1984

1983 Corn Performance Trials

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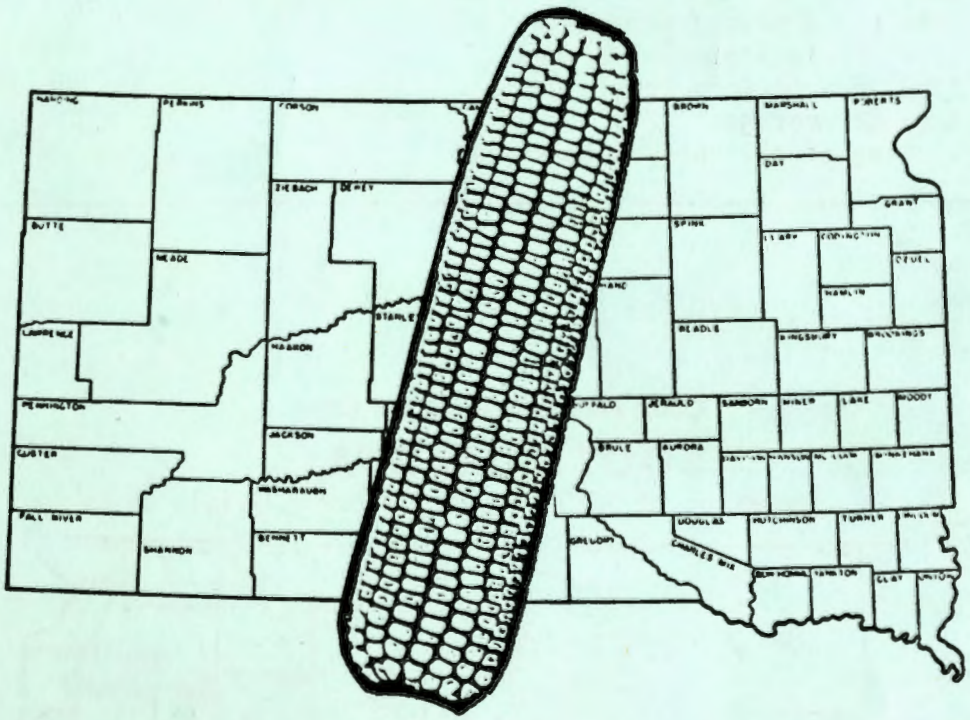


PLANT SCIENCE DEPARTMENT
AGRICULTURAL EXPERIMENT STATION
SOUTH DAKOTA STATE UNIVERSITY
BROOKINGS, SOUTH DAKOTA

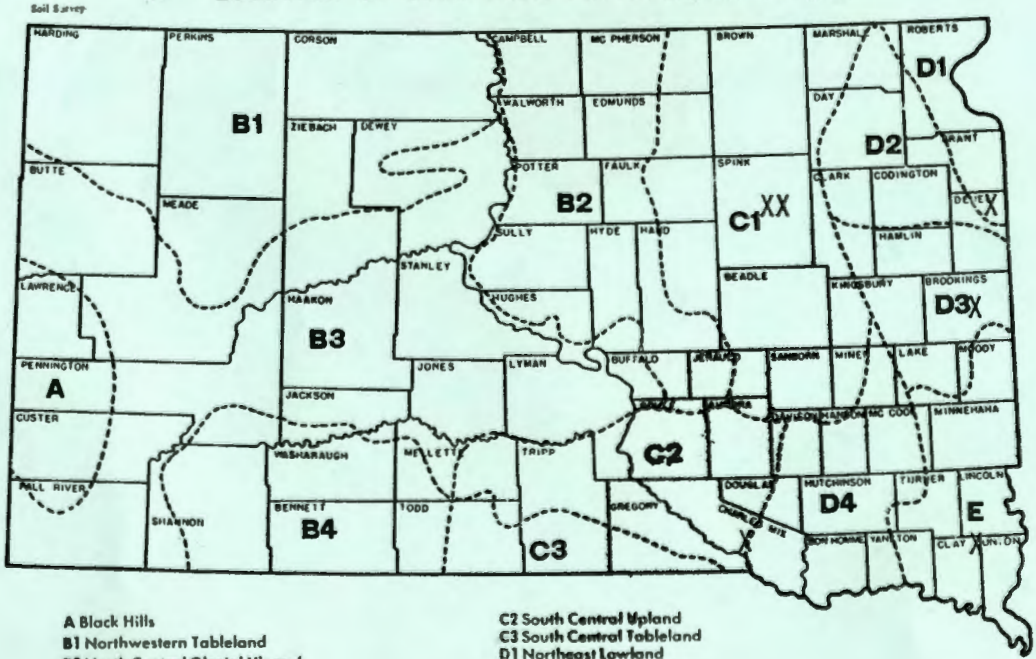
57007-1096

Listing of Tables

CROP ADAPTATION AREAS OF

SOUTH DAKOTA

X - Location of 1983 Corn Performance Trials



A Black Hills
B1 Northwestern Tableland
B2 North Central Glacial Ulpand
B3 Pierre Plain
B4 Southwestern Tableland
C1 Northern James Valley
C2 South Central Upland
C3 South Central Tableland
D1 Northeast Lowland
D2 Northern Prairie Coteau
D3 Central Prairie Coteau
D4 Southern James Flatland
E Southeast Prairie Upland

1983 Corn Performance Trials

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The relative performance of corn hybrids grown under similar environmental conditions in 1983 are evaluated in this report. Information in the accompanying tables includes grain yields in bushels per acre, moisture percentages of either ear corn or shelled corn at harvest, performance scores and other related information. Records of the corn hybrids harvested in 1983 and available two-, three- and four-year averages of yield, moisture and stalk lodging percentages are also presented. The trials reported here were conducted under the Plant Science Department program in Crop Performance Testing, Agricultural Experiment Station, SDSU.

Location of the 1983 Trials

Trials were located in the crop adaptation areas marked on the accompanying map of South Dakota. The exact location of each trial and date of seeding and harvesting are included in Table 1. The D1 trial in Deuel County was so variable it was harvested by the cooperator. The soil classification, laboratory analyses of soil samples taken and fertility applied at each site are given in Table 2.

Weather and Climatic Conditions

Climatic data (Table 3) for the 1983 corn growing season, May-October, are based upon information obtained from a U.S. Weather Bureau station reasonably near each trial site. The Milbank recording station is closest to the field north of Gary in Deuel County. Stations are located at or near the other trial sites; the Pickstown station representing the Geddes trial. Precipitation quantities would vary from the actual site to the recording station but temperatures are similar over a much wider area and considered applicable to the trial area.

The continued delay for favorable tillage conditions and desire to work fields before they were ideally ready, created less than desirable seedbeds at most sites. Germination was uneven because of seedbed conditions and continued wet, cool conditions during June. Growth was slow and uneven during the early months of the growing season. Weather conditions changed from excessive moisture, which caused some flooded fields, to very limited rainfall in July and August. The temperatures were very high and high velocity winds occurred for extended periods, especially during pollination. The stress conditions continued into September. Variability was high in nearly all trials due to unfavorable germinating conditions, slow rate of growth, poor pollination and stress conditions during the important periods of plant growth. Timely precipitation and cooler conditions occurred only at Brookings and yields were good. The excess moisture moved the herbicide through the soil more rapidly than needed to be effective.

The assistance of the following individuals is appreciated: Dwayne Beck, Burton Lawrensen, Herb Lund, Lucian Edler, Kevin Kirby, Delbert Robbins, and Zeno Wicks of the Stations; and John Biddle and Steve Johnson, farmer-cooperators.

Table 1. Location of Trials, Dates of Seeding and Harvesting of the 1983 Corn Performance Trials, South Dakota.

Area	County	Location	Post Office	Dates Seeded	Dates Harvested
C1-dry	Spink	James Valley Res. Farm, 6E	Redfield	May 16	Nov. 7
C1-irr.	Spink	James Valley Res. Farm, 6E	Redfield	May 16	Nov. 7
C2	Charles Mix	Jack Biddle Farm, 3E,1N,½E	Geddes	May 27	Nov. 1
D1	Deuel	Steve Johnson, 3W, 8S	Revillo	May 23	-------
D3	Brookings	Plant Science Farm, 2NE	Brookings	May 13	Oct. 7&8
E	Clay	Southeast Exp. Farm, 7W, 3S	Beresford	May 24	Nov. 8

Many entries were mature by mid-October and were past possible freeze damage when the first frost occurred over the state on September 21.

