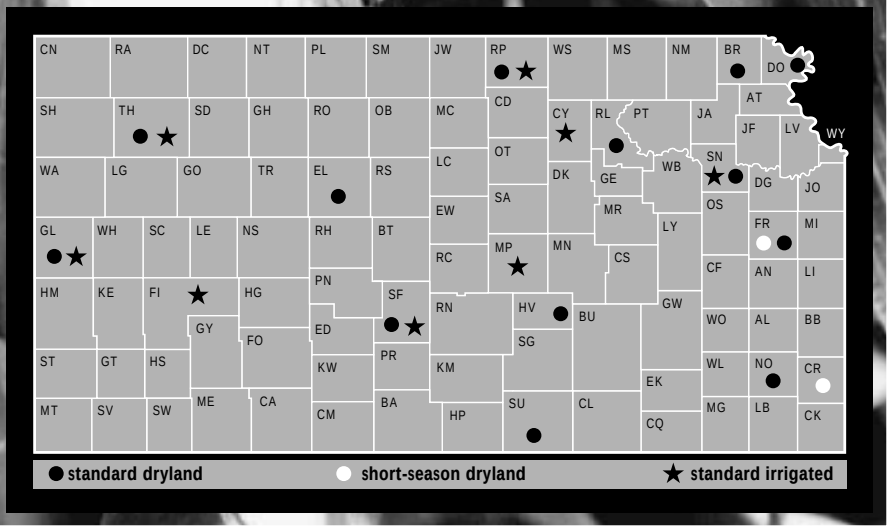
2002

KANSAS PERFORMANCE TESTS WITH

CORN HYBRIDS

REPORT OF PROGRESS 899

Kansas State University
Agricultural Experiment Station
and Cooperative Extension Service



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Contribution No. 03-160-S from the Kansas Agricultural Experiment Station.

2002 CORN CROP REVIEW

Statewide Growing Conditions

Weather during the growing season was characterized by extremes. The season started out with cool, wet weather in the eastern part of the state, followed by a prolonged drought over nearly the entire state, and ended with rain in many areas as harvest approached.

Drought conditions prevailed during much of the season, especially in central and western Kansas. Prior to planting, well over half the crop acreage had a topsoil water deficit (Figure 1). The moisture situation improved temporarily in May, but western Kansas received little of that precipitation. From mid-June until harvest, topsoil moisture was short or very short on over 60% of the crop acreage. During most of that time, maximum temperatures were at or above 100º F. These drought and temperature stresses coincided with the critical pollination and grain fill stages of crop development.

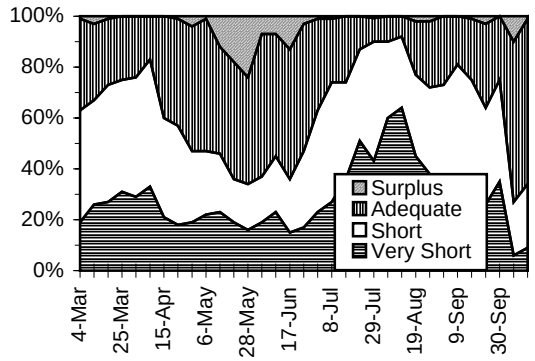


Figure 1. Statewide status of topsoil moisture.

Moisture and temperature extremes significantly influenced the corn crop. Most of the crop started out in good or fair condition (Figure 2). The crop began to deteriorate in early June. From late July until harvest, roughly half the crop was classified as poor or very poor. Only one or two percent of the crop was classified as excellent after August 5. (Crop-Weather reports, Kansas Ag. Statistics, Topeka)

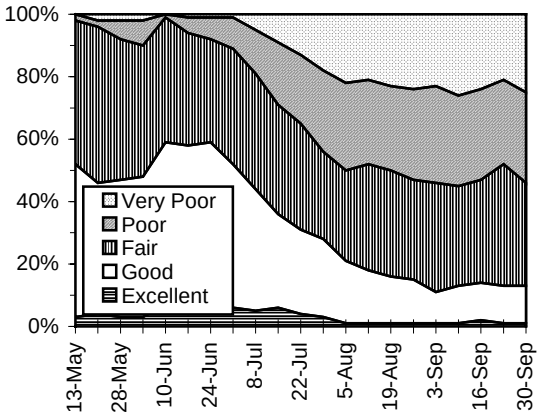


Figure 2. Condition of 2002 Kansas corn crop.

Diseases

Corn diseases were a mixed bag in 2002, and their incidence and severity reflected the weather in the state. Early in the season there were many reports from the eastern production areas of cold weather crown stress, potash and phosphorous deficiencies, crazy top downy mildew, and holcus spot; all problems associated with cool, wet conditions.

Because of the dryness that followed throughout the state, many of the common foliar problems normally found, such as gray leaf spot, common rust and southern rust, were present at minimal levels. An interesting occurrence in the dryland fields of western Kansas was an extremely high incidence of common smut in many hybrids. Common smut, while normally associated with physical damage from hail or blowing sand, is also favored by hot, droughty conditions that interfere with pollination and give the fungus a better chance to infect the ear. The dry weather across the state was also responsible for a higher than normal incidence of charcoal stalk rot. Many fields were nearly 100 percent infected, often with significant lodging.

Lastly, there were numerous reports of corn contaminated with aflatoxin. Aflatoxin is produced by the ear mold fungus *Aspergillus flavus*. By mid-September, 40 percent of the samples tested had detectable levels of aflatoxin, and of these, nearly half were above the 20 ppb limit deemed safe for human consumption by the FDA. (Doug Jardine, Kansas State University Department of Plant Pathology)

Insects

Dry weather appeared to limit insect populations and resulting damage to the corn crop. Few reports of insects causing seedling damage (cutworm, wire worm) were received. Corn leaf aphids were found in fields in south central Kansas in early July. In late July, Banks grass mite populations began to increase in southwest Kansas. Predatory insects appeared to limit the extent of damage in many fields. European corn borer numbers were low in southwest Kansas. First generation southwestern corn borer numbers were higher than normal near Garden City. (Kansas Insect Newsletter, Extension Entomology, Kansas State University; Kansas Cooperative Economic Insect Survey Reports, Kansas Department of Agriculture; and Southwest Kansas Entomology Update, Southwest Research-Extension Center)

Harvest Statistics

The October 11 Crops Report predicted a 286 million bushel crop, down 26% from last year. This is the lowest total production since 1995 when there were nearly a million fewer acres planted (Figure 3). In 2002, 2.6 million acres were harvested, down 15% from last year. The predicted average yield of 110 bushels per acre is 17 bushels below the final estimate for 2001. (Kansas Agricultural Statistics)

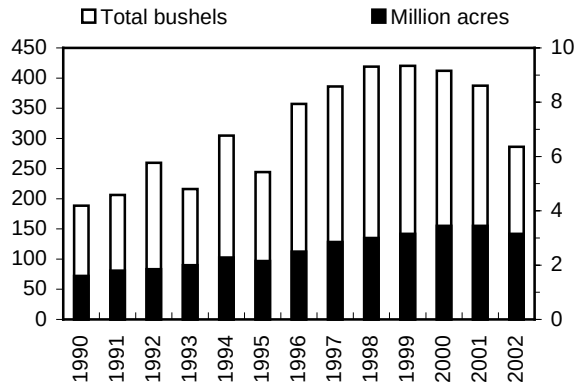


Figure 3. Historical Kansas corn production.

2002 PERFORMANCE TESTS

Objectives and Procedures

Corn Performance Tests, conducted annually by the Kansas Agricultural Experiment Station, provide farmers, extension workers, and seed industry personnel with unbiased agronomic information on many of the corn hybrids marketed in the state. Entry fees from private seed companies help finance the tests. Seed companies receive test announcements and entry forms in late January each year; deadlines for receipt of completed entry forms and seed are in early March. Because entry selection and location are voluntary, not all hybrids grown in the state are included in tests, and the same group of hybrids is not grown uniformly at all test locations.

Short-season corn performance tests target hybrids for early-planted, short-season, cropping systems. These systems typically are utilized on soils with poor water-holding capacities, often subjecting the hybirds to severe heat and drought stress in July and August. Early-maturing hybrids can escape a good portion of the typical stress, if they are planted early.

A summary of growing-season weather data is given in individual test discussions. These data are from the nearest weather-reporting station and often are supplemented with information from the test site. Precipitation graphs include cumulative lines for 2002 and the 30-year normal in addition to the daily rainfall amounts since last fall. Temperature graphs include daily maximum and minimum temperatures compared with normal. General trends in precipitation and temperature relative to normal are readily observed in the graphs. A table with monthly totals and averages for the growing season also is included.

The growth unit or growing degree day concept was developed to measure the amount of heat available for growth and maturation. To calculate the daily growing degree day accumulation, add the maximum temperature and the minimum temperature for each day, divide by 2, and subtract a base temperature of 50. Any temperature below 50°F was considered to be 50, and any temperature over 86°F was considered 86.

Explanatory information is given preceding data summaries for each test. Tables 1-24 contain results from the individual performance tests. Hybrids are listed in order of increasing days to half silk and increasing grain moisture for the current year, so hybrids of similar maturity appear together.

Figures 4-9 graphically summarize yield and maturity information over the past 3 years for each region. In these figures, hybrid performance is standardized using the average of two check hybrids present in every test. The number beside each bar shows the number of tests where a given hybrid was compared with the check hybrids. In general, the greater the number of comparisons, the greater confidence one can place in the stated performance of that hybrid. Symbols beside each bar indicate if a hybrid was significantly greater (+), lower (-), than the average of the check hybrids. As with individual test results, small differences should not be overemphasized. Relative ranking and large differences are better indicators of performance.

Most corn tests were planted at a rate 10% to 20% above the desired population and thinned only to remove doubles. Planting to stand enables evaluation of product performance for the entire growing season.

Four plots (replications) of each hybrid were grown at each location in a randomized complete block design. Each harvested plot consisted of two rows trimmed to a specific length ranging from 20 to 30 feet at the different locations. Four-row plots were used at some locations where drought stress is common. Tests were harvested with specialized plot combines equipped with automatic weighing and sampling devices.

Grain yields are reported as bushels per acre of shelled grain (56 lbs/bu) adjusted to a moisture content of 15.5%. Yields also are presented as percent of test average to speed recognition of highest-yielding hybrids. Hybrids yielding more than 100% of the test average year after year merit consideration. Adaptation to individual farms for appropriate maturity, stalk strength, and other factors also must be considered.

The percentage of lodged stalks is reported when appropriate. Plants broken over below the ear and dropped ears were considered lodged, although most were harvestable with modern machinery. Severely lodged stalks or dropped ears that could not be picked up by normal harvest procedures were not included in yield. Because harvest often is delayed until latest maturing entries are ripe, early and mid-season hybrids could lose ears simply because they must wait well past their optimum harvest date. In most years at most locations, dropped ears constitute a very small portion of lodging and do not significantly affect yields.

Relative maturity is measured in terms of both number of days from planting to silking and grain moisture at harvest. Entries are listed in order of increasing maturity based on days to silking and harvest moisture in the current year to facilitate comparison of hybrids of like maturity. Maturity can be critical when considering a corn hybrid for a specific cropping system.

Small differences in yield or other characteristics should not be overemphasized. Least significant differences (LSDs) are shown at the bottom of each table. Unless two entries differ by at least the LSD shown, little confidence can be placed in one being superior to the other. The coefficient of variability (CV) can be used to estimate the degree of confidence one can have in published data from replicated tests. In this testing program, CVs below 10% generally indicate reliable, uniform data, whereas CVs of 10 to 15% are not uncommon and usually indicate that data are acceptable for the rough performance comparisons desired from these tests. Tests with CVs over 15% still may be useful, especially for tests with low yields.

Grain Quality Summary

Relative protein, oil, and starch contents for many hybrids are presented in Appendix 3. Two hybrids that were present in every test were used as checks. Hybrids are included if they were present in the same tests with the checks at least 6 times. At every location, each hybrid was compared to the average of the two check hybrids. These differences were averaged over the total number of tests where the comparisons were made and were used to calculate standardized values. The corn hybrids displayed rather narrow ranges for the various quality parameters. However, the differences, especially for protein, were large enough to have a potential economic impact for livestock feeders.

Table 1. Companies entering hybrids in the 2002 Kansas Corn Performance Tests.

AgSource Seeds Inc
Boone, IA
515-432-8100
agsourceseeds.com

Monsanto Seed (Asgrow/DeKalb)
St. Louis, MO
800-833-5252
farmsource.com

Bo-Jac Hybrid Seed Co
Mt. Pulaski, IL
800-397-2069
bo-jac.com

CroPlan Genetics
Arden Hills, MN
800-851-8110
croplangenetics.com

Crow's Hybrid Corn Co
Kentland, IN
800-331-7201
crowshybrid.com

Fontanelle Hybrids
Fontanelle, NE
402-721-1410
fontanelle.com

Freedom Seed Co
Astoria, IL
800-262-4480
freedomseed.com

Garst Seed Co
Slater, IA
800-831-6630
garstseed.com

JC Robinson Seed Co
Waterloo, NE
800-228-9906
goldenharvestseeds.com

Hawkeye Hybrids Inc
Pella, IA
641-628-3827
hawkeyeh@lisco.net

Hoegemeyer Hybrids
Hooper, NE
402-654-3399
hoegemeyer.com

High Plains Hybrids
Hugoton, KS
800-848-1988
jkramer@pld.com

Kaystar Seed
Huron, SD
605-352-5750
kaystarseed.com

Kruger Seed Co
Dike, IA
800-772-2721
krugerseed.com

Lewis Hybrids Inc
Ursa, IL
800-252-7851
lewishybrids.com

LG Seeds
Gibbon, NE
877-505-7313
lgseedskrny@nebi.com

Midland Genetics Group
Ottawa, KS
800-819-SEED
midland@kanza.net

Midwest Seed Genetics
Carroll, IA
800-369-8218
midwestseed.com

Mycogen Seeds
Indianapolis, IN
317-337-7557
mycogen.com

NC+ Hybrids
Lincoln, NE
402-467-2517
nc-plus.com

Syngenta Seeds, Inc
Ames, IA
800-258-0498
syngenta.com

Ottilie RO Seed
Marshalltown, IA
641-753-5561
ottilieseed.com

Pfister Hybrid Corn Co
El Paso, IL
309-527-6000
pfisterhybrid.com

Pioneer, A DuPont Company
Lakewood, CO
303-716-3960
pioneer.com

Polansky Seed
Belleville, KS
785-527-2271
polanskyseed.com

Premium Seed Inc
Berwick, IL
309-462-2396
premiumseed.com

Producers Hybrids
Battle Creek, NE
402-675-2975
producershybrids.com

Renze Hybrids
Carroll, IA
712-669-3301
Renze@Netins.net

Roth Seed Co Inc
Phillipsburg, KS
785-543-5551

Seeds 2000, Inc
Breckenridge, MN
218-643-2410
seeds2000.com

Stine Seed Co
Adel, IA
800-362-2510
stineseed.com

Thompson Seed
Leland, IA
877-561-9067
thompsonseeds.com

Triumph Seed Co Inc
Ralls, TX
800-530-4789
triumphseed.com

United Suppliers Inc
Eldora, IA
877-714-4503
uniteds.com

NORTHEAST KANSAS DRYLAND CORN TEST ON SILT LOAM SOIL

Private farm 1 mile north of Severance; Fuhrman Farms, Inc.

Manona silt loam; Soybean in 2001

150 - 0 - 0 lb/a N, P, K

Planted on 4/25/02; Harvested on 9/10/02

Target stand of 26,000 plants/acre; 8.0 in. spacing

Timely rains and deep soils allowed this test to yield better than most dryland locations this year.

	Precipitation		Average Temp.		GDU	
Month	2002	Norm.	2002	Norm.	2002	Norm.
Oct.-Mar.	6.2	9.9	41	38	96	38
April	3.9	3.1	54	54	255	238
May	7.2	4.5	60	65	380	455
June	1.9	5.0	75	73	719	694
July	1.3	4.1	79	78	821	814
August	1.8	4.0	75	76	751	778
Sept.	0.7	4.9	69	68	553	542
Totals:	23.1	35.5	55	53	3,573	3,558

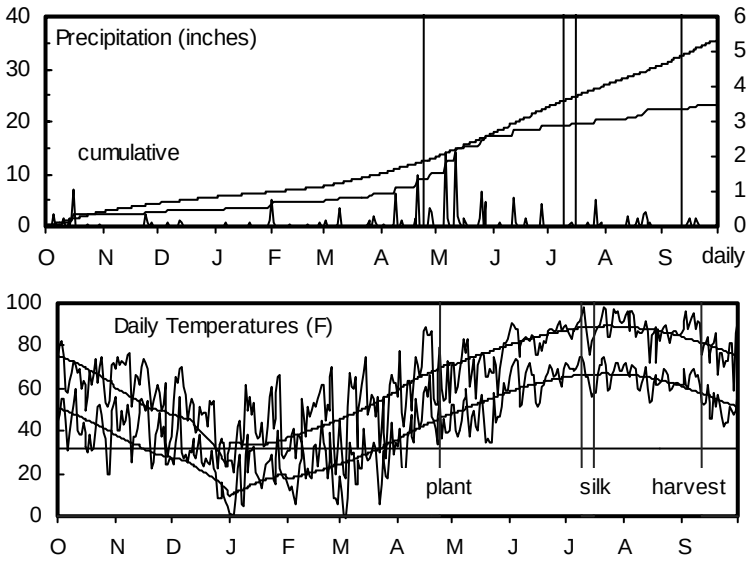


Table 2. Severance Corn Performance Test, 2000-2002.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
BRAND	NAME	2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
FREEDOM	5675	120	--	--	--	--	86	--	--	--	--	75	11	99	4	56
MATURITY CHECK	SHORT - G8590	127	154	177	140	153	91	88	94	--	14	76	11	99	0	55
HOEGEMEYER	2696	127	--	--	--	--	92	--	--	--	--	76	12	103	3	55
MIDWEST SEED	G 8122	148	--	--	--	--	106	--	--	--	--	76	12	95	7	56
MYCOGEN	2784	151	--	--	--	--	109	--	--	--	--	76	12	100	7	56
KRUGER	K-9113	121	--	--	--	--	87	--	--	--	--	77	11	90	0	56
KRUGER	K-9115	119	--	--	--	--	85	--	--	--	--	77	12	87	1	56
MATURITY CHECK	MID - H2649	137	179	184	158	167	99	102	97	--	15	77	12	98	7	56
NC+	5411	150	176	--	163	--	108	100	--	--	16	77	12	96	3	55
NK	N65-M7	149	--	--	--	--	107	--	--	--	--	77	12	104	7	56
PFISTER	2656RR	149	--	--	--	--	108	--	--	--	--	77	12	97	4	55
GOLDEN HARVEST	H-9164Bt	160	--	--	--	--	115	--	--	--	--	77	13	98	3	53
KRUGER	K-9212BT	136	--	--	--	--	98	--	--	--	--	77	13	97	0	59
PIONEER	32H58	148	--	--	--	--	107	--	--	--	--	77	13	107	10	59
PIONEER	32R42	125	180	--	153	--	90	103	--	--	16	77	13	104	13	58
PIONEER	33R77	150	199	--	174	--	108	113	--	--	16	77	13	97	3	55
MYCOGEN	2799IMI	160	--	--	--	--	115	--	--	--	--	77	14	101	0	56
MYCOGEN	2833	166	189	200	177	185	119	108	106	--	17	77	14	101	0	55
CROPLAN GEN.	818Bt	144	--	--	--	--	103	--	--	--	--	77	19	95	0	54
AGSOURCE	61A61RR	140	--	--	--	--	101	--	--	--	--	78	11	102	4	55
FREEDOM	5495	140	--	--	--	--	101	--	--	--	--	78	11	98	3	55
RENZE	6363	154	--	--	--	--	111	--	--	--	--	78	11	99	6	56
AGSOURCE	5713Bt	122	--	--	--	--	88	--	--	--	--	78	12	99	1	55
AGSOURCE	6887	136	185	198	161	173	98	105	105	--	16	78	12	96	20	57
GOLDEN HARVEST	H-8906	149	--	--	--	--	107	--	--	--	--	78	12	101	12	55
MIDLAND	7A15	144	--	184	--	--	104	--	97	--	--	78	12	98	10	56
NK	N67-T4	150	159	202	154	170	108	91	107	--	15	78	12	103	1	56
AGSOURCE	6283Bt	142	--	--	--	--	103	--	--	--	--	78	13	94	0	59
CROW'S	5202	135	--	--	--	--	97	--	--	--	--	78	13	94	1	57
GOLDEN HARVEST	H-9235Bt/RR	135	--	--	--	--	97	--	--	--	--	78	13	101	13	57
HAWKEYE	SX51	131	182	--	157	--	95	104	--	--	16	78	13	100	7	59
KRUGER	K9315BBT	146	--	--	--	--	105	--	--	--	--	78	13	90	0	53
KRUGER	K-9315BT	136	--	--	--	--	98	--	--	--	--	78	13	91	0	57
STINE	9614Bt	137	--	--	--	--	99	--	--	--	--	78	13	96	2	57

(continued)

Table 2. Severance Corn Performance Test, 2000-2002 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
		2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
THOMPSON	T-2312CL	130	--	--	--	--	94	--	--	--	--	78	13	85	3	59
AGSOURCE	6203Bt	132	--	--	--	--	95	--	--	--	--	78	14	98	1	56
GOLDEN HARVEST	H-9667	136	--	--	--	--	98	--	--	--	--	78	14	101	2	54
NC+	5021RB	167	--	--	--	--	120	--	--	--	--	78	14	101	2	54
GARST	8328Bt/IT	138	--	--	--	--	99	--	--	--	--	78	16	97	1	56
KRUGER	K-9017BT	147	--	--	--	--	106	--	--	--	--	78	16	93	1	56
MIDLAND	7A36	119	--	--	--	--	86	--	--	--	--	78	16	96	11	61
PIONEER	33P67	158	202	205	180	188	114	115	108	--	18	78	16	97	2	59
NK	N79-L3	155	160	191	158	169	112	91	101	--	19	78	18	105	2	61
GOLDEN HARVEST	H-9087	127	--	--	--	--	92	--	--	--	--	79	11	100	3	54
PFISTER	2730	128	--	--	--	--	92	--	--	--	--	79	11	95	10	54
CROW'S	5360	128	193	--	161	--	92	110	--	--	16	79	12	90	1	55
GARST	8371	128	--	--	--	--	92	--	--	--	--	79	12	95	23	56
HAWKEYE	00-682	124	--	--	--	--	89	--	--	--	--	79	12	98	2	55
HOEGEMEYER	2679	128	177	--	153	--	92	101	--	--	15	79	12	100	10	55
KAYSTAR	KX - 898	140	--	--	--	--	100	--	--	--	--	79	12	95	4	56
KRUGER	K-9912RR	128	--	--	--	--	92	--	--	--	--	79	12	99	2	57
PFISTER	2750	150	199	201	174	183	108	113	106	--	16	79	12	101	8	57
THOMPSON	T-2115	139	--	--	--	--	100	--	--	--	--	79	12	91	2	56
AGSOURCE	6787	145	194	197	169	179	105	110	104	--	16	79	13	102	1	56
BO-JAC	7848CL	142	--	--	--	--	102	--	--	--	--	79	13	104	5	56
GARST	8530Bt	143	--	--	--	--	103	--	--	--	--	79	13	97	1	56
KRUGER	EX9212CL	141	--	--	--	--	101	--	--	--	--	79	13	103	12	59
KRUGER	K-9912CL	133	--	--	--	--	96	--	--	--	--	79	13	107	12	60
RENZE	8381BT	153	--	--	--	--	110	--	--	--	--	79	13	102	2	56
STINE	9803	120	180	--	150	--	87	103	--	--	17	79	13	95	2	58
FREEDOM	5645	131	--	--	--	--	95	--	--	--	--	79	14	99	7	58
GARST	8383YG1	126	--	--	--	--	91	--	--	--	--	79	14	100	1	57
HAWKEYE	9191	134	191	205	163	177	97	109	108	--	17	79	14	97	1	56
HOEGEMEYER	2714	137	--	--	--	--	98	--	--	--	--	79	14	98	11	57
MIDWEST SEED	G 8070	135	--	--	--	--	97	--	--	--	--	79	14	94	1	57
PRODUCERS	7290BT	142	--	--	--	--	102	--	--	--	--	79	14	90	0	56
THOMPSON	T-2315BT	142	--	--	--	--	102	--	--	--	--	79	14	89	2	57
CROPLAN GEN.	691Bt	155	--	--	--	--	112	--	--	--	--	79	15	103	0	55
MIDLAND	7A25Bt	139	173	--	156	--	100	99	--	--	17	79	15	87	0	53
RENZE	8492BT	148	--	--	--	--	106	--	--	--	--	79	15	92	1	52
TRIUMPH	1866Bt	138	--	--	--	--	99	--	--	--	--	79	18	99	3	56
TRIUMPH	2011RR	133	--	--	--	--	96	--	--	--	--	79	18	100	2	56
KRUGER	K-9313	133	--	--	--	--	96	--	--	--	--	80	11	98	5	54
MIDLAND	7A25	124	--	--	--	--	89	--	--	--	--	80	12	84	5	54
RENZE	6492	131	--	--	--	--	94	--	--	--	--	80	12	102	2	53
FREEDOM	5662	136	--	173	--	--	98	--	91	--	--	80	13	99	2	54
LEWIS	5942	133	--	--	--	--	96	--	--	--	--	80	13	98	7	54
NC+	5202B	151	--	--	--	--	109	--	--	--	--	80	13	101	2	56
NK	N68-K7	155	--	--	--	--	112	--	--	--	--	80	13	98	0	58
PFISTER	3030Bt	146	--	--	--	--	105	--	--	--	--	80	14	98	1	53
AGSOURCE	7247	118	--	--	--	--	85	--	--	--	--	80	15	95	10	59
AGSOURCE	EX23163Bt	151	--	--	--	--	109	--	--	--	--	80	15	98	1	53
KRUGER	K-9217BT	158	--	--	--	--	114	--	--	--	--	80	15	100	0	52
THOMPSON	T-2217BT	147	--	--	--	--	106	--	--	--	--	80	15	102	3	54
FONTANELLE	5800	114	192	--	153	--	82	109	--	--	18	80	16	103	8	55
RENZE	8383BT	125	--	--	--	--	90	--	--	--	--	80	16	103	0	56
MATURITY CHECK	FULL - M798	132	190	202	161	174	95	108	107	--	19	80	18	92	9	56
PRODUCERS	795BT	149	--	--	--	--	107	--	--	--	--	80	18	96	1	54
LEWIS	6662Bt	139	--	--	--	--	100	--	--	--	--	81	14	96	0	53
	AVERAGES	139	175	189	157	168	139	175	189	--	16	78	13	98	4	56
	CV (%)	8	8	8	--	--	8	8	8	--	--	2	6	6	154	1
	LSD (0.05)**	18	20	17	--	--	13	11	9	--	--	2	1	9	10	1

** Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

NORTHEAST KANSAS DRYLAND CORN TEST ON SILTY CLAY LOAM SOIL

Private farm north of Powhattan; Larry Maddux, agronomist; Charles Clark and William Riley, technicians

Grundy silty clay loam; Soybean in 2001

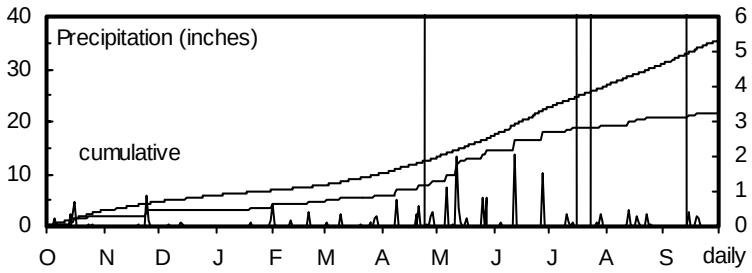
110 - 0 - 0 lb/a N, P, K

Planted on 4/25/02; Harvested on 9/12/02

Target stand of 23,000 plants/acre; 9.1 in. spacing

Difficult planting conditions resulted in variable stands, but hybrid yields did not appear to be related to stands. Drought conditions limited yields.

