

KNOW YOUR CORN IMPROVEMENT TEAM

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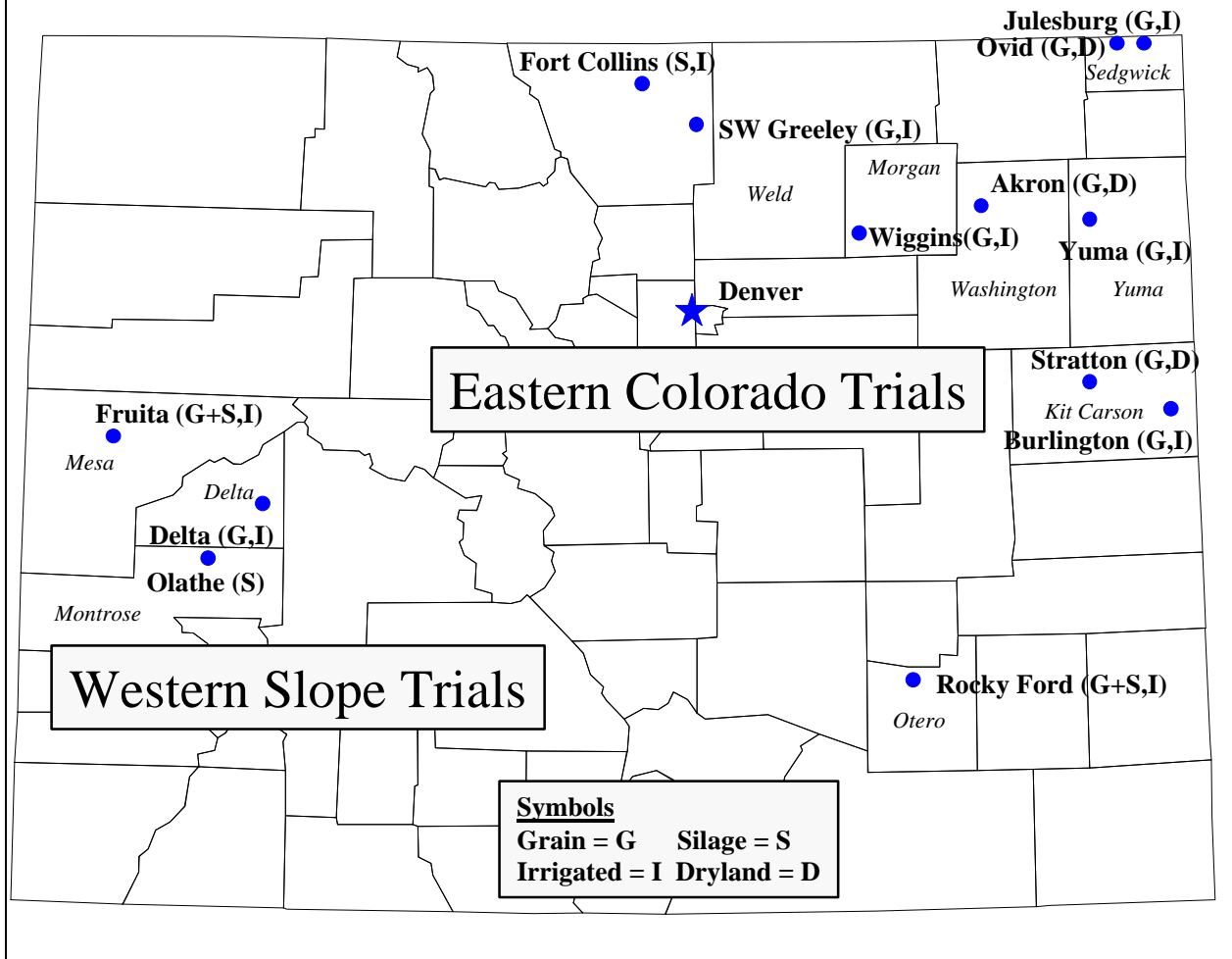
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1999 Colorado Corn Variety Performance Trials



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1999 COLORADO CORN PERFORMANCE TRIALS

Introduction

The importance of corn in Colorado has fluctuated greatly during the last 120 years. The earliest records in Colorado dates back to 1879 when Colorado farmers planted 23,000 acres and yields averaged 19.8 bu/acre. The highest acreage planted to corn in the state was 2.58 million acres in 1934. Average yields of grain corn did not exceed 30 bu/acre until 1956 when 68% of the corn acreage was irrigated. In 1997, the average irrigated corn grain yield was over 160 bu/acre. In recent years, Colorado corn producers annually plant approximately one million acres of hybrid corn, for both grain and silage. Hybrid corn seed, valued more than \$30 million, is purchased every year by Colorado corn producers from hybrid seed corn companies. Variable climatic conditions, innovations from biotechnology, acquisitions and mergers of seed companies, and rapid evolution of new hybrid lines means that unbiased performance information is very important to Colorado corn producers when choosing the best hybrid for their farm.

To provide Colorado corn growers with reliable and unbiased performance information, Colorado State University personnel annually evaluate commercial corn hybrids at multiple locations. Participation by the seed companies in the state trials is voluntary. All commercial companies are given the opportunity to enter one or more hybrids at any location. Reference to commercial companies or hybrids is made with the understanding that no discrimination is intended and no endorsement is implied by Colorado State University.

In 1999 corn grain hybrids were tested under irrigation at six Eastern Colorado locations and three Western Slope locations. Corn hybrids were also tested at three dryland locations in Eastern Colorado. Irrigated silage corn hybrids were tested at two Eastern Colorado locations and two Western Slope locations. Eastern Colorado trials were conducted by Colorado State University's Department of Soil and Crop Sciences, Crops Testing program, and Western Slope trials were conducted by Calvin Pearson of the Fruita Research Center, Colorado Agricultural Experiment Station

A randomized complete block field design with three replicates was used at all Eastern Colorado irrigated trials and four replicates were used in all dryland trials. Target plant populations for the trials were 32,000 and 15,000 seeds per acre for irrigated and dryland trials, respectively. Irrigated trials were planted at 15% above target population and dryland trial target populations were attained by hand thinning. The center two rows (200 ft²), of four row plots, were harvested for grain yield. Western Slope trials were planted at a target population of 33,500 seeds per acre. Plot area harvested was approximately 230 ft² at these sites.

All grain yields are reported in bushels per acre adjusted to 15.5% moisture content. Additional variables reported are grain moisture at harvest, test weight, plant height, lodging and/or stalk breakage, plants per acre, and ear drop. Ears dropped per plot were counted at the time of harvest, but fallen ears are not included in the plot yields. A silk date is reported for the Rocky Ford trial. Silage yields are reported in tons per acre adjusted to 70% moisture content. The moisture content of silage at harvest is reported as an indicator of hybrid maturity. The least significant difference (LSD) value ($\alpha=0.30$) and the coefficients of variation (CV) are reported for yield¹.

The 1999 Cropping Season

The 1999 corn cropping season in eastern Colorado can be characterized by the following observed phenomena:

- average growing degree days (GDD)
- few damaging hail storms
- precipitation was normal or above normal during critical period from July 15 to August 15 for dryland corn
- later than normal killing frost, long dry harvest period with insignificant lodging and ear loss

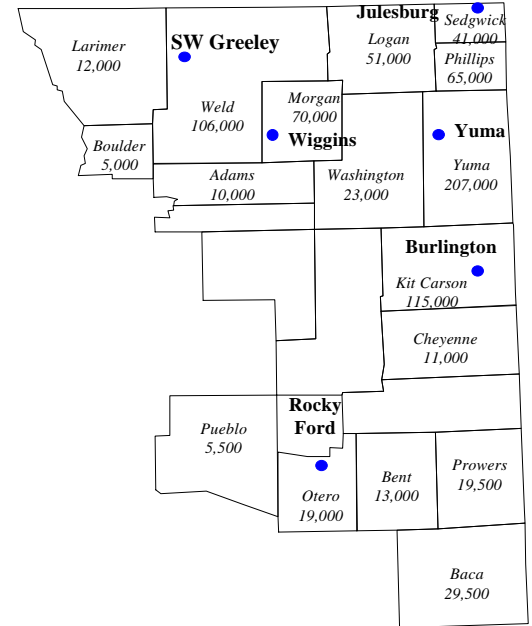
¹Carmer, S.G. 1976. Optimal significance levels for application of the least significant difference in crop performance trials. *Crop Sci.* 16:95-99.