Temperatures were excessive in the southern and central portion of the state during July and August with nearly two-thirds of the days during these months recording temperatures above 90°F.

Lodging was not a serious problem at most sites in 1983. Corn borers caused most of the lodging, the most serious being in the trials at Brookings. The irrigated trial at Redfield was irrigated with approximately 2 inches of water each time the tensiometer reached 50 cb at a depth of 18 inches.

Hybrid Entry Procedure

Hybrids in the trials were entered by the participating companies and they designate the locations where their entries were to be grown. A fee was charged for each entry in each area except for hybrids included by the Agricultural Experiment Station. Either closed- or open-pedigree hybrids were eligible and each was allowed to be entered once in each adaptation area. A maximum of 5 entries could be entered by a company at any trial site. A listing of the firms, with brands and hybrids harvested, is presented in Table 16.

Table 2. Laboratory Analyses, Soil Classification and Fertilizer Applied to the 1983 Corn Performance Trial Fields.

Area	Soil Classification	% O.M.	P lb/A	K lb/A	pH	Preparation and method	lb/A N	lb/A P	lb/A K
C1-dry	Beotia SiCl	2.7	63	1005	7.6	Plowed and disced(sunfl.)	90	20	0
C1-irr.	Beotia SiCl	2.7	30	760	7.4	Plowed and disced(sorghum)	150	50	0
C2	Highmore SiL	4.1	42	880	6.2	Disced and harrowed(stubble)	0	0	0
D1	Forman SiCl	2.4	45	510	6.1	Plowed and harrowed	101	49	25
D3	Lamour SiL	4.1	16	165	6.8	Plowed and harrowed (sudan)	60	40	0
E	Egan SiL	2.9	65	980	6.4	Plowed and disced(sm grain)	100	40	20

Table 3. Temperature and Precipitation Data for the 1983 Corn Performance Trials

Location	Type of Data	May	June	July	August	Sept.	Oct.	Total
Brookings	Precip. (inches)	1.14	4.45	3.03	4.29	2.35	1.22	16.48
2 NE	Temp. (mean)	52.4	64.0	74.2	74.9	59.2	46.0	
	Days 90° F +	--	1	8	9	3	--	
Centerville	Precip. (inches)	3.16	11.02	2.95	1.06	2.16	0.70	21.05
6 SE	Temp. (mean)	55.2	66.5	76.6	77.3	63.0	48.0	
	Days 90° F +	1	1	16	22	6	--	
Pickstown	Precip. (inches)	3.31	6.07	2.87	0.17	0.78	0.87	14.07
	Temp. (mean)	56.1	67.6	76.8	80.6	66.0	51.5	
	Days 90° F +	--	3	16	26	9	--	
Redfield	Precip. (inches)	2.06	4.95	2.83	3.63	2.59	1.76	17.82
6E	Temp. (mean)	53.6	64.9	75.4	77.6	60.7	47.0	
	Days 90° F +	--	2	12	22	5	--	

Hybrids frequently used by the industry have been used as check entries since 1975. They are indicated in the trials as SDAES Check 1, 4, 9, etc. The identities of the checks are as follows:

Check 1 = B73 x Mo17Ht
Check 2 = A632Ht x A619Ht
Check 4 = W64Ht x W117Ht
Check 9 = Mo17 x A634
Check 10 = A632 x W153R

Changes occur from time to time but the checks are maintained to establish a several year average before another might be substituted.

Experimental Procedure

Entries included in each trial were seeded in four or more replications. Two population levels were included at sites where climatic conditions are generally more favorable for growing corn. Because of the widespread variability, no data is given for the differing population levels. The number of replications depended upon the site and populations under trial. Plots of individual hybrids were located at random within each replication. Available space, soil type and variability, and other factors determined plot size and number of replications. The plot size, populations, and related data are presented in Table 4.

Recommended insecticides were used at all locations for corn rootworm control. The product used depended upon prior history of the field and insecticide used in the past years. A recommended short-residue preemergence herbicide was banded over the row at seeding at all sites.

All trials were seeded as drilled corn. A 31-cell cone seeder was used for the single-row plots. These units were mounted above commercial flexi-planter units with double-disc openers. Seeding rate was 15% more kernels than the number of plants per plot desired. Because field work was initially delayed and then rushed, the seedbed was often lumpy. Stands were below desired levels because of the field conditions at seeding and wet, cool weather in June.

Table 4. Field Methods for the 1983 Corn Trials.

Area	Table No.	Number of Replications Harvested	Method of Seeding	Final Population Obtained	Rows		
					Number of	Width, inches	Length, feet
C1-dry	10	4	drilled	9,887	1	30	34
C1-irr.	11	6	drilled	17,877	1	30	26
C2	14	4	drilled	10,069	1	30	32
D1	-	-	drilled	14,774	1	30	34
D3	6	4	drilled	14,667	1	36	32
E	8	4	drilled	17,483	1	36	30

Measurements of Performance

Yield. The yield reported for each hybrid is the average obtained from the yield weights of all replications, expressed as bushels per acre of No. 2 corn at 15.5% moisture. Varieties of equal potential may yield differently because of variations in slope, soil fertility, and stand. Mathematical determinations have been made to determine whether yield differences obtained were caused by variations in environment or were true varietal differences. The 1983 coefficients of variations (CV) were quite high in all but the Brookings trial. No differences were found for populations in the 1983 trials.

To convert data in these tables to the metric system of kilograms or quintals per hectare use the following methods. (The factor 1.121 converts from lb/A to kg/ha).

I. 1 bu. #2 shelled corn = 54 lb.: 1 lb. = .454 kilograms; 1 hectare = 2.471 acres; so 54 x .454 x 2.471 = 60.6 x B/A = kilograms per hectare.

II. Or, assuming a yield of 60.6 B/A from the tables;
Step 1 = 60.6 B/A x 54 lb/B = 3272 lb/acre.
Step 2 = 3272 lb/acre x 1.121 = 3668 kilograms/hectare or 36.7 quintals/hectare.

Table 5. Harvest methods and moisture determinations for the 1983 corn trials.

Area	Harvest Methods	Samples Used for Moisture Determinations	Moisture Determined
C1-dry	Plot combine	Shelled corn	Electronically
C1-irr.	Plot combine	Shelled corn	Electronically
C2	Plot combine	Shelled corn	Electronically
D3	Picker-sheller	Shelled corn	Electronically
E	Plot combine	Shelled corn	Electronically

Moisture Content. The moisture content of each entry is expressed as the percentage of moisture in the ear corn or shelled corn at the time of harvest (Table 5). Moisture content is inversely related to maturity. Because maturity is of prime importance in South Dakota, these figures are of considerable importance in the evaluation of the entries.

Stalk breakage was not a severe problem in 1983 although it was apparent at Brookings (Table 6), caused by corn borer. Ear droppage was not an apparent problem for most trials and only a few were noted, not serious enough to cause a major reduction of yield.

Performance Rating. Undue delays should be held to a minimum if farm operations are to be efficient and provide high economic returns. Prevention of harvest operation delays and reduction of additional drying costs are possible if an operator can produce sound, dry corn. Grain yield and moisture percentages are of prime importance. The cash grain operator who does not turn livestock into his fields after harvest will receive greater returns when the stalks remain upright so that the ears will go through his harvesting machinery. Because of the importance of the three factors - yield, moisture percentage and upright stalks - the three results in the tables presenting this information are used to determine a rating or performance score.

The yields in each test were converted to percentages by comparing them to the mean yield of the test. Similar calculations were made for moisture and stalks broken below the ear at harvest time after first subtracting the moisture content or stalks broken from 100% so that the varieties could be ranked according to their ability to produce sound, upright corn rather than soft, lodged corn.

