2-1976

1975 Corn Performance Trials

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South Dakota State University

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Circular 215

February 1976

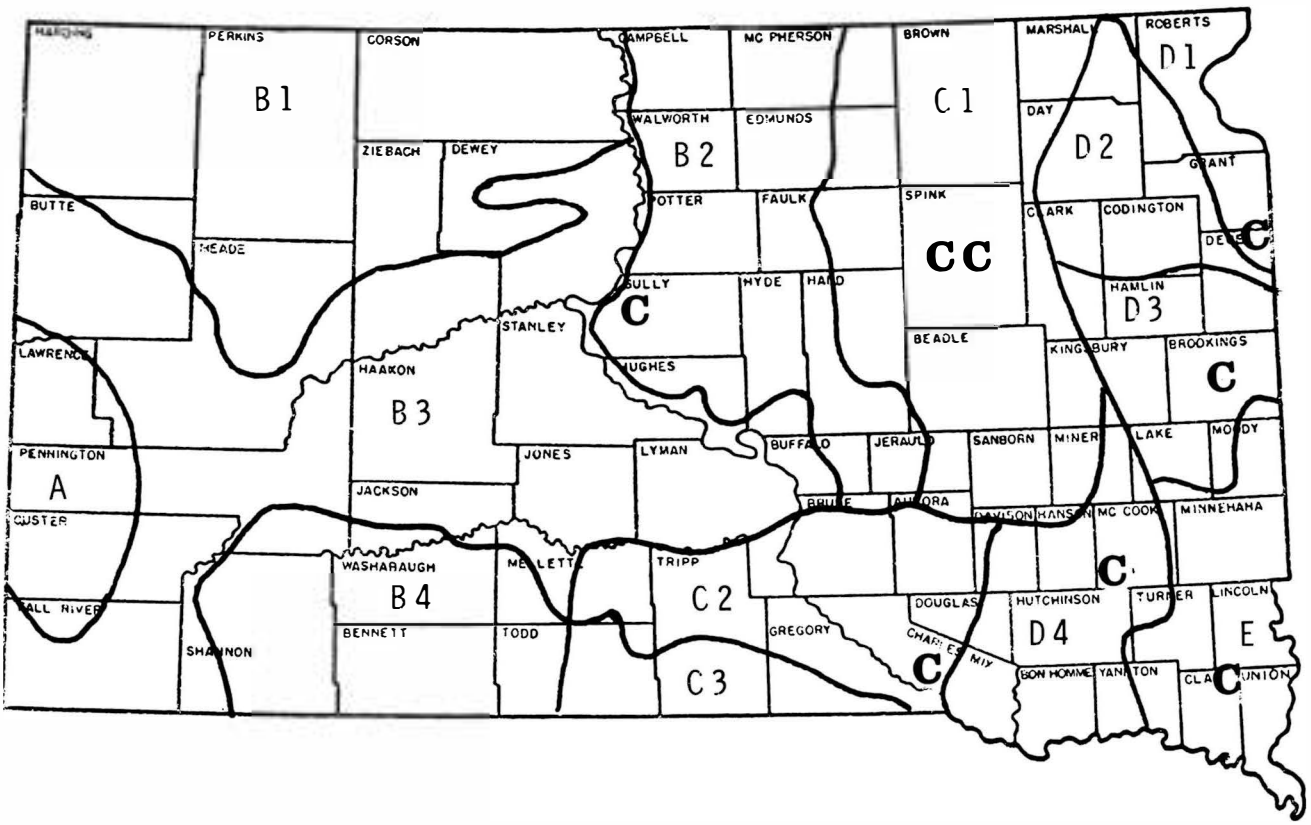
Plant Science Department

Agricultural Experiment Station

South Dakota State University

LISTING OF TABLES

CROP ADAPTATION AREAS



C - Indicates site of 1975 Corn Performance Trial

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The relative performance of corn hybrids grown in 1975 under similar environmental conditions is evaluated in this report. Information in the accompanying tables includes grain yields in bushels per acre, moisture percentage of either ear corn or shelled corn at harvest, performance scores and other related information. Records of the corn hybrids harvested in 1975 and available two-, three-, and four-year averages of yield, moisture and stalk lodging percentages are also presented. The trials reported were conducted under the Plant Science Department program in Crop Performance Testing, Agricultural Experiment Station, South Dakota State University.

Location of the 1975 Trials

Trials were located in the crop adaptation areas marked on the accompanying South Dakota map. The exact location of each trial and dates of seeding and harvesting are included in Table 1. No data are presented for the Beresford or Geddes sites. The drouth damage at Beresford was so severe that the stalks had only barren, smutted ears at harvest. The Geddes yield results were so small and variable that they were of little reliable value. The soil classification, laboratory analysis of soil samples taken and fertilizer applied at each site is given in Table 2.

Weather and Climatic Conditions

Climatic data (Table 3) for the 1975 corn growing season, May-October, are based upon information obtained from a U.S. Weather Bureau station reasonably near each trial. Data are presented for all but the Geddes area. Stations are located at all other sites except for the Agar and Deuel County trials so data from official stations at Onida and Milbank are presented for these two trials, respectively. Precipitation quantities would vary from the actual site to the recording station, especially at the Deuel site, but temperatures are comparative over a much wider area and considered applicable to the trial area.

Recorded precipitation totals at all sites were less than their seasonal averages. The precipitation in May was adequate and caused little delay in seeding. A driving rain at Redfield just after seeding caused severe crusting and the plot area was rotary-hoed several times to break the crust and aid emergence of the young plants. Stands were down as the final counts for the two populations desired were about 2,000 plants per acre lower than intended.

The assistance of the following individuals is appreciated: D. B. Shank of the Plant Science Department; Joe Giles, Burton Lawrensen, Herb Lund and Robert Morris of the stations; and cooperators William Fijala, John Heaton, Clifford Hofer and Mike Mikkelson.

Table 1. Location of the 1975 Corn Performance Trials

Area	County	Location	Post Office	Date Seeded	Date Harvested
B2	Sully	M. Mikkelson Farm, 7W, 1N	Agar	May 27	Oct. 7
C1-dry	Spink	James Valley Res. Farm, 6E	Redfield	May 21	Oct. 28
C1-irr.	Spink	James Valley Res. Farm, 6E	Redfield	May 21	Oct. 27
C2	Charles Mix	Wm. Fijala Farm, 2E, 1N	Geddes	May 13	Oct. 15
D1	Deuel	J. Heaton Farm, 1W, 5N	Gary	May 19	Oct. 21
D3	Brookings	Plant Science Farm, 2NE	Brookings	May 16	Oct. 16
D4	McCook	C. Hofer Farm, 1S	Bridgewater	May 13	Oct. 22
E	Clay	SE Experiment Farm, 7W, 3S	Beresford	May 14	Dried out

Rainfall in June was quite adequate and the plants grew rapidly as the temperatures increased. The temperatures kept increasing into July and were often accompanied by high-velocity drying winds. Little precipitation was recorded at most sites during July and the plants suffered greatly from the drouth.

Timely rains helped at some locations but the corn at Agar, Beresford, Bridgewater and Geddes was hardest hit. Many varieties suffered in varying amounts, depending upon their maturity. Because of the drouth and severe heat tasseling and silking were non-existent or erratic and fertilization failed to be effective. During the critical tasseling and silking period in July temperatures were above 90° F. nearly every day (Table 3). Had the varieties been able to set kernels, conditions at the Beresford and Bridgewater locations were favorable the remainder of the year and excellent yields could have been expected.

The yields at the remaining locations were good considering the moisture available and the high temperatures. Smut was a common occurrence in the trials where the stresses were most severe. Ear husks also failed to fully develop and cover the ear in many of the trials, especially for some varieties. Lodging is frequently quite serious when plants have been subjected to stress. This was not a problem in the trials harvested but was quite evident at the Southeast Farm.