Eastern Colorado Irrigated Grain Corn Performance Data

Each year about 750,000 acres of irrigated corn for grain is planted in Colorado, yielding 120-165 bu/acre, and producing upwards of 100 million bushels of corn with a value over \$150 million. Irrigated corn producers spend over \$20 million a year for seed. CSU conducts hybrid performance trials to provide unbiased and reliable information to Colorado producers so they may select the best hybrids for their farming conditions.

An important climatic factor determining irrigated corn yield is growing degree days. GDD calculations are accumulated from May 1 to September 30 based on daily temperatures as the average daily high and low temperature minus 50° F. For calculating the mean daily temperature, a minimum temperature below 50° F is counted as 50° F, and a maximum above 86° F is counted as 86° F. GDD's in 1999 were close to the long term average GDD at all locations.

Six eastern Colorado irrigated corn trial locations for 1999 and the 1998 corn acreage harvested in seventeen important corn producing counties of Colorado.



Trial Location	Weather Station	1999 GDD	Long Term Average GDD
Burlington	Burlington	2633	2673
Julesburg	Julesburg	2716	2752
SW Greeley	Fort Collins	2404	2335
Rocky Ford	Rocky Ford	2995	2837
Wiggins	Fort Morgan	2714	2535
Yuma	Yuma	2731	2615

Table 1. Irrigated corn cultural conditions in 1999

	Burlington	Greeley	Julesburg	Rocky Ford	Wiggins	Yuma
Soil Type	Keith Silt Loam	Weld Silt Loam	Keith, Goshen, Kuma Silt Loam	Silty Clay Loam	Bijou Loamy Sand	Julesburg Loamy Sand
Previous Crop	Corn	Wheat	Corn	Onions	Corn	Corn
Fertilization						
N acre ⁻¹	180	150	170	200	230	250
P ₂ O ₅ acre ⁻¹	35	42	35	50	40	50
K ₂ O acre ⁻¹	20	0	0		50	50
Zn acre ⁻¹	1	1	0		1	1.5
S acre ⁻¹	0	25	0		5	40
Herbicide	Atrex Balance	Bladex 90 DS	Dual II	Dual II Bladex DF	Dual Bladex	Epic
Insecticide	Furadan	Counter CR	Pen Cap	Capture	None	None
Irrigation	Sprinkler	Furrow	Sprinkler	Furrow	Sprinkler	Sprinkler

Table 2. Irrigated corn performance at Burlington in 1999¹

Hybrid	Grain		Test	Plant	Density	Lodging
	Yield	Moisture	Weight	Height		
	bu/ac	%	lb/bu	in	plants/ac	%
Fontanelle HC7734 (RR)	167	16.3	53.0	81	29595	3
DEKALB DK551 (BTY)	164	15.3	56.2	80	29908	3
Wilson 1205 (BT)	160	13.8	56.9	82	31827	0
Grand Valley SX1300	157	20.2	55.5	76	29201	3
LG Seeds LG2544	157	15.7	55.4	81	29231	6
Wilson 1580	155	19.1	57.8	76	30644	1
Fontanelle 5117	155	18.0	55.3	81	28382	1
Grand Valley G VX3376	154	17.2	57.4	71	27860	2
Triumph 1141 (BT)	154	24.5	52.4	81	27639	3
Wilson 1364	153	16.0	57.3	68	29051	1
Geertson GS-1117	152	18.9	55.8	78	26595	12
Novartis N6423	150	24.1	55.1	74	26564	7
Mycogen 2652	148	14.4	54.9	83	27775	2
AgriPro AP 9355 (BT)	148	13.9	57.0	84	29602	3
AgriPro AP 9489	147	19.2	57.6	73	29362	3
AgriPro AP 9559 (BT)	146	24.3	54.3	79	28988	4
Wilson 1464	145	19.2	56.7	75	27578	3
AgriPro AP 9466	145	18.0	55.0	77	30933	6
LG Seeds LG2579	143	21.2	56.1	78	26746	4
DEKALB DK589 (BTY)	142	14.6	55.3	81	32095	1
NC+ 4880	140	21.1	55.7	79	29121	5
Asgrow RX686 (RR/YG)	140	17.9	52.9	78	26280	4
Novartis NX6668	140	21.6	55.9	72	27837	4
DEKALB DK579	139	20.9	57.3	76	28422	0
Miller Preferred MP-1072	138	20.7	58.3	71	30094	3
Grand Valley SX1264	137	18.5	57.7	73	28614	3
Wilson 1436 (BT)	137	15.2	55.8	76	27311	5
AgriPro AP 9565	135	21.2	54.8	74	29896	6
Asgrow RX697	134	18.6	57.0	72	29034	1
Grand Valley G VX9256	133	14.6	55.4	80	26762	9
Fontanelle HC7529 (BT)	133	16.0	56.3	76	27173	8
Kaystar 7700 (RR)	133	15.1	53.4	80	25928	5
Asgrow RX740	132	17.6	57.3	79	25597	0
Novartis N59-Q9	130	16.6	57.0	79	29453	2
Grand Valley G VX9258	130	14.0	55.0	75	28330	4
AgriPro AP 9520	129	19.4	55.5	77	28181	4
Asgrow RX638 (YG)	128	16.8	56.5	81	28207	2
Asgrow RX738 (RR)	124	17.6	55.2	82	24561	1
NC+ 4119	124	19.9	54.7	78	26145	9
Asgrow RX799 (BT)	112	33.2	52.5	87	28776	1
Average	142	18.5	55.7	78	28382	4
CV%	11.5					
LSD _(0.30)	14					

¹Trial conducted on the Don Sircy farm, seeded 5/10 and harvested 10/23.
No significant ear drop.

Table 3. 2-Yr average irrigated corn performance at Burlington, 1998-99

Hybrid	Grain		Test
	Yield	Moisture	Weight
	bu/ac	%	lb/bu
Fontanelle 5117	180	17.5	56.0
Grand Valley SX1300	179	18.0	56.4
LG Seeds LG2579	175	18.4	56.9
AgriPro AP 9489	175	18.1	58.9
AgriPro AP 9565	174	19.5	56.4
Wilson 1464	173	18.6	58.1
Grand Valley SX1264	172	17.9	58.6
NC+ 4880	170	18.8	57.2
Asgrow RX697	168	17.7	58.4
AgriPro AP 9520	166	17.5	56.1
Novartis N59-Q9	162	16.0	57.8
Average	172	18.0	57.3

Table 4. Irrigated corn performance at SW Greeley in 1999¹

Hybrid	Grain		Test	Plant	Density	Lodging
	Yield	Moisture	Weight	Height		
	bu/ac	%	lb/bu	in	plants/ac	%
DEKALB DK440	186	12.8	53.4	84	28683	1
AgriPro AP 9313	178	13.4	51.1	74	29111	2
DEKALB DK520 (RR)	172	14.6	51.7	85	26607	2
Asgrow RX481	170	14.3	52.0	71	26981	0
AgriPro AP 9355 (BT)	169	13.6	50.9	81	28157	0
Grand Valley SX1177	168	13.0	54.7	86	31738	2
DEKALB DK539	168	14.6	53.8	84	28082	0
Grand Valley SX1216	168	13.8	52.4	81	28657	2
DEKALB DK507	167	13.7	53.2	77	29487	0
Grand Valley HRX5367(RR)	166	13.1	53.0	77	28684	0
Kaystar KX-625 (BT)	165	13.7	53.3	84	27761	0
LG Seeds LG2411	164	13.6	52.8	87	28237	6
LG Seeds LG2484	163	14.7	52.3	77	30511	1
Seedex 7401	163	19.1	51.0	83	32207	1
AgriPro AP 9340	163	14.0	50.7	72	29228	2
Grand Valley GVX0313	160	14.5	53.8	74	24447	2
NC+ 3037	159	18.7	52.5	73	27984	1
Geertson GS-998	158	13.9	51.4	73	27720	2
Seeds 2000 3121 (BT)	157	13.8	53.5	79	27602	1
Grand Valley GVX7236	156	13.6	51.4	80	30028	3
Seedex 6101	153	14.1	52.6	82	26704	1
Grand Valley GVX67703	151	13.5	53.8	86	28184	4
AgriPro AP 9466	150	20.8	48.1	88	26362	8
Seeds 2000 2951	150	12.8	54.2	87	28660	0
NC+ 2919	150	16.4	52.2	82	28633	1
Miller Preferred MP-1028	148	14.3	54.0	71	29463	1
Asgrow RX488 (RR)	147	12.9	49.9	77	30909	1
Grand Valley SX1215	144	13.3	49.4	74	30267	1
Average	161	14.4	52.2	80	28611	2
CV%	8.3					
LSD _(0.30)	11					

¹Trial conducted on the Jim Geist farm; seeded 5/19 and harvested 11/2.
No significant ear drop.