The performance ratings that appear in the tables were computed as follows:

$$\frac{(\text{Yield percentage} \times 50)+(\text{Dry matter percentages} \times 35)+(\text{Percent upright stalks} \times 15)}{100}$$

Use of the Tables. South Dakota conditions are generally quite different from those in the mid-western Corn Belt. Most of the crop adaptation areas have conditions common to the Northern Great Plains, i.e., limited frost-free growing periods, limited precipitation and high summer temperatures. Corn hybrids that provide satisfactory yields of harvestable corn that can be stored without additional costly handling are desirable. The performance score provides information on these factors in a weighted fashion or manner.

In choosing a hybrid, first check those which yield the most. Then look for entries with below average moisture and good standability. The results will generally be similar to that of the performance score. Finally, check the performance score over a "several year period", if available, as the average of several years is considerably more reliable than the data from only one year. When planting a new hybrid the acreage should be limited until the hybrid's adaptation to the environment of the particular farm is known.

Table 6. 1983 Corn Performance Trial, Area D3, Plant Science Farm, Brookings

BRAND AND VARIETY	TYPE AND CROSS	YIELD B/A	PCT ROOT LODGED	PCT STALK LODGED	PCT EARS DROPPED	PERCENT MOISTURE	PERFORMANCE SCORE RATING
STAUFFER S5260	M 2X	137.9	0.0	10.1	0.0	20.9	1
MC CURDY 5596	M 2X	130.3	0.0	9.7	0.0	22.0	2
DE KALB T950	E 2X	127.6	0.0	14.3	0.0	19.7	4
DE KALB XL-25A	M 2X	126.3	0.0	8.3	0.0	20.6	3
JACQUES 7700	M 2X	125.8	0.0	7.8	0.0	21.4	5
CARGILL 867	E 2X	124.2	0.0	18.4	0.0	21.0	13
CARGILL 891	M 2X	124.0	0.0	6.1	0.0	21.8	6
P-A-G HX243	M 2X	123.3	0.0	14.6	0.0	21.0	11
STAUFFER S5340	M 2X	123.2	0.0	6.5	0.0	21.4	7
KELTGEN KS101	M 2X	123.0	0.0	14.3	0.0	19.3	8
CURRY SC-1450	M 2X	122.4	0.0	8.7	0.0	21.1	9
LYNKS LX4210	M 2X	121.6	0.0	8.5	0.0	21.0	10
CARGILL 861	E 2X	121.4	0.0	15.0	0.0	20.1	14
LYNKS LX4225	M 2X	121.2	0.0	18.1	0.0	21.5	21
PIONEER 3707	M 2X	119.6	0.0	9.2	0.0	19.8	12
STAUFFER S4402	E 2X	119.1	0.0	15.8	0.0	19.2	19
CURRY SC-1424	M 2X	118.4	0.0	7.8	0.0	21.2	17
PRIDE X1073	M 2X	118.4	0.0	8.6	0.0	19.7	15
P-A-G SX275	M 2X	117.8	0.0	3.8	0.0	21.6	16
TOP FARM SX104	M 2X	117.7	0.0	10.7	0.0	19.3	18
LYNKS LX4115	E 2X	117.6	0.0	15.6	0.0	20.8	26
SIGCO 2405	M 2X	117.2	0.0	21.2	0.0	19.3	30
KELTGEN KS1020	M 2X	117.0	0.0	9.0	0.0	21.3	23
DE KALB DK-556	M 2X	116.4	0.0	5.5	0.0	21.1	20
JACQUES JX151	M 2X	116.4	0.0	22.8	0.0	15.8	24
CENEX 2106	M 2X	116.3	0.0	17.5	0.0	19.0	27
LYNKS LX4232	M 2X	116.1	0.0	6.2	0.0	21.3	22
PIONEER 3901	E 2X	115.8	0.0	21.9	0.0	19.4	37
CURRY SC-1408	E 2X	115.5	0.0	17.3	0.0	19.5	31
KELTGEN KS95	M 2X	115.3	0.0	15.7	0.0	19.4	29
PIONEER 3732	M 2X	115.3	0.0	17.2	0.0	20.3	35
SEEDTEC X83102	M M2X	114.9	0.0	17.1	0.0	19.4	33
P-A-G SX179	E 2X	114.7	0.0	11.8	0.0	18.9	25
P-A-G SX 193	E 2X	114.3	0.0	13.5	0.0	19.8	32
PIONEER 3726	M 2X	113.9	0.0	14.5	0.0	20.1	36
MELLOW DENT 2019	L 2X	113.3	0.0	6.0	0.0	21.0	28
TOP FARM SX1105	L 2X	112.9	0.0	12.1	0.0	19.5	34
SIGCO 1300	E 2X	112.4	0.0	16.7	0.0	19.5	40
KELTGEN KS104	M 2X	112.3	0.0	16.9	0.0	20.5	44
FONTANELLE 370	E 2X	112.3	0.0	16.3	0.0	20.3	43
MELLOW DENT 217AA	L 2X	112.1	0.0	14.5	0.0	20.4	41
WESTERN 5400	M 2X	112.0	0.0	13.6	0.0	20.2	39
DE KALB DK-484	E 2X	112.0	0.0	18.6	0.0	19.9	46
PRIDE 5523	M 2X	110.9	0.0	12.9	0.0	20.3	42
WESTERN KX-57	M 2X	110.9	0.0	14.8	0.0	20.7	49
MELLOW DENT 2014	M 2X	109.4	0.0	7.8	0.0	19.6	38
P-A-G SX239	E 2X	109.3	0.0	11.0	0.0	20.5	48
CENEX 2111	E 2X	108.4	0.0	10.9	0.0	19.3	45
MC CURDY 80-71	E 2X	107.7	0.0	11.9	0.0	19.8	50
ASGROW RX511	E 2X	107.1	0.0	17.8	0.0	19.9	56
'S GOLD 6880	M 2X	107.1	0.0	16.1	0.0	20.5	55
DE KALB T1000	M 2X	107.1	0.0	13.2	0.0	20.6	52
SDAES CHECK 2	L 2X	106.7	0.0	35.5	0.0	21.2	64
SDAES CHECK 9	M 2X	106.7	0.0	2.8	0.0	21.2	47
TOP FARM SX1098	M 2X	106.5	0.0	12.2	0.0	19.0	51
ASGROW RX532	M 2X	106.4	0.0	15.2	0.0	19.8	54
NORTHRUP KING EX2242	E 2X	104.7	0.0	17.4	0.0	18.7	57
KELTGEN KS1030	M 2X	104.2	0.0	12.3	0.0	20.2	58
TOP FARM SX1193	M 2X	104.1	0.0	22.1	0.0	18.1	59
CENEX 2096	E 2X	103.0	0.0	9.3	0.0	18.6	53
SDAES CHECK 4	M 2X	100.7	0.0	15.2	0.0	20.8	61

Table 6. (continued)

BRAND AND VARIETY	TYPE AND CROSS	YIELD B/A	PCT ROOT LODGED	PCT STALK LODGED	PCT EARS DROPPED	PERCENT MOISTURE	PERFORMANCE SCORE RATING
MC CURDY 81-3	M 2X	99.6	0.0	16.8	0.0	20.3	63
PRIDE X1033	E 2X	99.5	0.0	14.3	0.0	18.5	60
NORTHRUP KING PX9301	M 2X	98.5	0.0	16.4	0.0	19.1	62
PIONEER 3906	E 2X	97.6	0.0	18.8	0.0	19.1	65
TOP FARM SX1194	M 2X	97.0	0.0	21.0	0.0	19.2	67
PRIDE XA1052	M 2X	94.8	0.0	11.5	0.0	20.3	66
SDAES CHECK 10	M 2X	94.7	0.0	37.9	0.0	18.9	69
MELLOW DENT 212AA	M 2X	92.6	0.0	23.1	0.0	19.6	68
PRIDE 4422	E 2X	80.7	0.0	29.8	0.0	18.5	71
WESTERN 3400	E 2X	78.8	0.0	14.5	0.0	17.9	70
Means		112.0		14.4		20.0	
LSD (.05)		16.5		C.V. - % = 9.1			

Table 7. Area D3 2-, 3-, and 4-year yield, moisture and stalk lodging averages of corn hybrids, 1980-1983.