All trials were seeded after any killing frost occurred in the spring. A killing frost did not occur in the fall until October 1 or later. Even after the initial frost the stalks were still green and functional until mid-October. The absence of a killing frost until this late in the season permitted corn that had been set back by the drouth to go ahead and produce some good quality grain. The quality

Table 2. Laboratory analysis, soil classification and fertilizer applied to the 1975 corn performance trial fields

Area	Soil Classification	% O.M.	P lb/A	K lb/A	pH	Fertilizer applied: Preparation or method	N	P	K
B2	Agar SiCl	2.9	22	1000	7.2	plowed and disced, oats	-	-	-
C1-dry	Beotia SiCl	3.0	43	940	7.4	disced, chisled & harrowed	40	0	0
C1-irr.	Beotia SiCl	3.3	68	880	7.1	disc, chiseled & harrowed	130	0	0
C2	Highmore SiCl	3.1	21	1000	6.5	plowed and disced	-	-	-
D1	Forman SiL	3.4	17	470	7.1	plowed & disced (soybeans)	-	-	-
D4	Clarno SiCl	2.8	6	710	6.6	plowed & disced (soybeans)	70	-	-
E	Egan SiCl	3.6	74	1000	6.1	plowed & disced	80	40	20

Table 3. Temperature and precipitation data for the 1975 corn growing season in South Dakota

Location and District	Month	Month mean temp.	Departure from normal	Av. departure	Days 90°+	Month total	Departure from normal	Total departure
		Temperature, degrees F.				Precipitation, inches		
Onida 4NW[a]	May	59.0	b			1.90	b	
	June	67.3			2	3.69		
B2	July	78.1			22	1.49		
	Aug.	73.3			10	2.28		
	Sept.	60.9			1	1.24		
	Oct.	51.1				0.74		
	First freeze Oct. 10 - 23°					11.34		
Redfield 6E	May	58.8	b			2.29	b	
	June	66.7			2	M		
C1	July	76.6			22	T		
	Aug.	71.6			11	1.97		
	Sept.	63.0			3	0.61		
	Oct.	50.7			1	1.15		
	First freeze Oct. 1 - 26°							
Milbank	May	60.0	+2.3			1.16	-1.89	
	June	61.4	+1.1		5	3.15	-1.16	
D1	July	77.6	+4.8		23	0.25	-2.57	
	Aug.	71.8	+0.3		7	2.11	-0.46	
	Sept.	59.3	-1.8		2	1.82	+0.23	
	Oct.	52.7	+1.2	+1.3		1.43	-0.12	-6.43
	First freeze Oct. 17 - 28°					9.92		
Brookings	May	58.2	+2.0			1.25	-1.95	
	June	64.1	-1.6		2	3.91	-0.67	
D3	July	73.6	+2.5		17	0.77	-2.07	
	Aug.	69.1	-0.5		2	4.64	+1.78	
	Sept.	54.3	-4.7			4.01	+1.77	
	Oct.	47.2	-2.3	-0.8		0.48	-0.54	-1.68
	First freeze Oct. 1 - 30°					15.06		
Bridgewater	May	62.1	b		2	1.67	b	
	June	68.8			3	5.37		
D4	July	78.1			25	0.40		
	Aug.	73.9			9	7.33		
	Sept.	60.3			4	3.22		
	Oct.	53.4				0.51		
	First freeze Oct. 1 - 30°					18.50		
Centerville	May	60.6	-0.1		1	2.30	-1.18	
6 SE	June	66.6	-3.6		1	4.70	0.00	
	July	76.6	+1.3		21	0.31	-2.80	
E	Aug.	71.4	-2.5		6	6.70	+3.66	
	Sept.	57.0	-6.7		2	2.71	-0.07	
	Oct.	52.6	-0.6	-2.0		0.28	-1.37	-1.76
	First freeze Oct. 1 - 29°					17.00		

a - All data based upon reports of Monthly Climatological Data, U.S. Department of Commerce, Ashville, NC.

b - Departures are figured from 30 years data. This station has not been in operation for that long a period.

varied from location to location and between varieties. The yields were higher than expected in some areas. In spite of the very poor yields in many of the production areas, there were areas along the eastern border of South Dakota that received moisture and warm temperatures in the proper combinations and produced over 150 bushels per acre yields.

Hybrid Entry Procedure

Hybrids entered are submitted by participating commercial concerns and they designate the locations where their entries are to be grown. Hybrids registered with the South Dakota State Department of Agriculture prior to March 20, 1975 were eligible for entry. A fee was charged for each entry in each area except for hybrids included by Agricultural Experiment Station personnel. Either closed or open pedigree hybrids were eligible and each was allowed to be entered once in each adaptation area. No more than seven entries from one concern were accepted for each location. A listing of the firms, with brands and varieties entered, is presented in Table 17.

In prior years check entries used were released hybrids of the South Dakota Agricultural Experiment Station. A change was made in 1975 to include hybrids made up of released inbreds commonly used by the industry. Several of these were included in each trial as Check 1, 4, 7, etc. The identities are as follows:

Check 1	B73 x Mo17Ht	Check 5	(W64AHt x W117Ht)(W153R x A632Ht)
Check 2	A632Ht x A619Ht	Check 6	(A641 x A635)(W153R)
Check 3	W153R x A632Ht	Check 7	A641 x Co109
Check 4	W64AHt x W117Ht	Check 8	A632Ht x Co109

The hybrids included are the joint effort of the Plant Science Department and Clyde Black & Sons, Inc., Ames, Iowa. Seed was provided by Clyde Black & Son, Inc.

Several experimental hybrids have been included by Agricultural Experiment Station personnel for several years and have shown promise. The pedigrees of the hybrids included over a period of years is listed below:

SDAES Ex 82	(W64AxSD10)(W117)	SDAES PP147	(SD10xA632)(SDP232xSDP2)
SDAES Ex 94	(A632xB14A)(SD23xSD43A)	SDAES PP171	(SD10xA632)(SDP2)
SDAES Ex 94A	(A632xB14A)(SD23xSD43B)	SDAES PP183	(M14xSDP236m)(W117)
SDAES Ex 96	(SD18xW64A)(W117)	SDAES PP198	(W64AxSD10)(SDP232xW117)
SDAES Ex 100	(W117xSD9)(SD24)	SDAES PP199	(SDP236mxSDP2)(A632)
SDAES Ex 102	(W117xSD25)	SDAES PP204	(SDP309xA632)
SDAES Ex 103	(SD25xA632)	SDAES PP204A	(SDP236mxSDP309)(A632)
SDAES Ex 104	(W64AxSD17A)		
SDAES Ex 105	(SD22xA532)		

Experimental Procedure

The entries included in each trial were seeded in four or more replications. 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 the plot size and number of replications. The plot size, populations and related data are presented in Table 4.

Recommended organic phosphate insecticides were used at all locations for corn rootworm control. A recommended short-residue preemergence herbicide was banded over the row at seeding at all but one site. Atrazine was sprayed over the entire plot area at Brookings for grassy weed control.

The trials were seeded as drilled corn using 31-cell cone seeders mounted above commercial flexi-planter units with double disc openers. The planting rate was 15% more kernels than the number of plants desired. Plots were thinned to the desired stand where necessary. The stands at Redfield were lower than desired because of severe soil crusting that occurred just as the kernels were germinating and emerging. The dry weather contributed to some decline in desired populations but in the face of the severe drouth the reduction was perhaps more beneficial than realized. Where two populations were grown (Table 4) it was felt that the lower levels might be favored in the presence of the severe stress that occurred in 1975. However, no significant differences were found, even at the Southeast Farm where the lower population has been best over the years.

Table 4. Field methods for the 1975 corn trial sites

Area	Table No.	Number of Replications Harvested	Method of Seeding	Population Obtained	Row Number of	Row Width, Inches	Row Length, Feet
B2	16	4	drilled	10,700	1	40	36
C1-dry	10	4	drilled	11,275	1	36	36
C1-irr.	11	3	drilled	16,250	1	36	32
C1-irr.	11	3	drilled	19,550	1	36	32
C2	--	---	drilled	10,300	1	40	36
D1	14	3	drilled	11,940	1	38	36
D1	14	3	drilled	15,535	1	38	36
D3	6	3	drilled	12,140	1	36	32
D3	6	3	drilled	16,065	1	36	32
D4	8	3	drilled	12,970	1	38	36
D4	8	---	drilled	15,685	1	38	36
E	--	---	drilled	15,805	1	30	32
E	--	---	drilled	19,315	1	30	32

a - No significant differences between populations; means reported in tables.

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 variations were great in some of the 1975 trials.

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 evaluation of entries.

Lodging. Root lodging was not a serious problem in 1975. Stalk lodging was also minimal, even with the stresses caused by the severe drought. The trial at the Southeast Farm was not harvested but severe lodging was quite apparent when the decision was reached to abandon the trials.