Table 5. 2-Yr average irrigated corn performance at SW Greeley, 1998-99

Hybrid	Grain		Test
	Yield	Moisture	Weight
	bu/ac	%	lb/bu
AgriPro AP 9313	178	14.2	54.0
AgriPro AP 9340	172	16.1	53.8
Grand Valley SX1216	169	14.3	54.6
Grand Valley GVX7236	166	14.1	53.7
Grand Valley SX1215	152	14.1	52.1
Average	167	14.6	53.7

Table 6. Irrigated corn performance at Julesburg in 1999¹

Hybrid	Grain		Test	Plant	Density	Lodging
	Yield	Moisture	Weight	Height		
	bu/ac	%	lb/bu	in	plants/ac	%
DEKALB DK551 (BTY)	181	22.6	54.4	87	27149	15
Seedex 7401	177	30.1	54.2	83	26381	8
Grand Valley GVX7236	176	19.8	55.4	89	27272	3
NC+ 3869	171	29.9	54.5	84	25352	10
AgriPro AP 9440	170	25.6	55.2	83	25706	3
Wilson 1205 (BT)	169	20.6	56.2	96	27934	11
Grand Valley GVX8936	167	23.9	49.1	89	27444	3
DEKALB DK537	167	21.1	54.9	91	27877	2
DEKALB DK539	167	22.0	56.8	88	27230	12
Triumph 4542	165	25.2	53.5	88	26243	16
Kaystar 7700 (RR)	163	29.8	49.6	92	26564	13
Fontanelle 4193	162	33.0	54.4	85	26982	10
DEKALB DK579	160	30.5	55.1	87	26604	1
Grand Valley GVX3376	160	28.2	56.9	89	26423	25
Wilson 1436 (BT)	159	24.9	54.3	86	25906	4
AgriPro AP 9355 (BT)	159	20.8	56.5	91	27769	6
Fontanelle 4997	158	30.3	54.5	87	25370	3
Asgrow RX638 (YG)	157	26.6	53.9	85	25223	5
Grand Valley HRX5376(RR)	157	24.1	54.9	85	26698	15
Grand Valley SX1264	156	31.8	54.7	86	26369	6
AgriPro AP 9520	156	27.1	51.7	87	27463	2
Asgrow RX481	156	25.5	54.1	83	26042	25
Garst 8550 (BT)	155	33.1	53.5	84	25890	14
Wilson 1580	154	30.8	55.9	97	29074	6
AgriPro AP 9489	154	31.0	54.2	84	25907	12
Wilson 1364	154	27.3	55.1	95	27191	3
Seedex 7301	154	28.6	52.5	92	27164	10
Geertson GS-1117	153	34.7	52.5	89	28283	2
NC+ 3037	152	26.5	53.4	86	27386	31
Asgrow RX488 (RR)	151	16.0	56.2	83	25439	5
Kaystar KX-660	150	25.1	53.7	83	26656	9
LG Seeds LG2512	148	27.3	53.7	96	29076	3
LG Seeds LG2484	147	24.9	56.1	78	25285	4
Garst 8546	142	35.1	51.4	89	28448	4
Fontanelle HC7529 (BT)	142	28.5	53.8	87	26642	9
Average	159	26.9	54.2	88	26813	9
CV%	8.4					
LSD _(0.30)	11					

¹Trial conducted on the Gene Bauerle farm, seeded 5/11 and harvested 10/22.
No significant ear drop.

Table 7. 2-Yr average irrigated corn performance at Julesburg, 1998-99

Hybrid	Grain		Test
	Yield	Moisture	Weight
	bu/ac	%	lb/bu
AgriPro AP 9440	176	21.7	56.0
Grand Valley GVX7236	175	18.0	56.7
Fontanelle 4193	173	27.3	57.9
Grand Valley SX1264	168	26.1	57.5
AgriPro AP 9489	159	26.0	57.8
Fontanelle 4997	156	27.5	58.6
Average	168	24.1	57.3

Table 8. Irrigated corn performance at Rocky Ford in 1999¹

Hybrid	Grain		Test	Plant	Density	Silking ²
	Yield	Moisture	Weight	Height		
	bu/ac	%	lb/bu	in	plants/ac	date
Garst 8546	227	13.9	58.1	81	33396	200
Asgrow RX738 (RR)	226	14.3	59.7	84	31672	200
Pioneer brand 33B50	222	16.8	60.1	82	30855	198
Grand Valley SX1300	221	14.4	58.2	80	32126	199
LG Seeds LG2637	217	16.5	59.4	86	31036	202
AgriPro AP 9565	216	14.2	58.5	82	31581	198
Novartis NX6668	215	13.7	57.9	84	30855	199
DEKALB DK647 (BTY)	215	14.7	58.2	90	33578	200
Pioneer brand 33P66	214	15.8	61.1	83	30764	200
Mycogen 2725	213	13.7	58.4	83	33124	199
Pioneer brand 3237	211	21.2	60.6	81	33578	203
Garst Seed 8543 (IT)	209	13.8	58.6	80	32670	200
Grand Valley SX1333	207	14.7	61.1	86	31581	199
Grand Valley GVX5338(RR)	206	14.0	59.7	81	31490	201
Pioneer brand 33J56	205	16.5	61.3	85	32307	199
Asgrow RX799 (BT)	203	18.5	60.0	91	33850	201
Novartis N7070 (BT)	203	13.8	58.0	82	33305	200
DEKALB DK595 (BTY)	203	13.6	59.2	82	31853	198
Asgrow RX889	201	21.9	59.8	82	32942	203
DEKALB DK611	201	14.2	59.8	84	31400	200
Novartis N7333 (BT)	198	18.5	60.1	88	32852	199
AgriPro AP 9689 (BT)	197	14.2	59.2	79	32035	199
Grand Valley GVX4601	195	23.9	59.0	97	31944	201
DEKALB DK655	194	18.6	59.9	84	31944	201
Pioneer brand 31A12	194	18.5	60.2	86	31944	200
Triumph 1866 (BT)	187	22.9	61.3	88	30310	204
Grand Valley SX1445 (RR)	180	20.2	60.3	85	30643	201
AgriPro HY 9646	176	21.4	57.1	95	31400	206
Average	206	16.7	59.5	85	32037	200
CV%	6.3					
LSD _(.30)	11					

¹Trial conducted on the Arkansas Valley Research Center; seeded 5/10 and harvested 11/3.

²Julian date.

Table 9. 2-Yr average irrigated corn performance at Rocky Ford, 1998-99

Hybrid	Grain		Test
	Yield	Moisture	Weight
	bu/ac	%	lb/bu
LG Seeds LG2637	215	20.8	59.2
Mycogen 2725	212	19.0	59.2
Garst Seed 8543 (IT)	212	16.7	59.3
Grand Valley SX1300	212	19.1	59.3
Novartis N7070 (BT)	209	17.4	58.6
AgriPro AP 9565	208	17.7	58.6
Novartis N7333 (BT)	204	22.0	60.5
Grand Valley SX1333	199	16.5	61.4
Pioneer brand 31A12	195	23.8	60.4
AgriPro HY 9646	182	24.2	57.5
Average	205	19.2	59.6