	Precipitation		Average Temp.		GDU	
Month	2002	Norm.	2002	Norm.	2002	Norm.
Oct.-Mar.	6.1	9.9	41	38	108	50
April	2.5	3.0	56	54	297	256
May	5.8	4.1	62	64	429	453
June	3.7	5.4	76	73	747	690
July	1.2	4.2	79	78	822	807
August	1.5	4.2	76	76	777	774
Sept.	1.0	4.6	70	68	572	541
Totals:	21.8	35.4	56	53	3,751	3,572



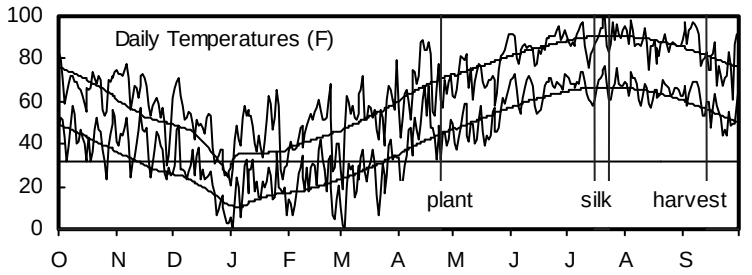


Table 3. Powhattan Corn Performance Test, 2000-2002.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
BRAND	NAME	2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
DEKALB	DKC60-19	45	--	--	--	--	91	--	--	--	--	80	16	91	1	59
MYCOGEN	2784	58	--	--	--	--	117	--	--	--	--	81	14	90	13	56
PFISTER	2656RR	57	--	--	--	--	116	--	--	--	--	81	15	96	9	57
KRUGER	K-9113	43	--	--	--	--	87	--	--	--	--	81	16	89	4	57
RENZE	8381BT	53	--	--	--	--	107	--	--	--	--	81	16	92	10	57
MYCOGEN	2833	65	177	131	121	125	133	98	116	78	17	81	17	84	2	55
NK	N67-T4	47	174	123	110	114	95	96	109	78	16	81	17	96	1	59
RENZE	6363	63	--	--	--	--	128	--	--	--	--	81	17	95	21	56
FREEDOM	5675	41	--	--	--	--	84	--	--	--	--	82	--	93	6	--
FREEDOM	5495	45	--	--	--	--	91	--	--	--	--	82	13	92	18	56
MATURITY CHECK	SHORT - G8590	48	162	110	105	107	97	90	98	79	15	82	15	93	20	58
AGSOURCE	61A61RR	61	--	--	--	--	124	--	--	--	--	82	16	93	15	57
CROW'S	5360	37	--	--	--	--	75	--	--	--	--	82	16	83	13	57
POLANSKY	XP51	56	--	--	--	--	114	--	--	--	--	82	16	90	16	57
GOLDEN HARVEST	H-8906	59	--	--	--	--	121	--	--	--	--	82	17	89	6	57
HAWKEYE	SX70	56	--	117	--	--	114	--	104	--	--	82	17	96	15	58
NK	N65-M7	59	--	--	--	--	119	--	--	--	--	82	17	94	14	57
AGSOURCE	6787	47	214	118	131	127	96	119	105	79	17	82	18	96	6	57
GARST	8530Bt	52	--	--	--	--	105	--	--	--	--	82	18	94	6	58
GOLDEN HARVEST	H-9164Bt	55	--	--	--	--	112	--	--	--	--	82	18	98	1	53
HAWKEYE	SX57	42	194	--	118	--	85	107	--	79	17	82	18	94	4	58
KRUGER	K-9115	50	--	--	--	--	102	--	--	--	--	82	18	83	13	58
KRUGER	K9315BBT	57	--	--	--	--	116	--	--	--	--	82	18	69	1	55
MIDLAND	7A15	54	192	--	123	--	110	106	--	79	17	82	18	92	21	58
POLANSKY	XP52	60	--	--	--	--	121	--	--	--	--	82	18	91	23	58
GARST	8328Bt/IT	66	--	--	--	--	134	--	--	--	--	82	19	93	5	56
MYCOGEN	2799IMI	59	--	--	--	--	121	--	--	--	--	82	19	93	2	56
PIONEER	33P67	54	198	118	126	123	109	110	104	79	18	82	19	88	2	58
GOLDEN HARVEST	H-9087	41	--	--	--	--	83	--	--	--	--	83	--	92	11	--
KRUGER	K-9313	44	--	--	--	--	89	--	--	--	--	83	15	89	11	55
MATURITY CHECK	MID - H2649	56	190	115	123	120	114	105	102	80	15	83	15	89	8	56
THOMPSON	T-2115	63	--	--	--	--	128	--	--	--	--	83	15	82	4	56
THOMPSON	T-2312CL	49	--	--	--	--	99	--	--	--	--	83	15	87	14	57

(continued)

Table 3. Powhattan Corn Performance Test, 2000-2002 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
		2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
DEKALB	DKC60-09	45	--	--	--	--	91	--	--	--	--	83	16	94	1	56
PFISTER	2730	58	--	--	--	--	117	--	--	--	--	83	16	89	23	56
US SEEDS	US C1153	62	--	--	--	--	127	--	--	--	--	83	16	89	23	56
AGSOURCE	6283Bt	49	--	--	--	--	100	--	--	--	--	83	17	91	1	58
AGSOURCE	6887	54	215	118	135	129	110	119	105	80	17	83	17	82	7	57
DEKALB	DKC64-01	47	--	--	--	--	96	--	--	--	--	83	17	90	6	58
GARST	8371	52	--	--	--	--	105	--	--	--	--	83	17	86	14	57
PFISTER	2750	48	198	124	123	123	97	110	110	79	16	83	17	93	8	58
CROPLAN GEN.	691Bt	58	--	--	--	--	118	--	--	--	--	83	18	89	4	55
STINE	9614Bt	49	--	--	--	--	100	--	--	--	--	83	18	88	1	59
US SEEDS	US C1141	45	185	--	115	--	90	103	--	79	17	83	18	93	8	58
MIDWEST SEED	G 8122	52	--	--	--	--	105	--	--	--	--	83	19	87	13	56
NC+	5202B	51	--	--	--	--	104	--	--	--	--	83	19	84	6	58
NC+	5411	39	197	--	118	--	78	109	--	80	18	83	19	88	26	57
NK	N72-J5	41	197	--	119	--	84	109	--	79	17	83	19	94	11	57
KRUGER	K-9315BT	47	--	--	--	--	95	--	--	--	--	83	20	87	0	57
GOLDEN HARVEST	H-9235Bt/RR	53	--	--	--	--	108	--	--	--	--	84	18	91	2	58
KAYSTAR	KX - 898	47	--	--	--	--	95	--	--	--	--	84	18	93	24	57
KRUGER	K-9212BT	58	--	--	--	--	117	--	--	--	--	84	18	93	0	59
AGSOURCE	7247	48	--	--	--	--	98	--	--	--	--	84	19	85	18	59
ASGROW	RX730RR/YG	53	--	--	--	--	107	--	--	--	--	84	19	92	2	56
FREEDOM	5645	50	--	--	--	--	102	--	--	--	--	84	19	89	18	57
FREEDOM	5662	34	--	111	--	--	69	--	98	--	--	84	19	93	9	57
KRUGER	EX9212CL	61	--	--	--	--	124	--	--	--	--	84	19	95	6	57
NK	N68-K7	46	--	--	--	--	93	--	--	--	--	84	19	94	1	59
RENZE	8383BT	41	--	--	--	--	84	--	--	--	--	84	19	88	1	58
THOMPSON	T-2315BT	38	--	--	--	--	78	--	--	--	--	84	19	87	0	57
GOLDEN HARVEST	H-9667	53	--	--	--	--	108	--	--	--	--	84	20	92	6	54
MIDLAND	7A36	43	--	--	--	--	88	--	--	--	--	84	20	88	8	58
MIDWEST SEED	G 8070	41	--	--	--	--	84	--	--	--	--	84	20	87	2	58
AGSOURCE	6203Bt	49	--	--	--	--	99	--	--	--	--	84	21	89	0	57
MIDLAND	7B35Bt	47	--	--	--	--	96	--	--	--	--	84	21	82	0	58
KRUGER	K-9017BT	62	--	--	--	--	125	--	--	--	--	84	23	92	1	55
PIONEER	32R42	26	190	--	108	--	52	105	--	81	--	85	--	94	17	--
BO-JAC	415	45	--	--	--	--	91	--	--	--	--	85	16	92	13	56
GARST	8383YG1	43	--	--	--	--	86	--	--	--	--	85	19	87	2	58
KRUGER	K-9912CL	55	--	--	--	--	112	--	--	--	--	85	19	97	17	58
PIONEER	32H58	40	--	--	--	--	82	--	--	--	--	85	19	92	8	57
CROW'S	5202	46	--	--	--	--	93	--	--	--	--	85	21	84	1	56
KRUGER	K-9912RR	38	--	--	--	--	77	--	--	--	--	86	15	91	11	57
PIONEER	33R77	43	208	--	125	--	88	115	--	82	17	86	17	91	8	54
RENZE	6492	46	--	--	--	--	94	--	--	--	--	86	17	88	4	57
KRUGER	K-9217BT	56	--	--	--	--	113	--	--	--	--	86	19	92	0	56
MIDLAND	7A25	32	--	--	--	--	65	--	--	--	--	86	19	81	6	56
MATURITY CHECK	FULL - M798	53	182	110	117	115	108	101	98	83	19	86	20	88	1	56
AGSOURCE	EX23163Bt	46	--	--	--	--	94	--	--	--	--	86	21	96	10	56
MIDLAND	7A25Bt	42	181	--	112	--	86	100	--	83	19	86	21	82	0	55
THOMPSON	T-2217BT	50	--	--	--	--	102	--	--	--	--	86	21	90	0	55
RENZE	8492BT	43	--	--	--	--	88	--	--	--	--	86	22	91	3	56
CROPLAN GEN.	818Bt	43	--	--	--	--	88	--	--	--	--	86	26	94	0	54
NK	N83-Z8	72	--	--	--	--	146	--	--	--	--	86	26	94	2	54
PFISTER	3030Bt	40	--	--	--	--	82	--	--	--	--	87	18	93	0	57
LEWIS	6662Bt	35	--	--	--	--	71	--	--	--	--	87	19	94	5	53
HAWKEYE	9191	51	203	114	127	122	104	112	101	84	18	87	20	89	9	55
LEWIS	5942	33	--	--	--	--	67	--	--	--	--	88	26	92	13	54
NC+	5021RB	38	--	--	--	--	77	--	--	--	--	89	--	94	0	--
	AVERAGES	49	180	113	115	114	49	180	113	80	17	84	18	90	8	57
	CV (%)	17	6	10	--	--	17	6	10	--	--	2	9	6	128	2
	LSD (0.05)**	12	16	13	--	--	24	9	12	--	--	2	2	7	14	2

** Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

NORTHEAST KANSAS DRYLAND CORN TEST ON SILT LOAM SOIL

Agronomy North Farm near Manhattan; Kraig Roozeboom, agronomist; Karl Mannschreck, superintendent

Reading silt loam; Soybean in 2001

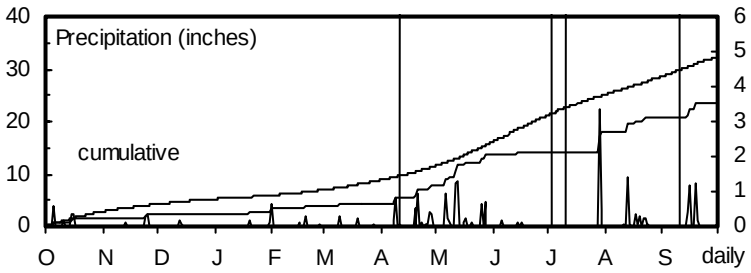
120 - 0 - 0 lb/a N, P, K

Planted on 4/12/02; Harvested on 9/9/02

Target stand of 23,000 plants/acre; 9.1 in. spacing

Drought conditions severly limited yields. Most of the lodging was caused by a wind storm in late July.

	Precipitation		Average Temp.		GDU	
Month	2002	Norm.	2002	Norm.	2002	Norm.
Oct.-Mar.	4.4	8.7	43	39	142	62
April	3.5	2.7	58	54	359	243
May	5.7	4.5	63	64	456	449
June	0.4	5.1	78	73	755	691
July	3.8	3.9	82	79	839	824
August	2.7	3.5	79	77	798	798
Sept.	3.0	3.8	71	69	607	577
Totals:	23.7	32.2	58	54	3,953	3,642



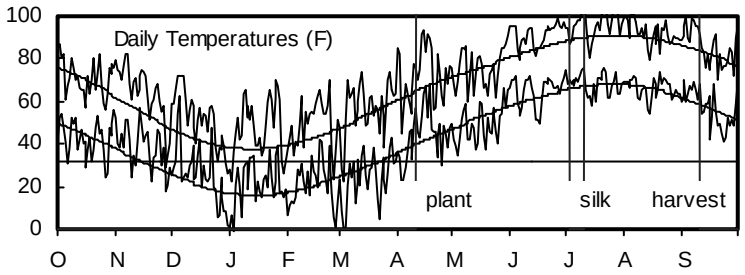


Table 4. Manhattan Corn Performance Test, 2000-2002.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
BRAND	NAME	2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
DEKALB	DKC60-19	78	--	--	--	--	114	--	--	--	--	80	16	104	0	56
FREEDOM	5675	59	--	--	--	--	86	--	--	--	--	82	13	98	0	54
DEKALB	DKC60-09	57	--	--	--	--	84	--	--	--	--	82	15	98	24	55
GOLDEN HARVEST	H-9164Bt	85	--	--	--	--	124	--	--	--	--	82	15	103	9	53
KRUGER	K9315BBT	86	--	--	--	--	126	--	--	--	--	82	16	82	1	54
AGSOURCE	61A61RR	103	--	--	--	--	150	--	--	--	--	82	17	101	9	56
GOLDEN HARVEST	H-8906	92	--	--	--	--	134	--	--	--	--	82	17	101	10	56
GOLDEN HARVEST	H-9087	79	--	--	--	--	115	--	--	--	--	82	17	94	0	55
KRUGER	K-9113	68	--	--	--	--	99	--	--	--	--	82	17	101	9	57
PFISTER	2656RR	97	--	--	--	--	141	--	--	--	--	82	17	100	28	56
PFISTER	2750	87	113	180	100	127	127	118	102	79	16	82	17	101	26	56
RENZE	6363	101	--	--	--	--	148	--	--	--	--	82	18	103	15	57
AGSOURCE	6887	73	107	194	90	125	106	112	110	79	17	82	19	93	9	56
MYCOGEN	2799IMI	71	--	--	--	--	103	--	--	--	--	82	19	101	48	55
THOMPSON	T-2115	66	--	--	--	--	96	--	--	--	--	82	19	99	38	57
AGSOURCE	6283Bt	82	--	--	--	--	119	--	--	--	--	82	20	101	11	56
GARST	8328Bt/IT	81	--	--	--	--	118	--	--	--	--	82	20	101	30	54
KRUGER	K-9212BT	65	--	--	--	--	95	--	--	--	--	82	20	104	14	56
MYCOGEN	2833	83	102	185	92	123	121	106	106	78	18	82	20	101	54	54
THOMPSON	T-2312CL	75	--	--	--	--	109	--	--	--	--	82	21	98	13	55
FREEDOM	5495	67	114	--	90	--	97	119	--	80	13	83	14	99	14	56
MATURITY CHECK	SHORT - G8590	58	81	173	70	104	84	85	98	78	15	83	17	93	13	57
KRUGER	K-9115	76	--	--	--	--	110	--	--	--	--	83	18	90	21	57
KRUGER	K-9313	75	--	--	--	--	110	--	--	--	--	83	18	93	0	55

(continued)

Table 4. Manhattan Corn Performance Test, 2000-2002 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
		2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
KRUGER	K-9912RR	59	--	--	--	--	85	--	--	--	--	83	18	93	20	58
GOLDEN HARVEST	H-9235Bt/RR	64	--	--	--	--	93	--	--	--	--	83	19	104	5	58
GARST	8543Bt/IT	83	105	--	94	--	121	109	--	78	16	83	20	102	0	55
MATURITY CHECK	MID - H2649	68	108	166	88	114	99	113	95	81	15	84	16	96	4	57
ASGROW	RX730RR/YG	52	--	--	--	--	76	--	--	--	--	84	17	102	4	57
KRUGER	EX9212CL	70	--	--	--	--	102	--	--	--	--	84	18	104	41	58
KRUGER	K-9912CL	69	--	--	--	--	100	--	--	--	--	84	18	101	14	59
PFISTER	2730	69	--	--	--	--	100	--	--	--	--	84	18	94	4	56
AGSOURCE	6203Bt	63	--	--	--	--	91	--	--	--	--	84	19	100	13	56
DEKALB	DKC64-01	70	--	--	--	--	102	--	--	--	--	84	19	100	10	58
NC+	5202B	50	--	--	--	--	73	--	--	--	--	84	19	94	31	58
NC+	5411	63	101	--	82	--	92	105	--	80	18	84	19	93	35	57
RENZE	8381BT	79	--	--	--	--	115	--	--	--	--	84	19	99	29	56
KRUGER	K-9017BT	68	--	--	--	--	99	--	--	--	--	84	21	96	40	56
AGSOURCE	7247	69	--	--	--	--	100	--	--	--	--	84	22	97	0	58
CROPLAN GEN.	818Bt	82	--	--	--	--	119	--	--	--	--	84	22	107	20	55
GARST	8363Bt	60	100	187	80	116	88	105	107	80	20	84	22	97	13	57
THOMPSON	T-2315BT	58	--	--	--	--	84	--	--	--	--	85	16	93	6	51
RENZE	8383BT	54	--	--	--	--	79	--	--	--	--	85	20	102	4	57
PIONEER	33P67	89	106	201	98	132	130	111	115	81	19	85	22	99	0	56
FREEDOM	5662	41	--	169	--	--	59	--	97	--	--	86	17	103	38	56
CROPLAN GEN.	691Bt	80	--	--	--	--	116	--	--	--	--	86	19	99	6	55
KRUGER	K-9315BT	63	--	--	--	--	92	--	--	--	--	86	19	96	3	58
FREEDOM	5645	47	116	--	81	--	69	121	--	81	18	86	20	100	29	57
GARST	8383YG1	55	--	--	--	--	80	--	--	--	--	86	20	101	3	58
GOLDEN HARVEST	H-9667	63	--	--	--	--	91	--	--	--	--	86	20	103	13	54
MYCOGEN	2888IMI	77	--	174	--	--	112	--	99	--	--	86	22	100	60	55
RENZE	6492	52	--	--	--	--	76	--	--	--	--	87	17	92	30	55
KRUGER	K-9217BT	42	--	--	--	--	62	--	--	--	--	87	19	101	58	54
PIONEER	33R77	90	110	--	100	--	131	115	--	82	17	87	19	100	75	53
NC+	5021RB	69	--	--	--	--	101	--	--	--	--	88	17	102	65	56
PFISTER	3030Bt	37	--	--	--	--	53	--	--	--	--	88	19	98	78	56
THOMPSON	T-2217BT	28	--	--	--	--	42	--	--	--	--	88	19	95	56	55
RENZE	8492BT	33	--	--	--	--	49	--	--	--	--	88	20	86	67	55
AGSOURCE	7894CL	63	134	--	98	--	91	140	--	83	21	88	22	104	73	56
MATURITY CHECK	FULL - M798	78	116	176	97	123	113	121	101	83	20	88	22	95	71	56
	AVERAGES	69	96	176	82	113	69	96	176	80	17	84	19	98	23	56
	CV (%)	17	10	6	--	--	17	10	6	--	--	2	7	6	95	4
	LSD (0.05)**	16	15	13	--	--	23	16	8	--	--	2	2	9	31	3

** Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

Table 5. NORTHEAST Kansas corn hybrid yield summary (% of test average), 2002.

BRAND/NAME	SEV[1]	POW	BEL	MAN	AVG.
AGSOURCE					
5713Bt	88	--	--	--	--
61A61RR	101	124	--	150	125
6203Bt	95	99	--	91	95
6283Bt	103	100	--	119	107
6787	105	96	--	--	--
6887	98	110	--	106	105
7247	85	98	--	100	95
7894CL	--	--	--	91	--
EX23163Bt	109	94	--	--	--
ASGROW					
RX730RR/YG	--	107	--	76	--
BO-JAC					
415	--	91	--	--	--
7848CL	102	--	--	--	--
CROPLAN GEN.					
691Bt	112	118	--	116	115
818Bt	103	88	--	119	103
CROW'S					
5202	97	93	--	--	--
5360	92	75	--	--	--
DEKALB					
DKC60-09	--	91	--	84	--
DKC60-19	--	91	--	114	--
DKC64-01	--	96	--	102	--
FONTANELLE					
5800	82	--	--	--	--
FREEDOM					
5495	101	91	--	97	96
5645	95	102	--	69	89
5662	98	69	--	59	75
5675	86	84	--	86	86
GARST					
8328Bt/IT	99	134	--	118	117
8363Bt	--	--	--	88	--
8371	92	105	--	--	--
8383YG1	91	86	--	80	86
8530Bt	103	105	--	--	--
8543Bt/IT	--	--	--	121	--
GOLDEN HARVEST					
H-8906	107	121	--	134	120
H-9087	92	83	--	115	97
H-9164Bt	115	112	--	124	117
H-9235Bt/RR	97	108	--	93	99
H-9667	98	108	--	91	99

BRAND/NAME	SEV[1]	POW	BEL	MAN	AVG.
HAWKEYE					
00-682	89	--	--	--	--
9191	97	104	--	--	--
SX51	95	--	--	--	--
SX57	--	85	--	--	--
SX70	--	114	--	--	--
HOEGEMEYER					
2679	92	--	--	--	--
2696	92	--	--	--	--
2714	98	--	--	--	--
KAYSTAR					
KX - 898	100	95	--	--	--
KRUGER					
EX9212CL	101	124	--	102	109
K-9017BT	106	125	--	99	110
K-9113	87	87	--	99	91
K-9115	85	102	--	110	99
K-9212BT	98	117	--	95	103
K-9217BT	114	113	--	62	96
K-9313	96	89	--	110	98
K9315BBT	105	116	--	126	116
K-9315BT	98	95	--	92	95
K-9912CL	96	112	--	100	103
K-9912RR	92	77	--	85	85
LEWIS					
5942	96	67	--	--	--
6662Bt	100	71	--	--	--
MIDLAND					
7A15	104	110	--	--	--
7A25	89	65	--	--	--
7A25Bt	100	86	--	--	--
7A36	86	88	--	--	--
7B35Bt	--	96	--	--	--
MIDWEST SEED					
G 8070	97	84	--	--	--
G 8122	106	105	--	--	--
MYCOGEN					
2784	109	117	--	--	--
2799IMI	115	121	--	103	113
2833	119	133	--	121	124
2888IMI	--	--	--	112	--
NC+					
5021RB	120	77	--	101	99
5202B	109	104	--	73	95
5411	108	78	--	92	93

[1] SEV = Severance, Doniphan Co. POW = Powhattan, Brown Co. BEL = Belleville, Republic Co. MAN = Manhattan, Riley Co.