Dropped ears were not a common problem, in spite of the high winds early in October. No effort was made to include these ears as it is a penalty of machine harvesting in commercial operations.

Table 5. Harvest methods and moisture determinations for the 1975 corn trials

Area	Harvest method	Samples used for Moisture Determinations	Moisture Determined
B2	Hand picked	Ear sections	Oven-dried
C1-dry	Picker-sheller	Shelled corn	Electronically
C1-irr.	Picker-sheller	Shelled corn	Electronically
C2	Hand picked	Ear sections	Electronically
D1	Picker-sheller	Shelled corn	Electronically
D3	Picker-sheller	Shelled corn	Electronically
D4	Picker-sheller	Shelled corn	Electronically

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. To the cash grain operator who does not turn livestock into the field after harvest, the better stalks stand so that the ears will go through his harvesting machinery, the higher will be his return per acre. Because of the importance of the three factors--yield, dry matter 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:

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

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 Plains: i.e., limited frost-free growing periods, limited precipitation and higher summer temperatures. Corn hybrids that provide satisfactory yields of harvestable corn that can be stored without additional costly handling are desireable. The performance score provides information on these factors in a weighted fashion.

In choosing a hybrid, first check those yielding 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 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. 1975 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
SDKOTA TS-67	N 2X	100.7	0.0	1.1	0.0	29.4	1
TROJAN TXS 102	N 2X	99.1	0.0	3.2	0.0	29.4	3
ACCO UC 3301	N 2X	97.7	0.0	1.1	0.0	29.9	4
SECURITY SS 105	N 2X	97.0	0.0	2.1	0.0	28.7	5
SDKOTA SS-51	N M2X	96.9	0.0	2.1	0.0	24.9	2
ASGROW RX 58	N 2X	94.9	0.0	1.1	0.0	28.9	6
MC CURDY MSX 44A	N 2X	94.9	0.0	1.1	0.0	28.9	6
CURTIS A201	N 2X	94.4	0.0	1.6	0.0	29.5	8
CARGILL 863	N 2X	92.1	0.0	0.5	0.0	28.6	9
FUNKS G-4288	N 3X	91.0	0.0	1.6	0.0	27.2	10
WESTERN RX-55	N 2X	90.6	0.0	1.6	0.0	28.8	11
ASGROW RX 64	N 2X	89.5	0.0	1.6	0.0	31.1	16
O'S GOLD SX1100	N 2X	89.4	0.0	1.6	0.0	28.0	13
CURRY SC-142	N 2X	88.2	0.0	1.6	0.0	29.6	17
SECURITY SS 105W	N M2X	86.0	0.0	1.1	0.0	32.5	24
FUNKS G-4444	N 2X	87.4	0.0	2.6	0.0	28.9	20
ASGROW RX 53	N 2X	87.3	0.0	0.0	0.0	25.6	12
PAYCO SX 365	N 2X	87.3	0.0	0.6	0.0	29.4	19
SDAES PP 204A	N M2X	87.0	0.0	0.0	0.0	28.0	15
MC CURDY MSX 42	N 2X	86.4	0.0	0.0	0.0	29.2	23
SDKOTA SS-59A	N M2X	84.7	0.0	0.0	0.0	26.4	22
SDAES EX 74	N 4X	83.9	0.0	0.5	0.0	31.7	36
SDAES PP 204	N 2X	83.3	0.0	0.5	0.0	30.1	34
P-A-G SX 210	N 2X	83.1	0.0	1.6	0.0	30.3	37
PAYCO SX 775	N 2X	83.0	0.0	0.0	0.0	28.5	30
PIONEER 3780	N 2X	82.6	0.0	0.5	0.0	28.3	32
FUNKS G-4366	N 3X	82.5	0.0	0.0	0.0	31.4	42
CHECK =4	N 2X	82.4	0.0	0.0	0.0	22.8	18
O'S GOLD SX900	N M2X	82.3	0.0	0.0	0.0	21.8	14
CARGILL 434	N 3X	82.1	0.0	1.1	0.0	30.9	44
MC CURDY MSP 333	N 3X	81.9	0.0	0.5	0.0	29.3	39
TROJAN TXS 94	N 2X	81.6	0.0	0.0	0.0	22.5	21
ACCO UC 4201	N 2X	81.1	0.0	0.5	0.0	32.2	50
ACCO U 356	N 3X	80.9	0.0	0.6	0.0	32.9	51
CURRY SC-146	N 2X	80.7	0.0	3.8	0.0	22.3	25
FUNKS G-4321	N 2X	80.4	0.0	1.6	0.0	27.4	41
CARGILL 830	N 2X	79.3	0.0	1.1	0.0	22.2	28
MC CURDY MSX 24	N 2X	79.2	0.0	2.2	0.0	21.2	26
PAYCO SX 680	N 2X	79.2	0.0	0.0	0.0	22.6	29
TROJAN TXS 99	N 2X	78.8	0.0	0.5	0.0	21.6	27
ASGROW RX 42	N 2X	78.6	0.0	0.5	0.0	23.7	33
NORTHRUP-KING PX20	N 2X	78.3	0.0	2.2	0.0	22.1	31
PIONEER 3785	N 2X	77.9	0.0	0.5	0.0	23.3	35
PRIDE 5525	N 2X	77.5	0.0	0.0	0.0	29.3	52
PIONEER 3780R	N M2X	77.5	0.0	0.5	0.0	26.2	46
P-A-G SX 67	N 2X	77.4	0.0	0.5	0.0	23.3	38
NORTHRUP-KING PX529	N 3X	77.0	0.0	2.2	0.0	28.0	54
CARGILL 845	N 2X	77.0	0.0	0.5	0.0	25.3	45
WEATHERMASTER EPX5P	N 2X	76.4	0.0	0.0	0.0	30.3	58
MC CURDY MSX 46	N 2X	76.4	0.0	0.0	0.0	29.9	57
ACCO UC 1901	N 2X	75.7	0.0	0.0	0.0	22.7	43
NORTHRUP-KING PX32	N 2X	75.7	0.0	0.0	0.0	28.4	56
P-A-G SX 177	N 2X	75.5	0.0	1.6	0.0	20.8	40
MC CURDY 73-9	N M2X	75.5	0.0	0.0	0.0	31.4	61
ACCO U 322	N 3X	75.4	0.0	0.5	0.0	23.6	47
O'S GOLD SX5500A	N 2X	75.1	0.0	1.1	0.0	35.5	69
SECURITY SS 108	N 2X	74.2	0.0	0.0	0.0	31.4	64
PRIDE 3315	N 2X	74.2	0.0	0.0	0.0	25.0	53
MC CURDY 36M	N M2X	74.2	0.0	0.5	0.0	29.8	62
SDAES PP 199	N 3X	73.7	0.0	1.1	0.0	22.2	49
FUNKS G-4141	N 2X	72.9	0.0	1.1	0.0	20.6	48

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
SUKUTA TS-49	N 2X	72.5	0.0	0.0	0.0	23.7	55
TROJAN TXS 103A	N 2X	72.5	0.0	1.1	0.0	35.6	75
PIONEER 3506	N 3X	72.5	0.0	0.0	0.0	29.2	66
PRIDE 4404	N 2X	70.5	0.0	0.5	0.0	30.0	70
SDAES EX 96	N 3X	70.5	0.0	0.0	0.0	23.8	59
ACCO U 348	N 3X	69.2	0.0	0.5	0.0	28.9	72
FUNKS G-4180	N 3X	68.9	0.0	0.0	0.0	21.8	60
CHECK =3	N 2X	67.7	0.0	2.6	0.0	21.2	63
NORTHRUP-KING PX466	N 3X	67.3	0.0	0.5	0.0	22.4	67
SDAES EX 94A	N 4X	66.8	0.0	0.0	0.0	33.1	77
PIONEER 3955	N 3X	65.9	0.0	0.0	0.0	20.5	65
CHECK =5	N 4X	65.6	0.0	1.6	0.0	23.5	71
SDAES PP 183	N 3X	65.3	0.0	2.2	0.0	22.3	68
WEATHERMASTER EPX2A	N 2X	63.2	0.0	0.5	0.0	22.0	74
O'S GOLD SX2200A	N 2X	62.9	0.0	0.0	0.0	35.8	78
STANDARD KC 204	N 2X	62.7	0.0	0.0	0.0	21.3	73
ASGROW RX 70A	N 2X	61.2	0.0	0.0	0.0	34.0	79
CHECK =7	N 2X	56.5	0.0	1.6	0.0	18.0	76
Mean		**79.4**		**0.8**		**27.0**	
CV = 11.4 %	**LSD (.05)**	**10.2**					