Table 10. Irrigated corn performance at Wiggins in 1999¹

Hybrid	Grain		Test	Plant		Lodging
	Yield	Moisture	Weight	Height	Density	
	bu/ac	%	lb/bu	in	plants/ac	%
AgriPro AP 9520	186	13.5	52.5	85	32696	4
AgriPro AP 9565	184	14.5	53.3	80	31605	2
Grand Valley SX1264	183	15.1	56.3	80	33668	3
Asgrow RX686 (RR/YG)	182	17.3	49.5	91	33223	4
Asgrow RX697	180	15.9	54.3	71	31654	8
AgriPro AP 9559 (BT)	179	16.8	50.2	84	35176	1
DEKALB DK537	176	13.0	55.5	84	33995	3
Seedex 6101	175	13.5	56.2	74	33270	0
DEKALB DK551 (BTY)	173	12.9	54.6	83	32820	3
AgriPro AP 9489	172	15.1	56.6	76	33464	3
Garst 8550 (BT)	172	14.9	56.1	75	33950	11
Kaystar KX-625 (BT)	171	13.8	57.1	79	35366	2
Geertson GS-1099	169	14.7	56.5	88	33604	3
Grand Valley GVX7236	169	12.6	54.8	83	35510	8
Asgrow RX638 (YG)	167	14.1	55.8	76	32258	2
LG Seeds LG2484	167	13.2	56.5	75	30665	2
Asgrow RX488 (RR)	165	12.8	55.7	81	32359	1
AgriPro AP 9313	164	12.9	54.9	81	33115	6
DEKALB DK540	164	14.9	56.6	84	32436	3
DEKALB DK539	162	13.4	58.7	82	33483	6
Grand Valley GVX8936	160	13.8	54.3	88	33685	7
AgriPro AP 9355 (BT)	159	12.6	55.1	86	33359	0
Seedex 5701	157	13.0	56.1	81	32188	1
Garst Seed 8640	156	13.4	55.8	91	34087	2
Grand Valley GVX2058	156	12.3	53.7	80	34235	2
LG Seeds LG2512	154	13.4	56.7	86	32972	4
Average	169	14.0	55.1	82	33263	3
CV%	6.3					
LSD _(0.30)	9					

¹Trial conducted on the Larry Rothe farm; seeded 5/13 and harvested 11/5.
No significant ear drop.

Table 11. 2-Yr average irrigated corn performance at Wiggins, 1998-99

Hybrid	Grain		Test
	Yield	Moisture	Weight
	bu/ac	%	lb/bu
Grand Valley SX1264	170	23.7	56.7
AgriPro AP 9520	170	20.6	54.3
AgriPro AP 9565	169	26.2	55.8
Asgrow RX697	165	25.2	56.1
Grand Valley GVX7236	163	17.8	56.1
AgriPro AP 9313	157	18.6	56.1
DEKALB DK540	157	19.8	57.2
AgriPro AP 9489	154	25.8	56.8
Average	163	21.7	56.0

Table 12. Irrigated corn performance at Yuma in 1999¹

Hybrid	Grain		Test	Plant	Density
	Yield	Moisture	Weight	Height	
	bu/ac	%	lb/bu	in	plants/ac
Garst 8546	238	22.5	56.0	82	31310
Seedex 7301	235	18.1	56.0	83	33991
LG Seeds LG2584 (BT)	232	24.0	55.4	86	32839
DEKALB DK551 (BTY)	229	18.0	57.9	86	32422
AgriPro AP 9520	222	20.1	56.4	83	31419
LG Seeds LG2579	222	23.2	56.0	80	31366
LG Seeds LG2544	222	15.7	55.4	83	32701
Asgrow RX686 (RR/YG)	221	23.1	51.8	89	34338
Seedex 7401	220	19.9	58.6	75	30023
NC+ 4880	219	24.3	56.7	87	32955
Novartis NX6668	219	24.5	56.2	55	22296
Geertson GS-1067	219	17.3	55.9	83	33538
AgriPro AP 9466	218	21.5	56.7	88	32897
Grand Valley GVX9258	218	16.7	56.1	86	33518
NC+ 4119	217	20.7	56.3	86	33783
Fontanelle 4193	216	20.7	58.2	89	32881
AgriPro AP 9489	216	19.1	58.5	79	31786
Wilson 1205 (BT)	216	16.1	58.6	84	34357
Wilson 1364	215	18.8	58.5	89	33681
AgriPro AP 9565	215	25.6	56.0	83	32843
Grand Valley SX1264	215	19.0	58.3	85	33533
Grand Valley GVX9256	215	16.0	55.6	88	30025
Mycogen 2652	214	16.0	56.0	84	34353
Grand Valley GVX8936	213	15.6	56.7	87	30040
Wilson 1464	213	20.6	58.5	78	30714
Seeds 2000 3103	212	16.6	58.4	87	32277
Grand Valley HRX5376 (RR)	212	15.5	57.7	77	32050
AgriPro AP 9355 (BT)	211	17.2	58.8	90	30132
Miller Preferred MP-1072	211	21.2	60.3	81	33681
DEKALB DK589 (BTY)	210	18.3	55.5	83	33326
Triumph 1141 (BT)	209	28.1	56.4	87	34796
Garst 8590	209	18.6	58.5	83	35471
Wilson 1580	209	21.2	59.2	87	34658
Asgrow RX697	208	21.4	57.3	77	29837
Kaystar KX-660	205	16.5	56.3	80	31061
Novartis N59-Q9	205	19.3	57.9	90	32693
Novartis N6423	204	23.4	55.5	90	31813
Fontanelle 4997	203	20.1	59.8	76	32354
Asgrow RX738 (RR)	202	19.5	56.7	79	31832
AgriPro AP 9559 (BT)	201	24.7	55.4	89	33618
Asgrow RX638 (YG)	201	18.9	56.4	74	31776
Wilson 1436 (BT)	200	18.9	56.7	85	31666
Grand Valley GVX3376	199	18.9	58.7	82	33219
DEKALB DK579	199	22.0	58.3	82	33428
Seeds 2000 3105	198	17.2	57.3	83	33299
Fontanelle HC7529 (BT)	198	23.1	56.8	81	33805
Garst 8550 (BT)	194	22.0	56.2	79	33511
AgriPro AP 9440	193	16.8	57.7	82	34989
Miller Preferred MP-1108	186	14.8	58.1	84	31894
Average	212	19.8	57.1	83	32465
CV%	7.4				
LSD _(0.30)	13				

¹Trial conducted on the Byron Weathers farm; seeded 5/11 and harvested 10/26. No significant lodging nor ear drop.

Table 13. 2-Yr average irrigated corn performance at Yuma, 1998-99

Hybrid	Grain		Test
	Yield	Moisture	Weight
	bu/ac	%	lb/bu
LG Seeds LG2579	218	23.3	57.7
NC+ 4880	218	23.8	57.7
AgriPro AP 9520	216	21.0	57.5
Grand Valley SX1264	213	19.7	59.6
AgriPro AP 9565	209	24.6	57.6
Novartis N59-Q9	208	18.8	58.4
Miller Preferred MP-1072	208	20.9	61.5
AgriPro AP 9489	207	21.1	59.6
Wilson 1464	205	21.7	59.6
Asgrow RX697	204	24.4	58.3
Fontanelle 4193	201	21.9	59.6
Fontanelle 4997	199	20.9	61.0
AgriPro AP 9440	198	18.2	58.7
Average	208	21.6	58.9

Dryland Grain Corn Performance Data

Northeastern Colorado growers have been adopting more intensive dryland cropping systems as shown by increased dryland corn acreage which rose from 26,000 acres in 1990 to 240,000 acres in 1998. Most of the acreage is found in nine NE Colorado counties. Average dryland corn yield in Colorado was 63 bu/acre in 1998.

Three northeastern Colorado dryland corn trial locations for 1999 and the 1998 dryland acreage harvested.