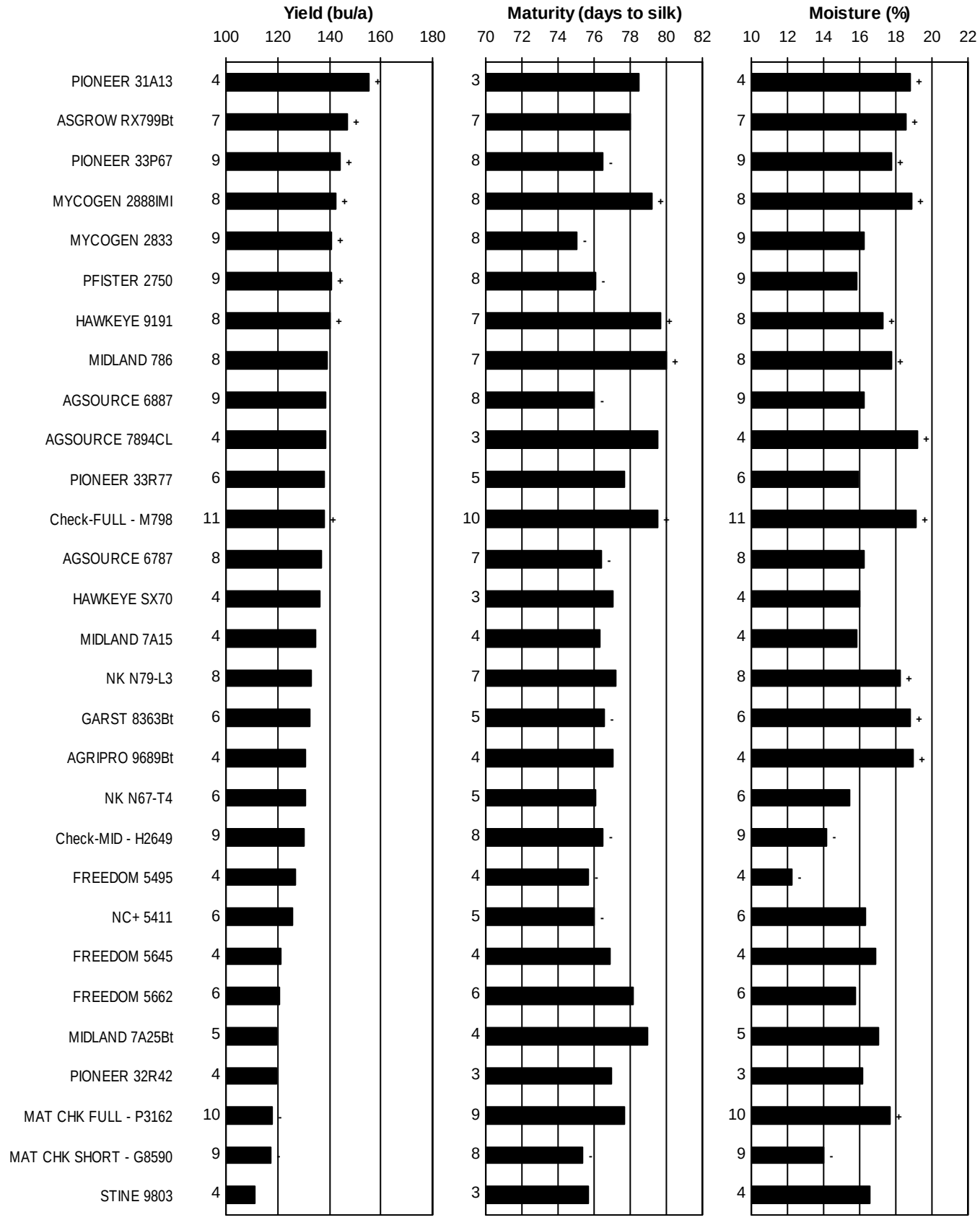
Table 5. NORTHEAST Kansas corn hybrid yield summary (% of test average), 2002.

BRAND/NAME	SEV[1]	POW	BEL	MAN	AVG.
NK					
N65-M7	107	119	--	--	--
N67-T4	108	95	--	--	--
N68-K7	112	93	--	--	--
N72-J5	--	84	--	--	--
N79-L3	112	--	--	--	--
N83-Z8	--	146	--	--	--
PFISTER					
2656RR	108	116	--	141	122
2730	92	117	--	100	103
2750	108	97	--	127	110
3030Bt	105	82	--	53	80
PIONEER					
32H58	107	82	--	--	--
32R42	90	52	--	--	--
33P67	114	109	--	130	118
33R77	108	88	--	131	109
POLANSKY					
XP51	--	114	--	--	--
XP52	--	121	--	--	--
PRODUCERS					
7290BT	102	--	--	--	--
795BT	107	--	--	--	--
RENZE					
6363	111	128	--	148	129
6492	94	94	--	76	88
8381BT	110	107	--	115	111
8383BT	90	84	--	79	84
8492BT	106	88	--	49	81
STINE					
9614Bt	99	100	--	--	--
9803	87	--	--	--	--
THOMPSON					
T-2115	100	128	--	96	108
T-2217BT	106	102	--	42	83
T-2312CL	94	99	--	109	101
T-2315BT	102	78	--	84	88
TRIUMPH					
1866Bt	99	--	--	--	--
2011RR	96	--	--	--	--
US SEEDS					
US C1141	--	90	--	--	--
US C1153	--	127	--	--	--

BRAND/NAME	SEV[1]	POW	BEL	MAN	AVG.
MATURITY CHECK					
FULL - M798	95	108	--	113	105
MID - H2649	99	114	--	99	104
SHORT - G8590	91	97	--	84	91
AVERAGES (bu/a)	139	49	--	69	86
CV (%)	8	17	--	17	--
LSD (0.05)**	13	24	--	23	--

[1] SEV = Severance, Doniphan Co. POW = Powhattan, Brown Co. BEL = Belleville, Republic Co. MAN = Manhattan, Riley Co.

Figure 4. NORTHEAST Kansas corn hybrid standardized performance summary, 2000-2002.



Values beside bars indicate the number of comparisons with checks. Symbols (+,-) indicate if statistically higher or lower than mean of checks.

NORTHEAST KANSAS SPRINKLER IRRIGATED CORN TEST ON SILT LOAM SOIL

Kansas River Valley Experiment Field, Topeka; Larry Maddux, agronomist; Charles Clark and William Riley, technicians

Eudora silt loam; Soybean in 2001

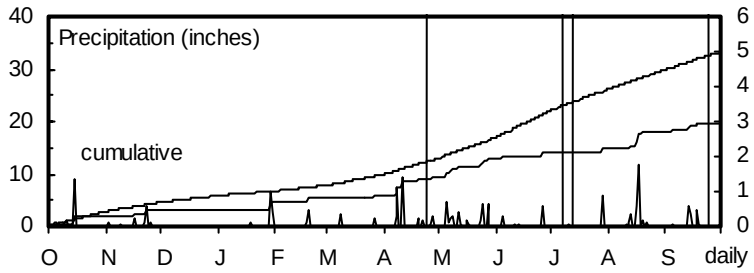
160 - 35 - 0 lb/a N, P, K

Planted on 4/25/02; Harvested on 9/23/02

Target stand of 30,000 plants/acre; 7.0 in. spacing

Irrigation was initiated earlier than normal due to dry weather in June. Little corn borer activity was noticed. Lodging was minimal and sporadic.

	Precipitation		Average Temp.		GDU	
Month	2002	Norm.	2002	Norm.	2002	Norm.
Oct.-Mar.	5.9	9.8	43	38	136	55
April	3.6	3.0	58	54	341	242
May	3.6	4.0	65	64	475	452
June	1.0	5.1	78	74	795	704
July	0.9	4.1	82	78	876	828
August	3.3	3.7	79	77	823	799
Sept.	1.6	3.5	72	69	622	560
Totals:	19.8	33.1	58	54	4,067	3,640



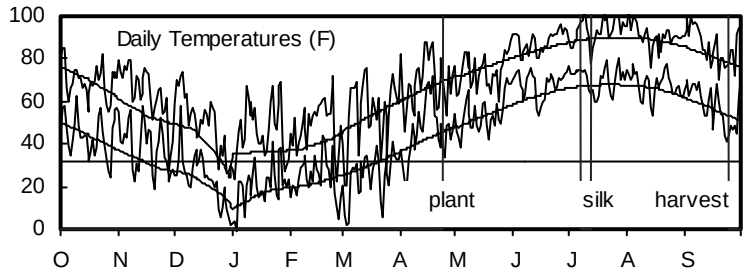


Table 6. Topeka Irrigated Corn Performance Test, 2000-2002.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
BRAND	NAME	2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
MYCOGEN	2833	195	194	158	194	182	101	105	93	67	16	72	16	94	1	56
MATURITY CHECK	SHORT - G8590	145	175	158	160	159	75	94	94	68	15	73	14	89	4	57
DEKALB	DKC60-09	178	--	--	--	--	92	--	--	--	--	73	15	95	1	57
DEKALB	DKC60-19	172	--	--	--	--	89	--	--	--	--	73	16	98	0	57
GOLDEN HARVEST	H-9216	203	196	--	199	--	105	106	--	68	16	73	16	92	1	56
ASGROW	RX730RR/YG	185	--	--	--	--	96	--	--	--	--	73	18	97	3	56
AGSOURCE	61A61RR	189	--	--	--	--	98	--	--	--	--	74	15	88	5	57
AGSOURCE	6283Bt	179	--	--	--	--	93	--	--	--	--	74	16	87	0	59
AGSOURCE	6887	193	189	--	191	--	100	102	--	70	17	74	16	88	1	56
AGSOURCE	7247	156	--	--	--	--	81	--	--	--	--	74	16	86	3	59
HOEGEMEYER	2665	188	190	--	189	--	98	102	--	69	16	74	16	93	1	57
MIDLAND	7A15	195	--	159	--	--	101	--	94	--	--	74	16	93	2	56
MIDWEST SEED	G 8122	180	--	--	--	--	93	--	--	--	--	74	16	84	4	56
NC+	5411	195	192	--	194	--	101	104	--	70	17	74	16	92	3	57
NK	N68-K7	198	--	--	--	--	103	--	--	--	--	74	16	97	2	57
POLANSKY	XP51	180	--	--	--	--	93	--	--	--	--	74	16	89	1	56
STINE	9803	170	--	--	--	--	88	--	--	--	--	74	16	90	4	57
AGSOURCE	6203Bt	209	--	--	--	--	108	--	--	--	--	74	17	92	1	57
DEKALB	DKC64-01	192	--	--	--	--	99	--	--	--	--	74	17	91	2	58
GARST	8288	192	--	--	--	--	100	--	--	--	--	74	17	82	2	57
GARST	8371	192	--	--	--	--	100	--	--	--	--	74	17	84	4	56
MIDWEST SEED	G 8070	202	--	--	--	--	105	--	--	--	--	74	17	88	1	57
NC+	5202B	198	--	--	--	--	102	--	--	--	--	74	17	88	1	57

(continued)

Table 6. Topeka Irrigated Corn Performance Test, 2000-2002 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
		2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
PRODUCERS	7290BT	212	--	--	--	--	110	--	--	--	--	74	17	87	1	57
STINE	9614Bt	197	190	--	194	--	102	102	--	69	17	74	17	90	7	58
GARST	8530Bt	198	--	--	--	--	102	--	--	--	--	74	18	93	1	57
GOLDEN HARVEST	H-9533Bt	191	169	156	180	172	99	91	92	69	17	74	18	94	3	56
PRODUCERS	795BT	205	--	--	--	--	106	--	--	--	--	74	20	91	1	55
GOLDEN HARVEST	H-9164Bt	179	183	--	181	--	93	99	--	70	16	75	15	92	3	55
HOEGEMEYER	2679	196	181	--	188	--	102	97	--	69	16	75	16	88	1	56
POLANSKY	XP52	199	--	--	--	--	103	--	--	--	--	75	16	92	4	56
CROPLAN GEN.	737Bt	195	--	--	--	--	101	--	--	--	--	75	17	96	1	57
GARST	8383YG1	209	--	--	--	--	108	--	--	--	--	75	17	93	1	57
MATURITY CHECK	MID - H2649	185	192	150	189	176	96	103	89	71	15	76	15	90	2	56
MIDLAND	7A25	178	--	--	--	--	93	--	--	--	--	76	16	78	2	54
MIDLAND	7A28	186	174	--	180	--	97	94	--	72	17	76	16	86	9	54
PIONEER	32R42	191	218	--	204	--	99	117	--	70	16	76	16	93	1	58
PIONEER	32W86	209	--	--	--	--	108	--	--	--	--	76	17	93	1	59
PIONEER	33P67	220	210	187	215	206	114	113	111	70	18	76	18	96	1	58
CROPLAN GEN.	818Bt	211	--	--	--	--	109	--	--	--	--	76	19	92	0	55
PIONEER	33R77	205	223	--	214	--	106	120	--	72	16	77	16	90	1	56
AGSOURCE	7894CL	193	188	--	190	--	100	101	--	72	17	77	17	100	8	57
GOLDEN HARVEST	H-9667	188	--	--	--	--	97	--	--	--	--	77	17	91	2	55
MATURITY CHECK	FULL - M798	199	191	191	195	193	103	103	113	73	17	77	17	91	7	57
MIDLAND	7A25Bt	210	188	--	199	--	109	102	--	73	17	77	17	78	10	55
NK	N83-Z8	226	224	--	225	--	117	120	--	73	19	77	19	93	9	57
MIDLAND	786	194	190	188	192	191	101	102	111	72	16	78	16	90	2	56
MYCOGEN	2888IMI	194	--	194	--	--	101	--	115	--	--	78	18	96	4	57
	AVERAGES	193	186	169	189	182	193	186	169	70	17	75	17	91	3	57
	CV (%)	8	7	8	--	--	8	7	8	--	--	1	3	5	134	1
	LSD (0.05)**	21	22	17	--	--	11	12	10	--	--	1	1	6	5	1

** Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

NORTHEAST KANSAS FURROW IRRIGATED CORN TEST ON SILT LOAM SOIL

Mark Taddiken farm near Clifton; Mark Taddiken; Taddiken Farm, Inc.

Muir silt loam; Soybean in 2001

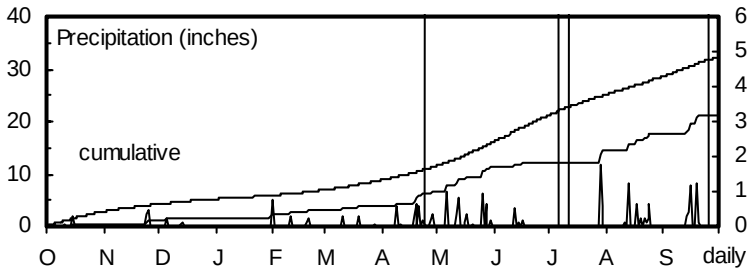
200 - 15 - 0 lb/a N, P, K

Planted on 4/25/02; Harvested on 9/24/02

Target stand of 30,000 plants/acre; 7.0 in. spacing

This furrow-irrigated test avoided the worst of the stresses of the summer and responded with excellent yields.

	Precipitation		Average Temp.		GDU	
Month	2002	Norm.	2002	Norm.	2002	Norm.
Oct.-Mar.	3.8	8.7	43	39	83	62
April	3.0	2.7	57	54	288	243
May	4.4	4.5	63	64	429	449
June	0.8	5.1	79	73	780	691
July	2.3	3.9	83	79	860	824
August	3.5	3.5	79	77	821	798
Sept.	3.2	3.8	71	69	606	577
Totals:	21.0	32.2	57	54	3,866	3,642



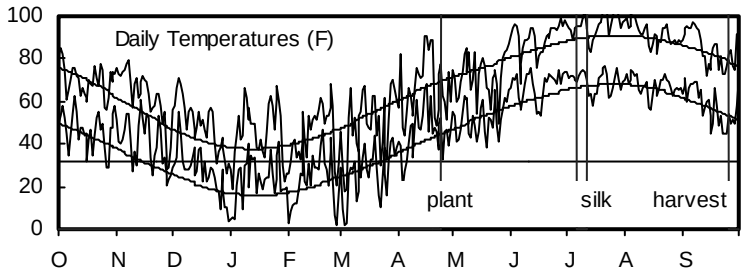


Table 7. Clifton Irrigated Corn Performance Test, 2000-2002.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
BRAND	NAME	2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
AGSOURCE	7247	181	--	--	--	--	84	--	--	--	--	72	16	91	--	60
GOLDEN HARVEST	H-9216	194	214	--	204	--	90	96	--	72	16	72	17	99	--	57
PFISTER	2656RR	209	--	--	--	--	97	--	--	--	--	72	17	101	--	57
MATURITY CHECK	SHORT - G8590	169	201	164	185	178	79	90	107	74	15	73	15	93	--	58
GOLDEN HARVEST	H-9164Bt	215	192	--	204	--	100	86	--	73	15	73	17	101	--	56
PFISTER	2750	211	239	--	225	--	98	107	--	74	16	73	17	99	--	57
US SEEDS	US C1141	208	221	--	215	--	97	99	--	74	16	73	17	103	--	57
STINE	9803	193	--	--	--	--	90	--	--	--	--	73	18	99	--	58
GOLDEN HARVEST	H-9533Bt	201	219	--	210	--	94	98	--	74	18	73	19	88	--	57
MATURITY CHECK	MID - H2649	199	231	141	215	191	93	104	92	74	15	74	15	96	--	58
AGSOURCE	6283Bt	216	--	--	--	--	101	--	--	--	--	74	16	99	--	60
US SEEDS	US C1153	187	--	--	--	--	87	--	--	--	--	74	16	93	--	57
AGSOURCE	61A61RR	202	--	--	--	--	94	--	--	--	--	74	17	99	--	57
CROPLAN GEN.	737Bt	209	--	--	--	--	97	--	--	--	--	74	17	106	--	58
MIDLAND	7A24	188	--	--	--	--	88	--	--	--	--	74	17	92	--	56
MIDLAND	7B15	193	236	161	214	196	90	106	105	74	16	74	17	94	--	57
NC+	5202B	217	--	--	--	--	101	--	--	--	--	74	17	95	--	58
NK	N72-J5	221	238	--	230	--	103	107	--	74	16	74	17	104	--	57
PFISTER	2730	204	--	--	--	--	95	--	--	--	--	74	17	92	--	56
AGSOURCE	6887	206	241	176	224	208	96	108	115	74	17	74	18	90	--	57
GARST	8371	187	--	--	--	--	87	--	--	--	--	74	18	86	--	57
MIDLAND	795	216	--	148	--	--	101	--	96	--	--	74	18	95	--	55
MYCOGEN	2833	213	234	172	223	206	99	105	112	74	16	74	18	97	--	56

(continued)

Table 7. Clifton Irrigated Corn Performance Test, 2000-2002 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
		2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
NC+	5411	208	--	--	--	--	97	--	--	--	--	74	18	96	--	56
NK	N68-K7	224	--	--	--	--	104	--	--	--	--	74	18	101	--	58
PREMIUM	P262	205	--	--	--	--	95	--	--	--	--	74	18	100	--	57
PIONEER	33P67	234	242	171	238	216	109	109	112	74	17	74	19	102	--	60
CROPLAN GEN.	818Bt	220	--	--	--	--	102	--	--	--	--	74	20	99	--	56
GARST	8288	235	--	--	--	--	110	--	--	--	--	74	20	102	--	57
PIONEER	32W86	227	--	--	--	--	106	--	--	--	--	75	17	93	--	60
GOLDEN HARVEST	H-9667	211	--	--	--	--	98	--	--	--	--	75	18	99	--	56
PIONEER	32R42	225	244	--	234	--	105	109	--	76	17	75	18	103	--	59
AGSOURCE	6203Bt	225	--	--	--	--	105	--	--	--	--	75	19	96	--	57
GARST	8363Bt	228	--	148	--	--	106	--	96	--	--	75	19	105	--	58
GARST	8383YG1	251	--	--	--	--	117	--	--	--	--	75	19	102	--	57
PFISTER	3030Bt	250	--	--	--	--	116	--	--	--	--	76	18	97	--	56
PIONEER	33R77	249	256	--	253	--	116	115	--	76	17	76	18	97	--	56
TRIUMPH	2011RR	219	--	--	--	--	102	--	--	--	--	76	18	99	--	58
AGSOURCE	7894CL	253	233	--	243	--	118	105	--	78	18	76	20	104	--	58
MATURITY CHECK	FULL - M798	239	229	127	234	198	111	103	83	77	18	76	20	97	--	58
MYCOGEN	2888IMI	242	--	133	--	--	113	--	87	--	--	76	20	102	--	58
TRIUMPH	1866Bt	242	--	--	--	--	113	--	--	--	--	77	19	95	--	58
	AVERAGES	215	223	153	219	197	215	223	153	74	17	74	18	98	--	57
	CV (%)	7	6	9	--	--	7	6	9	--	--	2	5	7	--	1
	LSD (0.05)**	22	17	16	--	--	10	8	11	--	--	2	1	10	--	1

** Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

NORTH CENTRAL KANSAS FURROW IRRIGATED CORN TEST

Irrigation Experiment Field, Scandia; Barney Gordon, agronomist; Michael Larson and Allan Milner, technicians

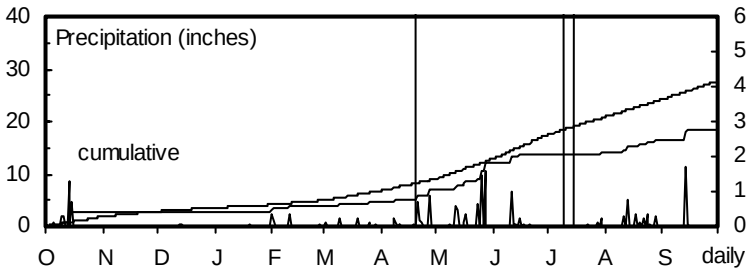
Crete silt loam; Soybean in 2001

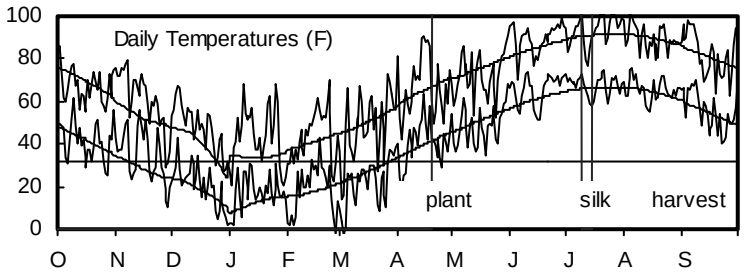
220 - 30 - 0 lb/a N, P, K

Planted on 4/20/02; Harvested on 10/12/02

Target stand of 30,000 plants/acre; 7.0 in. spacing

Good stands. Very hot and dry in June, July, and August. A total of 19" of water applied in 6 irrigations. No disease or insect problems of importance.





Month	Precipitation 2002	Precipitation Norm.	Average Temp. 2002	Average Temp. Norm.	GDU 2002	GDU Norm.
Oct.-Mar.	4.6	6.7	39	36	77	28
April	2.3	2.3	54	52	273	224
May	5.3	3.8	61	63	402	429
June	1.5	4.6	77	73	748	686
July	0.4	3.4	81	78	820	808
August	2.5	3.4	78	77	784	778
Sept.	1.8	3.5	69	68	551	528
Totals:	18.3	27.5	55	52	3,653	3,481

Table 8. Scandia Irrigated Corn Performance Test, 2000-2002.