Table 7. Area D3 2-, 3-, and 4-year yield, moisture and stalk lodging averages of corn hybrids, 1972-1975

	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
ACCO U 348			56			1			23
ACCO UC 1901			60			1			19
ACCO UC 3301	90	80	72	5	5	1	22	23	25
ASGROW RX 42			63			0			19
ASGROW RX 53			69			1			20
ASGROW RX 56			72			2			24
CARGILL 434			61			3			24
CARGILL 863		78	70		3	2		21	22
CURRY SC-142			70			3			24
CURTIS A201		86	75		4	1		23	24
FUNK'S G-4180		70	57		2	0		18	18
FUNK'S G-4286		77	67		6	1		21	22
FUNK'S G-4321		75	62		3	2		21	22
FUNK'S G-4366		73	63		4	2		23	25
FUNK'S G-4444		81	68		3	2		23	24
MCCURDY MSX 24			66			1			18
MCCURDY MSX 44A			71			1			23
MCCURDY MSX 46			61			1			24
MCCURDY 36M		71	58		2	0		22	24
O'S GOLD SX 1100		83	73		2	1		21	22
O'S GOLD SX 2200A			49			0			28
O'S GOLD SX 5500A			53			1			34
P-A-G SX 67	87	75	66	2	2	0	20	19	20
PAYCO SX 680			66			0			19
PAYCO SX 775	88	76	67	1	2	1	22	22	23
PAYCO SX 865	93	80	69	3	3	1	24	23	24
PIONEER 3780	89	75	64	3	4	1	21	20	22
PIONEER 3785		78	66		2	1		19	19
PRIDE 4404			54			0			24
SDAES EX 94		76	60		1	0		23	25
SDAES EX 96		70	56		3	0		19	20
SUKUTA SS-51			75			1			20
SUKUTA SS-59A			66			0			21
SUKUTA TS-49		77	61		0	0		19	19
SUKUTA TS-67		88	77		2	1		23	24
TROJAN TXS 94	80	67	53	1	1	0	18	16	15

Table 8. 1975 Corn Performance Trial, Area D4, Clifford Hofer Farm, Bridgewater

BRAND AND VARIETY	TYPE AND CROSS	YIELD B/A	PCT ROOT LODGED	PCT STALK LODGED	PCT EARS DROPPED	PERCENT MOISTURE	PERFORMANCE SCORE RATING
DISCO SX 30	N 2X	57.3	0.0	1.0	0.0	23.4	1
FUNKS G-4445	N 2X	53.9	0.0	0.0	0.0	22.5	2
O'S GOLD SX 5500A	N 2X	52.0	0.0	0.9	0.0	23.4	3
NORTHROP-KING PX610A	N 3X	49.0	0.0	0.9	0.0	21.4	5
TROJAN TXS 105A	N 2X	48.6	0.0	2.7	0.0	19.6	4
SECURITY SS 108	N 2X	44.5	0.0	0.0	0.0	19.0	6
FUNKS G-4449	N 2X	44.1	0.0	1.7	0.0	21.7	8
TROJAN TXS 111	N 2X	44.1	0.0	0.0	0.0	19.7	7
CARGILL 863	N 2X	43.2	0.0	3.5	0.0	19.3	9
MC CURDY 72-17	N M2X	42.4	0.0	0.0	0.0	22.2	10
WESTERN KX-64	N 2X	42.2	0.0	0.9	0.0	23.1	12
ACCO U 370	N 3X	41.5	0.0	0.9	0.0	19.7	11
ASGROW RX 81	N 2X	41.3	0.0	1.0	0.0	20.9	13
SECURITY SS 109	N 2X	41.1	0.0	0.0	0.0	21.9	14
FUNKS G-4366	N 3X	40.6	0.0	2.8	0.0	20.1	15
ACCO UC 3301	N 2X	40.2	0.0	3.6	0.0	22.3	19
NORTHROP-KING PX606	N 3X	39.6	0.0	0.0	0.0	20.7	17
SOKOTA TS-77	N 2X	39.2	0.0	0.9	0.0	19.1	16
MC CURDY 72-13	N 2X	38.6	0.0	1.9	0.0	17.2	18
TROJAN TXS 106A	N 2X	38.5	0.0	1.7	0.0	18.0	20
CURRY SC-143	N 2X	37.4	0.0	1.7	0.0	19.1	24
ASGROW RX 60	N 2X	37.3	0.0	0.9	0.0	18.3	21
PRIDE 5525	N 2X	37.0	0.0	2.7	0.0	17.3	23
CARGILL 434	N 3X	36.5	0.0	2.8	0.0	20.1	27
TROJAN TXS 102	N 2X	36.4	0.0	11.6	0.0	20.4	31
CARGILL 449	N 3X	36.3	0.0	1.0	0.0	19.7	26
O'S GOLD SX 1100	N 2X	36.3	0.0	2.6	0.0	20.5	28
MC CURDY MSX 46	N 2X	36.3	0.0	0.0	0.0	19.0	25
PIONEER 3965	N 2X	36.1	0.0	0.0	0.0	14.9	22
PIONEER 3535	N 2X	35.8	0.0	0.0	0.0	20.1	29
SOKOTA SS-67	N M2X	35.3	0.0	2.6	0.0	21.0	33
ASGROW RX 70A	N 2X	34.8	0.0	1.9	0.0	19.7	34
CHECK =3	N 2X	34.7	0.0	2.5	0.0	17.4	30
NORTHROP-KING PX32	N 2X	34.6	0.0	1.9	0.0	18.5	32
FUNKS G-4321	N 2X	34.5	0.0	4.5	0.0	19.5	35
WILSON 1017	N 2X	34.0	0.0	0.9	0.0	21.6	38
WILSON 1500	N 2X	33.9	0.0	1.0	0.0	20.9	36
ACCO UC 4201	N 2X	33.6	0.0	0.0	0.0	20.1	37
PAYCO SX 865	N 2X	33.3	0.0	8.1	0.0	21.6	39
DISCO SX1104	N 2X	32.2	0.0	1.8	0.0	21.5	42
ACCO UC 4601	N 2X	32.2	0.0	8.8	0.0	23.4	46
CHECK =5	N 4X	31.6	0.0	6.3	0.0	17.6	41
O'S GOLD SX2200A	N 2X	31.5	0.0	2.6	0.0	18.5	40
SOKOTA TS-67	N 2X	31.3	0.0	3.6	0.0	21.0	43
FUNKS G-4268	N 3X	30.6	0.0	2.8	0.0	19.2	44
SECURITY SS 105W	N M2X	30.6	0.0	0.0	0.0	22.1	48
MC CURDY MSP 333	N 3X	30.3	0.0	1.0	0.0	19.0	45
P-A-G SX 397	N 2X	30.3	0.0	0.0	0.0	20.1	47
WESTERN KX-611	N 3X	30.2	0.0	0.0	0.0	21.2	49
P-A-G SX 210	N 2X	29.8	0.0	2.2	0.0	19.2	50
P-A-G SX 424	N 2X	29.1	0.0	0.9	0.0	21.0	51
SDACS PP204A	N M2X	28.4	0.0	0.0	0.0	21.1	52
ASGROW RX 56	N 2X	28.3	0.0	0.0	0.0	22.3	54
WILSON 1016	N 2X	28.3	0.0	1.9	0.0	21.4	53
CARGILL 890	N 2X	27.7	0.0	0.0	0.0	21.0	55
ACCO UC 3601	N 2X	27.6	0.0	0.0	0.0	22.4	56
MC CURDY 444	N 2X	26.6	0.0	8.7	0.0	20.1	60
PIONEER 3543	N 3X	26.4	0.0	0.9	0.0	20.5	57
CHECK =2	N 2X	26.2	0.0	3.5	0.0	21.0	61
NORTHROP-KING PX50A	N 2X	26.2	0.0	1.0	0.0	21.1	59
NORTHROP-KING PX65	N 2X	26.1	0.0	0.0	0.0	20.3	58