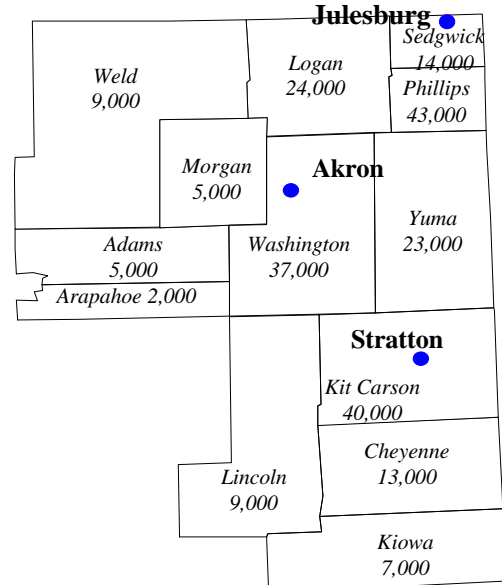


Table 14. Dryland cultural conditions in 1999

	Akron	Julesburg	Stratton
Soil Type	Rago Silt Loam	Richfield Loam	Keith Silt Loam
Previous Crop	Wheat	Wheat	Wheat
Fertilization			
N lb acre ⁻¹	50	108	80
P ₂ O ₅ lb acre ⁻¹		27	30
K ₂ O acre ⁻¹			0
Zn acre ⁻¹			1
Herbicide	Roundup Frontier Atrazine	Dual II	Marksman
Insecticide	None	None	None

Trial Location	1999 GDD	Long Term Average GDD	1999 Precip. 7/15-8/25	% of normal 7/15-8/25
Julesburg	2716	2752	4.33"	148 %
Akron	2614	2571	7.01"	234 %
Stratton	2724	2707	6.16"	197 %

The 1999 dryland trials benefitted from above average precipitation in the critical July-August period at all three locations. Nielsen et al. (1996) determined that 70% of variation in dryland corn yield can be explained by rainfall during the six-week period, from 15 July to 25 August, corresponding to tasseling, silking, and early grain-filling. Grain yields in 1999 were higher at Akron and Stratton where more critical rainfall was received. GDD's in 1999 were close to average long-term GDD at all three trial locations.

Reference: Nielsen, D., Peterson, G., Anderson, R., Ferreira, V., Shawcroft, W. and Remington, K. 1996. Estimating Corn Yields From Precipitation Records. Conservation Tillage Fact Sheet #2-96. USDA-ARS, P.O. Box 400, Akron, CO.

Table 15. Dryland corn performance at Akron in 1999¹

Hybrid	Grain			Density plants/ac	Lodging %	Ear Height in
	Yield bu/ac	Moisture %	Test Weight lb/bu			
DEKALB DK537	139	13.6	55.6	19047	0	24
Mycogen 2545 (IMI)	136	13.4	57.8	15444	8	24
Asgrow RX481	128	13.6	56.7	18417	0	20
DEKALB DK520 (RR)	127	13.2	56.5	19818	0	21
Asgrow RX488 (RR)	124	12.5	55.6	16648	0	30
Kaystar KX-625 (BT)	124	13.3	58.0	12717	0	24
Garst 8686	122	14.5	59.2	16843	0	30
Novartis N4640 (BT)	120	12.7	56.9	18267	0	20
LG Seeds LG2484	119	13.0	56.8	17268	0	19
Triumph 4542	119	14.0	57.2	17632	5	28
AgriPro AP 9355 (BT)	118	13.0	56.9	18881	0	32
AgriPro AP 9313	118	12.8	56.0	20421	0	29
AgriPro HY 9339	116	13.4	56.3	18351	0	24
AgriPro AP 9489	111	14.0	56.8	17424	10	22
Mycogen 2652	110	13.0	54.2	18732	0	28
Mycogen 2592 (BT)	110	13.4	57.4	16591	0	25
Grand Valley GVX7236	108	13.2	56.4	19068	0	26
Novartis N4242 (BT)	108	13.8	55.8	19201	0	22
Novartis NX4217 (BT)(IMI)	107	13.4	58.0	19373	0	24
Grand Valley SX1230	106	14.5	58.8	18732	0	32
DEKALB DK493 (RR)	105	12.5	56.8	17714	0	20
Asgrow RX686 (RR/YG)	104	21.6	51.6	18131	0	30
Mycogen 2620	97	22.8	53.0	18572	0	34
Mycogen 2544 (BT)	96	14.1	55.4	15719	13	28
AgriPro AP 9559 (BT)	89	16.0	54.5	17855	0	21
Asgrow RX638 (YG)	75	13.2	56.0	16960	0	24
Average	113	14.2	56.3	17839	1	25
CV%	15.5					
LSD _(0.30)	19					

¹Trial conducted on the Central Great Plains Research Center; seeded 5/7 and harvested 10/28. Only two of four replicates were reported. No ear drop.

Table 16. 2-Yr average dryland corn performance at Akron, 1998-99

Hybrid	Grain		Test Weight lb/bu
	Yield bu/ac	Moisture %	
Novartis N4640 (BT)	82	12.9	54.5
AgriPro HY 9339	77	13.8	54.1
AgriPro AP 9313	77	12.9	53.3
Novartis N4242 (BT)	76	13.3	54.5
AgriPro AP 9489	74	15.8	55.1
Grand Valley SX1230	70	14.9	55.7
Average	76	13.6	54.4

Table 17. Dryland corn performance at Julesburg in 1999¹

Hybrid	Grain		Test		Ear
	Yield	Moisture	Weight	Density	Height
	bu/ac	%	lb/bu	plants/ac	in
DEKALB DK520 (RR)	108	12.1	54.4	15441	31
Grand Valley GVX7236	104	11.9	54.0	17484	30
Mycogen 2592 (BT)	99	13.0	56.7	15443	29
Asgrow RX488 (RR)	99	12.0	55.2	15228	28
Novartis NX4217 (BT)(IMI)	98	12.6	57.7	16370	29
Grand Valley GVX8967	97	12.8	56.8	18060	33
Novartis N4640 (BT)	96	12.1	56.4	15775	30
Garst Seed 8692 (IT)	95	13.3	56.8	16835	30
Mycogen 2620	95	13.6	55.4	18478	29
DEKALB DK493 (RR)	94	11.8	54.7	17142	27
Asgrow RX638 (YG)	93	12.8	54.2	17858	28
Novartis N4242 (BT)	93	12.5	57.2	16061	29
Mycogen 2545 (IMI)	93	12.7	56.6	14958	29
AgriPro AP 9355 (BT)	92	12.1	54.8	16711	30
Mycogen 2657 (BT)	90	13.6	53.7	17213	30
AgriPro AP 9520	90	12.3	51.1	19399	32
AgriPro AP 9489	90	13.3	55.7	17930	33
Mycogen 2544 (BT)	88	13.1	55.8	16932	32
Asgrow RX481	88	12.0	53.5	16067	28
Grand Valley SX1230	87	13.4	54.4	16815	28
Triumph 4542	86	13.0	51.7	18494	33
Kaystar KX-790	82	12.6	53.7	17068	24
Mycogen 2652	80	12.2	52.2	18405	28
AgriPro AP 9559 (BT)	73	19.7	50.0	18125	31
Asgrow RX686 (RR/YG)	59	31.0	47.4	16357	32
Average	91	13.7	54.4	16986	30
CV%	12.5				
LSD _(0.30)	8				

¹Trial conducted on the Dean Pirrie farm; seeded 5/25 and harvested 11/0. No ear drop or lodging.

Table 18. 2-Yr average dryland corn performance at Julesburg, 1998-99

Hybrid	Grain		Test
	Yield	Moisture	Weight
	bu/ac	%	lb/bu
Grand Valley GVX8967	93	13.2	56.8
Novartis N4242 (BT)	90	13.0	57.5
Grand Valley GVX7236	88	13.0	55.8
Novartis N4640 (BT)	86	12.5	56.4
AgriPro AP 9520	82	13.2	52.7
Grand Valley SX1230	81	13.7	55.2
AgriPro AP 9489	79	13.5	56.0
Average	85	13.1	56.3

Table 19. Dryland corn performance at Stratton in 1999¹

Hybrid	Grain		Test	Plant	Density
	Yield	Moisture	Weight	Height	
	bu/ac	%	lb/bu	in	plants/ac
AgriPro AP 9565	129	14.2	57.0	69	13355
Mycogen 2545 (IMI)	122	13.3	58.6	66	14538
AgriPro AP 9489	122	14.0	58.4	64	13877
AgriPro AP 9559 (BT)	120	14.4	56.7	67	15008
Mycogen 2657 (BT)	119	13.8	57.8	70	15544
Novartis N4640 (BT)	118	12.8	57.8	65	14746
Asgrow RX488 (RR)	116	12.5	57.4	69	13686
Asgrow RX686 (RR/YG)	114	14.2	54.9	67	13798
Asgrow RX638 (YG)	114	13.3	57.5	68	14217
Mycogen 2544 (BT)	113	13.3	58.1	67	13746
Mycogen 2652	112	12.7	55.9	70	14306
LG Seeds LG2544	111	12.8	56.5	66	14176
Mycogen 2620	107	14.1	58.8	71	15410
DEKALB DK493 (RR)	103	13.0	57.6	66	13379
Novartis NX4217 (BT)(IMI)	103	13.1	58.8	62	15385
Kaystar KX-625 (BT)	102	13.0	58.9	64	14601
Novartis N4242 (BT)	100	13.2	58.6	65	14039
Garst 8780 HpH	100	12.9	57.2	70	14992
Mycogen 2592 (BT)	100	13.6	58.4	64	13923
AgriPro AP 9355 (BT)	98	12.9	57.9	66	13147
Asgrow RX481	97	13.9	57.3	60	13782
DEKALB DK520 (RR)	96	13.4	57.6	68	13812
Average	110	13.4	57.6	67	14249
CV%	14.3				
LSD _(0,30)	12				

¹Trial conducted on the Pautler Bros. farm; seeded 5/21 and harvested 10/25.