BRAND	NAME	ACRE YIELD, BUSHELS 2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	YIELD AS % OF TEST AVERAGE 2002	2001	2000	2001-2002 Days to Silk	2001-2002 Grain Moist. %	2002 Days to Silk	2002 Grain Moist. %	2002 Final Stand %	2002 Ldg %	2002 Test Wt. lb/bu
MATURITY CHECK	SHORT - G8590	184	183	190	184	186	82	93	96	78	14	80	14	119	0	59
DEKALB	DKC57-40	193	--	--	--	--	86	--	--	--	--	81	13	120	1	58
DEKALB	DKC64-01	222	--	--	--	--	99	--	--	--	--	81	14	118	4	60
GOLDEN HARVEST	H-9164Bt	197	205	--	201	--	88	104	--	80	14	81	14	120	2	57
GOLDEN HARVEST	H-9216	219	191	--	205	--	98	97	--	81	14	81	14	119	3	58
MATURITY CHECK	MID - H2649	193	200	190	197	194	86	101	96	80	14	81	14	120	2	59
MYCOGEN	2833	230	205	228	217	221	102	104	115	79	14	81	14	117	0	58
NC+	5202B	227	--	--	--	--	101	--	--	--	--	81	14	118	2	59
PIONEER	33P67	231	218	223	224	224	103	110	113	79	14	81	14	116	1	62
AGRIPRO	9570Bt	254	204	196	229	218	113	103	99	81	14	82	14	118	1	59
AGSOURCE	61A61RR	246	--	--	--	--	109	--	--	--	--	82	14	118	1	59
AGSOURCE	6203Bt	215	--	--	--	--	96	--	--	--	--	82	14	118	1	59
CROPLAN GEN.	737Bt	200	--	--	--	--	89	--	--	--	--	82	14	119	2	59
DEKALB	DKC60-17	254	--	--	--	--	113	--	--	--	--	82	14	118	2	59
GARST	8383YG1	256	--	--	--	--	114	--	--	--	--	82	14	119	2	59
GARST	8543Bt/IT	252	211	221	231	228	112	106	111	80	14	82	14	119	2	58
GOLDEN HARVEST	H-9533Bt	251	204	191	228	215	112	103	96	80	14	82	14	118	2	59
HOEGEMEYER	2679	210	192	--	201	--	94	97	--	81	14	82	14	117	2	59
KAYSTAR	KX - 898	211	199	--	205	--	94	101	--	80	14	82	14	116	3	59
MIDLAND	7B15	232	207	206	219	215	103	105	104	81	14	82	14	117	3	59
MIDWEST SEED	G 8070	218	--	--	--	--	97	--	--	--	--	82	14	116	4	59
MIDWEST SEED	G 8122	217	--	--	--	--	97	--	--	--	--	82	14	119	3	59
NC+	5411	207	211	--	209	--	92	107	--	81	14	82	14	116	1	59

(continued)

Table 8. Scandia Irrigated Corn Performance Test, 2000-2002 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
		2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
NK	N68-K7	250	--	--	--	--	111	--	--	--	--	82	14	119	5	59
NK	N72-J5	252	207	--	230	--	112	105	--	80	14	82	14	119	2	58
PIONEER	33R77	218	211	--	215	--	97	107	--	80	14	82	14	120	2	59
AGSOURCE	6283Bt	248	--	--	--	--	110	--	--	--	--	83	14	116	2	60
AGSOURCE	6887	210	198	--	204	--	93	100	--	81	14	83	14	118	2	59
ASGROW	RX730RR/YG	233	199	--	216	--	104	101	--	80	14	83	14	119	1	59
ASGROW	RX740RR	229	203	--	216	--	102	103	--	82	14	83	14	119	4	61
CROPLAN GEN.	818Bt	206	--	--	--	--	92	--	--	--	--	83	14	118	2	58
FONTANELLE	5800	235	--	195	--	--	105	--	99	--	--	83	14	116	2	59
FONTANELLE	HC-7966Bt	234	--	--	--	--	104	--	--	--	--	83	14	117	2	58
MYCOGEN	2888IMI	223	--	204	--	--	99	--	103	--	--	83	14	118	2	60
NK	N79-L3	230	216	213	223	220	102	109	108	81	14	83	14	119	2	61
PIONEER	32H58	200	--	--	--	--	89	--	--	--	--	83	14	119	2	61
AGSOURCE	7247	214	--	--	--	--	95	--	--	--	--	84	14	118	3	61
AGSOURCE	7894CL	197	182	--	189	--	88	92	--	81	14	84	14	117	3	60
ASGROW	RX799Bt	245	--	176	--	--	109	--	88	--	--	84	14	119	2	59
GARST	8288	224	--	--	--	--	100	--	--	--	--	84	14	116	2	60
GOLDEN HARVEST	H-9667	250	--	--	--	--	111	--	--	--	--	84	14	119	5	59
MATURITY CHECK	FULL - M798	189	197	207	193	198	84	100	104	82	14	84	14	117	2	60
MIDLAND	795	237	200	189	218	208	105	101	95	83	14	84	14	119	2	58
MIDLAND	7B05RR	213	186	--	200	--	95	94	--	82	14	84	14	118	2	60
POLANSKY	XP52	233	--	--	--	--	104	--	--	--	--	84	14	119	3	58
PIONEER	32W86	246	--	--	--	--	109	--	--	--	--	85	14	119	3	60
	AVERAGES	225	198	198	211	207	225	198	198	80	14	82	14	118	2	59
	CV (%)	5	3	7	--	--	5	3	7	--	--	1	2	2	77	1
	LSD (0.05)**	17	8	16	--	--	8	4	8	--	--	1	--	NS	NS	1

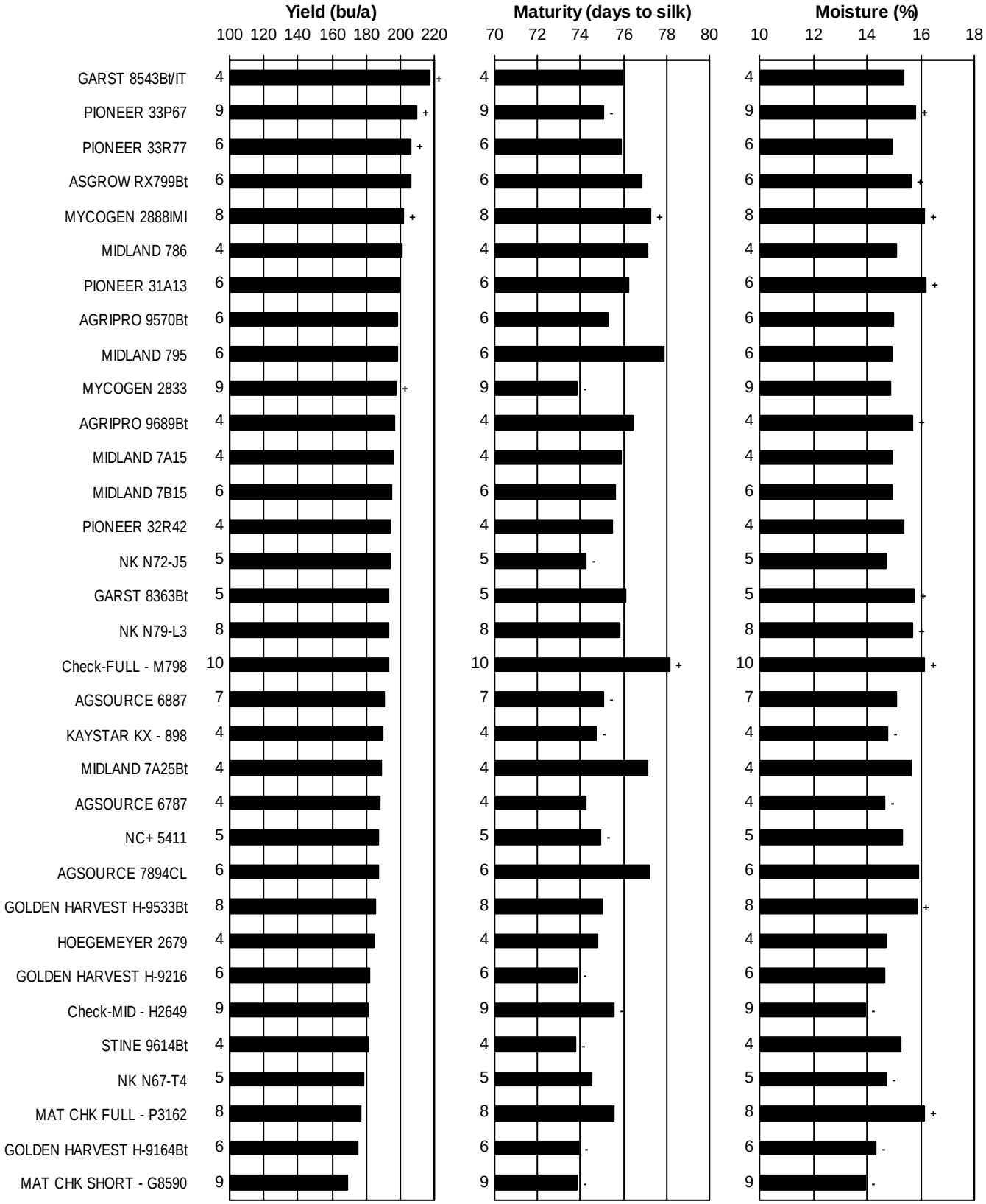
** Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

Table 9. NORTHEAST Kansas IRRIGATED corn hybrid yield summary (% of test avg.), 2002.

BRAND/NAME	TOP[1]	CLI	SCA	AVG.
AGRIPRO				
9570Bt	--	--	113	--
AGSOURCE				
61A61RR	98	94	109	101
6203Bt	108	105	96	103
6283Bt	93	101	110	101
6887	100	96	93	97
7247	81	84	95	87
7894CL	100	118	88	102
ASGROW				
RX730RR/YG	96	--	104	--
RX740RR	--	--	102	--
RX799Bt	--	--	109	--
CROPLAN GEN.				
737Bt	101	97	89	96
818Bt	109	102	92	101
DEKALB				
DKC57-40	--	--	86	--
DKC60-09	92	--	--	--
DKC60-17	--	--	113	--
DKC60-19	89	--	--	--
DKC64-01	99	--	99	--
FONTANELLE				
5800	--	--	105	--
HC-7966Bt	--	--	104	--
GARST				
8288	100	110	100	103
8363Bt	--	106	--	--
8371	100	87	--	--
8383YG1	108	117	114	113
8530Bt	102	--	--	--
8543Bt/IT	--	--	112	--
GOLDEN HARVEST				
H-9164Bt	93	100	88	94
H-9216	105	90	98	98
H-9533Bt	99	94	112	101
H-9667	97	98	111	102
HOEGEMEYER				
2665	98	--	--	--
2679	102	--	94	--
KAYSTAR				
KX - 898	--	--	94	--
MIDLAND				
786	101	--	--	--
795	--	101	105	--
7A15	101	--	--	--
7A24	--	88	--	--
7A25	93	--	--	--
7A25Bt	109	--	--	--
7A28	97	--	--	--
7B05RR	--	--	95	--
7B15	--	90	103	--
MIDWEST SEED				
G 8070	105	--	97	--
G 8122	93	--	97	--
MYCOGEN				
2833	101	99	102	101
2888IMI	101	113	99	104
NC+				
5202B	102	101	101	102
5411	101	97	92	97
NK				
N68-K7	103	104	111	106
N72-J5	--	103	112	--
N79-L3	--	--	102	--
N83-Z8	117	--	--	--
PFISTER				
2656RR	--	97	--	--
2730	--	95	--	--
2750	--	98	--	--
3030Bt	--	116	--	--
PIONEER				
32H58	--	--	89	--
32R42	99	105	--	--
32W86	108	106	109	108
33P67	114	109	103	109
33R77	106	116	97	106
POLANSKY				
XP51	93	--	--	--
XP52	103	--	104	--
PREMIUM				
P262	--	95	--	--
PRODUCERS				
7290BT	110	--	--	--
795BT	106	--	--	--
STINE				
9614Bt	102	--	--	--
9803	88	90	--	--
TRIUMPH				
1866Bt	--	113	--	--
2011RR	--	102	--	--
US SEEDS				
US C1141	--	97	--	--
US C1153	--	87	--	--
MATURITY CHECK				
FULL - M798	103	111	84	100
MID - H2649	96	93	86	92
SHORT - G8590	75	79	82	78
AVERAGES (bu/a)	193	215	225	211
CV (%)	8	7	5	--
LSD (0.05)**	11	10	8	--

[1] TOP = Topeka, Shawnee Co. CLI = Clifton, Clay Co. SCA = Scandia, Republic Co.

Figure 5. NORTHEAST Kansas IRRIGATED corn hybrid standardized performance summary, 2000-2002.



Values beside bars indicate the number of comparisons with checks. Symbols (+,-) indicate if statistically higher or lower than mean of checks.

NORTHEAST KANSAS DRYLAND CORN TEST ON SILTY CLAY LOAM

Erma Harden farm northwest of Topeka; Larry Maddux, agronomist; Charles Clark and William Riley, technicians

Silt loam; Soybean in 2001

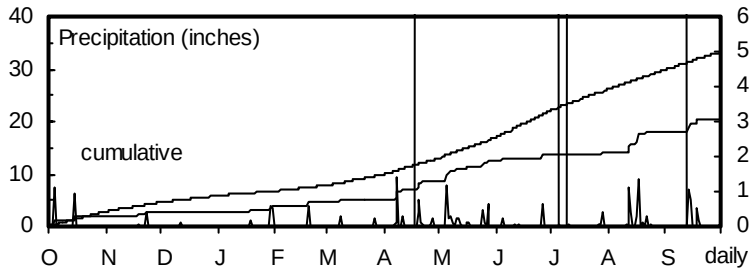
140 - 35 - 0 lb/a N, P, K

Planted on 4/18/02; Harvested on 9/11/02

Target stand of 22,000 plants/acre; 9.5 in. spacing

Hot, dry conditions from mid-June until late July severely limited yields. A late-July storm caused the plants to lean, but they had all recovered by harvest.

	Precipitation		Average Temp.		GDU	
Month	2002	Norm.	2002	Norm.	2002	Norm.
Oct.-Mar.	5.2	9.8	42	38	133	55
April	3.6	3.0	57	54	316	242
May	3.9	4.0	63	64	425	452
June	1.0	5.1	76	74	732	704
July	0.6	4.1	73	78	685	828
August	3.6	3.7	74	77	724	799
Sept.	2.5	3.5	67	69	508	560
Totals:	20.4	33.1	55	54	3,521	3,640



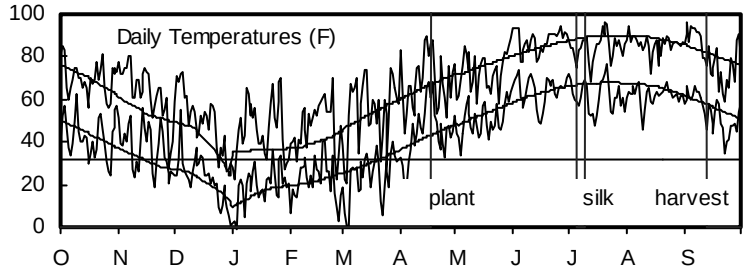


Table 10. Topeka Dryland Corn Performance Test, 2000-2002.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
BRAND	NAME	2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
DEKALB	DKC60-09	43	--	--	--	--	85	--	--	--	--	77	13	91	--	54
MYCOGEN	2784	61	--	--	--	--	121	--	--	--	--	77	14	87	--	57
DEKALB	DKC60-19	46	--	--	--	--	92	--	--	--	--	78	13	94	--	56
HOEGEMEYER	2679	58	--	--	--	--	115	--	--	--	--	78	13	88	--	55
FREEDOM	5675	39	--	--	--	--	78	--	--	--	--	78	14	90	--	56
KRUGER	K-9115	40	--	--	--	--	79	--	--	--	--	78	14	77	--	58
MATURITY CHECK	MID - H2649	51	153	128	102	111	101	114	90	73	14	78	14	88	--	56
MATURITY CHECK	SHORT - G8590	49	98	124	73	90	97	73	88	72	14	78	14	83	--	57
MYCOGEN	2A791	55	--	--	--	--	109	--	--	--	--	78	14	90	--	56
NK	N65-M7	54	--	--	--	--	107	--	--	--	--	78	14	90	--	57
PIONEER	34B97	49	--	--	--	--	96	--	--	--	--	78	14	79	--	57
ASGROW	RX730RR/YG	55	--	--	--	--	110	--	--	--	--	79	14	93	--	57
CROPLAN GEN.	631	54	--	--	--	--	106	--	--	--	--	79	14	93	--	58
KRUGER	K-9212BT	54	--	--	--	--	107	--	--	--	--	79	14	87	--	58
STINE	9716	55	--	--	--	--	108	--	--	--	--	79	14	84	--	57
KRUGER	K-9315BT	47	--	--	--	--	92	--	--	--	--	79	15	85	--	57
STINE	9715Bt	50	--	--	--	--	100	--	--	--	--	79	15	90	--	58
DEKALB	DKC64-01	40	--	--	--	--	80	--	--	--	--	80	14	83	--	57
GARST	8383YG1	40	--	--	--	--	80	--	--	--	--	80	14	86	--	59
HOEGEMEYER	2665	42	--	--	--	--	83	--	--	--	--	80	14	95	--	58
KRUGER	EX9212CL	57	--	--	--	--	112	--	--	--	--	80	15	93	--	59
MIDLAND	7A15	45	143	--	94	--	89	107	--	74	15	80	15	90	--	57
MIDLAND	7A28	61	128	--	94	--	120	95	--	75	15	80	15	88	--	55
FREEDOM	5645	53	--	--	--	--	104	--	--	--	--	80	16	88	--	58
PIONEER	33P67	54	169	157	111	127	107	126	111	75	15	81	14	93	--	58
PIONEER	33R77	51	187	--	119	--	102	139	--	75	15	81	15	84	--	57
MATURITY CHECK	FULL - M798	56	160	166	108	127	110	119	118	77	17	82	17	88	--	57
MIDLAND	786	45	136	154	90	112	89	101	109	75	16	82	17	86	--	55
MYCOGEN	2888IMI	55	--	166	--	--	108	--	117	--	--	82	17	95	--	56
NK	N83-Z8	57	--	--	--	--	113	--	--	--	--	82	17	90	--	58
	AVERAGES	51	134	141	92	109	51	134	141	74	15	79	15	88	--	57
	CV (%)	14	10	11	--	--	14	10	11	--	--	2	4	7	--	2
	LSD (0.05)**	10	18	18	--	--	19	14	13	--	--	2	1	8	--	1

** Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

EAST CENTRAL KANSAS DRYLAND CORN TEST ON UPLAND SILT LOAM SOIL

East Central Kansas Experiment Field, Ottawa; Keith Janssen, agronomist; Jim Kimball, technician

Woodson silt loam; Soybean in 2001

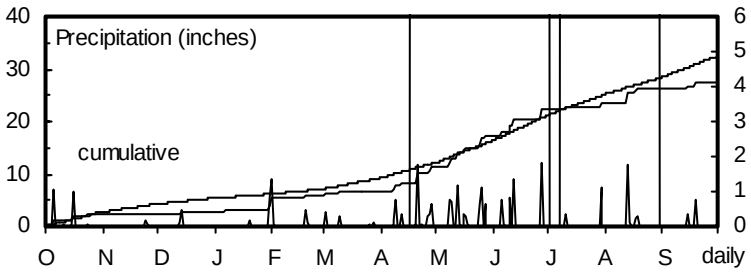
111 - 38 - 0 lb/a N, P, K

Planted on 4/17/02; Harvested on 8/29/02

Target stand of 21,000 plants/acre; 10.0 in. spacing

Favorable early growth. Dry conditions after June severely limited yields.

	Precipitation		Average Temp.		GDU	
Month	2002	Norm.	2002	Norm.	2002	Norm.
Oct.-Mar.	6.9	9.1	45	41	149	99
April	4.6	2.9	59	56	356	282
May	6.0	4.1	64	66	460	489
June	4.9	4.9	77	74	760	718
July	1.5	4.0	81	80	869	831
August	2.5	3.2	79	79	827	804
Sept.	1.1	4.0	73	70	646	606
Totals:	27.3	32.3	59	56	4,065	3,830



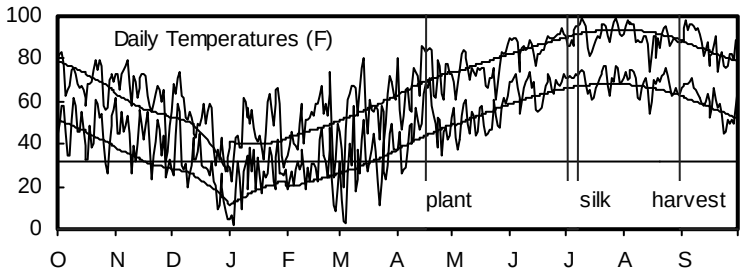


Table 11. Ottawa Corn Performance Test, 2000-2002.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
BRAND	NAME	2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
PIONEER	35P15	54	--	--	--	--	135	--	--	--	--	75	11	113	55	53
FREEDOM	5675	43	--	--	--	--	108	--	--	--	--	76	9	112	23	48
CROPLAN GEN.	631	56	--	--	--	--	141	--	--	--	--	76	11	112	48	52
MYCOGEN	2784	58	--	--	--	--	147	--	--	--	--	76	11	103	34	53
NK	N65-M7	59	--	--	--	--	148	--	--	--	--	76	11	106	43	52
NK	N67-T4	50	114	103	82	89	126	108	106	71	12	76	11	115	38	52
GARST	8328Bt/IT	57	--	--	--	--	144	--	--	--	--	76	12	105	53	52
KRUGER	K-9115	41	--	--	--	--	104	--	--	--	--	77	--	94	33	--
MATURITY CHECK	SHORT - G8590	48	97	97	72	80	121	91	99	72	12	77	11	109	40	53
MYCOGEN	2A791	53	--	--	--	--	134	--	--	--	--	77	12	108	38	51
GARST	8342GLS/Bt/IT	41	109	119	75	90	103	103	122	72	14	77	13	102	18	53
HOEGEMEYER	2665	38	108	--	73	--	96	102	--	72	13	77	13	109	45	53
MIDLAND	7A15	36	--	99	--	--	91	--	101	--	--	77	15	112	13	53
KRUGER	K-9212BT	41	--	--	--	--	105	--	--	--	--	78	--	112	48	--
KRUGER	K-9315BT	28	--	--	--	--	71	--	--	--	--	78	--	102	20	--
NC+	5202B	29	--	--	--	--	73	--	--	--	--	78	--	105	13	--
HOEGEMEYER	2679	36	110	--	73	--	91	104	--	73	11	78	11	110	98	51
US SEEDS	US C1153	40	--	--	--	--	101	--	--	--	--	78	11	103	85	50
GARST	8348	39	--	--	--	--	99	--	--	--	--	78	13	103	33	53
KRUGER	EX9212CL	41	--	--	--	--	104	--	--	--	--	78	14	114	68	55
NK	N68-K7	23	--	--	--	--	59	--	--	--	--	78	15	113	15	55
PRODUCERS	795BT	44	--	--	--	--	112	--	--	--	--	78	15	108	35	53
US SEEDS	US C1141	34	114	--	74	--	85	108	--	73	14	78	15	105	15	54
MATURITY CHECK	MID - H2649	44	111	97	78	84	110	105	99	74	11	79	11	108	63	51
NC+	5021RB	25	--	--	--	--	63	--	--	--	--	80	--	107	85	--
PIONEER	33R77	37	110	--	74	--	95	104	--	75	14	80	14	104	15	52
PIONEER	31B13	39	126	119	82	95	97	120	121	76	15	80	15	110	85	54
MATURITY CHECK	FULL - M798	33	108	95	71	79	84	102	97	76	18	80	18	102	60	54
FREEDOM	5645	25	--	--	--	--	64	--	--	--	--	80	19	104	43	56
MIDLAND	786	32	110	95	71	79	81	104	97	76	18	80	19	107	23	50
TRIUMPH	2011RR	33	--	--	--	--	82	--	--	--	--	80	19	109	18	52
MYCOGEN	2888IMI	24	--	102	--	--	60	--	104	--	--	80	21	113	93	55
TRIUMPH	1866Bt	26	103	99	64	76	65	97	101	76	--	81	--	102	68	--
	AVERAGES	40	106	98	73	81	40	106	98	73	14	78	14	107	44	53
	CV (%)	21	10	8	--	--	21	10	8	--	--	1	8	5	48	2
	LSD (0.05)**	11	15	10	--	--	29	14	10	--	--	1	2	8	30	1

** Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

SOUTHEAST KANSAS DRYLAND CORN TEST ON RIVER-BOTTOM SILT LOAM SOIL

Private farm south of Erie; James Long, agronomist; Kelly Kusel, research technician

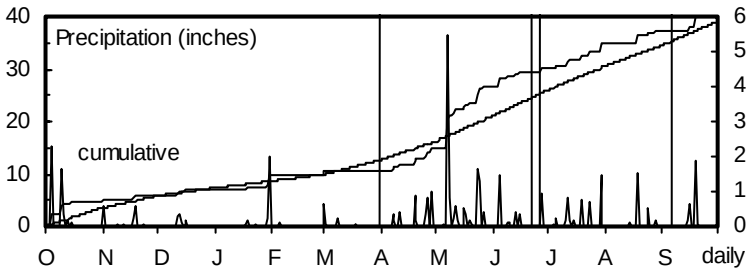
Lanton silt loam; Soybean in 2001

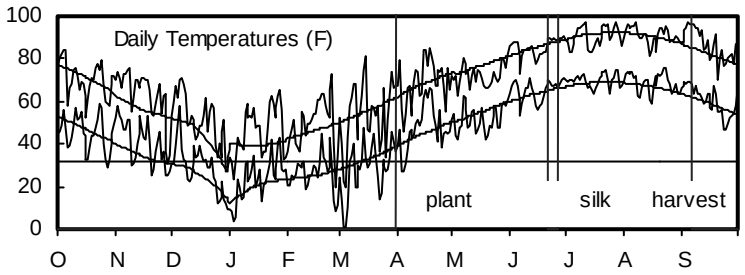
150 - 30 - 30 lb/a N, P, K

Planted on 4/1/02; Harvested on 9/5/02

Target stand of 25,000 plants/acre; 8.4 in. spacing

Good planting conditions followed by an excellent spring allowed the test to weather a hot, dry summer and produce outstanding yields. Some European corn borers were noted.





Month	Precipitation 2002	Precipitation Norm.	Average Temp. 2002	Average Temp. Norm.	GDU 2002	GDU Norm.
Oct.-Mar.	10.8	12.5	44	41	128	87
April	4.2	3.5	58	56	330	272
May	11.9	4.9	63	66	413	494
June	3.4	4.9	75	75	737	728
July	4.5	4.6	80	80	857	845
August	2.4	4.0	80	78	846	815
Sept.	2.8	4.5	73	71	658	615
Totals:	39.9	38.8	58	56	3,968	3,856

Table 12. Erie Corn Performance Test, 2000-2002.

