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1975

# A STATE UNIVERSITY



AGRONOMY

- Crops
- Soils
- Climate

*Iowa - Agriculture*

*Dam*

## THE 1975 IOWA CORN YIELD TEST REPORT

### District 6

Results of the Iowa Corn Yield Test are published to aid Iowa farmers in selecting corn varieties. This is the fifty-sixth consecutive year for the test.

The presentation of data for the varieties tested does not imply approval or endorsement by the authors or by the agencies sponsoring or conducting the test. Iowa State University approves the reproduction of any table in this report **only** if no portion is deleted and if the order of the data is not rearranged. Entries in tables 1 and 2 are designated by brand name and variety.

### 1975 Procedure

Producers of corn seed and Iowa State University were eligible to enter varieties in the Iowa Corn Yield Test. Each producer was allowed a maximum of nine entries per district. All entries had to be available in a quantity of at least 10 bushels.

One-hundred varieties were compared in this test. Two open-pedigree varieties were entered by Iowa State University from its corn breeding program. Eighteen of the varieties were determined to be widely grown and were entered by Iowa State University. Varieties were considered widely grown if they were planted on 0.75 percent or more of the corn acreage in the district according to the 1974 survey of Iowa corn growers. Iowa State University entered a maximum of five widely grown varieties of any given brand. These entries were given priority over the remaining 80 entries made by seed producers.

Each entry was replicated four times in 4-row plots at a planting rate of 23,000 kernels per acre at each location. All locations were machine-planted. The center two rows of each plot were harvested with a corn combine. No gleanings or dropped ears were included in yield data. A moisture determination was made from each plot, and yields were corrected to 15.5-percent moisture for shelled corn.

*Prepared by William E. Falck, associate in agronomy, and C.D. Hutchcroft, professor of agronomy and secretary of the Iowa Crop Improvement Association.*

### How Information Is Presented

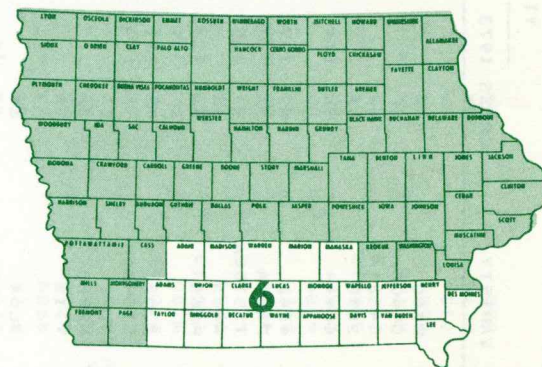
The data presented are averages of two locations in 1973, 1974, and 1975. Yield in bushels per acre and percentages of moisture, root lodging, stalk lodging, dropped ears, and stand are shown for all varieties tested in 1975 and for varieties tested in 1973 and 1974 that were in the 1975 test.

### Interpretation of Results

Yield differences due to variation in soil, fertility, moisture availability, insect infestation, and diseases, plus any variation due to planting and harvesting techniques, are identified through statistical analysis. The LSD values shown in tables 1 and 2 represent, in bushels per acre, the amounts of yield variation that could be due to variations in the factors just mentioned. In comparing varieties; yield differences greater than the LSD value can be attributed to genetic differences in the yield potential of these varieties; yield differences less than the LSD value are not statistically different and could have been due to other factors.

Grain moistures shown in tables 1 and 2 are indicators of maturity and natural drying rate. Maturity of varieties entered generally ranged from early to full season. Yield comparisons should be made among varieties of similar maturity.

Yield comparisons were made at one plant population that was similar to the moderate planting rate in the past years. It is important to select varieties having stable performance over a range of environmental conditions. High yields for two or more consecutive years indicate stable performance. Supplemental yield and agronomic information about specific varieties may be obtained from your seed corn dealers and from neighbors who have grown these varieties.