	ACRE YIELD, B/A			STK LODGING, PCT			GRAIN MOIST, PCT		
BRAND AND VARIETY	4-YR	3-YR	2-YR	4-YR	3-YR	2-YR	4-YR	3-YR	2-YR
ASGROW RX 511	106	115	117	6	7	9	22	23	24
CARGILL 861			119			9			25
CENEX 2106			113			10			23
CURRY SC-1424	110	119	112	3	3	4	25	27	28
DEKALB T1000			107			7			26
DEKALB T950			120			9			23
DEKALB XL-25A	102	111	114	4	4	4	23	24	25
FONTANELLE 370			111			8			26
KELTGEN KS101			122			7			23
KELTGEN KS1020		111	118		3	5		27	27
KELTGEN KS104			109			10			25
KELTGEN KS95		113	117		6	8		23	24
LYNKS LS4232			118			4			28
LYNKS LX4210		116	115		3	4		27	28
LYNKS LX4225			120			10			27
MC CURDY 5596	106	116	122	6	6	6	27	29	30
MC CURDY 80-71			107			6			23
MC CURDY 81-3			104			9			25
O'S GOLD SX6880	105	114	113	4	6	8	23	25	25
PIONEER 3707			117			5			24
PIONEER 3732			118			9			24
PIONEER 3901			118			11			23
PIONEER 3906			103			10			22
PRIDE 4422			97			15			23
PRIDE 5523			114			8			25
SDAES CHECK 2	101	106	107	12	15	21	24	25	26
SDAES CHECK 9	98	106	111	2	3	3	25	27	27
TOP FARM SX104	109	112	113	4	5	8	20	22	22
TOP FARM SX1098			107			8			22
TOP FARM SX1105			112			7			24

Table 8. 1983 Corn Performance Trial, Area E, Southeast Experiment Farm, Beresford

BRAND AND VARIETY	TYPE AND CROSS	YIELD B/A	PCT ROOT LODGED	PCT STALK LODGED	PCT EARS DROPPED	PERCENT MOISTURE	PERFORMANCE SCORE RATING
CURRY SC-1460	L 2X	98.9	0.0	3.9	0.0	17.7	1
FONTANELLE 435	M 2X	97.4	0.0	0.7	0.0	20.1	2
MC CURDY 7384	L 2X	94.7	0.0	0.0	0.0	22.0	4
PIONEER 3377	L 2X	94.5	0.0	0.0	0.0	20.5	3
PIONEER 3389	L 2X	87.7	0.0	0.0	0.0	20.2	5
LYNKS LX4232	M 2X	86.8	0.0	2.0	0.0	18.4	6
SDAES CHECK 9	M 2X	84.6	0.0	3.3	0.0	18.3	7
WILSON 1100B	E 2X	82.9	0.0	1.5	0.0	18.4	8
NC+ 3653	M 2X	82.7	0.0	2.0	0.0	18.3	9
ASGROW RX717	L 2X	82.1	0.0	2.0	0.0	18.6	10
MC CURDY 5596	M 2X	81.8	0.0	3.8	0.0	18.3	11
JACQUES 7900	L 2X	81.4	0.0	0.7	0.0	22.4	12
DE KALB EX 6261	L 2X	80.2	0.0	1.3	0.0	21.3	13
WILSON 1600A	M 2X	79.4	0.0	0.7	0.0	21.6	16
CARGILL 921	M 2X	79.2	0.0	1.3	0.0	19.8	14
P-A-G SX243	M 2X	78.1	0.0	3.6	0.0	18.1	15
DE KALB XL-55A	M 2X	78.1	0.0	6.6	0.0	19.3	17
MELLOW DENT 222A	L 2X	76.3	0.0	0.0	0.0	21.1	18
FONTANELLE 580	L 2X	75.9	0.0	1.3	0.0	22.7	23
PRIDE X1153	L 2X	75.2	0.0	1.9	0.0	22.0	25
SDAES CHECK 1	L 2X	75.0	0.0	1.4	0.0	21.3	24
NORTHRUP KING PX9527	L 2X	74.2	0.0	2.0	0.0	19.4	21
KELTGEN EXP 113	M 2X	74.1	0.0	2.1	0.0	18.5	20
STAUFFER S5260	M 2X	73.9	0.0	0.7	0.0	18.3	19
STAUFFER 6389	L 2X	73.7	0.0	2.8	0.0	18.4	22
KELTGEN KS114	L 2X	73.6	0.0	0.0	0.0	20.9	27
PRIDE 6611	L 2X	72.5	0.0	1.4	0.0	19.4	28
CURRY SC-1490	L 2X	72.3	0.0	0.7	0.0	24.9	36
P-A-G EXP 111571	M 2X	72.3	0.0	0.7	0.0	18.3	26
O'S GOLD 6882	L 2X	72.3	0.0	0.0	0.0	19.5	29
NC+ 3990	M 2X	72.0	0.0	0.7	0.0	18.9	30
STAUFFER S5340	M 2X	71.6	0.0	2.6	0.0	17.6	31
CURRY SC-1424	M 2X	70.5	0.0	2.1	0.0	18.5	33
WESTERN 6800	L 2X	70.3	0.0	0.7	0.0	24.1	40
PIONEER 3380	L 2X	70.3	0.0	2.1	0.0	19.8	35
FONTANELLE 4528	M 2X	70.1	0.0	0.7	0.0	18.1	32
NORTHRUP KING PX9455	L 2X	69.5	0.0	2.1	0.0	18.4	34
PIONEER 3551	M 2X	68.5	0.0	2.9	0.0	20.0	39
MC CURDY 6475	L 2X	67.7	0.0	1.4	0.0	18.9	38
DE KALB XL-25A	M 2X	67.0	0.0	0.0	0.0	18.2	37
PRIDE X1123	L 2X	66.6	0.0	0.7	0.0	19.7	42
LYNKS LX4210	M 2X	66.5	0.0	2.2	0.0	18.4	41
O'S GOLD 2570	L 2X	65.3	0.0	1.5	0.0	22.7	45
KELTGEN KS115	L 2X	64.8	0.0	1.5	0.0	26.5	56
P-A-G SX275	M 2X	63.9	0.0	0.7	0.0	19.3	43
P-A-G EXP 193084	M 2X	63.1	0.0	6.1	0.0	18.3	47
CURRY SC-1450	M 2X	63.0	0.0	3.4	0.0	17.7	44
LYNKS LX4315A	L 2X	63.0	0.0	0.7	0.0	21.7	50
DE KALB DK-556	M 2X	62.3	0.0	0.8	0.0	18.7	46
MC CURDY 6555	L 2X	62.1	0.0	1.4	0.0	19.6	49
CURRY SC-1455	L 2X	62.0	0.0	1.9	0.0	20.1	52
CARGILL 891	M 2X	61.8	0.0	1.3	0.0	19.9	53
NC+ 1830	E 2X	61.6	0.0	3.5	0.0	17.9	48
FONTANELLE 427	M 2X	61.3	0.0	0.7	0.0	19.7	54
WILSON 1600	M 2X	60.9	0.0	0.7	0.0	19.1	55
PRIDE 7759	L 2X	60.5	0.0	3.3	0.0	26.7	67
CENEX 2110	L 2X	60.4	0.0	0.0	0.0	18.0	51
CARGILL 867	E 2X	59.9	0.0	2.6	0.0	18.5	57
PRIDE 6692	L 2X	59.4	0.0	2.0	0.0	19.2	58
KELTGEN KS1150	L 2X	59.0	0.0	2.0	0.0	22.4	64
SDAES CHECK 2	L 2X	58.4	0.0	3.3	0.0	19.7	61

Table 8. (continued)