BRAND	NAME	ACRE YIELD, BUSHELS 2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	YIELD AS % OF TEST AVERAGE 2002	2001	2000	2001-2002 Days to Silk	2001-2002 Grain Moist. %	2002 Days to Silk	2002 Grain Moist. %	2002 Final Stand %	2002 Ldg %	2002 Test Wt. lb/bu
DEKALB	DKC60-09	162	--	--	--	--	86	--	--	--	--	82	13	93	2	58
DEKALB	DKC60-19	181	--	--	--	--	96	--	--	--	--	82	13	98	0	59
FREEDOM	5675	150	--	--	--	--	79	--	--	--	--	82	13	92	2	58
GARST	8348	194	--	--	--	--	103	--	--	--	--	82	13	96	0	58
MYCOGEN	2784	194	--	--	--	--	103	--	--	--	--	82	13	99	0	57
GARST	8328Bt/IT	165	--	--	--	--	88	--	--	--	--	82	14	100	1	59
KRUGER	K-9115	216	--	--	--	--	115	--	--	--	--	82	14	100	0	58
MYCOGEN	2A791	195	--	--	--	--	104	--	--	--	--	82	14	103	0	56
GARST	8530Bt	189	--	--	--	--	100	--	--	--	--	83	13	101	0	59
KRUGER	EX9212CL	179	--	--	--	--	95	--	--	--	--	83	13	99	0	60
KRUGER	K-9212BT	170	--	--	--	--	90	--	--	--	--	83	13	95	0	59
KRUGER	K-9315BT	201	--	--	--	--	107	--	--	--	--	83	13	100	0	59
MATURITY CHECK	MID - H2649	158	197	152	178	169	84	98	94	78	14	83	13	95	2	58
MATURITY CHECK	SHORT - G8590	168	169	136	168	158	89	84	84	77	14	83	13	98	0	59
NC+	5202B	203	--	--	--	--	108	--	--	--	--	83	13	99	0	59
NK	N68-K7	175	--	--	--	--	93	--	--	--	--	83	13	95	0	58
PFISTER	2656RR	190	--	--	--	--	101	--	--	--	--	83	13	98	0	58
PFISTER	2750	200	214	173	207	196	106	107	107	77	14	83	13	97	0	58
TRIUMPH	1120BtRR	182	--	--	--	--	97	--	--	--	--	83	13	102	0	58
ASGROW	RX730RR/YG	192	--	--	--	--	102	--	--	--	--	83	14	99	0	58
MIDLAND	7A15	194	224	162	209	193	103	112	100	77	15	83	14	98	1	58
STINE	9803	195	211	--	203	--	104	105	--	77	16	83	14	99	0	59
CROPLAN GEN.	631	182	--	--	--	--	97	--	--	--	--	84	13	98	0	58

(continued)

Table 12. Erie Corn Performance Test, 2000-2002 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
		2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
MIDLAND	7A25Bt	192	219	--	206	--	102	109	--	79	15	84	13	96	0	58
NC+	5021RB	197	--	--	--	--	105	--	--	--	--	84	13	99	0	57
PFISTER	2730	184	--	--	--	--	97	--	--	--	--	84	13	94	0	57
AGRIPRO	9689Bt	189	220	198	205	202	100	110	122	78	16	84	14	102	0	59
DEKALB	DKC64-01	193	--	--	--	--	102	--	--	--	--	84	14	97	0	59
FREEDOM	5645	172	--	--	--	--	91	--	--	--	--	84	14	92	0	59
PIONEER	31A13	230	225	188	228	215	122	112	116	79	16	84	14	102	0	60
PIONEER	31B13	218	218	213	218	216	116	108	132	79	15	84	14	104	0	60
MIDLAND	7A28	208	226	--	217	--	110	113	--	79	16	84	15	95	0	56
MATURITY CHECK	FULL - M798	199	197	162	198	186	106	98	100	80	15	85	13	112	0	59
MIDLAND	786	196	--	162	--	--	104	--	100	--	--	85	14	99	0	57
MYCOGEN	2888IMI	190	--	182	--	--	101	--	112	--	--	85	14	103	1	58
NK	N83-N5	195	--	--	--	--	103	--	--	--	--	85	14	102	1	59
PFISTER	3030Bt	203	--	--	--	--	108	--	--	--	--	85	14	97	0	56
PIONEER	33R77	199	226	--	212	--	105	112	--	79	16	85	15	103	0	57
STINE	9715Bt	169	--	--	--	--	90	--	--	--	--	86	13	95	2	59
	AVERAGES	188	201	162	195	184	188	201	162	77	15	83	14	99	0	58
	CV (%)	9	7	10	--	--	9	7	10	--	--	1	3	6	296	1
	LSD (0.05)**	23	19	19	--	--	12	10	12	--	--	1	1	9	2	1

** Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

SOUTH CENTRAL KANSAS MINIMUM-TILL, DRYLAND CORN TEST ON SILT LOAM SOIL

Harvey County Experiment Field, Hesston; Mark Claassen, agronomist; Lowell Stucky and Kevin Duerksen, technicians

Smolan silt loam; Wheat in 2001

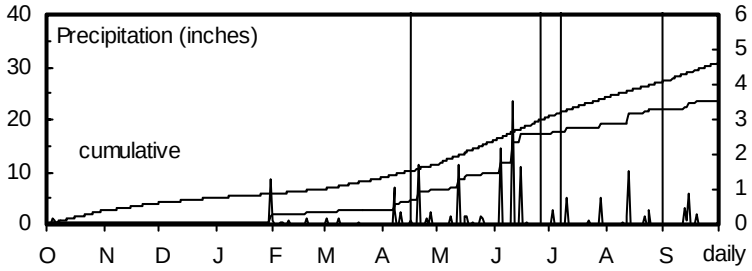
125 - 37 - 0 lb/a N, P, K

Planted on 4/17/02; Harvested on 8/30/02

Target stand of 20,000 plants/acre; 10.5 in. spacing

Early-season moisture was favorable for establishment and vegetative growth. Dry conditions in July and August limited yields.

	Precipitation		Average Temp.		GDU	
Month	2002	Norm.	2002	Norm.	2002	Norm.
Oct.-Mar.	2.6	8.7	42	41	130	97
April	4.2	2.6	56	56	293	277
May	2.9	4.4	62	66	416	486
June	7.4	4.7	76	75	734	730
July	2.1	3.6	81	81	844	841
August	2.5	3.1	79	80	824	816
Sept.	1.8	3.7	72	71	619	623
Totals:	23.6	30.8	57	56	3,859	3,870



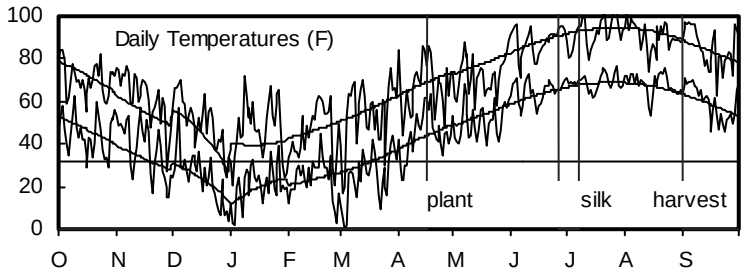


Table 13. Hesston Min-Till, Dryland Corn Test, 2000-2002.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
BRAND	NAME	2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
NK	N43-C4	67	--	--	--	--	114	--	--	--	--	70	11	105	3	54
DEKALB	DKC53-34	64	--	--	--	--	109	--	--	--	--	71	11	109	1	52
ASGROW	RX601RR/YG	63	--	--	--	--	107	--	--	--	--	72	11	112	0	55
DEKALB	DKC60-17	66	--	--	--	--	112	--	--	--	--	72	11	115	0	55
PIONEER	35R58	73	44	--	59	--	125	150	--	70	11	73	11	111	2	53
DEKALB	DKC57-40	55	--	--	--	--	93	--	--	--	--	74	11	110	0	54
GARST	8328Bt/IT	67	--	--	--	--	115	--	--	--	--	74	11	121	1	53
MATURITY CHECK	SHORT - G8590	67	41	84	54	64	114	138	87	71	11	74	11	110	0	55
MIDWEST SEED	G 7706	60	--	--	--	--	103	--	--	--	--	74	11	108	0	55
MIDWEST SEED	G 8122	56	--	--	--	--	95	--	--	--	--	74	11	89	0	55
MYCOGEN	2722IMI	61	--	--	--	--	104	--	--	--	--	74	11	109	2	54
MYCOGEN	2784	64	45	--	54	--	108	151	--	70	11	74	11	107	0	53
NK	N65-M7	61	--	--	--	--	105	--	--	--	--	74	11	112	0	55
NK	N67-T4	69	37	--	53	--	118	124	--	71	11	74	11	122	0	56
PIONEER	33B51	70	44	--	57	--	119	150	--	71	12	74	12	108	0	55
MIDLAND	7E24Bt	61	--	--	--	--	104	--	--	--	--	75	12	116	0	55
MIDLAND	7B15	59	31	--	45	--	101	107	--	73	11	76	11	110	0	55
MIDLAND	7A04Bt	57	24	--	40	--	97	81	--	74	12	76	12	107	2	54
MIDWEST SEED	G 8070	53	--	--	--	--	91	--	--	--	--	76	12	96	0	57
MATURITY CHECK	MID - H2649	49	42	103	46	65	84	143	108	73	11	77	11	108	1	54
ASGROW	RX740RR	51	--	--	--	--	86	--	--	--	--	77	12	112	0	58
CROPLAN GEN.	541Bt	53	--	--	--	--	90	--	--	--	--	77	12	114	0	56
MIDLAND	7A14Bt	50	--	--	--	--	85	--	--	--	--	77	12	115	1	56
PIONEER	31B13	64	21	119	43	68	110	70	124	74	12	77	12	110	4	57
MIDLAND	7A28	57	26	--	42	--	98	88	--	75	12	78	12	106	2	55
NC+	5021RB	49	--	--	--	--	83	--	--	--	--	78	12	108	3	55
MATURITY CHECK	FULL - M798	47	27	110	37	61	81	93	115	77	13	80	13	101	3	57
TRIUMPH	1866Bt	46	23	--	34	--	78	77	--	77	13	80	13	112	5	56
MYCOGEN	2888IMI	43	26	120	35	63	73	90	125	78	13	81	13	116	4	56
	AVERAGES	59	30	96	44	61	59	30	96	72	12	75	12	110	1	55
	CV (%)	8	15	9	--	--	8	15	9	--	--	1	4	3	162	1
	LSD (0.05)**	6	6	11	--	--	11	21	11	--	--	1	1	5	3	1

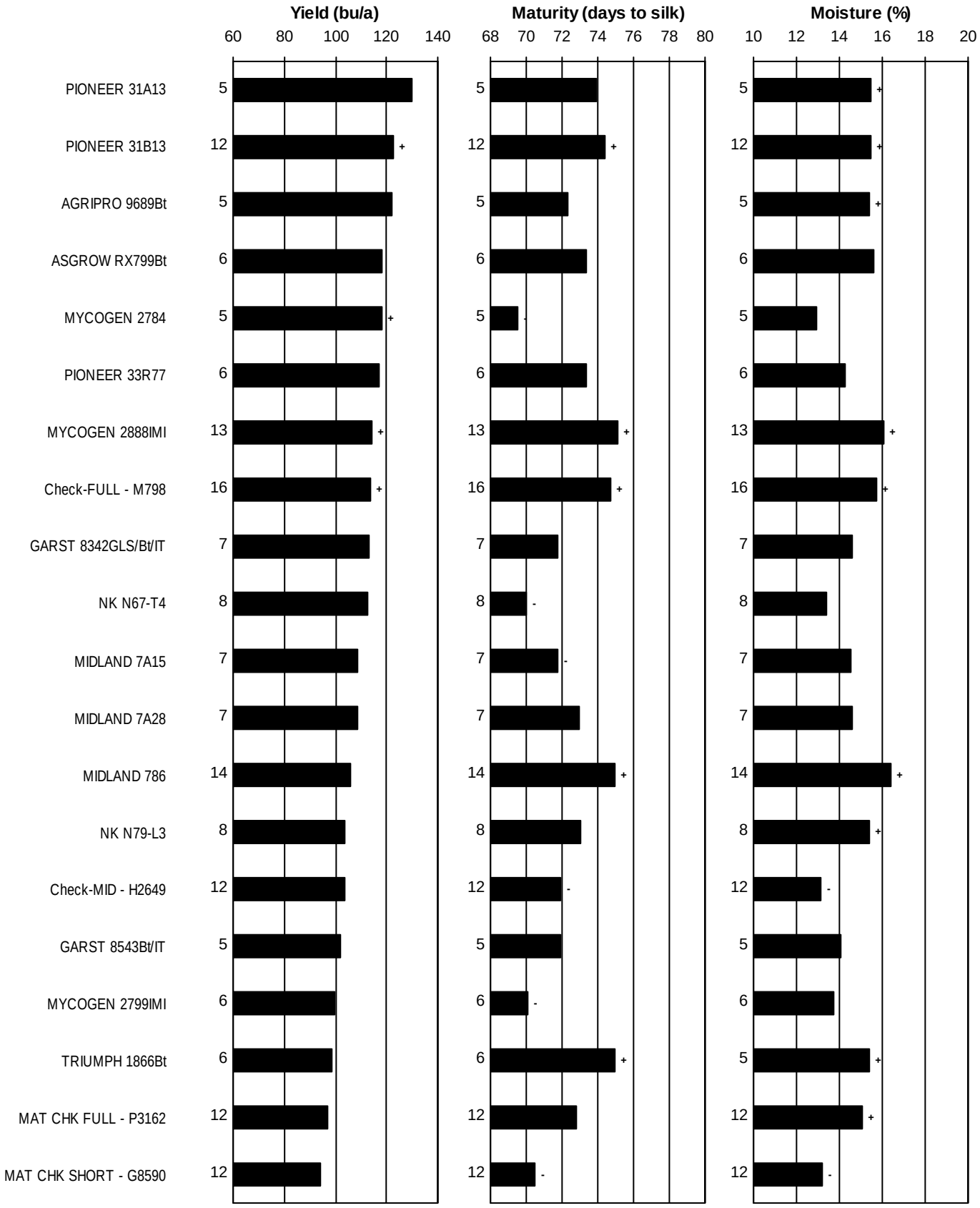
** Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

Table 14. EAST/CENTRAL Kansas corn hybrid yield summary (% of test average), 2002.

BRAND/NAME	TOP[1]	OTT	ERI	HES	AVG.
AGRIPRO					
9689Bt	--	--	100	--	--
ASGROW					
RX601RR/YG	--	--	--	107	--
RX730RR/YG	110	--	102	--	--
RX740RR	--	--	--	86	--
CROPLAN GEN.					
541Bt	--	--	--	90	--
631	106	141	97	--	--
DEKALB					
DKC53-34	--	--	--	109	--
DKC57-40	--	--	--	93	--
DKC60-09	85	--	86	--	--
DKC60-17	--	--	--	112	--
DKC60-19	92	--	96	--	--
DKC64-01	80	--	102	--	--
FREEDOM					
5645	104	64	91	--	--
5675	78	108	79	--	--
GARST					
8328Bt/IT	--	144	88	115	--
8342GLS/Bt/IT	--	103	--	--	--
8348	--	99	103	--	--
8383YG1	80	--	--	--	--
8530Bt	--	--	100	--	--
HOEGEMEYER					
2665	83	96	--	--	--
2679	115	91	--	--	--
KRUGER					
EX9212CL	112	104	95	--	--
K-9115	79	104	115	--	--
K-9212BT	107	105	90	--	--
K-9315BT	92	71	107	--	--
MIDLAND					
786	89	81	104	--	--
7A04Bt	--	--	--	97	--
7A14Bt	--	--	--	85	--
7A15	89	91	103	--	--
7A25Bt	--	--	102	--	--
7A28	120	--	110	98	--
7B15	--	--	--	101	--
7E24Bt	--	--	--	104	--
MIDWEST SEED					
G 7706	--	--	--	103	--
G 8070	--	--	--	91	--
G 8122	--	--	--	95	--
MYCOGEN					
2722IMI	--	--	--	104	--
2784	121	147	103	108	120
2888IMI	108	60	101	73	86
2A791	109	134	104	--	--
NC+					
5021RB	--	63	105	83	--
5202B	--	73	108	--	--
NK					
N43-C4	--	--	--	114	--
N65-M7	107	148	--	105	--
N67-T4	--	126	--	118	--
N68-K7	--	59	93	--	--
N83-N5	--	--	103	--	--
N83-Z8	113	--	--	--	--
PFISTER					
2656RR	--	--	101	--	--
2730	--	--	97	--	--
2750	--	--	106	--	--
3030Bt	--	--	108	--	--
PIONEER					
31A13	--	--	122	--	--
31B13	--	97	116	110	--
33B51	--	--	--	119	--
33P67	107	--	--	--	--
33R77	102	95	105	--	--
34B97	96	--	--	--	--
35P15	--	135	--	--	--
35R58	--	--	--	125	--
PRODUCERS					
795BT	--	112	--	--	--
STINE					
9715Bt	100	--	90	--	--
9716	108	--	--	--	--
9803	--	--	104	--	--
TRIUMPH					
1120BtRR	--	--	97	--	--
1866Bt	--	65	--	78	--
2011RR	--	82	--	--	--
US SEEDS					
US C1141	--	85	--	--	--
US C1153	--	101	--	--	--
MATURITY CHECK					
FULL - M798	110	84	106	81	95
MID - H2649	101	110	84	84	95
SHORT - G8590	97	121	89	114	105
AVERAGES (bu/a)	51	40	188	59	84
CV (%)	14	21	9	8	--
LSD (0.05)**	19	29	12	11	--

[1] TOP = Topeka, Shawnee Co. OTT = Ottawa, Franklin Co. ERI = Erie, Neosho Co. HES = Hesston, Harvey Co.

Figure 6. EAST/CENTRAL Kansas corn hybrid standardized performance summary, 2000-2002.



Values beside bars indicate the number of comparisons with checks. Symbols (+,-) indicate if statistically higher or lower than mean of checks.

EAST CENTRAL KANSAS DRYLAND SHORT-SEASON CORN TEST ON SILT LOAM SOIL

East Central Kansas Experiment Field, Ottawa; Keith Janssen, agronomist; Jim Kimball, technician

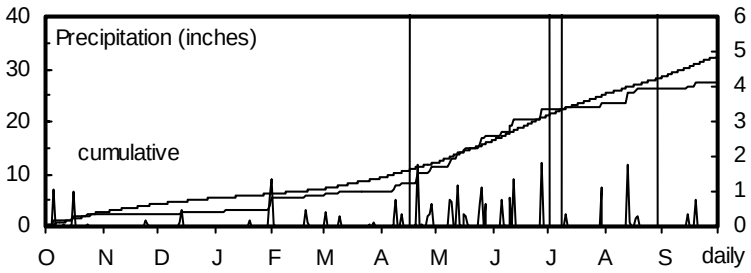
Woodson silt loam; Soybean in 2001

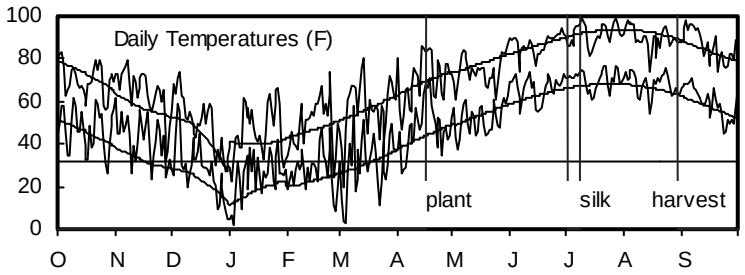
111 - 35 - 0 lb/a N, P, K

Planted on 4/17/02; Harvested on 8/28/02

Target stand of 22,000 plants/acre; 9.5 in. spacing

Late April and May had above-average rainfall. The last half of June and all of July and August were unusually hot and dry. The stresses induced a fair amount of lodging in some hybrids.





Month	Precipitation 2002	Precipitation Norm.	Average Temp. 2002	Average Temp. Norm.	GDU 2002	GDU Norm.
Oct.-Mar.	6.9	9.1	45	41	149	99
April	4.6	2.9	59	56	356	282
May	6.0	4.1	64	66	460	489
June	4.9	4.9	77	74	760	718
July	1.5	4.0	81	80	869	831
August	2.5	3.2	79	79	827	804
Sept.	1.1	4.0	73	70	646	606
Totals:	27.3	32.3	59	56	4,065	3,830

Table 15. Ottawa Short-Season Corn Performance Test, 2000-2002.

BRAND	NAME	ACRE YIELD, BUSHELS 2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	YIELD AS % OF TEST AVERAGE 2002	2001	2000	2001-2002 Days to Silk	2001-2002 Grain Moist. %	2002 Days to Silk	2002 Grain Moist. %	2002 Final Stand %	2002 Ldg %	2002 Test Wt. lb/bu
PIONEER	35P15	64	--	--	--	--	137	--	--	--	--	75	12	132	43	54
KRUGER	K-9012CL	47	--	--	--	--	101	--	--	--	--	76	11	135	7	51
NK	N58-D1	52	87	108	70	83	112	96	115	71	12	76	11	131	11	52
AGSOURCE	5713Bt	49	--	--	--	--	105	--	--	--	--	76	12	131	6	52
KRUGER	K-9108	37	--	--	--	--	80	--	--	--	--	76	12	140	10	52
KRUGER	K-9309BT	53	--	--	--	--	114	--	--	--	--	76	12	133	7	53
NK	N65-M7	48	--	--	--	--	102	--	--	--	--	76	12	134	19	54
PFISTER	2420	45	--	--	--	--	96	--	--	--	--	76	12	125	20	52
PIONEER	35P12	55	103	108	79	89	117	115	115	71	12	76	12	133	13	53
AGSOURCE	4663Bt	48	--	--	--	--	103	--	--	--	--	77	11	131	16	52
TRIUMPH	1141Bt	44	77	103	60	75	94	85	109	73	13	77	13	131	10	53
KRUGER	K-9310ABT	37	--	--	--	--	78	--	--	--	--	78	11	131	22	48
MATURITY CHECK	SHORT - G8590	48	81	93	64	74	104	89	99	73	12	78	12	123	9	54
PIONEER	34M95	53	--	--	--	--	114	--	--	--	--	78	12	133	5	53
GARST	8530Bt	42	--	--	--	--	90	--	--	--	--	78	13	120	9	53
KRUGER	K-9910BT	43	--	--	--	--	93	--	--	--	--	78	13	134	15	51
MIDLAND	775CL	48	--	--	--	--	102	--	--	--	--	78	15	115	13	54
MATURITY CHECK	MID - H2649	41	107	102	74	83	88	118	108	74	12	79	12	127	37	51
PRODUCERS	6960	44	--	--	--	--	94	--	--	--	--	79	12	131	33	51
MATURITY CHECK	FULL - M798	35	100	--	68	--	76	111	--	77	16	82	17	112	31	52
	AVERAGES	47	90	94	68	77	47	90	94	72	12	77	12	129	17	52
	CV (%)	15	9	11	--	--	15	9	11	--	--	1	6	5	62	1
	LSD (0.05)**	10	12	12	--	--	21	13	13	--	--	1	1	9	15	1

** Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

SOUTHEAST KANSAS DRYLAND SHORT-SEASON CORN TEST

Four-State Farm Show, Pittsburg; James Long, agronomist; Kelly Kusel, research technician

Parsons silt loam; Soybean in 2001

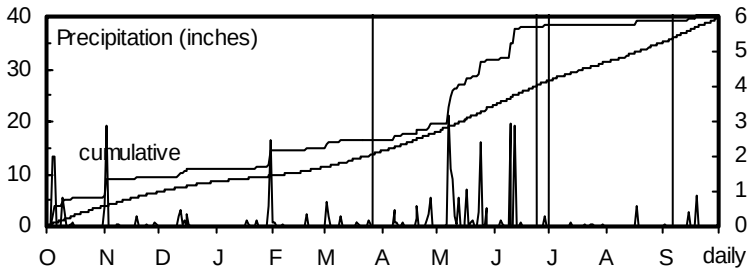
140 - 70 - 70 lb/a N, P, K

Planted on 3/28/02; Harvested on 9/5/02

Target stand of 22,000 plants/acre; 9.5 in. spacing

Cool, wet conditions resulted in slightly uneven emergence. Wet conditions continued through June. Rainfall was minimal after July 4th.