**IOWA STATE UNIVERSITY of Science and Technology  
Cooperative Extension Service,  
Agriculture and Home Economics Experiment Station,  
Iowa Crop Improvement Association, and the  
United States Department of Agriculture, cooperating**

**Ames, Iowa  
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PRIVE	KA	120	20.0	3	2	0	51
DOCKERDORFF	SX	148	26.9	3	2	0	86
PAG	SX	139	26.9	2	1	0	84
CARGILL	SX	138	26.9	1	0	1	81
*PICNEER	SX	145	27.2	0	0	0	94
CARGILL	SX	141	27.3	1	2	0	89
GOLDEN HARVEST	MS	153	27.3	1	12	0	91
H2615	SX	124	27.3	1	2	1	80
GOLDEN HARVEST	SX	146	27.5	1	3	0	89
IA-MO	SX	148	27.6	0	2	0	88
MIDDLEKCCP	SX	153	27.6	4	1	0	90
IA-MO	SX	139	27.6	5	4	1	80
NORTRUP KING	MS	149	27.9	1	3	0	90
AMERICANA	SX	134	27.9	2	0	0	82
SEAGULL	SX	144	27.9	9	0	0	85
SX55	SX	148	27.9	1	0	1	87
ACCO	SX	157	28.0	1	6	2	88
*TROJAN	SX	139	28.0	1	4	2	90
TXS117A	SX	148	28.1	0	3	0	86
X9880	3X	129	28.1	0	3	1	88
SUPER CROST	MS	135	28.3	1	0	0	85
S67	MS	163	28.4	1	3	0	89
UC9451	SX	152	28.6	1	2	0	88
MCALLISTER	SX	138	28.7	0	2	0	91
SX7408	SX	132	28.7	1	0	0	84
*PICNEER	SX	157	28.7	0	4	0	93
3366	SX	130	29.0	2	0	0	89
IOWA STATE UNIV	SX	154	29.3	1	3	0	80
SX39(E73XB77)	SX	147	29.4	0	1	0	91
GOLDEN HARVEST	SX	144	29.4	1	0	0	86
H2650	SX	137	29.4	1	2	0	87
IA-MO	SX	152	29.4	1	0	0	86
SX5500	SX	134	29.5	3	0	0	93
D17	SX	140	29.6	1	1	0	72
DOCKERDORFF	SX	127	29.6	3	5	0	86
ACCO	SX	143	29.8	5	7	0	71
UC9351	SX	125	29.9	0	2	0	84
MC CURDY	SX	139	30.0	0	5	0	90
MSX88	SX	146	30.0	0	3	0	86
854	SX	145	30.0	0	1	0	90
SECURITY	SX	149	30.1	0	5	0	76
SS118	SX	134	30.1	1	6	0	89
SX98	MS	126	30.2	2	2	0	91
*PAG	SX	145	30.2	1	0	0	80
AMERICANA	SX	147	30.2	26.3	26.2	0	72
FEDERAL	SX	151	30.2	0	1	0	85
X980	SX	145	30.2	0	2	0	80
AMERICANA	MS	146	30.2	0	5	0	92
SUPER CROST	SX	145	30.2	0	1	0	91
585	SX	165	30.2	2	0	0	87
LYNKS	SX	144	30.2	1	5	0	90
ACCO	SX	150	30.4	0	0	0	91
E48951	SX	155	30.4	0	7	0	85
M306	SX	144	30.5	0	4	0	87
MIDDLEKCOOP	SX	132	30.5	0	1	0	82
TXS119	SX	140	30.5	1	5	0	87
7545	3X	133	30.5	0	1	0	90
*CARGILL	SX	143	30.5	0	6	0	88
FS	SX	144	30.6	1	2	0	78
FARMERS	SX	148	30.9	1	0	0	84
4589	SX	145	30.9	0	3	0	82
SEAGULL	SX	157	31.0	1	2	0	77
SX59	SX	131	31.3	1	0	0	85
*MCALLISTER	SX	151	31.3	1	4	0	83
SX6837	SX	139	31.4	1	3	0	90
XL72A	SX	150	32.0	0	0	0	81
850	SX	132	32.1	3	1	0	79
FS	SX	144	33.4	2	2	0	88
PICNEER	SX	153	33.4	2	0	0	82
3184	SX	131	33.4	1	0	0	88
*DEKALB	SX	139	33.4	1	0	0	82
XL75	SX	150	33.4	3	0	0	88
860	SX	144	33.4	2	0	0	82

AVERAGE OF ALL ENTRIES 141.2 148.5 137.0 27.3 24.1 23.6 1.3 6.0 0.1 2.1 0.8 4.8 0.5 0.2 0.2 87.1 84.2 86.5

SX = SINGLE CROSS. MS = MODIFIED SINGLE CROSS. 3X = 3-WAY CROSS. 4X = 4-WAY CROSS.