BRAND AND VARIETY	TYPE AND CROSS	YIELD B/A	PCT ROOT LODGED	PCT STALK LODGED	PCT EARS DROPPED	PERCENT MOISTURE	PERFORMANCE SCORE RATING
MELLOW DENT 2014	M 2X	58.0	0.0	0.7	0.0	17.8	59
NORTHRUP KING PX9405	M 2X	57.7	0.0	2.1	0.0	18.7	60
WILSON 1400B	M 2X	56.7	0.0	0.8	0.0	18.5	63
PIONEER 3707	M 2X	56.4	0.0	0.0	0.0	18.2	62
CENEX 2114	L 2X	56.0	0.0	0.7	0.0	19.9	65
DE KALB T11CO	L 2X	55.9	0.0	1.5	0.0	19.7	68
MELLOW DENT 2019	M 2X	54.9	0.0	0.0	0.0	18.5	66
CARGILL 861	E 2X	51.7	0.0	2.0	0.0	18.0	69
NC+ 2747	E 2X	51.2	0.0	2.0	0.0	18.2	71
P-A-G SX239	E 2X	51.0	0.0	0.7	0.0	17.9	70
MELLOW DENT 217AA	M 2X	50.9	0.0	2.9	0.0	18.0	73
NC+ 2120	E 2X	50.3	0.0	0.0	0.0	17.5	72
CROWS 444	M 2X	50.0	0.0	1.5	0.0	18.9	74
JACQUES 7780	M 2X	48.5	0.0	0.8	0.0	19.2	75
LYNKS LX4225	M 2X	45.9	0.0	4.4	0.0	19.1	76
NORTHRUP KING PX9415	M 2X	40.8	0.0	4.4	0.0	18.1	77
Means		68.2		1.7		19.6	
LSD (.05)		N.S.		C.V. - % = 23.5			

Table 9. Area E 2-, 3-, and 4-year yield, moisture and stalk lodging averages of corn hybrids, 1980-1983

	ACRE YIELD, B/A			STK LODGING, PCT			GRAIN MOIST, PCT		
BRAND AND VARIETY	4-YR	3-YR	2-YR	4-YR	3-YR	2-YR	4-YR	3-YR	2-YR
CARGILL 921		124	117		30	43		20	21
CENEX 2114		104	91		12	17		20	21
CROWS 444			68			23			22
CURRY SC-1424		110	100		11	14		18	19
CURRY SC-1455		106	88		13	18		20	21
CURRY SC-1490			100			32			24
DEKALB EX6261			107			27			23
DEKALB T1100		111	98		9	12		20	21
DEKALB XL-55A		121	112		31	44		20	21
FONTANELLE 435			115			23			21
FONTANELLE 580			103			19			24
KELTGEN KS114		112	103		19	26		21	21
KELTGEN KS115		109	99		21	31		24	26
LYNKS LX4210		103	91		18	26		19	19
LYNKS LX4225			96			39			20
LYNKS LX4232			104			16			19
LYNKS LX4315A			99			24			22
MC CURDY 6475		107	96		14	20		20	20
MC CURDY 6555		104	85		10	14		20	21
NORTHRUP KING PX9415			75			17			19
NORTHRUP KING PX9527			102			19			21
O'S GOLD 6882		111	98		12	17		20	21
PIONEER 3377			95			23			22
PIONEER 3707			86			46			18
PRIDE 6611			94			15			20
PRIDE 6692			101			30			20
SDAES CHECK 1		111	102		16	24		22	22
SDAES CHECK 2		88	85		26	33		18	19
SDAES CHECK 9		105	101		23	30		18	19
WILSON 1100B			97			13			19
WILSON 1600		110	94		13	16		19	20
WILSON 1600A		114	106		20	26		21	22

Table 10. 1983 Corn Performance Trial, Area C1(dryland), James Valley Research Farm, Redfield

BRAND AND VARIETY	TYPE AND CROSS	YIELD B/A	PCT ROOT LODGED	PCT STALK LODGED	PCT EARS DROPPED	PERCENT MOISTURE	PERFORMANCE SCORE RATING
P-A-G SX179	E 2X	96.3	0.0	4.5	0.0	17.8	1
KELTGEN KS1030	M 2X	95.0	0.0	8.5	0.0	18.1	2
P-A-G SX195	E 2X	94.9	0.0	10.3	0.0	17.5	3
JACQUES JX77	E 2X	93.1	0.0	12.7	0.0	17.4	5
PIONEER 3726	M 2X	93.0	0.0	8.4	0.0	17.3	4
SEEDTEC 7971	M M2X	92.9	0.0	16.9	0.0	17.3	8
KELTGEN KS95	M 2X	92.4	0.0	9.3	0.0	18.0	6
KELTGEN KS1020	M 2X	91.9	0.0	10.6	0.0	17.5	7
PRIDE X1073	M 2X	90.6	0.0	19.5	0.0	17.5	14
WESTERN KX-57	M 2X	90.6	0.0	9.3	0.0	18.0	9
SDAES CHECK 4	M 2X	89.5	0.0	13.5	0.0	18.3	15
CARGILL 834	E 2X	89.2	0.0	8.6	0.0	18.2	12
PIONEER 3901	E 2X	89.0	0.0	5.2	0.0	17.6	10
CENEX 2106	M 2X	88.9	0.0	14.6	0.0	17.7	17
SDAES CHECK 10	M 2X	88.3	0.0	6.9	0.0	18.0	13
SIGCO 3106	M 2X	87.9	0.0	9.6	0.0	17.8	16
PRIDE 4422	E 2X	87.7	0.0	4.8	0.0	17.1	11
INTERSTATE 635	L 2X	87.5	0.0	12.0	0.0	17.8	18
PIONEER 3906	E 2X	86.5	0.0	16.7	0.0	17.4	24
ASGROW RX418	E 2X	86.3	0.0	9.8	0.0	18.0	21
PIONEER 3747	M 2X	85.7	0.0	8.2	0.0	17.5	19
PRIDE X1033	E 2X	85.3	0.0	7.4	0.0	17.4	20
DE KALB EXP-340	E 3X	84.9	0.0	7.1	0.0	17.7	22
NORTHRUP KING PX9301	M 2X	84.1	0.0	9.9	0.0	17.1	25
DE KALB XL-8	E 2X	84.1	0.0	5.5	0.0	17.5	23
CENEX 2096	E 2X	83.0	0.0	10.4	0.0	17.1	27
CARGILL 836	E 2X	82.9	0.0	13.0	0.0	17.8	28
TOP FARM SX104A	L 2X	82.5	0.0	13.4	0.0	17.2	29
TOP FARM SX1101	M 2X	82.0	0.0	3.6	0.0	17.0	26
PRIDE 5523	M 2X	80.7	0.0	10.7	0.0	17.7	32
INTERSTATE 434	M 2X	80.4	0.0	15.3	0.0	17.8	36
SIGCO 1300	E 2X	80.3	0.0	8.2	0.0	17.6	31
CURRY SC-1424	M 2X	80.2	0.0	5.3	0.0	18.0	30
CURRY SC-1408	E 2X	79.9	0.0	15.1	0.0	18.3	39
WESTERN KX-42	M 2X	79.9	0.0	13.1	0.0	18.0	37
INTERSTATE 468	L 2X	79.7	0.0	11.1	0.0	17.6	34
TOP FARM SX1105	L 2X	78.6	0.0	7.1	0.0	17.2	33
ASGROW RX420	E 2X	78.5	0.0	12.8	0.0	17.6	41
SDAES CHECK 9	M 2X	78.4	0.0	10.0	0.0	17.6	38
DE KALB T950	E 2X	78.3	0.0	7.5	0.0	17.5	35
CARGILL 861	E 2X	77.2	0.0	12.5	0.0	17.3	44
PIONEER 3732	M 2X	77.2	0.0	8.5	0.0	17.1	40
SIGCO 4300	M M2X	76.9	0.0	16.3	0.0	17.4	49
TOP FARM SX1199	M 2X	76.4	0.0	9.1	0.0	17.2	43
PRIDE XA1052	M 2X	76.3	0.0	11.0	0.0	18.0	47
KELTGEN KS101	M 2X	76.3	0.0	10.2	0.0	18.6	48
ASGROW RX532	M 2X	75.8	0.0	8.5	0.0	18.0	46
SEEDTEC 82126	M 2X	75.8	0.0	7.2	0.0	17.5	45
STAUFFER S3306	M 2X	75.6	0.0	13.2	0.0	18.1	52
DE KALB DK-484	E 2X	75.5	0.0	3.4	0.0	17.4	42
TOP FARM SX104	M 2X	75.1	0.0	13.3	0.0	18.0	53
JACQUES JX97	E 2X	73.9	0.0	4.4	0.0	17.8	50
DE KALB T891	E 3X	73.8	0.0	6.2	0.0	17.1	51
P-A-G SX239	E 2X	72.4	0.0	6.0	0.0	18.0	54
CURRY SC-1420	M 2X	72.4	0.0	20.0	0.0	17.5	57
STAUFFER S3242	M 2X	72.1	0.0	13.4	0.0	17.7	55
JACQUES JX47	E 2X	70.2	0.0	10.0	0.0	17.5	56
KELTGEN KS104	M 2X	68.4	0.0	12.5	0.0	17.6	58
CARGILL 867	E 2X	67.5	0.0	13.4	0.0	17.2	59
INTERSTATE 452	M 2X	66.7	0.0	15.9	0.0	17.7	60
Means		81.9		10.4		17.6	
LSD (.05)		N.S.		C.V. - % = 20.9			