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
ACCO U 378	N 3X	25.3	0.0	0.0	0.0	25.4	64
P-A-G SX 69	N 2X	25.5	0.0	3.5	0.0	21.2	63
FUNKS G-4444	N 2X	25.4	0.0	3.4	0.0	20.2	62
SDAES PP 204	N 2X	24.3	0.0	0.0	0.0	21.4	65
CURTIS A201	N 2X	23.7	0.0	6.5	0.0	22.0	67
CURRY TC-344	N 3X	22.4	0.0	2.7	0.0	21.8	70
PRIDE R-545	N 3X	22.3	0.0	0.0	0.0	18.0	66
WILSON 2317	N 2X	21.6	0.0	0.0	0.0	17.7	68
MC CURDY 3 X 3	N 2X	21.3	0.0	0.9	0.0	21.7	71
MC CURDY MSP 111B	N 3X	21.1	0.0	4.7	0.0	16.8	69
PRIDE 5565	N 2X	20.9	0.0	0.9	0.0	20.5	72
CURTIS 443	N 2X	19.9	0.0	4.3	0.0	20.2	73
CURRY SC-142	N 2X	19.1	0.0	5.2	0.0	21.8	74
DISCO SX 16A	N 2X	15.5	0.0	1.9	0.0	21.7	75
Mean		**33.4**		**2.1**		**20.4**	
CV = 37.9 %	**LSD (.05)**	**17.6**					

Table 9. Area D4 2-, 3-, and 4-year yield, moisture and stalk lodging averages of corn hybrids, 1972-1975

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
ACCO U 370			27			1			22
ACCO U 378	54	41	22	2	2	0	29	27	28
ACCO UC 3301	56	46	30	8	10	2	25	24	25
ACCO UC 4601			25			4			26
ASGROW RX 56			24			1			24
ASGROW RX 60			24			0			21
DISCO SX 1104			25			2			23
FUNK'S G-4321		43	28		8	4		22	22
FUNK'S G-4366		46	32		6	1		22	23
FUNK'S G-4444		40	18		4	2		23	23
FUNK'S G-4445			43			3			25
MCCURDY MSP 111B		39	23		5	3		19	19
MCCURDY MSX 44A			21			5			23
MCCURDY MSX 46			27			0			22
MCCURDY 3X3	52	40	20	5	7	0	26	24	24
MCCURDY 72-17			31			0			25
O'S GOLD SX 1100		43	24		6	3		23	23
O'S GOLD SX 2200A			21			1			22
O'S GOLD SX 5500A			30			0			27
PAYCO SX 865		42	22		10	5		24	24
PIONEER 3535			30			0			24
PIONEER 3543			25			0			22
SOKOTA SS-67			26			2			24
SOKOTA TS-67			22			3			24
TROJAN TXS 102	58	42	23	7	8	6	24	23	24
TROJAN TXS 108A		50	27		4	1		23	22
TROJAN TXS 111			28			0			23
WILSON 1016	53	40	23	6	7	2	24	23	23
WILSON 1017		45	22		6	1		24	24
WILSON 1500			28			1			24
WILSON 2317			19			0			22

Table 10. 1975 Corn Performance Trial, Area C1(dryland), James Valley Research Farm, Redfield

BRAND AND VARIETY	TYPE AND CROSS	YIELD BU/A	PCT ROOT LODGED	PCT STALK LODGED	PCT EARS DROPPED	PERCENT MOISTURE	PERFORMANCE SCORE RATING
WESTERN KX-55	N 2X	78.2	0.0	0.0	0.0	23.2	2
SOKOTA SS-67	N M2X	75.4	0.0	0.0	0.0	22.6	3
ACCO UC 1151	N 2X	75.4	0.0	0.0	0.0	17.7	1
TROJAN TXS 102	N 2X	74.3	0.0	0.0	0.0	23.4	4
FUNKS G-4321	N 2X	73.0	0.0	0.0	0.0	21.5	5
PAYCO SX 365	N 2X	72.9	0.0	0.0	0.0	23.7	7
FUNKS G-4444	N 2X	72.4	0.0	0.0	0.0	24.2	9
TROJAN TXS 94	N 2X	71.6	0.0	1.7	0.0	20.2	6
SOKOTA TS-67	N 2X	70.7	0.0	0.0	0.0	23.5	14
SOKOTA SS-51	N M2X	70.2	0.0	0.9	0.0	15.5	8
PAYCO SX 775	N 2X	69.7	0.0	0.0	0.0	20.1	10
PIONEER 3765	N 2X	69.2	0.0	0.0	0.0	19.3	11
ACCO UC 147	N 4X	68.6	0.0	1.8	0.0	18.1	12
SECURITY ST 95	N 3X	68.5	0.0	0.9	0.0	19.3	13
PAYCO SX 680	N 2X	68.2	0.0	0.9	0.0	19.5	15
CURTIS 4201	N 2X	67.8	0.0	0.0	0.0	24.8	21
CHECK =4	N 2X	67.6	0.0	0.0	0.0	20.3	17
SOARS PP 147	N 4X	67.0	0.0	0.0	0.0	18.0	16
ACCO UC 2301	N 2X	65.8	0.0	0.0	0.0	17.7	18
NORTHRUP-KING PX20	N 2X	65.3	0.0	0.0	0.0	17.3	19
PIONEER 3982A	N 2X	64.6	0.0	0.9	0.0	17.5	20
FUNKS G-4343	N 2X	62.9	0.0	0.0	0.0	22.2	25
FUNKS G-4288	N 3X	62.7	0.0	0.0	0.0	21.0	22
SOARS EX 104	N 2X	61.7	0.0	0.0	0.0	20.3	26
TROJAN TXS 99	N 2X	61.6	0.9	0.0	0.0	16.0	23
SOARS PP 199	N 3X	60.7	0.0	0.0	0.0	19.5	27
TROJAN TXS 92	N 2X	60.4	0.0	0.9	0.0	16.8	24
PIONEER 3965	N 3X	60.1	0.0	0.0	0.0	17.7	28
NORTHRUP-KING PX32	N 2X	59.7	0.0	0.0	0.0	20.9	32
PRIDE 3315	N 2X	59.7	0.0	0.0	0.0	19.9	30
CURRY TC-33P	N 3X	58.7	0.0	0.0	0.0	16.9	29
ACCO U 322	N 3X	57.9	0.0	0.0	0.0	19.7	33
ACCO UC 1131	N 2X	57.7	0.0	0.9	0.0	16.6	31
SOARS EX 103	N 2X	57.4	0.0	0.0	0.0	19.3	34
CHECK =5	N 4X	57.1	0.0	0.0	0.0	19.7	37
PRIDE 5-200A	N 2X	57.0	0.0	0.9	0.0	18.8	35
FUNKS G-4141	N 2X	56.6	0.0	0.0	0.0	17.4	36
SECURITY ST 105	N 3X	55.4	0.0	0.0	0.0	21.5	40
ACCO U 334	N 3X	54.1	0.0	0.0	0.0	19.5	41
SOARS PP 198	N 4X	53.7	0.0	0.0	0.0	17.7	39
SOARS PP 171	N 3X	53.5	0.0	0.0	0.0	16.8	38
PRIDE 3525	N 2X	52.3	0.9	0.0	0.0	22.0	44
PIONEER 3780B	N M2X	52.8	0.0	0.0	0.0	19.8	42
CURRY SC-144	N 2X	50.9	0.0	0.0	0.0	20.9	45
CHECK =8	N 2X	50.7	0.0	0.0	0.0	16.0	43
PRIDE 4404	N 2X	49.5	0.3	0.0	0.0	21.3	48
PIONEER 3596	N 3X	49.0	0.0	0.0	0.0	19.5	46
NORTHRUP-KING PX460	N 3X	47.9	0.0	0.0	0.0	18.0	47
NORTHRUP-KING PX442	N 4X	45.0	0.0	1.0	0.0	17.6	49
Mean		**62.1**		**0.2**		**19.7**	
CV = 15.1 %	**LSD (.05)**	**13.1**					