\*WIDELY GROWN VARIETY.



## 1975 Field Data

The District 6 test was conducted on farms operated by Andy Mosby near Corning in Adams County, by Maurice Beaver near Cedar in Mahaska County, and by the Fricke Brothers near Mount Union in Henry County. The Corning location was not harvested because of drouth and high temperatures. The field data are presented in Table A.

Subsoil moisture was favorable at planting time. Rainfall was below normal during May, June, July and September and above normal during August. Temperatures were above normal during May, June, July, and August and below normal during September. Yield levels were about normal for the district.

**Table A. Field Data**

	Beaver Farm Taintor silty clay loam			Fricke Farm Taintor silty clay loam		
	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Fertilizer applied, lbs.						
Plowdown	36	80	70	—	80	90
Preplant	125	—	—	160	—	—
Starter	—	—	—	12	48	24
<b>TOTAL</b>	<b>161</b>	<b>80</b>	<b>70</b>	<b>172</b>	<b>118</b>	<b>114</b>
1974 Crop	Soybeans			Soybeans		
Row Width	30 inches			30 inches		
Planting date	April 29			April 29		
Harvest date	Sept. 26			Sept. 27		

### District 6

Designations Identifying Brands in the Yield Test

Designation	Name and Address
ACCO	ACCO Seed Div. of Anderson, Clayton & Co., Belmond, Iowa 50421
Americana	Teweles Seed Co., Inc., Muscatine, Ia. 52761
Asgrow	Asgrow Seed Company, Des Moines, Ia. 50310
*Cargill	Cargill, Inc., Minneapolis, Minn. 55402
*DeKalb	DeKalb Ag. Research, Inc., DeKalb, Ill. 60115
Dockendorff	Dockendorff Hybrids, Danville, Ia. 52623
Farmers	Farmers Hybrid Companies, Inc., Hampton, Ia. 50441
Federal	Federal Hybrids, Marion, Ia. 52302
F.S.	F.S. Services, Inc., Bloomington, Ill. 61701
*Funks	Funk Seeds International, Inc., Bloomington, Ill. 61701
Golden Harvest	Columbiana Seed Co., Eldred, Ill. 62027
Hulting	Hulting Hybrids, Div. of Ferry-Morse, Geneseo, Ill. 61254
Iowa-Missouri	Iowa-Missouri Hybrid Corn Co., Keosauqua, Ia. 52565
Iowa State University	Department of Agronomy, Ia. State University, Ames, Ia. 50011
Lynks	Lynk Bros. & Baird, Inc., Marshalltown, Ia. 50158
*McAllister	McAllister Seed Farms, Mt. Pleasant, Ia. 52641
McCurdy	McCurdy Seed Co., Fremont, Ia. 52561
Middlekoop	Middlekoop Seed Corn Co., Packwood, Ia. 52580
*Northrup King	Northrup King & Co., Minneapolis, Minn. 55413
*O's Gold	O's Gold Seed Co., Parkersburg, Ia. 50665
*PAG	PAG Seeds, Minneapolis, Minn. 55402
*Pioneer	Pioneer Hi-Bred International, Inc., Des Moines, Ia. 50308
Pride	Pride Company, Inc., Glen Haven, Wis. 58810
Seagull	Rothermil Seed Co., West Liberty, Ia. 53776
Security	Security Seed Company, Williamsburg, Ia. 52361
Super Crost	Edward J. Funk & Sons, Inc., Kentland, Ind. 47951
*Trojan	Trojan Seed Co., Olivia, Minn. 56277

\*Widely grown entries made by Iowa State University.