No significant lodging nor ear drop.

Table 20. 2-Yr average dryland corn performance at Stratton, 1998-99

Hybrid	Grain		Test
	Yield	Moisture	Weight
	bu/ac	%	lb/bu
AgriPro AP 9489	106	15.9	57.7
AgriPro AP 9565	104	16.3	56.4
Mycogen 2545 (IMI)	104	14.0	57.7
Novartis N4242 (BT)	100	13.9	58.1
Novartis N4640 (BT)	98	13.6	57.5
DEKALB DK493 (RR)	92	13.3	56.1
Average	101	14.2	57.4

Western Slope Grain Corn Performance Data

Over 3,000,000 bushels of corn grain are produced on some 30,000 acres of irrigated farmland on the Western Slope every year, bringing in over \$8 million to local producers. Calvin Pearson of the Colorado Agricultural Experiment Station evaluates long-season and short-season corn grain hybrids to provide reliable and unbiased information to Western Slope producers.

Growing season conditions in 1999 on the Western Slope were favorable for corn production with GDD slightly above average GDD.

Trial Location	1999 GDD	Long Term Average GDD
Fruita	2820	2673
Delta	2623	2590

Two Western Slope corn trial locations for 1999 and the 1998 acreage harvested in four important corn producing counties of the Western Slope.

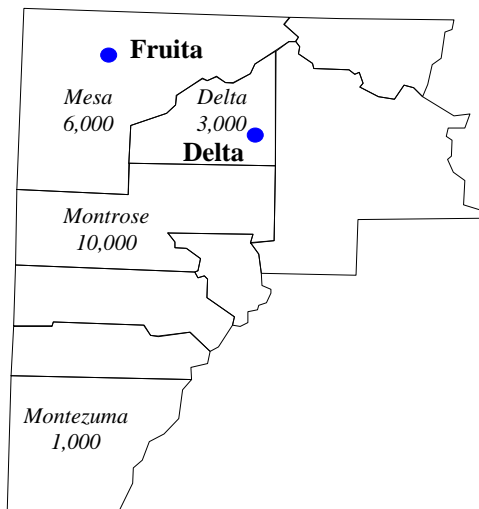


Table 21. Western Slope irrigated corn cultural conditions in 1999

	Delta	Fruita Short Season	Fruita Long Season
Soil Type	Mesa Sandy Clay Loam	Youngston Clay Loam	Youngston Clay Loam
Previous Crop	Pinto Beans	Alfalfa	Alfalfa
Fertilization			
N lb acre ⁻¹	205	216	216
P ₂ O ₅ acre ⁻¹	77	112	112
Herbicide	Lasso Clarity 2,4-D	Bladex 4L	Bladex 4L
Insecticide	Comite	Dimethoate Comite II Capture 2EC	Dimethoate Comite II Capture 2EC
Irrigation	Furrow	Furrow	Furrow

Table 22. Irrigated short season corn performance at Delta in 1999¹

Hybrid	Grain		Test		Lodging	Ear Drop
	Yield	Moisture	Weight	Density		
	bu/ac	%	lb/bu	plants/a c	%	%
HYTEST HT7512	198	17.8	44.5	35796	0	0
DEKALB DK551	196	13.8	48.1	37454	0	0
DEKALB DK537	195	12.6	50.9	37643	0	0
Grand Valley SX1238	188	12.3	48.5	36080	0	0
Grand Valley GVX4651	186	14.1	50.3	27700	0	1
Grand Valley HRX5376(RR)	186	14.2	50.9	34944	0	0
Grand Valley GVX8259(RR)	185	16.4	49.8	33334	0	0
Garst Seed 8640	184	12.9	50.9	30115	0	0
Garst Seed 8707	181	11.0	49.5	36649	0	0
Grand Valley GVX0313	179	12.8	52.0	36223	1	0
Grand Valley GVX7236	178	12.2	50.1	31772	0	0
DEKALB DK493	177	12.0	51.2	36649	0	0
DEKALB DK477	177	11.5	52.9	36649	1	0
HYTEST HT4310	176	11.2	51.6	34897	3	2
Grand Valley SX1215	175	11.8	49.5	37643	0	0
Grand Valley GVX7977	169	14.4	52.4	33713	0	0
Grand Valley HRX5367 (RR)	163	11.6	52.0	38117	1	0
Grand Valley SX1216	154	11.8	51.4	35892	4	0
Average	180	13.0	50.4	35071	1	0
CV%	5.6					
LSD _(0.30)	8					

Table 23. 2-Yr average irrigated corn performance at Delta, 1998-99

Hybrid	Grain		Test Weight
	Yield	Moisture	
	bu/ac	%	lb/bu
DEKALB DK551	220	16.2	51.7
Grand Valley SX1238	211	14.7	52.2
DEKALB DK493	195	13.9	54.3
Grand Valley GVX7236	192	14.1	53.6
Grand Valley SX1215	191	14.2	52.5
DEKALB DK477	189	13.4	55.3
Average	200	14.4	53.3

¹Trial conducted on the Wayne Brew farm; seeded 5/17 and harvested 11/8.

Table 24. Irrigated short season corn performance at Fruita in 1999¹

Hybrid	Grain		Test		Lodging
	Yield	Moisture	Weight	Density	
	bu/ac	%	lb/bu	plants/ac	%
Grand Valley SX1300	255	20.3	53.6	35937	2
HYTEST HT7512	240	18.2	55.0	34395	3
Grand Valley SX1270	236	16.4	57.8	33170	4
Grand Valley GVX8259 (RR)	224	15.1	57.4	32307	2
DEKALB DK551	224	13.3	56.4	36164	4
Grand Valley GVX9258	222	15.1	55.3	31808	4
Grand Valley GVX4651	221	16.2	56.7	28541	3
Gutwein 2400	218	14.6	55.4	32806	13
Grand Valley SX1238	216	14.8	55.6	35302	0
Grand Valley GVX9256	214	16.0	54.8	28678	1
DEKALB DK537	208	14.5	57.0	35620	3
Grand Valley SX1272	189	15.0	54.8	30855	5
Grand Valley HRX5376 (RR)	184	13.4	57.0	33941	2
DEKALB DK477	184	12.9	57.2	35030	1
DEKALB DK493	179	14.1	56.4	34531	1
HYTEST HT4310	170	11.0	55.7	33623	5
Grand Valley GVX7977	168	13.9	58.2	31037	2
Average	209	15.0	56.1	33161	3
CV%	16.6				
LSD _(0.30)	12				

¹Trial conducted on the Western Colorado Research Center; seeded 5/13 and harvested 10/26. No ear drop.

Table 26. Irrigated long season corn performance at Fruita in 1999¹

Hybrid	Grain		Test		Lodging
	Yield	Moisture	Weight	Density	
	bu/ac	%	lb/bu	plants/ac	%
HYTEST HT4138	249	23.0	55.2	35075	2
Grand Valley GVX4601	237	26.7	54.4	34258	1
DEKALB DK585	233	17.3	53.7	36663	2
DEKALB DK617	230	19.6	55.0	34349	2
HYTEST HT7820	219	27.8	54.4	35982	2
Gutwein 2611	169	24.0	55.4	32580	0
Average	223	23.1	54.7	34818	2
CV%	10.2				
LSD _(0.30)	17				

¹Trial conducted on the Western Colorado Research Center; seeded 5/13 and harvested 10/26. No ear drop.