Table 11. 1975 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
MC CURDY MSX 44A	N 2X	142.5	0.0	0.0	0.0	24.0	1
TROJAN TXS 102	N 2X	137.3	0.0	0.0	0.0	23.5	2
SECURITY SS 105	N 2X	136.0	0.0	0.4	0.0	23.7	3
CHECK =2	N 2X	135.1	0.0	0.0	0.0	23.4	4
WESTERN KX-55	N 2X	134.4	0.0	0.4	0.0	24.5	5
PIONEER 3780B	N M2X	129.8	0.0	0.0	0.0	19.6	7
FUNKS G-4444	N 2X	128.6	0.0	0.0	0.0	23.4	8
SOVES EX 105	N 2X	126.2	0.0	1.1	0.0	18.6	6
CURTIS A201	N 2X	126.3	0.0	0.8	0.0	25.0	15
SOKOTA TS-67	N 2X	125.8	0.0	0.0	0.0	23.9	13
DISCO SX 16	N 2X	125.6	0.0	0.0	0.0	23.5	12
TROJAN TXS 94	N 2X	124.9	0.0	0.4	0.0	21.3	10
SOKOTA SS-51	N M2X	124.3	0.0	0.4	0.0	19.5	9
MC CURDY MSX 46	N 2X	123.2	0.0	0.0	0.0	23.4	16
CURRY SC-142	N 2X	121.6	0.0	0.4	0.0	24.2	25
SECURITY SS 99	N M2X	121.6	0.0	0.0	0.0	19.0	11
ACCO UC 1151	N 2X	121.4	0.0	0.8	0.0	19.4	14
FUNKS G-4288	N 3X	120.8	0.0	0.8	0.0	21.1	17
ACCO UC 2901	N 2X	120.4	0.0	1.3	0.0	20.8	19
D'S GOLD SX1100	N 2X	120.2	0.0	0.0	0.0	23.4	28
MC CURDY 36M	N M2X	119.8	0.0	1.6	0.0	23.6	32
FUNKS G-4321	N 2X	119.5	0.0	0.0	0.0	21.9	23
PAYCO SX 680	N 2X	119.1	0.0	0.0	0.0	21.1	22
D'S GOLD SX 900	N M2X	118.4	0.0	0.8	0.0	19.2	20
PAYCO SX 775	N 2X	116.1	0.0	0.4	0.0	20.4	24
PRIDE 3315	N 2X	117.7	0.0	0.5	0.0	19.0	21
PRIDE 4404	N 2X	117.6	0.0	0.0	0.0	21.9	31
FUNKS G-4141	N 2X	117.5	0.0	0.0	0.0	18.2	18
PIONEER 3785	N 2X	117.5	0.0	0.9	0.0	21.4	29
PIONEER 3730	N 2X	117.4	0.0	0.0	0.0	20.7	27
CHECK =3	N 2X	117.2	0.0	2.5	0.0	19.4	26
TROJAN TXS 105A	N 2X	115.4	0.0	0.0	0.0	21.7	35
MC CURDY MSP 333	N 3X	115.0	0.0	0.8	0.0	20.9	34
ACCO UC 3201	N 2X	114.8	0.0	0.0	0.0	25.2	38
ACCO U 322	N 3X	114.6	0.0	0.9	0.0	19.8	33
NORTHRUP-KING PX 20	N 2X	113.7	0.0	0.0	0.0	18.1	30
FUNKS G-4180	N 3X	112.3	0.0	0.4	0.0	20.8	36
PRIDE 5525	N 2X	110.5	0.0	0.0	0.0	23.3	41
SOKOTA SS-67	N M2X	110.5	0.0	0.4	0.0	23.9	43
SOKOTA TS-49	N 2X	110.3	0.0	0.9	0.0	21.6	40
MC CURDY MSX 24	N 2X	108.8	0.0	2.2	0.0	19.3	39
NORTHRUP-KING PX32	N 2X	108.7	0.0	0.9	0.0	21.8	42
PIONEER 3965	N 2X	106.6	0.0	0.4	0.0	18.1	37
MC CURDY MSP 111P	N 3X	105.8	0.0	0.4	0.0	20.0	44
SOKOTA TS-46	N 2X	105.8	0.0	1.4	0.0	20.1	46
PRIDE R-200A	N 2X	105.3	0.0	0.9	0.0	19.7	45
ACCO UC 2301	N 2X	103.5	0.0	0.5	0.0	19.6	47
SECURITY SS 97	N 2X	102.8	0.0	0.0	0.0	22.0	49
ACCO UC 1131	N 2X	101.7	0.0	2.7	0.0	17.2	48
NORTHRUP-KING PX448	N 3X	98.8	0.0	1.3	0.0	19.0	50
CHECK =5	N 4X	96.9	0.0	0.4	0.0	21.1	51
NORTHRUP-KING PX466	N 3X	95.4	0.0	0.9	0.0	20.2	52
MC CURDY 73-9	N M2X	83.8	0.0	0.4	0.0	23.6	53
CURRY TC-343	N 3X	74.0	0.0	0.4	0.0	24.7	54
Mean		**116.1**		**0.5**		**21.4**	
CV = 14.4 %	**LSD (.05)**	**19.0**					

Table 12. Area C1 (dryland) 2-, 3-, and 4-year yield, moisture and stalk lodging averages of corn hybrids, 1972-1975

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
ACCO UC 147	67	64	54	2	2	2	19	18	17
ACCO U 334		60	47		1	0		20	20
ACCO UC 1151		65	57		1	0		19	19
ACCO UC 2301			55			0			18
CURRY SC-144			42			0			23
CURTIS A201		68	55		0	0		25	26
FUNK'S G-4288			55			1			22
FUNK'S G-4321			56			1			22
FUNK'S G-4444			58			1			24
PAYCO SX 680			54			0			18
PAYCO SX 775	68	64	49	1	0	0	22	21	20
PIONEER 3785			58			0			21
PIONEER 3932A			46			1			18
PRIDE 4404			44			0			20
SDAES PP 147	61	60	54	1	1	1	19	18	17
SDAES PP 171		53	45		0	0		17	15
SDAES PP 198			47			9			16
SDAES PP 199			50			0			18
SOKOTA SS-67			58			0			25
TROJAN TXS 92		57	46		1	1		17	16
TROJAN TXS 94	67	59	47	1	1	1	21	19	18

Table 13. Area C1 (irrigated) 2-, 3-, and 4-year yield, moisture and stalk lodging averages of corn hybrids, 1972-1975

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
ACCO UC 1151		114	104		1	0		19	18
ACCO UC 2301			94			1			19
ACCO UC 2901		113	106		1	1		21	20
ACCO UC 3201	109	114	100	1	0	0	26	23	21
CURRY SC-142	112	118	115	3	0	0	27	25	24
DISCO SX 16			112			0			24
FUNK'S G-4288			106			0			20
FUNK'S G-4321			102			0			23
FUNK'S G-4444			106			0			24
MCCURDY MSP 111B		106	94		0	0		20	19
MCCURDY MSP 24			103			1			18
MCCURDY MSP 333	110	114	97	2	0	0	24	22	21
MCCURDY MSP 44A			121			0			24
O'S GOLD SX 1100			109			0			24
O'S GOLD SX 900		106	103		2	1		19	18
PAYCO SX 680			105			0			20
PAYCO SX 775	108	111	99	5	0	0	22	21	19
PIONEER 3780	110	115	105	2	0	0	23	21	19
PIONEER 3785		100	100		1	0		20	19
PRIDE R-200A	107	107	98	4	1	0	22	20	20
PRIDE 4404			103			0			21
SOKOTA SS-51			114			0			18
SOKOTA SS-67			106			0			24
SOKOTA TS-49		108	99		1	0		22	21
TROJAN TXS 94	111	116	110	4	0	0	23	21	20