	Precipitation		Average Temp.		GDU	
Month	2002	Norm.	2002	Norm.	2002	Norm.
Oct.-Mar.	16.7	14.1	44	43	116	130
April	3.0	3.7	59	57	336	288
May	12.2	5.0	62	66	408	487
June	6.4	4.8	75	74	741	717
July	0.3	3.5	81	80	881	834
August	0.6	3.9	81	78	871	815
Sept.	1.4	4.5	75	71	703	624
Totals:	40.5	39.4	58	57	4,055	3,894



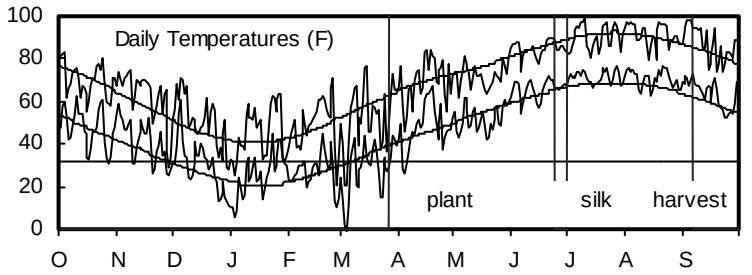


Table 16. Pittsburg Short-Season Corn Test, 2000-2002.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
BRAND	NAME	2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
PIONEER	35P15	141	--	--	--	--	112	--	--	--	--	88	13	94	--	58
KRUGER	K-9108	102	--	--	--	--	81	--	--	--	--	89	12	94	--	57
NK	N58-D1	128	163	180	146	157	102	107	106	84	13	89	13	97	--	59
DEKALB	DK551BtY	113	156	185	135	151	90	103	109	86	13	90	13	98	--	57
GARST	8585GLS/IT	127	144	--	135	--	101	94	--	86	13	90	13	91	--	58
KRUGER	K-9309BT	112	--	--	--	--	89	--	--	--	--	90	13	86	--	57
DEKALB	DKC58-78	122	160	--	141	--	97	105	--	86	13	91	13	91	--	56
DEKALB	DKC60-09	132	--	--	--	--	105	--	--	--	--	91	13	100	--	57
KRUGER	K-9012CL	117	--	--	--	--	93	--	--	--	--	91	13	94	--	57
KRUGER	K-9310ABT	123	--	--	--	--	98	--	--	--	--	91	13	88	--	57
NK	N65-M7	137	--	--	--	--	109	--	--	--	--	91	13	89	--	57
PIONEER	35P12	150	152	192	151	165	119	100	113	85	13	91	13	96	--	58
DEKALB	DKC60-19	134	--	--	--	--	106	--	--	--	--	92	13	90	--	58
KRUGER	K-9910BT	127	--	--	--	--	101	--	--	--	--	92	13	88	--	56
MATURITY CHECK	SHORT - G8590	135	156	157	146	149	108	102	93	87	13	92	13	92	--	58
STINE	9617	118	--	--	--	--	94	--	--	--	--	92	13	94	--	58
GARST	8530Bt	134	173	--	153	--	106	113	--	86	15	92	14	96	--	58
PIONEER	34M95	133	--	--	--	--	106	--	--	--	--	92	14	91	--	60
TRIUMPH	1141Bt	118	--	181	--	--	94	--	107	--	--	92	14	87	--	58
MATURITY CHECK	MID - H2649	105	159	157	132	140	83	104	93	88	13	93	13	94	--	57
MATURITY CHECK	FULL - M798	130	160	--	145	--	104	105	--	90	16	94	15	98	--	58
	AVERAGES	126	152	169	139	149	126	152	169	86	14	91	13	93	--	58
	CV (%)	10	6	8	--	--	10	6	8	--	--	1	3	10	--	1
	LSD (0.05)**	17	13	19	--	--	13	9	11	--	--	1	1	NS	--	1

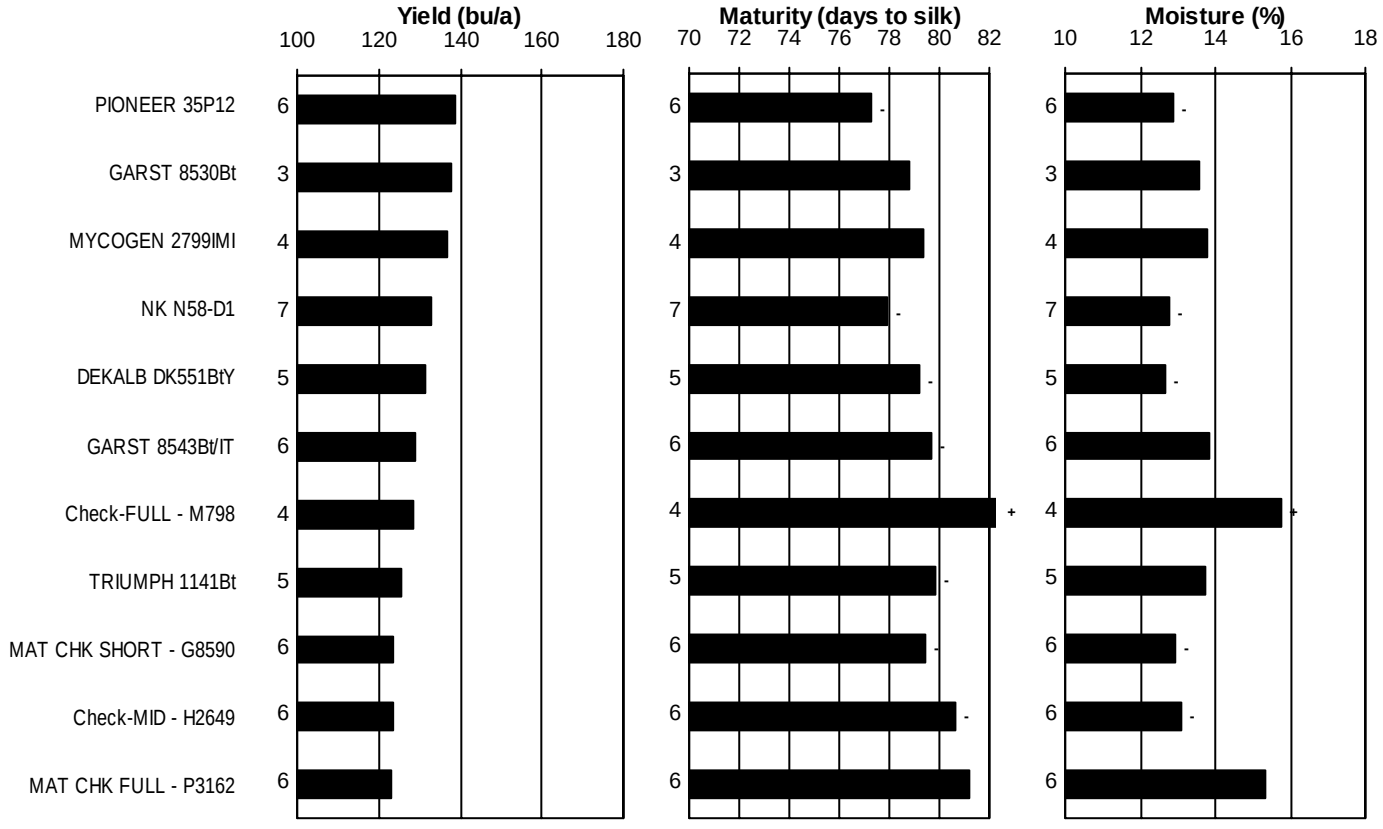
** Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

Table 17. SOUTHEAST SHORT-SEASON corn hybrid yield summary (% of test average), 2002.

BRAND/NAME	OTT[1]	PIT	AVG.
AGSOURCE			
4663Bt	103	--	--
5713Bt	105	--	--
DEKALB			
DK551BtY	--	90	--
DKC58-78	--	97	--
DKC60-09	--	105	--
DKC60-19	--	106	--
GARST			
8530Bt	90	106	98
8585GLS/IT	--	101	--
KRUGER			
K-9012CL	101	93	97
K-9108	80	81	80
K-9309BT	114	89	102
K-9310ABT	78	98	88
K-9910BT	93	101	97
MIDLAND			
775CL	102	--	--
NK			
N58-D1	112	102	107
N65-M7	102	109	106
PFISTER			
2420	96	--	--
PIONEER			
34M95	114	106	110
35P12	117	119	118
35P15	137	112	125
PRODUCERS			
6960	94	--	--
STINE			
9617	--	94	--
TRIUMPH			
1141Bt	94	94	94
MATURITY CHECK			
FULL - M798	76	104	90
MID - H2649	88	83	86
SHORT - G8590	104	108	106
AVERAGES (bu/a)	47	126	86
CV (%)	15	10	--
LSD (0.05)**	21	13	--

[1] OTT = Ottawa, Franklin Co. PIT = Pittsburg, Crawford Co.

Figure 7. Kansas SHORT-SEASON corn hybrid standardized performance summary, 2000-2002.



Values beside bars indicate the number of comparisons with checks. Symbols (+,-) indicate if statistically higher or lower than mean of checks.

SOUTH CENTRAL KANSAS IRRIGATED CORN TEST ON SILT LOAM SOIL

Inman, Kansas; Kraig Roozeboom, agronomist; Don Schroeder, cooperator

Crete silt loam; Soybean in 2001

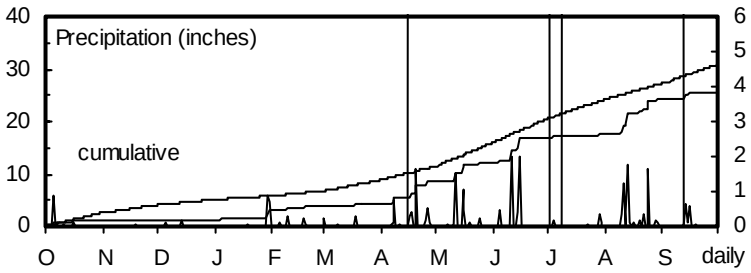
187 - 58 - 0 lb/a N, P, K

Planted on 4/16/02; Harvested on 9/11/02

Target stand of 30,000 plants/acre; 7.0 in. spacing

Good stands and early growth set the test up for a good season. However, irrigation problems in late July and early August severly limited yields. Stress-induced stalk rots caused severe lodging in some plots.

	Precipitation		Average Temp.		GDU	
Month	2002	Norm.	2002	Norm.	2002	Norm.
Oct.-Mar.	4.4	8.7	41	41	130	97
April	4.2	2.6	54	56	271	277
May	3.5	4.4	62	66	428	486
June	4.9	4.7	76	75	728	730
July	0.7	3.6	81	81	843	841
August	6.5	3.1	80	80	823	816
Sept.	1.5	3.7	72	71	611	623
Totals:	25.7	30.8	56	56	3,833	3,870



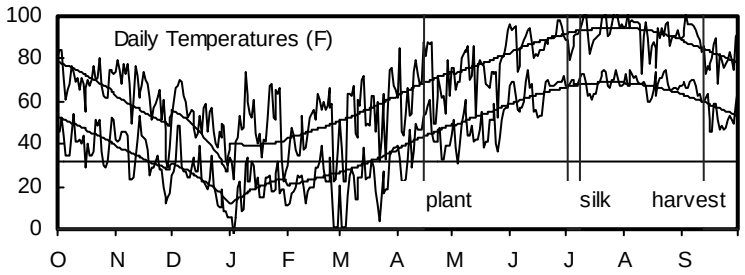


Table 18. Inman Irrigated Corn Performance Test, 2000-2002.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
BRAND	NAME	2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
GOLDEN HARVEST	H-9164Bt	82	174	--	128	--	70	97	--	75	11	76	10	113	57	52
DEKALB	DKC60-17	113	--	--	--	--	97	--	--	--	--	76	13	112	24	57
GOLDEN HARVEST	H-9176Bt/RR	105	--	--	--	--	90	--	--	--	--	77	11	109	52	56
ASGROW	RX730RR/YG	112	--	--	--	--	96	--	--	--	--	77	12	111	30	56
MATURITY CHECK	SHORT - G8590	116	168	--	142	--	99	93	--	75	12	77	12	109	19	57
MIDLAND	7E24Bt	123	--	--	--	--	105	--	--	--	--	77	12	109	38	57
NK	N68-K7	104	--	--	--	--	89	--	--	--	--	77	13	109	19	58
NK	N72-J5	122	198	--	160	--	104	109	--	76	14	77	13	104	7	57
MATURITY CHECK	MID - H2649	82	176	--	129	--	70	98	--	76	12	78	11	103	47	55
MIDLAND	7A14Bt	108	--	--	--	--	92	--	--	--	--	78	12	117	34	57
ASGROW	RX740RR	128	--	--	--	--	109	--	--	--	--	78	13	114	15	58
ASGROW	RX799Bt	97	--	--	--	--	82	--	--	--	--	78	13	113	53	57
DEKALB	DKC64-01	117	--	--	--	--	100	--	--	--	--	78	13	108	4	57
MIDWEST SEED	G 8070	131	--	--	--	--	112	--	--	--	--	78	13	97	6	57
MYCOGEN	7821BT	73	185	--	129	--	62	102	--	77	14	78	13	114	77	57
STINE	9614Bt	136	--	--	--	--	116	--	--	--	--	78	13	109	19	58
GARST	8288	126	--	--	--	--	107	--	--	--	--	78	14	93	17	58
GARST	8371	115	--	--	--	--	98	--	--	--	--	78	14	98	6	58
GARST	8383YG1	114	--	--	--	--	97	--	--	--	--	78	14	106	7	58
MIDWEST SEED	G 8122	123	--	--	--	--	104	--	--	--	--	78	14	96	12	58
CROPLAN GEN.	818Bt	146	--	--	--	--	124	--	--	--	--	78	15	107	25	55
MIDLAND	7B15	125	190	--	157	--	106	105	--	76	14	78	15	105	16	58

(continued)

Table 18. Inman Irrigated Corn Performance Test, 2000-2002 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
		2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
NC+	5790B	117	188	--	152	--	99	104	--	77	14	79	12	104	36	56
NK	N67-T4	121	191	--	156	--	103	106	--	77	13	79	12	112	23	57
MIDLAND	7A04Bt	116	194	--	155	--	99	108	--	78	14	79	13	106	18	56
NC+	6871B	122	188	--	155	--	104	104	--	77	15	79	14	108	16	57
MIDLAND	7A28	126	184	--	155	--	107	102	--	78	15	80	14	102	20	56
PIONEER	31N27	113	--	--	--	--	97	--	--	--	--	80	14	104	29	58
PIONEER	32D99	126	--	--	--	--	108	--	--	--	--	80	15	110	6	57
GARST	8303	128	--	--	--	--	109	--	--	--	--	80	17	107	5	58
PIONEER	33R77	138	199	--	168	--	117	110	--	79	14	81	13	112	10	56
PIONEER	31A13	144	--	--	--	--	122	--	--	--	--	81	17	109	7	59
NC+	5021RB	132	--	--	--	--	112	--	--	--	--	82	13	102	12	57
MYCOGEN	2888IMI	124	180	--	152	--	106	100	--	80	15	82	15	114	28	58
MATURITY CHECK	FULL - M798	111	171	--	141	--	94	95	--	80	16	82	16	98	40	58
NK	N83-Z8	132	169	--	150	--	112	94	--	80	17	82	17	106	19	58
TRIUMPH	1866Bt	124	172	--	148	--	106	95	--	80	17	82	17	101	19	57
	AVERAGES	117	180	--	149	--	117	180	--	77	14	79	14	107	24	57
	CV (%)	15	6	--	--	--	15	6	--	--	--	2	8	6	71	2
	LSD (0.05)**	25	16	--	--	--	22	9	--	--	--	2	2	9	24	1

** Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

SOUTH CENTRAL KANSAS IRRIGATED CORN TEST ON SANDY LOAM SOIL

Russell & Son Farms, St. John; Victor Martin, agronomist; Ron Cunningham and Jeff Scott, technicians

Naron loamy fine sand; Corn in 2001

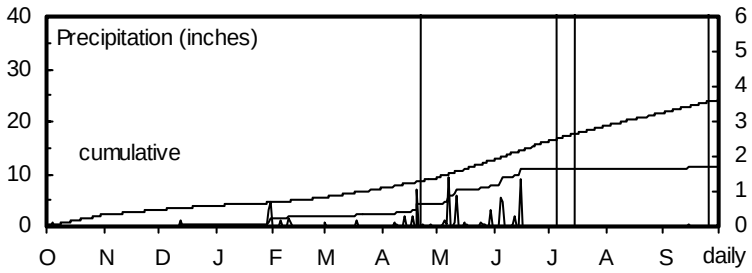
225 - 0 - 0 lb/a N, P, K

Planted on 4/23/02; Harvested on 9/24/02

Target stand of 30,000 plants/acre; 7.0 in. spacing

Dry, hot conditions stressed the plots during most of the summer. Yields were good, but somewhat variable.

	Precipitation		Average Temp.		GDU	
Month	2002	Norm.	2002	Norm.	2002	Norm.
Oct.-Mar.	2.3	7.2	43	42	135	132
April	2.1	2.0	58	57	333	308
May	3.5	3.4	64	66	464	506
June	3.3	3.7	78	76	754	730
July	0.0	2.9	81	79	845	825
August	0.0	2.5	80	78	823	760
Sept.	0.1	2.5	72	69	616	559
Totals:	11.2	24.1	57	57	3,968	3,819



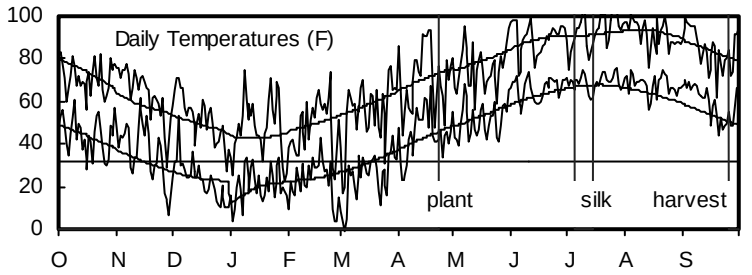


Table 19. St. John Irrigated Corn Performance Test, 2000-2002.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
BRAND	NAME	2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
ASGROW	RX799Bt	192	--	--	--	--	105	--	--	--	--	72	13	104	2	--
DEKALB	DKC60-17	174	--	--	--	--	95	--	--	--	--	72	13	96	3	--
DEKALB	DKC64-01	180	--	--	--	--	98	--	--	--	--	72	13	101	0	--
GOLDEN HARVEST	H-9164Bt	172	231	--	202	--	94	123	--	70	13	72	14	116	0	--
ASGROW	RX730RR/YG	186	--	--	--	--	102	--	--	--	--	73	13	112	0	--
GARST	8383YG1	199	--	--	--	--	109	--	--	--	--	73	13	101	2	--
MIDWEST SEED	G 8070	205	--	--	--	--	112	--	--	--	--	73	13	104	2	--
MIDWEST SEED	G 8122	181	--	--	--	--	99	--	--	--	--	73	13	91	7	--
NK	N67-T4	178	221	--	200	--	97	118	--	70	14	73	13	110	0	--
NK	N68-K7	183	--	--	--	--	100	--	--	--	--	73	13	108	3	--
FONTANELLE	5591	172	--	--	--	--	94	--	--	--	--	73	14	97	6	--
GARST	8288	199	--	--	--	--	109	--	--	--	--	73	14	96	5	--
GOLDEN HARVEST	H-9176Bt/RR	172	--	--	--	--	94	--	--	--	--	73	14	102	0	--
FONTANELLE	5282	185	--	--	--	--	101	--	--	--	--	74	13	99	10	--
KAYSTAR	X-2151	170	--	--	--	--	93	--	--	--	--	74	13	93	6	--
MATURITY CHECK	MID - H2649	161	164	--	162	--	88	87	--	72	13	74	13	99	4	--
MIDLAND	7B15	169	198	--	184	--	93	106	--	71	13	74	13	96	6	--
NK	N72-J5	171	169	--	170	--	93	90	--	72	14	74	13	97	6	--
ROTH	RSC-2217Bt	177	--	--	--	--	97	--	--	--	--	74	13	96	0	--
MATURITY CHECK	SHORT - G8590	161	187	--	174	--	88	100	--	71	14	74	14	95	4	--
MYCOGEN	7821BT	210	224	--	217	--	115	119	--	72	14	74	14	117	5	--
NC+	6871B	195	220	--	208	--	107	117	--	72	15	74	14	104	0	--
ROTH	RSC-2097	180	--	--	--	--	98	--	--	--	--	74	14	92	7	--

(continued)

Table 19. St. John Irrigated Corn Performance Test, 2000-2002 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
		2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
STINE	9614Bt	162	--	--	--	--	89	--	--	--	--	74	14	106	1	--
MIDLAND	7A04Bt	189	--	--	--	--	103	--	--	--	--	75	13	94	0	--
MIDLAND	7A28	180	--	--	--	--	98	--	--	--	--	75	13	99	4	--
NC+	5790B	188	208	--	198	--	103	111	--	72	14	75	13	110	1	--
ROTH	RSC-2216	150	--	--	--	--	82	--	--	--	--	75	13	93	6	--
MIDLAND	7A14Bt	186	--	--	--	--	102	--	--	--	--	75	14	114	0	--
FONTANELLE	5732	169	--	--	--	--	92	--	--	--	--	76	13	102	6	--
NC+	5021RB	198	--	--	--	--	108	--	--	--	--	76	13	103	0	--
FONTANELLE	5800	170	--	--	--	--	93	--	--	--	--	76	14	102	5	--
PIONEER	31A13	215	210	--	213	--	118	112	--	74	15	76	14	105	0	--
PIONEER	31N27	186	--	--	--	--	102	--	--	--	--	76	14	95	12	--
PIONEER	32D99	188	--	--	--	--	103	--	--	--	--	77	14	107	7	--
MATURITY CHECK	FULL - M798	170	177	--	173	--	93	94	--	75	13	78	13	100	7	--
MYCOGEN	2888IMI	180	215	--	198	--	99	115	--	75	14	78	13	108	3	--
TRIUMPH	1866Bt	164	196	--	180	--	90	104	--	75	14	78	13	101	3	--
NK	N83-Z8	212	--	--	--	--	116	--	--	--	--	78	14	105	1	--
PIONEER	33R77	196	195	--	195	--	107	104	--	75	15	78	14	98	5	--
DEKALB	DKC68-70	211	--	--	--	--	115	--	--	--	--	80	14	111	2	--
DEKALB	DKC69-70	197	--	--	--	--	108	--	--	--	--	82	16	105	1	--
	AVERAGES	183	188	--	185	--	183	188	--	72	14	75	13	102	3	--
	CV (%)	12	8	--	--	--	12	8	--	--	--	2	4	7	111	--
	LSD (0.05)**	31	21	--	--	--	17	11	--	--	--	2	1	9	5	--

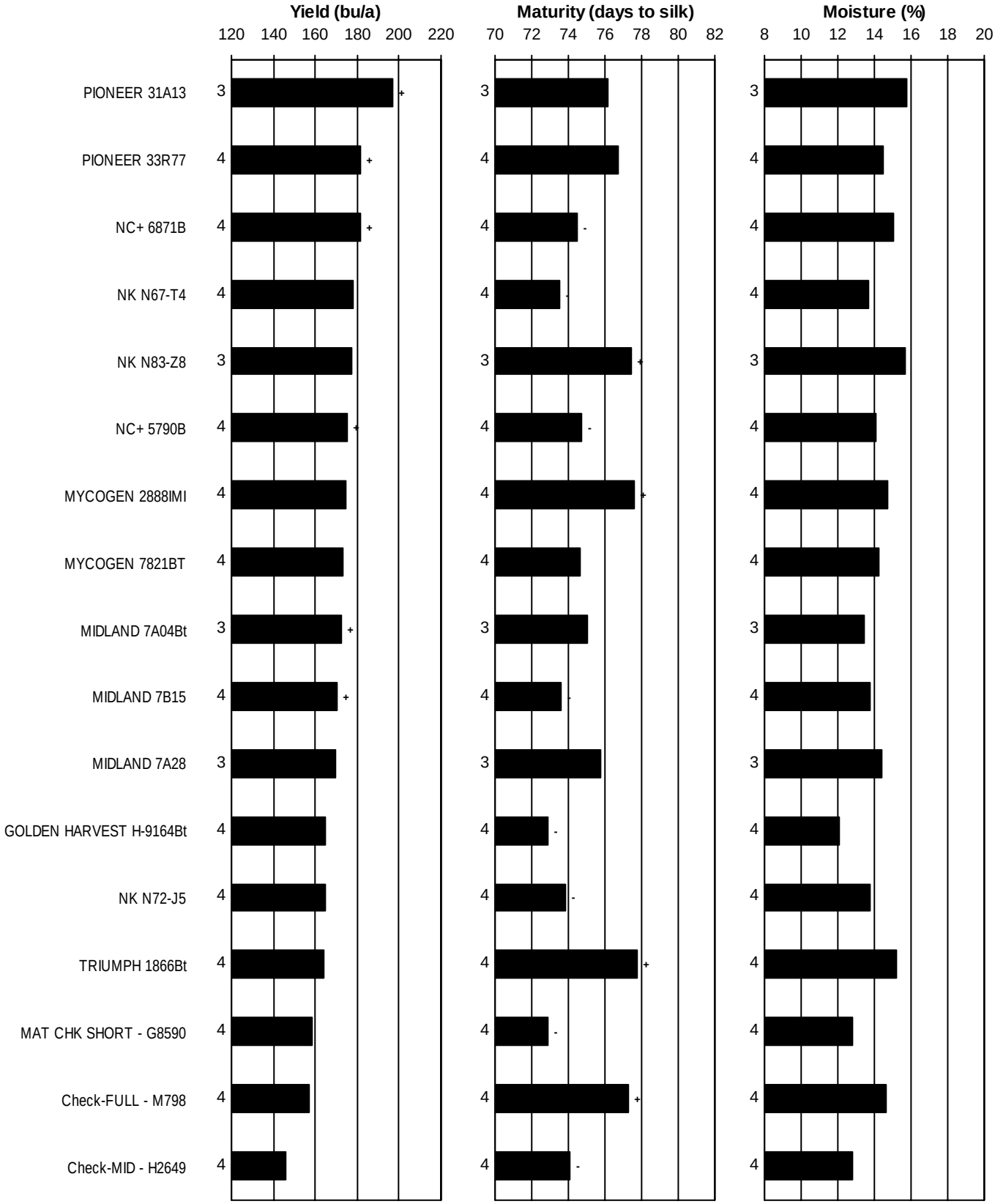
** Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

Table 20. CENTRAL IRRIGATED corn hybrid yield summary (% of test average), 2002.

BRAND/NAME	INM[1]	STJ	AVG.
ASGROW			
RX730RR/YG	96	102	99
RX740RR	109	--	--
RX799Bt	82	105	94
CROPLAN GEN.			
818Bt	124	--	--
DEKALB			
DKC60-17	97	95	96
DKC64-01	100	98	99
DKC68-70	--	115	--
DKC69-70	--	108	--
FONTANELLE			
5282	--	101	--
5591	--	94	--
5732	--	92	--
5800	--	93	--
GARST			
8288	107	109	108
8303	109	--	--
8371	98	--	--
8383YG1	97	109	103
GOLDEN HARVEST			
H-9164Bt	70	94	82
H-9176Bt/RR	90	94	92
KAYSTAR			
X-2151	--	93	--
MIDLAND			
7A04Bt	99	103	101
7A14Bt	92	102	97
7A28	107	98	103
7B15	106	93	99
7E24Bt	105	--	--
MIDWEST SEED			
G 8070	112	112	112
G 8122	104	99	102
MYCOGEN			
2888IMI	106	99	102
7821BT	62	115	88
NC+			
5021RB	112	108	110
5790B	99	103	101
6871B	104	107	105
NK			
N67-T4	103	97	100
N68-K7	89	100	94
N72-J5	104	93	99
N83-Z8	112	116	114
PIONEER			
31A13	122	118	120
31N27	97	102	99
32D99	108	103	105
33R77	117	107	112
ROTH			
RSC-2097	--	98	--
RSC-2216	--	82	--
RSC-2217Bt	--	97	--
STINE			
9614Bt	116	89	102
TRIUMPH			
1866Bt	106	90	98
MATURITY CHECK			
FULL - M798	94	93	94
MID - H2649	70	88	79
SHORT - G8590	99	88	94
AVERAGES (bu/a)	117	183	150
CV (%)	15	12	--
LSD (0.05)**	22	17	--

[1] INM = Inman, McPherson Co. STJ = St. John, Stafford Co.