Table 11. 1983 Corn Performance Trial, Area C1(irrigated), James Valley Research Farm, Redfield

BRAND AND VARIETY	TYPE AND CROSS	YIELD B/A	PCT ROOT LODGED	PCT STALK LODGED	PCT EARS DROPPED	PERCENT MOISTURE	PERFORMANCE SCORE RATING
CARGILL 861	E 2X	110.1	0.0	6.6	0.0	18.0	1
CURRY SC-1450	M 2X	105.7	0.0	4.0	0.0	17.8	2
KELTGEN KS104	M 2X	104.6	0.0	5.9	0.0	17.8	3
CARGILL 836	E 2X	104.4	0.0	3.2	0.0	19.1	5
P-A-G SX179	E 2X	102.9	0.0	2.4	0.0	17.2	4
CURRY SC-1455	L 2X	102.3	0.0	3.3	0.0	19.5	9
NORTHRUP KING PX9353	M 2X	101.6	0.0	2.7	0.0	17.5	6
CURRY SC-1420	M 2X	101.4	0.0	3.5	0.0	17.8	8
DE KALB DK-484	E 2X	101.2	0.0	3.4	0.0	17.1	7
PIONEER 3726	M 2X	99.4	0.0	4.2	0.0	17.9	10
P-A-G SX193	E 2X	98.8	0.0	4.9	0.0	17.9	12
CURRY SC-1424	M 2X	98.2	0.0	4.1	0.0	18.2	14
TOP FARM SX1101	M 2X	98.2	0.0	5.3	0.0	17.3	13
TOP FARM SX1100	M 2X	98.2	0.0	3.1	0.0	17.3	11
P-A-G SX239	E 2X	97.5	0.0	3.9	0.0	17.8	15
TOP FARM SX104A	L 2X	96.9	0.0	2.5	0.0	18.0	16
CENEX 2108	M 2X	95.9	0.0	4.0	0.0	17.9	18
MC CURDY 81-54	M 2X	95.4	0.0	3.5	0.0	18.1	19
KELTGEN KS1030	M 2X	94.7	0.0	4.3	0.0	14.6	17
WESTERN 5400	M 2X	94.5	0.0	2.5	0.0	17.7	21
D'S GOLD 2330	M 2X	94.2	0.0	4.9	0.0	16.1	20
SEEDTEC X82126	M M2X	93.9	0.0	4.3	0.0	17.2	22
ASGROW RX511	E 2X	93.8	0.0	3.0	0.0	17.8	23
NORTHRUP KING PX9415	M 2X	93.4	0.0	4.8	0.0	17.9	25
INTERSTATE 468	L 2X	93.2	0.0	1.7	0.0	18.1	24
CENEX 2106	M 2X	91.7	0.0	3.4	0.0	17.3	26
STAUFFER S5602	M 2X	91.6	0.0	6.9	0.0	18.0	29
SIGCO 2405	M 2X	91.2	0.0	4.6	0.0	17.6	28
NORTHRUP KING PX9405	M 2X	91.0	0.0	2.1	0.0	17.9	27
CENEX 2110	L 2X	89.9	0.0	5.3	0.0	18.0	30
INTERSTATE 635	L 2X	89.7	0.0	2.5	0.0	19.1	31
PIONEER 3732	M 2X	89.6	0.0	5.9	0.0	17.9	32
PIONEER 3747	M 2X	88.6	0.0	4.4	0.0	17.8	33
MC CURDY 4855	M 2X	88.3	0.0	5.9	0.0	17.5	35
KELTGEN KS95	M 2X	87.2	0.0	1.3	0.0	17.4	34
INTERSTATE 434	M 2X	86.9	0.0	3.4	0.0	17.6	36
STAUFFER S4402	E 2X	86.2	0.0	5.3	0.0	17.4	39
KELTGEN KS101	M 2X	85.8	0.0	4.1	0.0	17.1	37
DE KALB XL-6	E 2X	85.4	0.0	4.1	0.0	16.8	38
SIGCO 1300	E 2X	85.2	0.0	7.9	0.0	17.3	40
KELTGEN KS1020	M 2X	85.1	0.0	5.3	0.0	18.2	41
MC CURDY 80-71	E 2X	83.9	0.0	3.8	0.0	17.8	42
DE KALB EXP 342	E 2X	83.6	0.0	5.7	0.0	16.9	43
ASGROW RX532	M 2X	83.0	0.0	6.3	0.0	17.4	45
SDAES CHECK 2	L 2X	82.6	0.0	7.4	0.0	18.4	46
DE KALB XL-8	E 2X	81.7	0.0	1.4	0.0	17.1	44
TOP FARM SX1105	L 2X	80.7	0.0	8.8	0.0	17.8	50
SDAES CHECK 4	M 2X	80.3	0.0	2.5	0.0	18.1	47
CARGILL 867	E 2X	79.2	0.0	3.6	0.0	17.6	49
TOP FARM SX104	M 2X	77.9	0.0	4.7	0.0	17.1	52
INTERSTATE 452	M 2X	77.9	0.0	3.0	0.0	17.1	51
CARGILL 834	E 2X	77.0	0.0	1.2	0.0	17.3	53
PIONEER 3906	E 2X	76.4	0.0	1.9	0.0	14.5	48
D'S GOLD 1170A	M 2X	75.0	0.0	1.5	0.0	17.9	54
DE KALB T950	E 2X	75.0	0.0	3.1	0.0	17.3	55
ASGROW TX418	E 2X	72.2	0.0	4.7	0.0	16.7	56
PIONEER 3901	E 2X	67.3	0.0	5.8	0.0	17.1	57
ASGROW RX420	E 2X	59.4	0.0	4.7	0.0	16.9	58
SDAES CHECK 10	M 2X	53.4	0.0	15.0	0.0	17.0	59
Means		89.0		4.3		17.5	
LSD (.05)		N.S.		C.V. - % = 26.0			

Table 12. Area C1(dryland) 2-, 3-, and 4-year yield, moisture and stalk lodging averages of corn hybrids, 1980-1983

BRAND AND VARIETY	ACRE YIELD, B/A			STK LODGING, PCT			GRAIN MOIST, PCT		
	4-YR	3-YR	2-YR	4-YR	3-YR	2-YR	4-YR	3-YR	2-YR
CARGILL 834	75	76	85	4	4	5	19	19	20
CENEX 2106			85			8			20
CURRY SC-1424	84	83	86	3	3	3	22	22	25
KELTGEN KS101		77	83		5	6		19	21
KELTGEN KS1020		80	88		6	7		22	23
KELTGEN KS104		77	78		5	7		20	22
KELTGEN KS95			87			7			20
PIONEER 3732			90			6			21
PIONEER 3747			94			5			20
PIONEER 3901			90			4			20
PIONEER 3906			87			9			19
PRIDE 4422			87			3			20
PRIDE 5523			85			7			22
SDAES CHECK 10	77	78	88	4	5	5	18	18	20
SDAES CHECK 4	77	79	89	5	7	8	20	20	21
SIGCO 3106			88			13			20
STAUFFER S3242			78			7			20
STAUFFER S3306			83			8			20
TOP FARM SX104		78	84		8	9		19	21
TOP FARM SX104A		75	80		9	8		21	23