Table 14. 1975 Corn Performance Trial, Area D1, John Heaton Farm, Gary

BRAND AND VARIETY	TYPE AND CROSS	YIELD B/A	PCT ROOT LODGED	PCT STALK LODGED	PCT EARS DROPPED	PERCENT MOISTURE	PERFORMANCE SCORE RATING
PIONEER 3576	N 3X	83.0	0.0	0.5	0.0	20.7	1
SUKUTA SS-67	N M2X	76.9	0.0	0.0	0.0	21.7	3
TROJAN TXS 102	N 2X	76.4	0.0	0.0	0.0	23.1	4
FUNKS G-4321	N 2X	75.6	0.0	0.5	0.0	22.3	7
TROJAN TXS 99	N 2X	74.8	0.0	0.5	0.0	17.4	2
SUKUTA SS-69A	N M2X	74.7	0.0	0.5	0.0	21.2	8
SOAES EX 82	N 3X	73.1	0.0	0.5	0.0	17.2	5
SECURITY ST 95	N 3X	73.1	0.0	0.9	0.0	17.8	6
O'S GOLD SX1100A	N 2X	73.1	0.0	0.0	0.0	25.3	16
SUKUTA TS-67	N 2X	73.1	0.0	0.5	0.0	24.0	12
PIONEER 3780	N 2X	72.6	0.0	0.0	0.0	22.5	10
O'S GOLD SX1100	N 2X	72.6	0.0	0.5	0.0	22.5	11
CURTIS A201	N 2X	72.3	0.0	0.5	0.0	24.7	19
NORTHRUP-KING PX520	N 3X	72.2	0.0	0.0	0.0	23.1	15
SOAES EX 100	N 3X	71.7	0.0	0.5	0.0	22.0	14
ACCO UC 3301	N 2X	71.2	0.0	0.4	0.0	25.4	21
FUNKS G-4268	N 3X	71.1	0.0	0.5	0.0	22.2	18
CHECK =4	N 2X	70.4	0.0	0.5	0.0	19.7	13
NORTHRUP-KING PX48	N 2X	70.1	0.0	0.0	0.0	23.9	24
PAYCO SX 775	N 2X	70.0	0.0	0.0	0.0	22.6	20
PIONEER 3932A	N 2X	69.9	0.0	0.0	0.0	17.4	9
ACCO UC 1901	N 2X	69.1	0.0	0.5	0.0	18.6	17
SECURITY SS 97	N 2X	66.1	0.0	0.5	0.0	20.1	23
WESTERN KX-56	N 2X	67.9	0.0	0.0	0.0	23.5	29
SOAES EX 103	N 2X	67.4	0.0	0.0	0.0	21.3	28
CURTIS 521	N 2X	67.3	0.0	0.0	0.0	21.1	27
SECURITY SS 95	N M2X	66.3	0.0	0.9	0.0	16.8	22
FUNKS G-4166	N 3X	66.2	0.0	0.5	0.0	17.5	26
WESTERN KX-30	N M2X	65.5	0.0	0.5	0.0	15.9	25
PRIDE 3315	N 2X	64.4	0.0	0.0	0.0	20.0	31
PIONEER 3955	N 3X	63.3	0.0	0.9	0.0	16.7	30
FUNKS G-4444	N 2X	63.1	0.0	0.5	0.0	24.4	41
O'S GOLD SX900	N M2X	62.8	0.0	0.0	0.0	18.5	33
TROJAN TXS 92	N 2X	62.5	0.0	0.5	0.0	16.8	32
TROJAN TXS 94	N 2X	62.2	0.0	0.0	0.0	20.1	36
ACCO U 334	N 3X	61.5	0.0	0.0	0.0	21.9	42
FUNKS G-4141	N 2X	60.7	0.0	0.5	0.0	17.0	35
ACCO UC 2901	N 2X	60.3	0.0	1.4	0.0	21.5	47
SOAES PP 147	N 4X	60.3	0.0	1.4	0.0	16.5	37
PIONEER 3976	N 2X	59.8	0.0	0.5	0.0	15.0	34
SOAES PP 193	N 3X	59.8	0.0	0.9	0.0	17.5	38
PIONEER 3795	N 2X	59.6	0.0	0.9	0.0	19.3	44
SOAES EX 102	N 2X	59.6	0.0	0.5	0.0	17.6	39
NORTHRUP-KING PX32	N 2X	59.3	0.0	0.0	0.0	22.3	49
CHECK =3	N 2X	59.3	0.0	0.0	0.0	17.4	40
ACCO UC 147	N 4X	59.0	0.0	1.4	0.0	18.1	45
SOAES PP 198	N 4X	58.5	0.0	0.9	0.0	16.5	43
SOAES PP 199	N 3X	57.8	0.0	0.0	0.0	17.6	48
NORTHRUP-KING PX20	N 2X	57.4	0.0	0.0	0.0	16.7	46
PAYCO SX 680	N 2X	57.0	0.0	0.0	0.0	19.1	51
PRIDE 5-200A	N 2X	56.8	0.0	1.4	0.0	17.5	50
ACCO UC 2301	N 2X	56.6	0.0	0.0	0.0	21.7	54
NORTHRUP-KING PX466	N 3X	55.2	0.0	0.9	0.0	16.6	52
PRIDE 4404	N 2X	55.1	0.0	0.5	0.0	24.0	55
CHECK =7	N 2X	53.1	0.0	0.5	0.0	14.5	53
CHECK =5	N 4X	49.8	0.0	0.0	0.0	17.8	56
Mean		**65.5**		**0.4**		**19.9**	
CV = 21.4 %	**LSD (.05)**	**15.9**					

Table 15. Area D1 2-year yield, moisture and stalk lodging averages of corn hybrids, 1974-1975

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
ACCO DC 147			79			1			19
ACCO DC 1901			82			1			19
ACCO DC 2301			74			0			22
ACCO DC 3301			90			0			26
FUNK'S G-4180			75			0			19
FUNK'S G-4288			84			1			24
FUNK'S G-4321			90			0			23
FUNK'S G-4444			87			0			26
D'S GOLD SX 1100			88			0			24
PAYCO SX 660			82			0			20
PAYCO SX 775			87			0			23
PIONEER 3780			84			0			23
PIONEER 3785			77			1			20
PIONEER 3982A			86			1			19
PIONEER 3976			69			0			17
PRIDE R-206A			81			1			19
PRIDE 4404			64			0			24
SOARS EX 100			88			0			22
SOARS EX 102			75			0			19
SOARS EX 103			66			0			22
SOARS EX 82			89			1			19
SOARS PP 183			79			1			19
SOKOTA SS-59A			85			1			22
SOKOTA SS-67			95			1			24
SOKOTA TS-67			88			0			25
TROJAN TXS 92			76			0			18
TROJAN TXS 94			81			1			21

Table 16. 1975 Corn Performance Trial, Area B2, Mike Mikkelson Farm, Agar

BRAND AND VARIETY	TYPE AND CROSS	YIELD B/A	PCT ROOT LODGED	PCT STALK LODGED	PCT EARS DROPPED	PERCENT MOISTURE	PERFORMANCE SCORE RATING
ACCO UC 1151	N 2X	57.6	0.0	0.0	0.9	30.2	1
CHECK =6	N 3X	53.5	0.0	0.0	0.0	28.9	3
FUNKS G-4180	N 3X	53.5	0.0	0.9	0.0	33.3	8
NORTHRUP-KING PX 32	N 2X	53.2	0.0	0.0	0.0	39.8	15
NORTHRUP-KING PX 20	N 2X	53.0	0.0	0.9	2.8	28.5	5
FUNKS G-4288	N 3X	52.6	0.0	0.0	0.0	38.0	14
FUNKS G-4141	N 2X	52.5	0.0	1.0	0.0	26.8	4
TROJAN TXS 94	N 2X	52.0	0.0	0.0	0.9	36.5	13
SDAES EX 102	N 2X	51.9	0.0	0.0	0.0	27.5	6
PRIDE 1116	N 2X	51.7	0.0	0.0	3.7	34.6	11
SDAES PP 171	N 3X	51.6	0.0	0.0	0.0	28.8	7
SDAES EX 100	N 3X	50.7	0.0	0.0	0.0	37.8	21
SECURITY ST 95	N 3X	50.6	0.0	0.0	0.0	33.2	12
SDAES EX 82	N 3X	49.7	0.0	0.0	0.0	34.4	17
FUNKS G-4444	N 2X	49.7	0.0	0.0	0.0	42.5	28
SECURITY SS 97	N 2X	49.7	0.0	0.9	4.5	35.6	22
ACCO UC 1131	N 2X	49.7	0.0	0.0	0.0	25.8	9
NORTHRUP-KING PX466	N 3X	49.5	0.0	0.0	0.9	33.2	16
CHECK =7	N 2X	49.1	0.0	0.9	0.0	16.9	2
ACCO U 310	N 3X	49.0	0.0	0.0	0.0	27.2	10
SOKOTA SS-51	N M2X	48.5	0.0	0.0	0.0	33.1	20
SECURITY SS 95	N M2X	48.0	0.0	0.0	1.8	33.4	23
PRIDE R-144	N 3X	46.8	0.0	0.0	0.9	29.1	18
CHECK =4	N 2X	46.4	0.0	0.0	0.0	32.0	25
SDAES PP 147	N 4X	46.1	0.0	0.9	0.0	27.9	19
NORTHRUP-KING PX529	N 3X	45.6	0.0	0.9	0.0	42.3	31
PRIDE 1196	N 2X	45.5	0.0	0.0	3.7	32.2	26
SDAES PP 199	N 3X	45.4	0.0	0.0	0.0	29.0	24
SOKOTA SS-41	N M2X	43.8	0.0	0.0	0.0	29.5	27
ACCO UC 147	N 4X	41.6	0.0	0.9	2.8	32.0	29
FUNKS G-4321	N 2X	41.0	0.0	0.0	0.0	42.7	37
ACCO U 314	N 3X	40.9	0.0	0.9	0.9	31.5	30
SDAES EX 103	N 2X	38.7	0.0	0.0	0.0	31.9	34
TROJAN TXS 92	N 2X	37.3	0.0	1.0	0.0	32.8	36
CHECK =8	N 2X	37.1	0.0	2.8	2.8	26.9	32
WESTERN KX-211	T M3X	35.9	0.0	0.9	1.9	35.8	38
SOKOTA TS-28	N 2X	35.1	0.0	0.0	0.0	23.8	33
SDAES PP 198	N 4X	34.9	0.0	1.0	2.0	27.5	35
WESTERN K-1500	N 4X	32.8	0.0	2.6	3.5	40.2	39
Mean		**46.7**		**0.4**		**32.1**	