Figure 8. CENTRAL Kansas IRRIGATED corn hybrid standardized performance summary, 2000-2002.



Values beside bars indicate the number of comparisons with checks. Symbols (+,-) indicate if statistically higher or lower than mean of checks.

NORTHWEST KANSAS IRRIGATED CORN TEST ON SILT LOAM SOIL

Northwest Research-Extension Center, Colby; Patrick Evans, agronomist

Keith silt loam; Soybean in 2001

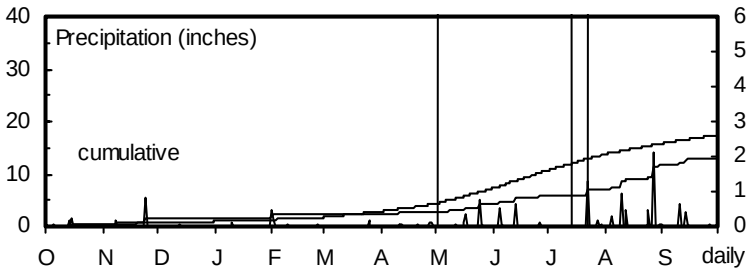
250 - 50 - 0 lb/a N, P, K

Planted on 5/2/02; Harvested on 10/15/02

Target stand of 30,000 plants/acre; 7.0 in. spacing

Over 20" of irrigation were needed to compensate for minimal rainfall. Disease and insect damage was minimal. High winds and heavy rain in late August caused the stalks to lean, but there were few lodged stalks or dropped ears.

	Precipitation		Average Temp.		GDU	
Month	2002	Norm.	2002	Norm.	2002	Norm.
Oct.-Mar.	2.5	2.8	38	36	97	22
April	0.4	1.4	52	49	292	193
May	1.4	2.9	59	60	376	357
June	1.4	3.5	77	70	686	599
July	1.5	3.1	79	76	758	750
August	4.4	2.1	75	74	690	710
Sept.	1.2	1.6	66	65	506	474
Totals:	12.9	17.4	53	51	3,404	3,105



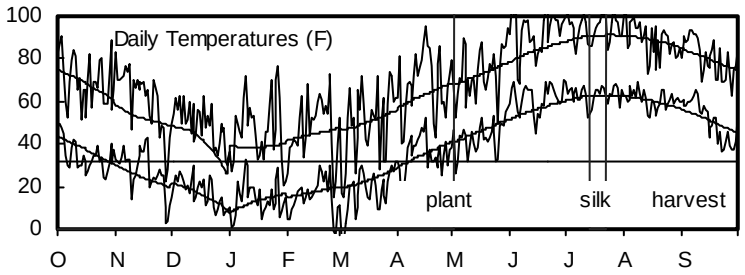


Table 21. Colby Irrigated Corn Performance Test, 2000-2002.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
BRAND	NAME	2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
DEKALB	DKC53-34	236	--	--	--	--	89	--	--	--	--	72	14	116	0	57
DEKALB	DKC60-17	262	--	--	--	--	99	--	--	--	--	73	17	118	0	57
ASGROW	RX601RR/YG	228	--	--	--	--	86	--	--	--	--	74	15	109	2	58
DEKALB	DKC57-40	257	--	--	--	--	97	--	--	--	--	74	15	119	0	59
KAYSTAR	KX - 890	248	--	--	--	--	94	--	--	--	--	74	16	105	1	56
OTTILIE	5170RR	248	--	--	--	--	94	--	--	--	--	74	16	122	5	55
NK	N72-J5	287	261	--	274	--	109	106	--	75	17	74	17	116	2	55
GOLDEN HARVEST	H-9176Bt/RR	265	--	--	--	--	100	--	--	--	--	74	18	111	0	56
FONTANELLE	5282	285	--	--	--	--	108	--	--	--	--	75	17	116	1	55
GOLDEN HARVEST	H-9164Bt	246	252	--	249	--	93	103	--	75	16	75	17	113	1	54
LG SEEDS	LG2585	264	240	--	252	--	100	98	--	75	17	75	17	121	1	56
LG SEEDS	LG2622	257	--	--	--	--	97	--	--	--	--	75	17	112	2	55
NK	N65-M7	274	--	--	--	--	103	--	--	--	--	75	17	118	1	56
NK	N67-T4	251	232	185	241	223	95	94	100	76	17	75	17	120	1	57
ASGROW	RX730RR/YG	262	231	--	246	--	99	94	--	75	18	75	18	116	0	56
FONTANELLE	5591	265	251	--	258	--	100	102	--	75	18	75	18	118	2	55
LG SEEDS	LG2606	264	257	--	260	--	100	105	--	75	18	75	18	118	2	56
OTTILIE	4999	266	--	--	--	--	101	--	--	--	--	75	18	114	1	57
FONTANELLE	HC-7638Bt	263	--	--	--	--	99	--	--	--	--	76	15	113	0	57
OTTILIE	4777Bt	274	--	--	--	--	104	--	--	--	--	76	15	122	0	58
MATURITY CHECK	SHORT - G8590	236	236	174	236	215	89	96	94	75	16	76	16	114	0	58
ROTH	RSC-2216	271	--	--	--	--	102	--	--	--	--	76	16	109	0	56

(continued)

Table 21. Colby Irrigated Corn Performance Test, 2000-2002 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
		2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
ASGROW	RX799Bt	283	--	221	--	--	107	--	119	--	--	76	17	116	1	58
GOLDEN HARVEST	H-8906	241	--	--	--	--	91	--	--	--	--	76	17	111	2	56
HAWKEYE	00-726	267	--	--	--	--	101	--	--	--	--	76	17	120	1	56
MIDLAND	7B15	259	282	194	271	245	98	115	105	76	17	76	17	120	1	56
MYCOGEN	2833	272	246	206	259	241	103	100	111	76	17	76	17	120	0	55
NC+	4822	264	--	--	--	--	100	--	--	--	--	76	17	120	1	56
TRIUMPH	1120BtRR	266	247	--	256	--	100	101	--	76	17	76	17	114	1	58
US SEEDS	US C1122RR/Bt	265	--	--	--	--	100	--	--	--	--	76	17	118	0	58
CROPLAN GEN.	737Bt	269	--	--	--	--	102	--	--	--	--	76	18	122	0	57
HAWKEYE	SX70	270	275	190	272	245	102	112	102	76	18	76	18	115	1	55
KAYSTAR	KX - 898	266	274	--	270	--	100	112	--	76	18	76	18	110	1	55
MIDLAND	7E24Bt	267	--	--	--	--	101	--	--	--	--	76	18	118	0	56
NK	N68-P1	265	--	--	--	--	100	--	--	--	--	76	18	110	1	56
OTTILIE	5267Bt	274	249	195	262	239	104	101	105	76	18	76	18	118	1	56
MATURITY CHECK	MID - H2649	244	247	197	246	230	92	101	106	77	15	77	15	114	1	58
MYCOGEN	6932CL	250	--	--	--	--	94	--	--	--	--	77	17	113	1	58
ROTH	RSC-2097	268	--	--	--	--	101	--	--	--	--	77	18	113	0	55
US SEEDS	US C1122Bt	259	--	--	--	--	98	--	--	--	--	77	18	114	0	58
US SEEDS	US C1143Bt	255	--	--	--	--	97	--	--	--	--	77	18	113	2	57
US SEEDS	US C1132ND	265	--	--	--	--	100	--	--	--	--	77	20	114	1	52
OTTILIE	5156RR	267	--	--	--	--	101	--	--	--	--	78	15	119	0	58
PIONEER	32W86	281	--	--	--	--	106	--	--	--	--	78	17	119	2	59
GARST	8288	283	--	--	--	--	107	--	--	--	--	78	18	108	1	56
NC+	5202B	282	--	--	--	--	107	--	--	--	--	78	18	118	1	57
PIONEER	33P67	302	--	186	--	--	114	--	100	--	--	78	18	119	0	59
PREMIUM	P260	261	--	--	--	--	99	--	--	--	--	78	18	110	0	54
ROTH	RSC-2217Bt	266	--	--	--	--	101	--	--	--	--	78	18	111	0	56
FONTANELLE	5800	293	--	--	--	--	111	--	--	--	--	78	19	116	0	55
PIONEER	33R77	277	274	--	276	--	105	112	--	79	18	79	18	113	0	56
PIONEER	31A13	290	--	199	--	--	110	--	107	--	--	79	20	116	0	56
FONTANELLE	HC-7966Bt	257	--	--	--	--	97	--	--	--	--	80	18	108	1	54
TRIUMPH	1866Bt	267	251	206	259	241	101	102	111	81	19	80	19	106	1	57
MATURITY CHECK	FULL - M798	261	255	193	258	236	99	104	104	82	19	81	19	112	1	56
	AVERAGES	264	246	185	255	232	264	246	185	76	17	76	17	115	1	56
	CV (%)	8	5	10	--	--	8	5	10	--	--	1	4	6	167	1
	LSD (0.05)**	30	19	21	--	--	11	8	11	--	--	2	1	9	2	1

** Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

WEST CENTRAL KANSAS IRRIGATED CORN TEST ON SILT LOAM SOIL

Southwest Research-Extension Center, Tribune; Alan Schlegel, agronomist; Michele Sells, agricultural technician

Ulysses silt loam; Sorghum in 2001

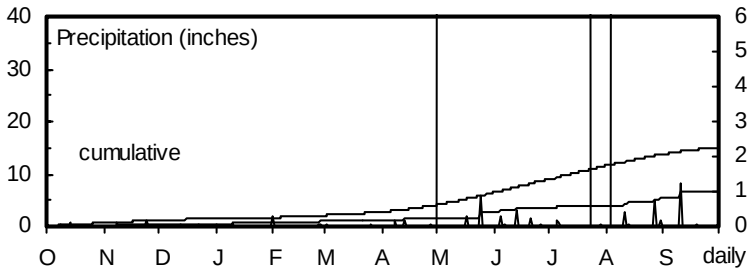
186 - 20 - 0 lb/a N, P, K

Planted on 5/1/02; Harvested on 10/15/02

Target stand of 30,000 plants/acre; 7.0 in. spacing

Irrigation was needed for emergence. Hail on June 12 reduced populations and delayed development. Some corn borer damage was noted.

	Precipitation		Average Temp.		GDU	
Month	2002	Norm.	2002	Norm.	2002	Norm.
Oct.-Mar.	1.1	2.7	39	37	140	78
April	0.4	1.3	54	49	321	227
May	1.2	2.3	62	60	441	386
June	1.0	2.6	77	70	683	589
July	0.3	2.5	79	76	742	721
August	1.4	2.2	76	74	704	694
Sept.	1.3	1.3	66	66	509	497
Totals:	6.8	15.0	54	52	3,539	3,191



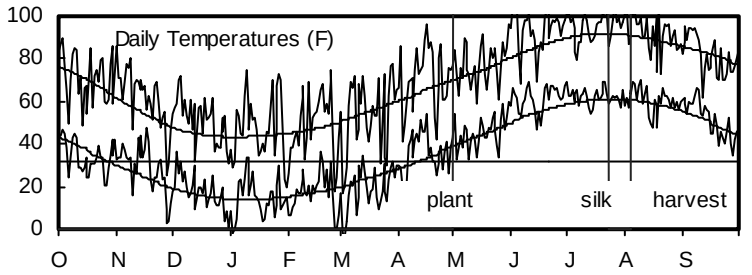


Table 22. Tribune Irrigated Corn Performance Test, 2000-2002.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
BRAND	NAME	2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
DEKALB	DKC60-19	170	--	--	--	--	116	--	--	--	--	52	23	92	0	53
NK	N67-T4	167	222	--	194	--	114	104	--	63	24	53	24	81	1	53
ASGROW	RX730RR/YG	175	217	--	196	--	119	102	--	63	24	53	25	91	3	53
LG SEEDS	LG2585	123	227	--	175	--	84	107	--	63	25	54	24	69	7	52
FONTANELLE	5591	148	226	--	187	--	101	106	--	63	25	54	25	81	9	52
GARST	8461	139	--	--	--	--	95	--	--	--	--	54	25	72	8	52
MYCOGEN	6920BT	149	--	--	--	--	102	--	--	--	--	54	26	82	0	52
NK	N65-M7	141	--	--	--	--	97	--	--	--	--	54	26	77	8	51
NK	N68-P1	151	--	--	--	--	103	--	--	--	--	54	26	80	9	51
GOLDEN HARVEST	H-9164Bt	169	229	--	199	--	116	107	--	63	27	54	27	94	2	50
GOLDEN HARVEST	H-9176Bt/RR	152	--	--	--	--	104	--	--	--	--	54	27	81	0	52
DEKALB	DKC58-24	129	--	--	--	--	88	--	--	--	--	55	20	92	2	55
DEKALB	DK551BtY	149	228	138	189	172	102	107	125	64	21	55	22	85	1	54
MATURITY CHECK	SHORT - G8590	130	210	113	170	151	89	99	102	64	22	55	23	83	4	53
PIONEER	34B97	150	--	--	--	--	103	--	--	--	--	55	23	93	7	54
KAYSTAR	KX - 890	144	--	--	--	--	98	--	--	--	--	55	24	79	11	51
NK	N72-J5	132	236	--	184	--	90	111	--	64	25	55	25	75	8	52
OTTILIE	5333	130	--	111	--	--	89	--	100	--	--	55	25	73	4	51
AGRIPRO	9570Bt	148	239	118	194	168	101	112	106	64	25	55	26	78	1	52
FONTANELLE	5282	141	--	--	--	--	96	--	--	--	--	55	26	70	11	51
KAYSTAR	X-2151	150	--	--	--	--	103	--	--	--	--	55	26	72	8	51
LG SEEDS	LG2606	130	239	--	185	--	89	112	--	64	26	55	26	77	6	51
MIDLAND	7E24Bt	148	--	--	--	--	102	--	--	--	--	55	27	89	2	51

(continued)

Table 22. Tribune Irrigated Corn Performance Test, 2000-2002 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
		2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
OTTILIE	5115	152	--	--	--	--	104	--	--	--	--	55	27	77	9	51
NC+	5411	152	--	--	--	--	104	--	--	--	--	55	28	79	6	51
OTTILIE	4999	140	--	--	--	--	96	--	--	--	--	55	28	77	11	52
FONTANELLE	HC-7638Bt	149	227	--	188	--	102	107	--	65	23	56	24	81	0	53
MATURITY CHECK	MID - H2649	113	204	100	158	139	77	96	90	64	25	56	24	76	3	52
GOLDEN HARVEST	H-8906	119	--	--	--	--	81	--	--	--	--	56	25	75	9	51
MIDLAND	7B15	129	227	144	178	167	88	107	130	64	25	56	25	75	6	51
TRIUMPH	1120BtRR	143	233	--	188	--	98	109	--	64	26	56	26	81	2	51
CROPLAN GEN.	737Bt	163	--	--	--	--	112	--	--	--	--	56	27	84	1	52
DEKALB	DKC64-01	131	--	--	--	--	89	--	--	--	--	56	28	71	0	51
FONTANELLE	5800	148	--	--	--	--	101	--	--	--	--	56	28	80	9	51
MYCOGEN	7821BT	202	--	--	--	--	138	--	--	--	--	56	28	106	0	52
PIONEER	33P67	182	--	--	--	--	124	--	--	--	--	56	28	107	0	54
NC+	5202B	152	--	--	--	--	104	--	--	--	--	56	29	82	0	51
STINE	9614Bt	132	230	--	181	--	90	108	--	64	29	56	31	71	0	51
PIONEER	32W86	149	--	--	--	--	102	--	--	--	--	59	29	77	13	53
CROPLAN GEN.	818Bt	140	--	--	--	--	96	--	--	--	--	60	31	79	4	52
NC+	6962R	154	--	--	--	--	105	--	--	--	--	62	32	101	3	51
MATURITY CHECK	FULL - M798	166	215	99	191	160	114	101	89	70	32	63	32	85	8	51
	AVERAGES	146	213	111	179	157	146	213	111	65	26	56	26	81	5	52
	CV (%)	12	8	15	--	--	12	8	15	--	--	2	5	13	85	1
	LSD (0.05)**	25	23	19	--	--	17	11	17	--	--	1	2	15	6	1

** Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

SOUTHWEST KANSAS IRRIGATED CORN TEST ON SILT LOAM SOIL

Southwest Research-Extension Center, Garden City; Merle Witt, agronomist

Keith silt loam; Soybean in 2001

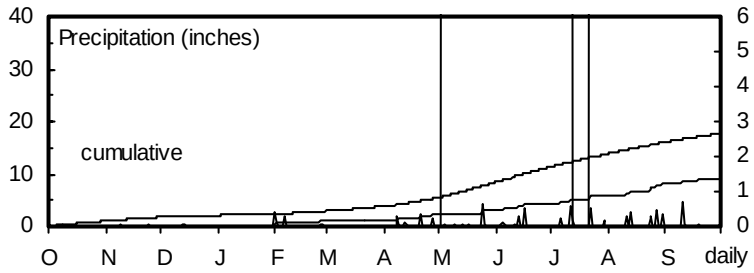
180 - 0 - 0 lb/a N, P, K

Planted on 5/2/02; Harvested on 10/17/02

Target stand of 30,000 plants/acre; 7.0 in. spacing

Prewatering was necessary for planting. Hot, dry summer. Southwestern corn borer caused most of the lodging.

	Precipitation		Average Temp.		GDU	
Month	2002	Norm.	2002	Norm.	2002	Norm.
Oct.-Mar.	1.1	3.8	40	38	155	60
April	1.2	1.6	56	51	322	219
May	0.9	2.9	63	62	444	396
June	1.2	3.0	78	72	726	642
July	1.6	2.5	81	78	823	769
August	2.1	2.2	77	75	742	743
Sept.	0.8	1.6	69	67	557	522
Totals:	8.8	17.6	56	53	3,768	3,350



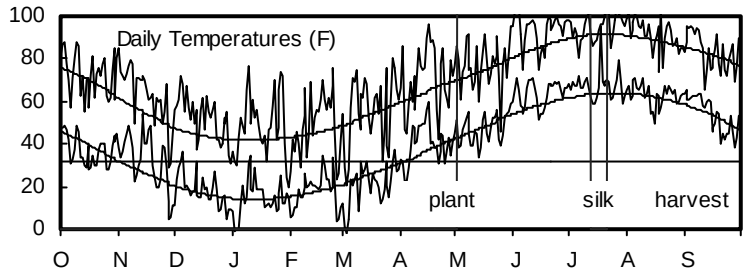


Table 23. Garden City Irrigated Corn Performance Test, 2000-2002.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
BRAND	NAME	2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
DEKALB	DKC58-24	190	--	--	--	--	84	--	--	--	--	71	13	100	3	--
DEKALB	DKC60-19	227	--	--	--	--	101	--	--	--	--	71	14	99	0	--
FONTANELLE	5591	218	187	--	203	--	97	98	--	72	13	71	14	92	29	--
GOLDEN HARVEST	H-9164Bt	227	205	--	216	--	101	107	--	72	12	72	12	103	2	--
MATURITY CHECK	SHORT - G8590	201	154	183	178	179	90	80	94	73	12	72	12	88	18	--
ROTH	RSC-2216	211	--	--	--	--	94	--	--	--	--	72	13	94	57	--
ASGROW	RX730RR/YG	232	196	--	214	--	103	102	--	72	13	72	14	102	2	--
GOLDEN HARVEST	H-8906	228	--	--	--	--	101	--	--	--	--	72	14	91	46	--
MIDLAND	7B15	233	196	200	214	209	104	102	103	73	13	72	14	88	42	--
NC+	5411	220	--	--	--	--	98	--	--	--	--	72	14	89	48	--
STINE	9616Bt	206	--	--	--	--	92	--	--	--	--	72	14	100	12	--
STINE	9803	225	--	--	--	--	100	--	--	--	--	72	14	95	27	--
AGRIPRO	9570Bt	208	202	202	205	204	92	105	104	72	14	72	15	94	5	--
GOLDEN HARVEST	H-9176Bt/RR	211	--	--	--	--	94	--	--	--	--	72	15	97	2	--
MIDLAND	7E24Bt	209	--	--	--	--	93	--	--	--	--	72	15	94	2	--
MIDWEST SEED	G 8122	223	--	--	--	--	99	--	--	--	--	72	15	80	45	--
NK	N67-T4	214	199	187	207	200	95	104	96	72	14	72	15	100	5	--
NK	N72-J5	240	201	--	220	--	107	105	--	73	12	73	13	100	46	--
TRIUMPH	1120BtRR	231	184	--	208	--	103	96	--	73	12	73	13	101	4	--
CROPLAN GEN.	737Bt	225	--	--	--	--	100	--	--	--	--	73	14	105	5	--
GARST	8363Bt	235	210	211	222	219	104	110	109	73	14	73	15	99	5	--
AGRIPRO	9476Bt	207	--	--	--	--	92	--	--	--	--	74	12	87	1	--
ASGROW	RX889YG	227	187	--	207	--	101	97	--	75	13	74	13	98	3	--

(continued)

Table 23. Garden City Irrigated Corn Performance Test, 2000-2002 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2001-2002		2002				
		2002	2001	2000	2-Yr. AVG.	3-Yr. AVG.	2002	2001	2000	Days to Silk	Grain Moist. %	Days to Silk	Grain Moist. %	Final Stand %	Ldg %	Test Wt. lb/bu
MATURITY CHECK	MID - H2649	219	194	175	207	196	98	101	90	75	12	74	13	97	6	--
NK	N68-K7	230	--	--	--	--	102	--	--	--	--	74	14	98	2	--
MYCOGEN	7821BT	226	223	--	224	--	100	116	--	74	14	74	15	101	10	--
NC+	5202B	226	--	--	--	--	101	--	--	--	--	74	15	89	4	--
ROTH	RSC-2097	221	--	--	--	--	98	--	--	--	--	74	15	91	38	--
STINE	9614Bt	214	196	--	205	--	95	102	--	74	14	74	15	94	2	--
ROTH	RSC-2217Bt	226	--	--	--	--	100	--	--	--	--	74	16	84	1	--
PIONEER	33P67	239	--	198	--	--	107	--	102	--	--	75	14	96	1	--
DEKALB	DKC64-01	224	--	--	--	--	99	--	--	--	--	75	15	95	2	--
FONTANELLE	5800	239	--	206	--	--	107	--	106	--	--	75	15	97	23	--
GARST	8383YG1	247	--	--	--	--	110	--	--	--	--	75	15	98	4	--
MIDWEST SEED	G 8070	234	--	--	--	--	104	--	--	--	--	75	15	88	1	--
PIONEER	31N27	230	--	--	--	--	102	--	--	--	--	75	15	90	46	--
CROPLAN GEN.	818Bt	256	--	--	--	--	114	--	--	--	--	75	16	97	4	--
PIONEER	32W86	241	--	--	--	--	107	--	--	--	--	76	13	99	52	--
MYCOGEN	2A791	215	--	--	--	--	95	--	--	--	--	76	14	96	26	--
FONTANELLE	MP-1155	231	199	207	215	212	103	104	106	75	13	76	15	100	33	--
PIONEER	31A13	245	210	227	228	227	109	110	117	76	15	76	16	102	0	--
FONTANELLE	5732	206	--	--	--	--	92	--	--	--	--	77	13	89	25	--
NC+	6962R	232	--	--	--	--	103	--	--	--	--	78	14	95	17	--
KAYSTAR	KX - 915	231	227	--	229	--	103	118	--	78	14	78	15	95	12	--
MATURITY CHECK	FULL - M798	212	186	212	199	203	94	97	109	78	14	78	15	86	10	--
FONTANELLE	HC-7966Bt	240	--	--	--	--	107	--	--	--	--	78	16	96	5	--
TRIUMPH	1866Bt	241	203	204	222	216	107	106	105	79	14	79	15	93	4	--
MYCOGEN	2888IMI	234	206	205	220	215	104	107	106	78	15	79	16	94	28	--
ASGROW	RX897RR	217	--	--	--	--	96	--	--	--	--	80	14	98	19	--
	AVERAGES	225	192	194	208	204	225	192	194	74	13	74	14	95	16	--
	CV (%)	7	7	8	--	--	7	7	8	--	--	1	7	7	98	--
	LSD (0.05)**	21	19	18	--	--	9	10	9	--	--	1	1	9	23	--

** Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

Table 24. WEST Kansas IRRIGATED corn hybrid yield summary (% of test average), 2002.