Table 13. Area C1(irrigated) 2-, 3-, and 4-year yield, moisture and stalk lodging averages of corn hybrids, 1980-1983

BRAND AND VARIETY	ACRE YIELD, B/A			STK LODGING, PCT			GRAIN MOIST, PCT		
	4-YR	3-YR	2-YR	4-YR	3-YR	2-YR	4-YR	3-YR	2-YR
ASGROW RX 511	124	131	129	6	6	3	21	20	20
CARGILL 834	104	112	111	4	3	1	20	19	20
CARGILL 961			138			4			22
CENEX 2106	114	121	124	2	2	2	20	19	20
CENEX 2108	124	125	124	2	2	3	22	22	22
CURRY SC-1420		133	133		2	2		23	23
CURRY SC-1424	128	129	126	2	1	2	25	24	25
CURRY SC-1455	131	136	136	2	2	2	29	29	29
DEKALB T950			114			2			20
DEKALB XL-8			112			1			19
KELTGEN KS101			122			3			20
KELTGEN KS1020		124	121		2	3		24	23
KELTGEN KS104		133	130		3	4		22	23
KELTGEN KS95		127	123		1	1		20	21
MC CURDY 4855	118	122	118	4	3	3	23	23	23
MC CURDY 80-71			112			2			21
MC CURDY 81-54			133			2			24
NORTHRUP KING PX9353			131			2			21
O'S GOLD 2330		125	127		2	3		19	20
PIONEER 3732			129			4			22
PIONEER 3747			120			2			21
PIONEER 3901			115			3			20
PIONEER 3906			109			1			18
SDAES CHECK 10	103	107	102	7	8	8	20	19	19
STAUFFER S5602			128			4			23
TOP FARM SX 104	114	122	119	3	2	3	20	20	21
TOP FARM SX 104A	122	127	118	3	2	2	23	23	24
TOP FARM SX1105			120			5			21

Table 14. 1983 Corn Performance Trial, Area C2, John Biddle Farm, Geddes

BRAND AND VARIETY	TYPE AND CROSS	YIELD B/A	PCT ROOT LODGED	PCT STALK LODGED	PCT EARS DROPPED	PERCENT MOISTURE	PERFORMANCE SCORE RATING
PIONEER 3551	M 2X	53.2	0.0	1.3	0.0	16.9	3
TOP FARM SX1101	M 2X	53.2	0.0	2.5	0.0	14.3	1
KELTGEN EXP 113	M 2X	52.8	0.0	0.0	0.0	15.2	2
PIONEER 3377	L 2X	48.6	0.0	1.3	0.0	19.6	6
NORTHRUP KING PX9405	M 2X	48.3	0.0	1.2	0.0	14.9	4
CENEX 2110	L 2X	48.0	0.0	1.4	0.0	15.3	5
P-A-G SX243	M 2X	46.4	0.0	0.0	0.0	15.9	7
DE KALB DK-484	E 2X	45.8	0.0	1.2	0.0	15.1	8
KELTGEN KS95	M 2X	45.8	0.0	4.1	0.0	15.0	10
NORTHRUP KING PX9455	L 2X	45.6	0.0	7.0	0.0	16.0	12
DE KALB T1000	M 2X	45.5	0.0	0.0	0.0	14.6	9
WESTERN KX-57	M 2X	45.2	0.0	0.0	0.0	15.8	11
TOP FARM SX1105	L 2X	44.2	0.0	0.0	0.0	15.0	13
SDAES CHECK 9	M 2X	44.1	0.0	1.4	0.0	16.2	14
WILSON 1102	E 2X	43.1	0.0	1.3	0.0	14.3	15
PIONEER 3707	M 2X	42.6	0.0	0.0	0.0	14.9	16
PIONEER 3389	L 2X	42.4	0.0	0.0	0.0	19.1	21
TOP FARM SX1095	M 2X	42.3	0.0	1.3	0.0	15.4	17
DE KALB T950	E 2X	41.9	0.0	0.0	0.0	15.7	18
FONTANELLE 4528	M 2X	41.8	0.0	0.0	0.0	15.8	19
WILSON 1100A	E 2X	41.5	0.0	5.4	0.0	15.7	23
FONTANELLE 427	M 2X	41.5	0.0	0.0	0.0	16.8	22
SDAES CHECK 10	M 2X	41.1	0.0	1.3	0.0	14.3	20
P-A-G SX275	M 2X	41.0	0.0	1.3	0.0	17.4	25
SDAES CHECK 4	M 2X	40.7	0.0	1.1	0.0	16.4	24
KELTGEN KS104	M 2X	39.4	0.0	1.3	0.0	14.5	26
SEEDTEC 82126	M M2X	39.3	0.0	2.9	0.0	15.6	27
ASGROW KX610	M 2X	38.6	0.0	1.3	0.0	16.8	30
KELTGEN KS1020	M 2X	38.5	0.0	3.0	0.0	14.9	28
DE KALB XL-25A	M 2X	38.3	0.0	2.4	0.0	15.4	29
FONTANELLE 435	M 2X	37.9	0.0	3.8	0.0	20.5	36
GREEN ACRES 3000	M 4X	37.6	0.0	1.3	0.0	17.4	31
SDAES CHECK 2	L 2X	36.7	0.0	3.2	0.0	16.5	35
TOP FARM SX104	M 2X	36.6	0.0	1.3	0.0	14.6	32
LYNKS LX4210	M 2X	36.4	0.0	0.0	0.0	16.8	34
CENEX 2108	M 2X	36.0	0.0	3.0	0.0	15.4	37
KELTGEN KS1030	M 2X	35.6	0.0	0.0	0.0	14.1	33
JACQUES 7700	M 2X	35.6	0.0	2.9	0.0	15.2	38
CARGILL 924	M 2X	35.3	0.0	4.1	0.0	19.6	40
CENEX 2115	L 2X	34.5	0.0	0.0	0.0	22.0	45
WILSON 1100B	E 2X	34.4	0.0	4.3	0.0	15.8	39
KALTENBURG KX61	M 2X	33.4	0.0	1.4	0.0	15.4	41
CARGILL 921	M 2X	33.3	0.0	1.3	0.0	23.0	49
LYNKS LX4115	E 2X	33.3	0.0	3.3	0.0	15.0	42
NORTHRUP KING PX9415	M 2X	32.7	0.0	2.8	0.0	16.2	47
DE KALB DK-556	M 2X	32.7	0.0	0.0	0.0	16.0	44
TOP FARM SX1098	M 2X	32.5	0.0	0.0	0.0	14.4	43
WILSON 1600	M 2X	32.4	0.0	0.0	0.0	18.6	48
CARGILL 949	L 2X	32.2	0.0	3.8	0.0	26.6	53
SEEDTEC 7971	M M2X	32.1	0.0	1.3	0.0	14.5	46
KALTENBURG KX77	L 2X	32.0	0.0	1.4	0.0	23.5	52
CARGILL 891	M 2X	32.0	0.0	4.0	0.0	19.0	50
JACQUES 7780	M 2X	31.7	0.0	0.0	0.0	19.8	51
JACQUES 7900	L 2X	30.2	0.0	2.5	0.0	23.5	54
PIONEER 3380	L 2X	27.7	0.0	0.0	0.0	17.8	55
GREEN ACRES 66	L 2X	27.3	0.0	4.6	0.0	26.7	58
LYNKS LX4225	M 2X	26.4	0.0	0.0	0.0	17.8	56
WESTERN 5800	M 2X	25.2	0.0	4.1	0.0	16.9	57
GREEN ACRES 99	L 2X	19.8	0.0	0.0	0.0	23.6	59
Means		38.4		1.7		17.1	
LSD (.05)		N.S.		C.V. - % = 26.9			

Table 15. Area C2 2-, 3-, and 4-year yield, moisture and stalk lodging averages of corn hybrids, 1980-1983

