Centre	320-352-6053	C
Wabasha	Zabel Seeds, Plainview	507-534-2487	C R

Stander

Douglas	Sward Seed Farm, Nelson	320-762-0143	C
Goodhue	Ag Partners Co-op, Goodhue	651-923-4496	C
Goodhue	Buck, Don, Zumbrota	507-732-5186	C
Grant	Adams Seed, Wendell	218-458-2151	C
Grant	Lacey Company, Gerald A., Wendell	218-458-2595	R
Kittson	Bloomquist Farms, Inc., Drayton, N.D.	218-455-3863	C R
Marshall	Jensen Seed Company, Stephen	218-478-3397	C
Meeker	Wigen Seed Farm, Litchfield	320-693-8182	C
Mower	Grass & Sons Seed Service, Le Roy	507-324-5820	R
Olmsted	Meyer's Seeds, Inc., Elgin	507-876-2482	C
Pennington	Asp, Kenneth, Thief River Falls	218-681-3272	C
Pipestone	Spronk, Art & Sons Seed Farm, Edgerton	507-442-5334	C
Wright	Hopkins, Joseph, Buffalo	612-682-1868	C

BEANS

Envoy Navy

Marshall	Jensen Seed Company, Stephen	218-478-3397	R
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Frontier Pinto

Polk	Mack Farms, Inc., Ron, East Grand Forks	218-773-2601	R
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Maverick Pinto

Grant	Kappahn, John M., Elbow Lake	218-685-4604	C
Polk	Thorson Farm, Inc., I. O., East Grand Forks	218-893-2285	C

Montcalm Red Kidney

Otter Tail	Wehking, Delmar, Parkers Prairie	218-338-2161	C
Norstar Navy			
Grant	Kappahn, John M., Elbow Lake	218-685-4604	R

BIG BLUESTEM

Bison

Roseau	Baumgartner Farms, Inc., Roseau	218-463-1332	C
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BIRDSFOOT TREFOIL

Norcen

Lake Of Woods	Pieper, Danny, Williams	218-783-4352	C R
Lake Of Woods	Pieper, Robert, Williams	218-783-4352	C R
Roseau	Solberg, Richard, Greenbush	218-782-2107	R
Roseau	Svoboda - Transgrud, Badger	218-528-3692	R

CANADA WILD RYE

Mandan

Marshall	Hapka Seed Farm, Argyle	218-437-6603	C
Roseau	Baumgartner Farms, Inc., Roseau	218-463-1332	C

CANOLA

Golden Boy

Wilkin	Seeds 2000, Breckenridge	218-643-2410	C
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Quantum

Out of state	Interstate Payco Seed Co, West Fargo, N.D.	701-282-7338	C
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CICER MILK VETCH

Windsor

Kittson	Carlson, Oscar T., Lake Bronson	218-754-4475	C
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CORN

E580 Hybrid

Renville	Enestvedt Bros., Sacred Heart	320-765-2728	C
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E585Bt Hybrid

Renville	Enestvedt Bros., Sacred Heart	320-765-2728	C
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E590 Hybrid

Renville	Enestvedt Bros., Sacred Heart	320-765-2728	C
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E605Bt Hybrid

Renville	Enestvedt Bros., Sacred Heart	320-765-2728	C
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E606 Hybrid

Renville	Enestvedt Bros., Sacred Heart	320-765-2728	C
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E670A Hybrid

Renville	Enestvedt Bros., Sacred Heart	320-765-2728	C
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E670ABt Hybrid

Renville	Enestvedt Bros., Sacred Heart	320-765-2728	C
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E699RR Hybrid

Renville	Enestvedt Bros., Sacred Heart	320-765-2728	C
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E805 Hybrid

Renville	Enestvedt Bros., Sacred Heart	320-765-2728	C
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CROWN VETCH

Penngift

Lake Of Woods	Tveit Farms, Roosevelt	218-442-5281	C
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DURUM WHEAT

Belzer

Marshall	Sczepanski, Thomas, Stephen	218-478-2462	R
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Maier

Marshall	Sczepanski, Thomas, Stephen	218-478-2462	R
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