CV = 23.5 % **LSD (.05)** **NS**

Table 17. Listing of hybrid corn entries harvested and the tables where the results appear.

Company & Brand	Variety	Tables
Cargill Seeds	434	6,7,8
Cargill Bldg.	449	8
Mpls., MN 55402	830	6
"Cargill"	845	6
	863	6,7,8
	890	8
Disco Seeds	SX 16	11,13
PO Box 640	SX 16A	8
Mitchell, SD 57301	SX 30	8
"Disco"	SX 1104	8,9
Northrup, King & Co.	PX 20	6,10,11,14,16
1500 Jackson St. NE	PX 32	6,8,10,11,14,16
Mpls., MN 55413	PX 48	14
"NK"	PX 50A	8
	PX 65	8
	PX 442	10
	PX 448	11
	PX466	6,10,11,14,16
	PX 529	6,14,16
	PX606	8
	PX 610A	8
Asgrow Seed Co.	RX 42	6,7
4244 Clinton Ave.	RX 53	6,7
Des Moines, IA 50310	RX 58	6,7,8,9
"Asgrow"	RX 60	8,9
	RX 64	6
	RX70A	6,8
	RX81	8
Wilson Hybrids	1016	8,9
PO Box 391	1017	8,9
Harlan, IA 51537	1500	8,9
"Wilson"	2317	8,9
King's Western Seeds	KX-30	14
205 Wyoming Ave. SW	KX-55	6,10,11,14
Huron, SD 57350	KX-64	8
"Western"	KX-211	16
	KX-611	8
	KX-1500	16
O's Gold Seed Co.	SX 900	6,11,13,14
PO Box 460	SX 1100	6,7,8,9,11,13,14,15
Parkersburg, IA	SX 1100A	14
"O's Gold"	SX 2200A	6,7,8,9
	SX 5500A	6,7,8,9
Payco Seed Co.	SX 680	6,7,10,11,12,13,14,15
PO Box 70	SX775	6,7,10,11,12,13,14,15
Dassel, MN 55325	SX 865	6,7,8,9,10
Curry Seed Co.	SC-142	6,7,8,11,13
PO Box 517	SC-144	10,12
Elk Point, SD 57025	SC-143	8
"Curry"	SC-146	6
	TC-338	10
	TC-343	11
	TC-344	8
McCurdy Seed Co.	3 x 3	8,9
Fremont, IA 52561	MSX24	6,7,11,13
"McCurdy"	MSX 42	6
	MXS 44A	6,7,8,9,11,13
	MSX 46	6,7,8,9,11
	36M	6,7,11
	MSP111B	8,9,11,13
	MSP 333	6,8,11,13
	72-13	8
	72-17	8,9
	73-9	6,11
P-A-G Seeds	SX 67	6,7
1200 Nor'star Ctr.	SX 69	8
Mpls., MN 55402	SX 177	6
"P-A-G"	SX 210	6,8
	SX 397	8
	SX 424	8
Pioneer Seed Co.	3535	8,9
1206 Mulberry St.	3543	8,9
Des Moines, IA 50308	3596	6,10,14
"Pioneer"	3780	6,7,10,13,14,15
	3780B	6,10,11
	3785	6,7,10,11,12,13,14,15
	3932A	10,12,14,15
	3955	6,10,14
	3965	8,11
	3976	14,15
South Dakota	Check 2	11
Agricultural	Check 3	6,11,14
Experiment	Check 4	6,10,14,16
Station	Check 5	6,10,11,14
"SDAES"	Check 6	16
	Check 7	6,14,16
	Check 8	10,16
	EX 82	14,15,16
	EX 94	6,7
	EX 94A	6
	EX 96	6,7
	EX 100	6,7
	EX 102	14,15,16
	EX 103	10,14,15,16
	EX 104	10
	EX 105	11
	PP 147	10,12,14,16
	PP 171	10,12,16
	PP 183	6,14,15
	PP 198	10,12,14,16
	PP 199	6,10,12,14,16
	PP 204	6
	PP 204A	6
Security Seed Co.	SS 95	11,14,16
Box 630	ST 95	10,14,16
Williamsburg, IA	SS 97	11,14,16
"Security"	SS 105	6,8,11
	ST 105	10
	SS 105W	6,8
	SS 108	6,8
Standard Chemical	KC 204	6
701 So. 42nd St.		
Omaha, NE 68103		
Clay Co. Seed Co.	A201	6,7,8,10,11,
Spencer, IA 51301		12,14
"Curtis"	443	8
	521	14
W'master Seeds	EPX 5P	6
Dassel, MN 55323	EPX 2A	6
"Weathermaster"		

Table 17 (Cont).

Company & Brand	Variety	Tables
Funk Seeds, Intl.	G-4141	6,10,11,14,16
1300 W. Washington	G-4180	6,7,11,14,15,16
Box 2911	G-4288	6,7,8,10,11,12,13,14,15,16
Bloomington, IL	G-4321	6,7,8,9,10,11,12,13,14,15,16
"Funk's"	G-4343	10
	G-4366	6,7,8,9
	G-4444	6,7,8,9,10,11,12,13,14,15,16
	G-4445	8,9
	G-4449	8
Sokota Hybrids	TS-28	16
PO Box 250	SS-41	16
Brookings, SD 57006	TS-46	11
"Sokota"	TS-49	6,7,11
	SS-51	6,7,10,11,13,16
	SS-59A	6,7,14,15
	TS-67	6,7,8,9,10,11,14,15
	SS-67	8,9,10,11,12,13,14,15
	TS-77	8
Trojan Seed Co.	TXS 92	10,12,14,15,16
PO Box 115	TXS 94	6,7,10,11,12,13,14,15,16
Watertown, SD 57201	TXS 99	6,10,14
"Trojan"	TXS 102	6,8,9,10,11,14
	TXS 105A	6,8,11
	TXS108A	8,9
	TXS 111	8,9
Pride Co., Inc.	R-144	16
Glen Haven, WI	R-200A	10,11,13,14,15
"Pride"	R-545	8
	1116	16
	1196	10,11,16
	3315	6,10,11,14
	4404	6,7,10,11,12,13,14,15
	5525	6,8
	5565	8
ACCO Seed	DC 147	10,12,14,15,16
PO Box 9	U 310	16
Belmond, IA 50421	U 314	16
"ACCO"	U 322	6,10,11
	U 334	10,12,14
	U 348	6,7
	U 356	6
	U 370	8,9
	U 378	8,9
	UC 1131	10,11,16
	UC 1151	10,11,12,13,16
	UC 1901	6,7,14,15
	UC 2301	10,11,12,13,14,15
	UC 2901	11,13,14
	UC 3201	11,13
	UC 3301	6,8,14,15
	UC 3601	8
	UC 4201	6,8
	UC 4601	8,9

Published in accordance with an Act passed in 1881 by the 14th Legislative Assembly, Dakota Territory, establishing the Dakota Agricultural College and in the Act of re-organization passed in 1887 by the 17th Legislative Assembly, which established the Agricultural Experiment Station at South Dakota State University. 6,000 printed at an estimated cost of 15 cents each, 1-76, 5680.