Table 25. 2-Yr average irrigated short season corn performance at Fruita, 1998-99

Hybrid	Grain		Test
	Yield	Moisture	Weight
	bu/ac	%	lb/bu
Grand Valley SX1300	266	20.9	54.8
DEKALB DK551	241	16.0	56.6
Grand Valley SX1238	225	16.5	55.6
DEKALB DK493	202	15.4	56.3
DEKALB DK477	198	14.8	57.6
Average	226	16.7	56.2

Corn Silage Performance Data for Eastern Colorado and the Western Slope

Colorado farmers annually cut more than 100,000 acres of corn for silage. Larimer, Weld, Morgan, Logan, Kit Carson, and Montrose counties are the most prominent silage-producing counties in Colorado. Corn seed for silage in Colorado represents annual sales of about \$3 million. Colorado State University personnel evaluate commercial corn silage hybrids at multiple locations to provide reliable and unbiased hybrid performance information to Colorado corn growers.

Trial Location	1999 GDD	Long Term Average GDD
Fruita	2820	2673
Delta (Olathe)	2623	2590
Fort Collins	2404	2335
Rocky Ford	2995	2837

Table 27. Corn silage cultural conditions in 1999

	Fort Collins	Fruita	Olathe	Rocky Ford
Soil Type	Fort Collins Clay Loam	Glenton very fine Sandy Loam	Sandy Loam	Silty Clay Loam
Previous Crop	Pinto Beans	Winter Wheat	Sweet Corn	Onions
Fertilization				
N lb acre ⁻¹	220	216	228	200
P ₂ O ₅ lb acre ⁻¹	50	112	100	50
K ₂ O lb acre ⁻¹			60	
Herbicide	Lasso/Bladex	Bladex 4L	Harness	Dual II Bladex DF
Insecticide	None	Dimethoate Comite II Capture 2EC	Comite Dimethoate	Capture
Irrigated	Furrow	Furrow	Furrow	Furrow

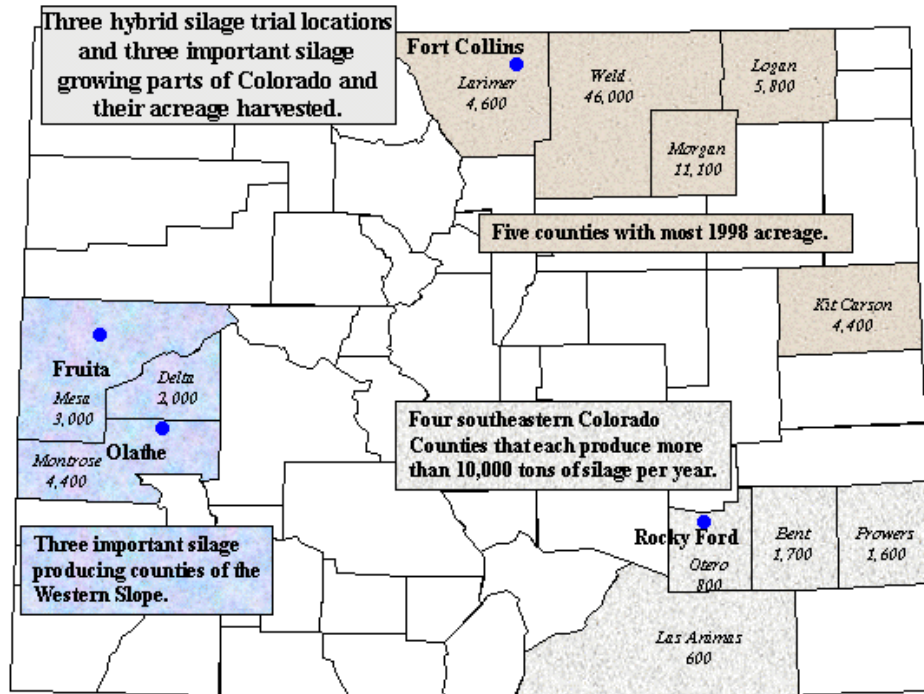


Table 28. Corn silage performance at Fort Collins in 1999¹

Hybrid	Plant			
	Yield	Moisture	Height	Density
	t/ac	%	in	plants/ac
Geertson GS-1099	29.2	69.9	107	33330
Grand Valley SX1550	29.0	72.8	110	33520
Golden Harvest EX98673	28.9	69.1	105	35238
Grand Valley SX1270	28.7	68.6	107	33087
AgriPro HY 9646	28.0	75.4	108	32579
Grand Valley SX1356	27.3	72.1	108	33869
Golden Harvest Check #1 (BT)	27.1	69.3	108	33796
Grand Valley SX1256	26.8	67.8	107	33945
Golden Harvest EX97735 (RR)	26.7	59.1	98	34668
Grand Valley SX1445 (RR)	26.5	70.7	114	32622
Golden Harvest EX98124	26.4	69.4	101	34402
LG Seeds LG2526 ML	25.6	72.0	111	32893
Asgrow RX738 (RR)	25.6	72.0	106	34499
Grand Valley SX1446 (RR)	25.3	71.1	113	34651
Golden Harvest EX97873	24.9	64.2	100	34123
Golden Harvest EX98590	24.6	70.3	97	33755
HYTEST HTX76221	24.5	75.2	128	32535
HYTEST HTX7877	24.5	74.2	112	34261
HYTEST HT7820	24.5	74.9	119	34913
Asgrow RX740	24.3	72.9	106	33427
Golden Harvest 7041659	23.7	68.2	102	35059
Golden Harvest EX98502 (BT)	23.6	71.0	102	33591
Triumph 1514	23.6	75.3	101	34332
Golden Harvest EX98548	23.1	68.1	95	33937
Golden Harvest EX97734	22.9	65.7	94	34074
Golden Harvest H-8250	22.5	71.7	103	34899
AgriPro AP 9689 (BT)	21.6	71.4	98	35106
Average	25.5	70.5	106	33967
CV%	10.3			
LSD _(.30)	2			

¹Trial conducted on the Agricultural Research Development and Education Center; seeded 5/13 and harvested 9/22.

Table 29. Corn silage performance at Rocky Ford in 1999¹

Hybrid	Plant				
	Yield	Moisture	Height	Density	Silking ²
	t/ac	%	in	plants/ac	date
Grand Valley SX1600	38.5	59.1	95	31853	205
HYTEST HT7820	37.4	60.5	102	29494	207
AgriPro HY 9646	37.3	61.0	96	31672	206
AgriPro HS 9843	36.9	63.6	94	32126	207
HYTEST HTX76221	35.9	64.4	112	28042	209
Garst Seed 8315	35.5	64.2	96	29766	209
DEKALB DK679 (BTY)	35.4	58.7	96	30764	205
Asgrow RX897	35.0	63.9	94	29222	205
Wilson E7004	34.7	63.6	92	29584	204
Asgrow RX913	34.6	64.5	99	30492	205
Pioneer brand 31B13 (BT)	34.5	62.5	95	33850	205
Golden Harvest Check #2 (BT)	34.3	58.4	83	31581	198
Golden Harvest 6091503	34.2	62.0	89	29403	204
Grand Valley GVX252653	33.8	64.2	99	30310	208
HYTEST HTX7877	33.5	58.8	97	30764	206
Grand Valley GVX7335	33.4	64.1	95	31218	205
Pioneer brand 31G20	33.0	59.9	95	30583	205
AgriPro AP 9828	33.0	64.6	94	30220	207
Golden Harvest EX99203 (BT)	32.9	54.5	82	30764	204
Golden Harvest H-9401 (BT)	32.8	59.2	92	29403	202
Wilson E4025	32.6	59.0	89	30855	203
Golden Harvest 7041676	32.5	57.5	86	32307	200
Asgrow RX799 (BT)	32.0	57.3	91	29494	203
DEKALB DK647 (BTY)	30.7	59.5	92	31400	203
Golden Harvest EX99151	30.3	57.7	87	30401	199
Golden Harvest EX99283 (RR)	29.8	57.3	82	30946	202
AgriPro AP 9689 (BT)	29.6	57.4	79	30583	198
Golden Harvest EX98710	29.3	53.6	81	29494	198
Pioneer brand 32P75	29.1	62.3	90	30583	202
Golden Harvest EX99216	29.1	57.1	85	31672	202
Golden Harvest EX98879 (BT/RR)	27.6	53.3	81	29584	199
Golden Harvest H-2547	27.0	57.0	87	31581	199
Average	33.0	60.0	91	30625	204
CV%	8.3				
LSD _(0.30)	2				

¹Trial conducted on the Arkansas Valley Research Center; seeded 5/10 and harvested 9/16.