BRAND AND VARIETY	ACRE YIELD, B/A			STK LODGING, PCT			GRAIN MOIST, PCT		
	4-YR	3-YR	2-YR	4-YR	3-YR	2-YR	4-YR	3-YR	2-YR
ASGROW RX610			42			9			12
CARGILL 921		66	57		29	42		22	26
CARGILL 924	51	62	55	22	29	41	23	20	23
CARGILL 949			31			7			15
CENEX 2108	40	48	36	17	20	13	15	11	11
DEKALB T1000			34			25			12
FONTANELLE 435		44	35		8	12		14	13
GREEN ACRES 3000	43	48	37	9	11	12	17	15	15
KELTGEN KS1020		49	39		3	5		12	12
KELTGEN KS104		68	59		8	10		17	19
KELTGEN KS95		47	40		19	22		10	10
LYNKS LX4210		42	31		4	4		11	11
LYNKS LX4225			35			10			13
NORTHRUP KING PX9145			32			9			11
PIONEER 3377			42			19			11
PIONEER 3707			40			14			10
SDAES CHECK 10	50	62	57	10	14	17	15	13	17
SDAES CHECK 4	33	39	34	13	16	24	13	11	12
SDAES CHECK 9	42	48	42	4	5	5	15	12	12
TOP FARM SX 104	46	51	42	7	9	9	12	9	11
TOP FARM SX1105			41			14			11
WESTERN KX-57			36			10			13
WILSON 11008			34			8			12
WILSON 1600		46	35		10	12		14	12

Table 16. Listing of Hybrid Corn Entries Harvested and the Tables where the Results Appear.

Company and Brand	Entry	Tables
Asgrow Seed Company	RX418	10,11
7000 Portage Road	RX420	10,11
Kalamazoo, MI 49001	RX511	6,7,10,11
"Asgrow"	RX532	6,10,11
	RX610	14
	RX717	8
Cargill Seeds	834	10,11,12,13
Box 328	836	10,11
ST. Peter, MN 56082	861	6,8,10,11,14
"Cargill"	867	6,8,10,11
	891	6,8,14
	921	8,9,14,15
	924	14,15
	949	14,15
Cenex	2096	6,10
Box 43089	2106	6,7,10,11,12,13
St. Paul, MN 55164	2108	11,13,14,15
"Cenex"	2110	8,11,14
	2111	6
	2114	8,9
	2115	11
Curry Seed Co.	1408	6,8
Box 517	1420	10,11,13
Elk Point, SD 57025	1424	6,7,8,9,10,11,12,13
"Curry"	1450	6,8,11
	1455	8,9,11,13
	1460	8
	1490	8,9
DeKalb-Pfizer Genetics	XL-6	11
3100 Sycamore Road	XL-8	10,11,13
DeKalb, IL 60115	XL-25a	6,7,8,14
"DeKalb"	XL-55a	8,9
	DK-484	6,10,11,14
	DK-556	6,8,14
	T891	10
	T950	6,7,10,11,13,14
	T1000	6,7,14,15
	T1100	8,9
	EXP-340	10
	EXP-342	11
	EXP-6261	8
Crows Hybrids	444	8,9
Centerville, SD 57014		
"Crows"		

Table 16 (Cont.). Listing of Hybrids Harvested and Tables where Results Appear.

Company and Brand	Entry	Tables
Fontanelle Hybrids	370	6,7
Rt. 1, Box 18	427	8,14
Nickerson, NE 68044	435	8,9,14,15
"Fontanelle"	580	8,9
	4528	8,14
Green Acres	66	14
Harrington, NE 68739	99	14
"Green Acres"	3000	14,15
Interstate Seed Co.	434	10,11
Box 470	452	10,11
Fargo, ND 58107	468	10,11
"Interstate"	635	10,11
Jacques Seed Co.	JX47	10
720 St. Croix St.	JX77	10
Prescott, WI 54021	JX97	10
"Jacques"	JX151	6
	7700	6,14
	7780	8,14
	7900	8,14
Kaltenburg Seed Farms	KX61	14,15
5506 Hwy 19, Rt. 2	KX77	14
Waunakee, WI 53597		
Keltgen Seed Co.	KS95	6,7,10,11,12,13,14,15
Box A	KS101	6,7,10,11,12,13
Olivia, MN 56277	KS1020	6,7,10,11,12,13,14,15
"Keltgen"	KS1030	6,10,11,14
	KS104	6,7,10,11,12,13,14,15
	KS114	8,9
	KS115	8,9
	KS1150	8
	Exp.113	8,14
King's Western Seed Co.	3400	6
PO Box 947	4800	11
Huron, SD 57350	5400	6,11
"Western"	5800	14
	6800	8
	KX-42	10
	KX-57	6,8,10,14,15
Lynks Seeds	LX4115	6,14
Box 637	LX4210	6,7,8,9,14,15
Marshalltown, IA 51058	LX4225	6,7,8,9,14,15
"Lynks"	LX4232	6,7,8,9
	LX4315A	8,9
McCurdy Seed Co.	4855	11,12
PO Box 66	5596	6,7,8
Fremont, IA 52561	6475	8,9
"McCurdy"	6555	8,9
	7384	8
	80-71	6,7,11,12
	81-3	6,7
	81-54	11,12
Mellow-Dent Industries	212AA	6
Alta, IA 51002	217AA	6,8
"Mellow-Dent"	222A	8
	2014	6,8
	2019	6,8
NC+ Hybrids, Inc.	1830	8
3820 N. 56th St.	2120	8
Lincoln, NE 68504	2747	8
"NC+"	3653	8
	3990	8
SeedTec Int'l, Inc.	7971	10,14
Box 5522	X83102	6,10,11,14
Fargo, ND 58105		
Northrup King Co.	PX9301	6,10
1754 Park Blvd.	PX9353	11,12
Fargo, ND 58103	PX9405	8,10,11
"Northrup King"	PX9415	8,9,10,14
	PX9455	8,14
	PX9527	8,9
	EX2242	6
O's Gold Seed Co.	1170A	11
PO Box 460	2330	11,12
Parkersburg, IA 50665	2570	8
"O's Gold"	6880	6,7
	6882	8,9
PAG Seeds	SX179	6,10,11
Box 1207	SX193	6,11
Fremont, NE 68025	SX195	10
"PAG"	SX239	6,8,10,11
	SX243	6,8,14
	SX275	6,8,14
	EX111571	8
	EX193084	8
Pioneer Hi-Bred Int'l	3377	8,9,14,15
7000 Pioneer Parkway	3380	8,14
Johnston, IA 50131	3389	8,14
"Pioneer"	3551	8,14
	3707	6,7,8,9,14,15
	3926	6,10,11
	3932	6,7,10,11,12,13
	3747	10,11,12,13
	3901	6,7,10,11,12,13
	3906	6,7,10,11,12,13
Pride Company, Inc.	4422	6,7,10,11
RFD Box 8	5523	6,7,10,11
Glen Haven, WI 53810	6611	8,9
"Pride"	6692	8,9
	7759	8
	X1033	6,10
	XA1052	6,10
	X1073	6,10
	X1123	6,10
	X1153	6,10
Sigco Research, Inc.	1300	6,10,11
Box 289	3106	10,12
Breckenridge, MN 56520	4300	10
"Sigco"	X2405	6,10
Stauffer Seeds	3242	10,11
2622 Blaney Road	3306	10,11
Madison, WI 53711	4402	6,11
"Stauffer"	5269	6,8
	5340	6,8
	5602	11
	6389	8
Top Farm Hybrids	SX104	6,7,10,11,12,13,14,15
Box 850	SX104A	10,11,12,13
Cokato, MN 55321	SX1095	14,15
"Top Farm"	SX1098	6,14
	SX1100	11
	SX1101	10,11,14
	SX1105	6,10,11,14
	SX1193	6
	SX1194	6
	SX1199	10
Wilson Hybrids, Inc.	1100A	14
Box 391	1100B	8,9,14,15
Harlan, IA 51537	1102	14
"Wilson"	1400B	8
	1600	8,9,14,15
	1600A	8,9

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