BRAND/NAME	COL[1]	TRI	GC	AVG.
AGRIPRO				
9476Bt	--	--	92	--
9570Bt	--	101	92	--
ASGROW				
RX601RR/YG	86	--	--	--
RX730RR/YG	99	119	103	107
RX799Bt	107	--	--	--
RX889YG	--	--	101	--
RX897RR	--	--	96	--
CROPLAN GEN.				
737Bt	102	112	100	105
818Bt	--	96	114	--
DEKALB				
DK551BtY	--	102	--	--
DKC53-34	89	--	--	--
DKC57-40	97	--	--	--
DKC58-24	--	88	84	--
DKC60-17	99	--	--	--
DKC60-19	--	116	101	--
DKC64-01	--	89	99	--
FONTANELLE				
5282	108	96	--	--
5591	100	101	97	100
5732	--	--	92	--
5800	111	101	107	106
HC-7638Bt	99	102	--	--
HC-7966Bt	97	--	107	--
MP-1155	--	--	103	--
GARST				
8288	107	--	--	--
8363Bt	--	--	104	--
8383YG1	--	--	110	--
8461	--	95	--	--

BRAND/NAME	COL	TRI	GC	AVG.
GOLDEN HARVEST				
H-8906	91	81	101	91
H-9164Bt	93	116	101	103
H-9176Bt/RR	100	104	94	99
HAWKEYE				
00-726	101	--	--	--
SX70	102	--	--	--
KAYSTAR				
KX - 890	94	98	--	--
KX - 898	100	--	--	--
KX - 915	--	--	103	--
X-2151	--	103	--	--
LG SEEDS				
LG2585	100	84	--	--
LG2606	100	89	--	--
LG2622	97	--	--	--
MIDLAND				
7B15	98	88	104	97
7E24Bt	101	102	93	99
MIDWEST SEED				
G 8070	--	--	104	--
G 8122	--	--	99	--
MYCOGEN				
2833	103	--	--	--
2888IMI	--	--	104	--
2A791	--	--	95	--
6920BT	--	102	--	--
6932CL	94	--	--	--
7821BT	--	138	100	--
NC+				
4822	100	--	--	--
5202B	107	104	101	104
5411	--	104	98	--
6962R	--	105	103	--

(continued)

[1] COL = Colby, Thomas Co. TRI = Tribune, Greeley Co. GC = Garden City, Finney Co.

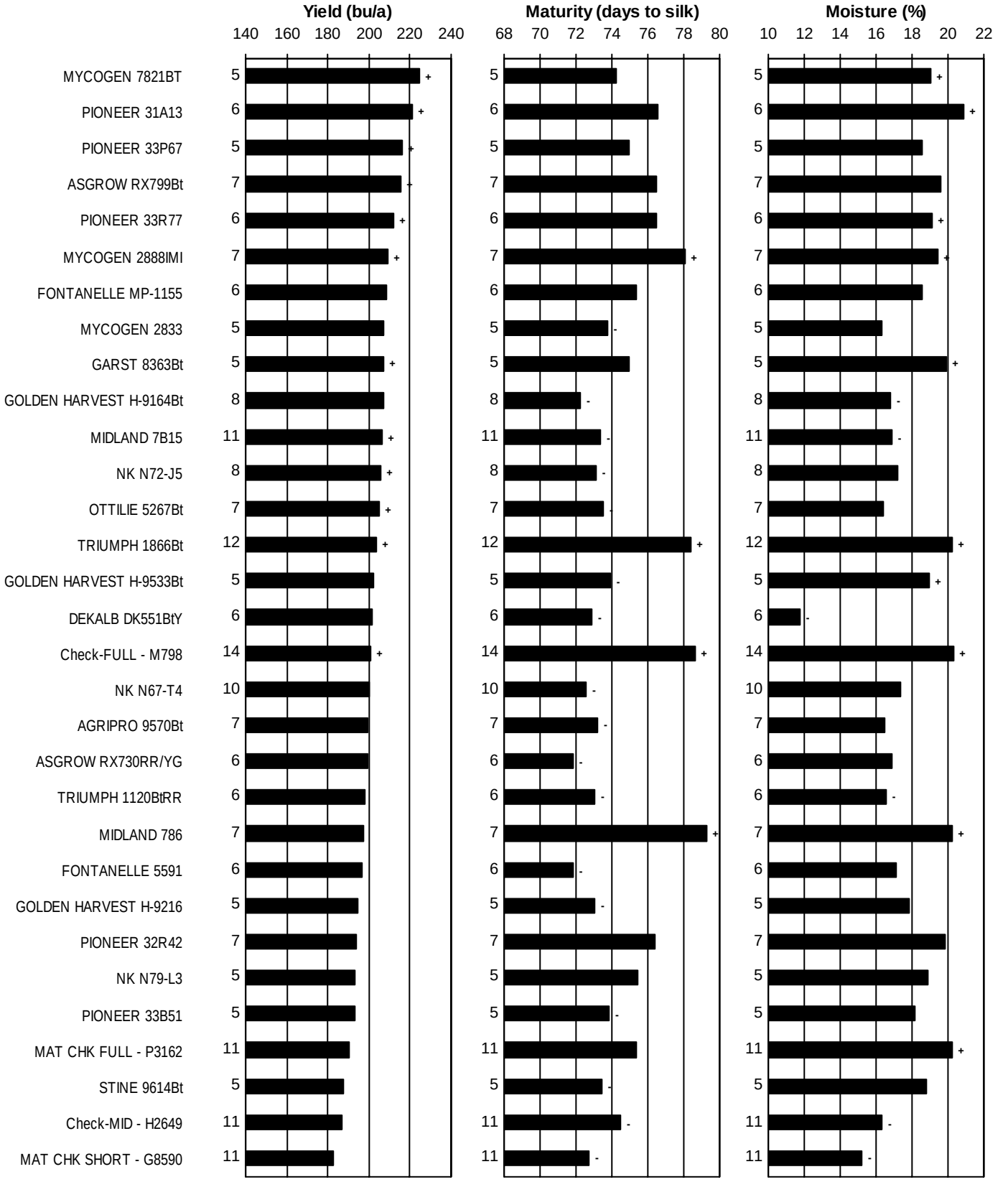
Table 24. WEST Kansas IRRIGATED corn hybrid yield summary (% of test average), 2002.

BRAND/NAME	COL[1]	TRI	GC	AVG.
NK				
N65-M7	103	97	--	--
N67-T4	95	114	95	101
N68-K7	--	--	102	--
N68-P1	100	103	--	--
N72-J5	109	90	107	102
OTTILIE				
4777Bt	104	--	--	--
4999	101	96	--	--
5115	--	104	--	--
5156RR	101	--	--	--
5170RR	94	--	--	--
5267Bt	104	--	--	--
5333	--	89	--	--
PIONEER				
31A13	110	--	109	--
31N27	--	--	102	--
32W86	106	102	107	105
33P67	114	124	107	115
33R77	105	--	--	--
34B97	--	103	--	--
PREMIUM				
P260	99	--	--	--
ROTH				
RSC-2097	101	--	98	--
RSC-2216	102	--	94	--
RSC-2217Bt	101	--	100	--
STINE				
9614Bt	--	90	95	--
9616Bt	--	--	92	--
9803	--	--	100	--
TRIUMPH				
1120BtRR	100	98	103	100
1866Bt	101	--	107	--

BRAND/NAME	COL	TRI	GC	AVG.
US SEEDS				
US C1122Bt	98	--	--	--
US C1122RR/Bt	100	--	--	--
US C1132ND	100	--	--	--
US C1143Bt	97	--	--	--
MATURITY CHECK				
FULL - M798	99	114	94	102
MID - H2649	92	77	98	89
SHORT - G8590	89	89	90	89
AVERAGES (bu/a)	264	146	225	212
CV (%)	8	12	7	--
LSD (0.05)**	11	17	9	--

[1] COL = Colby, Thomas Co. TRI = Tribune, Greeley Co. GC = Garden City, Finney Co.

Figure 9. WEST Kansas IRRIGATED corn hybrid standardized performance summary, 2000-2002.



Values beside bars indicate the number of comparisons with checks. Symbols (+,-) indicate if statistically higher or lower than mean of checks.

Table 25. Kansas Standardized Corn Hybrid Grain Quality Summary, 1997 - 2002.

NAME	Protein[1] (%)	Oil[1] (%)	Starch[1] (%)	N[2]	NAME	Protein[1] (%)	Oil[1] (%)	Starch[1] (%)	N[2]
CROPLAN GEN. 762 Bt/CL	9.2+	4.1	58.9 -	7	NC+ 5018	8.4	3.6	59.4	11
DELANGE DS 1995	9.2+	3.7	59.0 -	7	PIONEER 32R42	8.4	3.3	60.4+	6
WILSON 2330	9.1+	3.6	58.8 -	6	BO-JAC 614	8.4	3.9+	59.3	6
CARGILL 7770	9.1+	3.6	59.3 -	16	OTTILIE 5177RRBt	8.4	3.3 -	59.4	9
MAT CHK F-B73 X N204	9.1+	4.1+	58.9 -	10	DEKALB DK551BtY	8.3	3.3 -	60.0	7
PIONEER 32K61	9.1+	3.6	59.4	8	MYCOGEN 2767	8.3	3.5	59.9	6
MAT CHK FULL - DS1997	9.1+	3.6	59.1 -	16	DEKALB DK611	8.3	3.8	59.7	7
PIONEER 3237	9.0+	3.4 -	59.6	9	MIDLAND 786	8.3 -	3.9+	59.2 -	20
ASGROW RX897	9.0+	3.9+	59.1 -	6	ASGROW RX730YG	8.3	3.6	59.7	8
ASGROW RX740	8.9+	3.7	59.5	13	PIONEER 31A13	8.3	3.3 -	60.4+	9
MYCOGEN 7250	8.9	3.8	59.0 -	7	NC+ 4880	8.3	3.7	59.6	7
PIONEER 34K77	8.9	3.7	59.8	6	US SEEDS US C1120	8.3	3.5	59.5	7
CROPLAN GEN. 818	8.9+	3.7	59.4	13	HOEGEMEYER HBt821	8.2	3.6	59.9	6
CROPLAN GEN. 676 RR	8.8+	3.8	59.1 -	7	CARGILL 6888	8.2 -	3.8	59.5	6
PFISTER 3350	8.8	3.6	59.5	7	FRONTIER F3250	8.2	3.3 -	60.3+	6
AGRIPRO 9689Bt	8.8	3.5	59.6	7	HAWKEYE 9191	8.2	3.9	59.3	6
GOLDEN HARVEST H-2581	8.8	3.8	59.0 -	7	MIDLAND 7A08	8.2	3.7	59.4	7
ASGROW RX889	8.8	3.9	59.0	9	MYCOGEN 2799IMI	8.2 -	3.5	60.0	12
BO-JAC 415	8.8	3.7	59.0	6	AGRIPRO 9570Bt	8.1	3.5	60.0	8
MAT CHK FB73rhmXMO17	8.8	3.8+	58.9 -	10	PIONEER 31B13	8.1 -	3.5	60.5+	7
PIONEER 34R07	8.7	3.3	59.9	6	Check-MID - H2530	8.1 -	3.4 -	60.0+	37
TRIUMPH 1866Bt	8.7	4.0+	59.4 -	13	CROPLAN GEN. 661	8.1 -	3.6	60.0	9
MAT CHK SHORT - C4111	8.7+	3.6 -	59.5 -	35	OTTILIE 2467	8.1 -	3.5	60.0	6
DEKALB DK641	8.7	3.7	59.5	7	MIDWEST SEED G 7711	8.0 -	3.5	60.0	8
DEKALB DK626	8.6	3.9+	58.9 -	7	PFISTER 3977	8.0 -	4.0+	58.8	7
Check-FULL - M798	8.6	3.9+	59.5	29	MIDWEST SEED G 7718Bt	8.0 -	3.4	60.0	6
ASGROW RX799Bt	8.6	3.5	59.4	14	MIDLAND 7A25Bt	8.0 -	3.4	59.8	6
Check-FULL - P3162	8.6+	3.5 -	60.0+	37	GOLDEN HARVEST H-9164	8.0 -	3.4	59.8	7
NC+ 5445	8.6	3.7	59.2 -	11	PIONEER 33B51	8.0 -	3.2 -	60.7+	9
DEKALB DKC63-03	8.6	3.1 -	60.2+	6	MYCOGEN 2833	8.0 -	3.6	59.8	14
PIONEER 33P67	8.6	3.3 -	60.3+	12	NC+ 6359	7.9 -	3.7	59.8	6
GARST 8363Bt	8.5	3.5	59.8	15	MIDLAND 7A15	7.9 -	3.4	60.1	9
GARST 8543Bt/IT	8.5	3.5	59.9	10	NK N67-T4	7.9 -	3.5	60.2+	18
NK N79-L3	8.5	3.6	60.2+	10	MAT CHK SHORT - G8590	7.9 -	3.6	59.9	29
CARGILL 8311	8.5	3.9+	59.2 -	9	GOLDEN HARVEST H-9533	7.9 -	3.4 -	59.6	6
Check-MID - H2649	8.5	3.6	59.5 -	26	NC+ 5411	7.9 -	3.3 -	60.1	7
MYCOGEN 2888IMI	8.5	3.9+	59.4	14	AGSOURCE 6887	7.8 -	3.4 -	60.2+	9
ASGROW RX813	8.5	3.8+	59.4 -	10	MIDLAND 7A28	7.7 -	3.3 -	60.1	6
DEKALB DK647BtY	8.5	3.6	59.2 -	9	PFISTER 2750	7.7 -	3.3 -	60.4+	10
MYCOGEN 2725	8.5	3.6	59.6	11	STINE 9803	7.7 -	3.2 -	61.0+	6
BO-JAC 544	8.5	3.6	59.5 -	6	PIONEER 33R77	7.6 -	3.1 -	60.4+	10
GARST 8366	8.5	3.8+	59.2 -	6	AGSOURCE 6787	7.5 -	3.4	60.3+	8
MAT CHK FULL - M798	8.5	3.8+	59.6	7	NK N72-J5	7.5 -	3.1 -	60.8+	10
CARGILL 8011	8.5	3.7	59.3 -	9	KAYSTAR KX - 898	7.5 -	3.2 -	60.7+	6
ASGROW RX670	8.4	3.3	59.9	7	MIDLAND 7B15	7.5 -	3.3	60.4+	9
DEKALB DKC57-38	8.4	3.3 -	60.4+	6	DEKALB DKC60-15	7.2 -	3.1 -	60.9+	6

[1] Average performance standardized to mean of check hybrids. Adjusted to 15.5% moisture.

[2] N = Number of comparisons with checks; mean estimates were calculated only for those with at least 6 comparisons.

‡ Statistically significantly higher (+) or lower (-) than the mean of the check hybrids (P < 0.5).

APPENDIX: Entries in the 2002 Kansas Corn Performance Tests

	GDD	DBL	RES	P	F*
AGRIPRO					
9476Bt	2570	108	Bt	N	Y
9570Bt	2530	111	Bt	N	Y
9689Bt	2610	114	Bt	N	Y
AGSOURCE					
4663Bt	--	103	Bt	--	N
5713Bt	--	107	Bt	N	Y
61A61RR	--	111	RR	N	Y
6283Bt	--	112	Bt	Y	N
6787	2770	113	--	N	Y
6887	2790	114	--	N	Y
6203Bt	--	115	Bt	N	Y
7247	--	115	--	N	N
EX23163Bt	--	116	Bt	N	Y
7894CL	2900	119	CL	N	Y
ASGROW					
RX601RR/YG	2675	105	RR/YG	--	--
RX730RR/YG	2750	111	RR/YG	--	--
RX740RR	2790	111	RR	--	--
RX799Bt	2885	114	Bt	N	Y
RX897RR	2870	118	RR	--	--
RX889YG	2890	118	YG	--	--
BO-JAC					
415	2690	109	--	N	Y
7848CL	2730	112	CL	N	Y
CROPLAN GEN.					
441	--	--	--	N	Y
541Bt	--	--	Bt	N	Y
631	--	--	--	N	Y
691Bt	--	--	Bt	N	SF
737Bt	--	--	Bt	N	Y
818Bt	--	117	Bt	N	Y
CROW'S					
5202	--	113	Bt	N	Y
5360	--	114	--	N	Y
DEKALB					
DKC53-34	2579	103	RR/YG	--	--
DK551BtY	2645	105	Bt	Y	Y
DKC57-40	2650	107	RR	--	--
DKC58-24	2650	108	RR/YG	--	--
DKC58-78	2700	108	YG	--	--
DKC60-09	2740	110	RR/YG	--	--
DKC60-17	2750	110	RR	--	--
DKC60-19	2750	110	RR/YG	--	--
DKC64-01	2800	114	YG	--	--
DKC68-70	2930	118	YG	--	--
DKC69-70	2975	119	YG	--	--

	GDD	DBL	RES	P	F*
FONTANELLE					
5282	--	--	--	N	Y
5732	--	--	--	N	Y
HC-7764RR	--	--	RR	N	N
HC-7966Bt	--	--	Bt	N	Y
HC-7638Bt	--	111	Bt	N	Y
5591	--	115	--	N	Y
MP-1155	--	115	--	N	Y
5800	--	118	--	N	Y
FREEDOM					
5662	--	--	--	--	--
5675	--	--	--	--	--
5495	2395	98	--	--	Y
5645	2510	111	--	Y	--
GARST					
8578IT	2555	107	IT	N	Y
8585GLS/IT	2555	108	GLS,IT	N	Y
8543Bt/IT	2570	109	Bt,IT	N	Y
8461	2575	109	--	N	Y
8530Bt	2570	110	Bt	N	Y
8342GLS/Bt/IT	2610	114	LS,Bt,I	N	Y
8363Bt	2610	114	Bt	N	Y
8383YG1	2610	114	Bt	N	Y
8328Bt/IT	2600	115	Bt,IT	N	Y
8303	2620	115	--	N	Y
8371	2620	115	--	N	Y
8348	2640	115	--	N	Y
8288	2670	118	--	N	Y
GOLDEN HARVEST					
H-8906	--	--	--	N	Y
H-9087	--	--	--	N	Y
H-9176Bt/RR	--	--	Bt/RR	N	Y
H-9235Bt/RR	--	--	Bt/RR	N	Y
H-9667	--	--	--	N	Y
H-9164Bt	--	113	Bt	N	Y
H-9216	--	113	--	N	Y
H-9533Bt	2800	116	Bt	N	Y
HAWKEYE					
SX57	2600	110	--	Y	Y
SX51	2610	111	--	N	N
00-726	2615	112	--	Y	Y
00-682	2620	113	--	Y	Y
SX70	2620	113	--	Y	Y
9191	2630	115	--	N	Y
HOEGEMEYER					
2665	2610	112	--	--	Y
2679	2620	113	--	--	Y
2696	2660	115	--	--	Y
2714	2660	115	--	--	--
HPH					
KS3131RR	--	--	--	--	--

	GDD	DBL	RES	P	F*
KAYSTAR					
KX - 890	--	--	--	N	Y
X-2151	--	--	--	N	Y
KX - 898	--	114	--	N	Y
KX - 915	--	116	--	N	Y
KRUGER					
EX9212CL	--	--	--	--	--
K-9012CL	--	--	--	--	--
K-9017BT	--	--	--	--	--
K-9108	--	--	--	--	--
K-9113	--	--	--	--	--
K-9115	--	--	--	--	--
K-9212BT	--	--	--	--	--
K-9217BT	--	--	--	--	--
K-9309BT	--	--	--	--	--
K-9310ABT	--	--	--	--	--
K-9313	--	--	--	--	--
K-9315BT	--	--	--	--	--
K-9910BT	--	--	--	--	--
K-9912CL	--	--	--	--	--
K-9912RR	--	--	--	--	--
LEWIS					
5942	--	--	--	--	--
6662Bt	--	--	Bt	--	--
LG SEEDS					
LG2540	2580	109	--	N	Y
LG2585	2620	111	--	N	Y
LG2606	2650	112	--	N	Y
LG2617BT	2640	113	Bt	N	Y
LG2622	2788	113	--	N	Y
MIDLAND					
775CL	--	--	--	--	--
7E24Bt	--	--	--	--	--
7A04Bt	2750	110	Bt	Y	Y
7A24	2725	111	--	N	SF
7B35Bt	2780	111	Bt	--	Y
7B05RR	2780	112	RR	N	SF
7A14Bt	2790	112	Bt	--	Y
7A15	2780	113	--	Y	Y
795	2800	113	--	N	Y
7A25	2800	113	--	--	Y
7A36	2820	114	--	--	--
7B15	2820	114	--	Y	Y
786	2820	115	--	Y	Y
7A25Bt	2820	115	Bt	--	Y
7A28	2840	117	--	--	Y
MIDWEST SEED					
G 7706	--	110	--	N	Y
G 8070	--	113	Bt	N	Y
G 8122	--	114	--	N	Y

*GDD = growing degree days; DBL = days to black layer; RES = herbicide, disease, and insect resistance traits (Bt = transgenic corn borer protection, IMI, IT = imidazolinone resistant/tolerant, ECB = European corn borer resistance, LL = Liberty Link, RR = Roundup Ready, GLS = gray leaf spot); P = prolific; F = flex ear; values provided by entrants.

(continued)

APPENDIX: Entries in the 2002 Kansas Corn Performance Tests

	GDD	DBL	RES	P	F*
MYCOGEN					
2722IMI	--	--	--	--	--
2A791	--	--	--	--	--
6932CL	--	--	--	--	--
6920BT	2545	112	Bt	--	Y
2784	2730	113	--	--	Y
7821BT	2635	114	Bt	--	Y
2799IMI	2740	114	Bt,IMI	N	Y
2833	2745	115	Bt	N	Y
2888IMI	2860	118	IMI	Y	Y
NC+					
4822	2540	112	--	Y	Y
5202B	2550	113	Bt	N	Y
5021RB	2600	113	RR,Bt	N	Y
5411	2510	114	--	Y	Y
5790B	2550	115	Bt	Y	N
6871B	2640	118	Bt	N	N
6962R	2660	118	RR	N	Y
NK					
N43-C4	2520	102	Bt,LL	N	N
N58-D1	2660	108	Bt,LL	N	Y
N65-M7	2690	110	--	Y	Y
N67-T4	2630	111	Bt,LL	Y	Y
N68-P1	2630	111	IMT	Y	Y
N68-K7	2650	112	Bt,LL	Y	Y
N72-J5	2780	114	--	Y	Y
N79-L3	2830	118	Bt,LL	N	Y
N83-N5	2880	120	--	Y	Y
N83-Z8	2880	120	Bt,LL	Y	Y
OTTILIE					
4777Bt	2570	107	Bt	N	N
4999	2650	111	--	N	Y
5115	2650	111	--	N	Y
5156RR	2650	111	RR	N	N
5170RR	2670	111	RR	N	Y
5267Bt	2690	112	Bt	N	Y
5333	2730	113	--	N	Y
PFISTER					
2420	2580	106	--	Y	Y
2656RR	2740	109	RR	N	Y
2730	2750	111	--	Y	Y
2750	2760	111	--	N	Y
3030Bt	2800	113	Bt	Y	Y
PIONEER					
35P12	2530	105	--	N	Y
35P15	2530	105	Bt,CL	N	Y
35R58	2530	105	Bt	N	Y
34N43	2550	106	--	N	Y
34B97	2630	109	--	N	Y
34H31	2630	109	--	N	Y
34M95	2650	110	Bt	N	N
33B51	2680	111	Bt	N	Y
33P67	2760	114	Bt	N	Y
33R77	2760	114	--	N	Y
32W86	2780	115	--	Y	Y
31A13	2810	116	Bt	N	Y
32H58	2810	116	--	Y	Y
32R42	2810	116	--	N	Y
31B13	2830	117	Bt	Y	Y
32D99	2880	119	--	Y	Y
31N27	2910	120	--	N	Y
POLANSKY					
XP51	2725	111	--	--	Y
XP52A	2780	112	--	--	Y
XP52	2800	112	--	--	Y
PREMIUM					
P260	--	114	--	N	S
P262	--	114	--	N	S
PRODUCERS					
6960	2550	124	--	N	Y
7290BT	2600	126	Bt	N	Y
795BT	2695	132	Bt	N	Y
RENZE					
6363	--	113	--	N	Y
8381BT	--	114	Bt	N	Y
8383BT	--	114	Bt	N	Y
6492	--	115	--	N	Y
8492BT	--	117	Bt	N	Y
ROTH					
RSC-2216	2400	111	--	N	Y
RSC-2097	2450	112	--	N	Y
RSC-2217Bt	2500	112	Bt	N	Y
SEEDS 2000					
3171RR	2700	107	RR	N	Y
STINE					
9617	2480	106	--	N	Y
9616Bt	2520	110	Bt	N	N
9614Bt	2530	111	Bt	N	N
9715Bt	2540	112	Bt	N	Y
9716	2560	113	--	N	Y
9803	2600	114	--	N	Y
THOMPSON					
T-2115	--	--	--	--	--
T-2217BT	--	--	--	--	--
T-2312CL	--	--	--	--	--
T-2315BT	--	--	--	--	--
TRIUMPH					
1141Bt	2470	110	Bt	N	Y
1120BtRR	2480	111	Bt,RR	N	Y
1866Bt	2610	117	Bt	N	Y
2011RR	2650	119	RR	N	Y
US SEEDS					
US C1141	2579	114	--	N	Y
US C1143Bt	2610	114	Bt	N	Y
US C1153	2600	115	--	N	Y
US C1122Bt	2650	115	Bt	N	Y
US C1122RR/Bt	2650	115	RR,Bt	N	Y
US C1132ND	2650	115	--	N	Y
MATURITY CHECK					
SHORT - G8590	2560	106	--	--	Y
MID - H2649	2560	110	--	N	Y
FULL - M798	2820	115	--	Y	Y
FULL - P3162	2760	118	--	N	Y

*GDD = growing degree days; DBL = days to black layer; RES = herbicide, disease, and insect resistance traits (Bt = transgenic corn borer protection, IMI, IT = imidazolinone resistant/tolerant, ECB = European corn borer resistance, LL = Liberty Link, RR = Roundup Ready, GLS = gray leaf spot); P = prolific; F = flex ear; values provided by entrants.

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