²Julian date.

Table 30. 2-Yr average corn silage performance at Rocky Ford, 1998-99

Hybrid	Yield	Moisture
	t/ac	%
AgriPro HY 9646	41	59.9
Asgrow RX897	40	61.8
Pioneer brand 31B13 (BT)	40	59.2
AgriPro HS 9843	39	61.8
Garst Seed 8315	39	61.7
Wilson E7004	39	60.9
AgriPro AP 9828	??	??
Asgrow RX913	36	60.1
Average	39	60.9

Table 31. Corn silage performance at Fruita in 1999¹

Hybrid	Yield	Moisture	Density
	t/ac	%	plants/ac
HYTEST HT7820	32.5	67.0	36609
DEKALB DK679	32.0	65.2	35821
HYTEST HTX76221	31.4	64.8	33736
Grand Valley SX1564	30.0	65.9	35635
Grand Valley SX1545	30.0	66.2	31789
Grand Valley SX1550	29.9	64.0	36145
Wilson E7004	29.8	66.4	32530
HYTEST HTX7877	29.4	66.0	35821
Grand Valley G VX252653	29.4	68.4	36470
DEKALB DK641	28.8	57.1	36099
DEKALB DK647	28.2	60.7	37072
Wilson E4025	27.8	62.2	28453
Grand Valley SX1600	27.7	66.2	35172
Wilson Demand 118	27.1	72.1	35821
Gutwein 2707	20.6	70.1	31048
Average	29.0	65.5	34548
CV%	10.2		
LSD _(0.30)	2		

¹Trial conducted on the Western Colorado Research Center; seeded 5/13 and harvested 9/13.

Table 33. Corn silage performance at Olathe in 1999¹

Hybrid	Yield	Moisture	Density
	t/ac	%	plants/ac
HYTEST HT7820	29.9	75.9	35450
Grand Valley G VX4601	29.7	72.2	34662
DEKALB DK641	28.8	72.6	33689
Grand Valley SX1445 (RR)	28.3	72.1	34060
DEKALB DK679	28.0	75.7	33782
Grand Valley SX1360	27.3	73.8	35126
Grand Valley SX1446 (RR)	27.1	73.1	36516
DEKALB DK647	27.0	73.7	36006
HYTEST HTX7877	26.8	74.6	35033
Grand Valley SX1356	26.4	70.2	33735
Garst Seed 8314	26.2	76.5	34153
Grand Valley G VX7937	25.2	71.3	33875
Average	27.6	73.5	34674
CV%	12.3		
LSD _(0.30)	3		

¹Trial conducted on the Earl Seymour farm; seeded 5/11 and harvested 9/24.

Entry Forms for 2000 Trials

Entry forms for 2000 trials may be obtained from the Department of Soil and Crop Sciences, Colorado State University, Cynthia Johnson, C-4 Plant Science Building, Fort Collins, CO 80523-1170; Telephone (970) 491-1914; Fax (970) 491-2758; or e-mail cjohnson@agsci.colostate.edu. Year 2000 entry forms are also available on the CSU Crops Testing web site <http://www.colostate.edu/Depts/SoilCrop/extension/CropVar/index.html>. For Western Slope

Table 32. 2-Yr average corn silage performance at Fruita, 1998-99

Hybrid	Yield	Moisture
	t/ac	%
DEKALB DK679	35	70.6
Grand Valley SX1545	32	70.5
DEKALB DK641	31	66.3
Grand Valley SX1550	30	69.3
Average	32	69.1

Table 34. 2-Yr average corn silage performance at Olathe, 1998-99

Hybrid	Yield	Moisture
	t/ac	%
Garst Seed 8314	33	76.2
DEKALB DK679	33	75.4
Grand Valley SX1360	31	74.1
DEKALB DK641	30	72.6
Grand Valley SX1356	29	70.6
Average	31	73.8

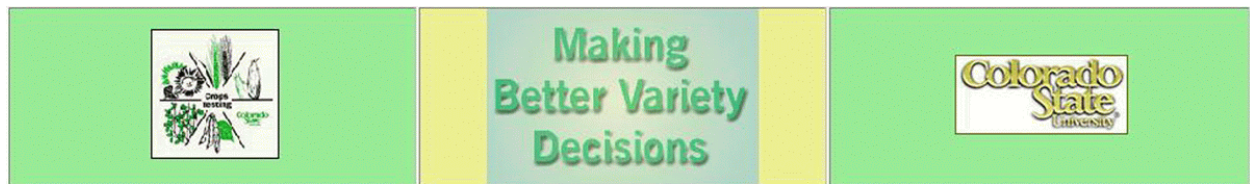
entry blanks, contact Calvin Pearson, Western Colorado Research Center, 1910 L Road, Fruita, CO 81521; Telephone (970) 858-0461.

Additional copies of this report may be ordered from the Department of Soil and Crop Sciences, Colorado State University, Cynthia Johnson, C-4 Plant Science Building, Fort Collins, CO 80523-1170; Telephone (970) 491-1914; Fax (970) 491-2758; or e-mail cjohnson@agsci.colostate.edu.

Seed Company Entrants in the 1999 Colorado Corn Performance Trials

BRAND/HYBRID	ENTRANT	ADDRESS	TELEPHONE
AgriPro	AgriPro Seeds, Inc.	23959 580 th Avenue, Ames, IA 50010	(800) 373-1741
Asgrow	Monsanto	3100 Sycamore Rd., Dekalb, IL 60115	(815) 758-3461
Dekalb	Monsanto	3100 Sycamore Rd., Dekalb, IL 60115	(815) 758-3461
Fontanelle	Fontanelle Hybrids	10981 8 th Street, Fontanelle, NE 68044-9706	(402) 721-1410
Garst	Garst Seed Co.	1460 B Front Nine Dr., Fort Collins, CO 80525	(970) 223-3638
Geertson	Geertson Seed Farms	1665 Burroughs Rd., Adrian, OR 97901	(541) 339-3768
Golden Harvest	Golden Harvest Seeds, Inc.	Box A 100 J.C. Robinson Blvd., Waterloo, NE 68069	(402) 779-2531
Grand Valley	Grand Valley Hybrids, Inc.	840 23 Road, Grand Junction, CO 81505	(970) 243-3115
HYTEST	AgriBioTech, Inc.	120 Corporate Park Dr., Henderson, NV 89014	(702) 566-2440
Kaystar	Kaystar Seed	702 3 rd Street SW, PO Box 947, Huron, SD 57350	(605) 352-8791
LG	LG Seeds	3551 Country Road F, PO Box 88, Tekamah, NE 68061	(800) 752-6574
Miller Preferred	Miller Preferred Seeds	10981 8 th Street, Fontanelle, NE 68044-2505	(402) 721-1410
Mycogen	Mycogen Seeds	1340 Corporate Center Curve, Eaganl, MN 55121-1233	(800) 380-7282
NC+	NC+ Hybrids	PO Box 4408, Lincoln, NE 68504	(402) 467-2517
Northrup King	Novartis Seeds, Inc.	One North Main, Suite 517, Hutchinson, KS 67501	(316) 664-9830
Pioneer	Pioneer Hi-Bred Int'l., Inc.	1616 So. Kentucky St., Ste C-150, Amarillo, TX 79102	(806) 356-0160
SEEDEX	Seedex	PO Box 1477, Longmont, CO 80502	(303) 678-7333
Seeds 2000	Seeds 2000	Box 200, Breckenridge, MN 56520	(218) 643-2410
Triumph	Triumph Seed Co, Inc.	PO Box 1050, Hwy 62 Bypass, Ralls, TX 79357	(806) 253-2584
Wilson	Wilson Seeds, Inc.	PO Box 391, Harlan, IA 51537	(712) 755-3841

<http://www.colostate.edu/Depts/SoilCrop/extension/CropVar/index.html>



Winter Wheat 1999 Variety Trial Results 1999 MEY Yield Results	Dry Beans 1999 results	Corn 1999 silage results 1999 dryland and irrigated grain results
Crop Variety Performance for Colorado Crops		
Sunflower 1999 results- oil and confection hybrids	Alfalfa 1999 results	Spring Wheat Barley, & Oats see 1998 results

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