TABLE 2. AVERAGES OF 1974-75 AND 1973-75 OF VARIETIES TESTED IN DISTRICT 6. LSD FOR YIELDS ARE 9 BUSHELS FOR 73-75 AND 11 BUSHELS FOR 74-75.

BRAND	VARIETY	CROSS	YIELD		MOISTURE PCT.	
			73-75	74-75	74-75	73-75
*FUNKS	G4444	SX	117	119	21.4	20.9
NORTHROP KING	PX50A	SX	125	125	21.9	—
SUPER CROST	4242	MS	133	131	22.0	21.7
*TROJAN	TXS108A	SX	136	134	22.8	21.6
*PIONEER	3517	MS	—	116	23.5	—
MIDDLEKOOP	M313	SX	141	141	23.6	22.6
*NORTHROP KING	PX610A	3X	141	132	23.8	—
MC CURDY	MSX84	SX	152	152	23.9	—
DOCKENDORFF	D77	SX	148	148	24.0	—
GOLDEN HARVEST	H2580	3X	136	136	24.0	—
SEAGULL	SX40	SX	140	140	24.1	—
O'S GOLD	SX5500A	SX	153	156	24.1	23.2
FUNKS	54507	SX	161	161	24.2	—
AMERICANA	3200	SX	149	149	24.2	—
GOLDEN HARVEST	H2500	SX	150	150	24.2	—
IA-MO	SX19	SX	147	147	24.2	—
*PIONEER	3388	MS	138	142	24.3	23.4
TROJAN	TXS115A	SX	149	149	24.7	—
ACCO	UC6601	SX	134	132	24.7	23.9
MCALLISTER	SX7300	SX	—	164	24.7	—
SUPER CROST	5440	SX	148	148	24.8	—
MIDDLEKOOP	M315	SX	149	146	24.8	23.7
MC CURDY	MSX70	SX	145	145	24.9	—
ASGROW	RX90	SX	141	141	24.9	—
*PIONEER	3301	SX	153	157	25.0	24.0
*DEKALB	XL66	SX	138	136	25.1	24.5
AMERICANA	Q300	3X	136	136	25.5	—
*TROJAN	TXS113	SX	146	145	25.6	24.7
CARGILL	Q30	SX	143	144	25.6	24.1
DOCKENDORFF	D74	SX	—	146	25.7	—
MIDDLEKOOP	M317	SX	142	144	25.8	24.9
MIDDLEKOOP	M316	SX	147	147	25.8	—
NORTHROP KING	PX76	SX	141	141	25.9	—
IA-MO	SX30	SX	152	152	26.0	—
GOLDEN HARVEST	H2655	MS	146	146	26.0	—
*PIONEER	3366	SX	142	135	26.0	24.4
*TROJAN	TXS117A	SX	148	148	26.1	—
SEAGULL	SX55	SX	139	136	26.3	25.6
SUPER CROST	567	MS	133	126	26.5	25.5
ACCO	UC9451	SX	—	156	27.1	—
HULTING	X9880	3X	140	138	27.3	—
ACCO	UC9351	SX	140	143	27.7	26.6
DOCKENDORFF	D17	SX	142	144	27.7	27.4
O'S GOLD	SX5500	SX	143	143	27.7	27.2
FEDERAL	FX59	SX	140	140	27.7	—
MC CURDY	MSX88	SX	141	141	27.8	—
GOLDEN HARVEST	H2650	SX	144	144	27.8	—
AMERICANA	67C0	SX	148	148	27.9	27.4
*PAG	SX98	SX	145	148	28.1	27.4
ACCO	E48951	SX	—	156	28.1	—
*TROJAN	TXS119	SX	132	126	28.2	27.7
MIDDLEKOOP	M306	SX	147	145	28.2	27.5
SUPER CROST	S85	SX	134	142	28.3	27.6
HULTING	X980	SX	141	141	28.3	—
FARMERS	4589	SX	138	138	28.4	—
*MCALLISTER	SX6837	SX	143	147	28.5	27.7
SEAGULL	SX59	SX	137	137	28.5	—
*CARGILL	979	SX	138	135	28.5	27.8
*DEKALB	XL72A	SX	145	142	28.5	27.7

## OTHER REPORTS

Separate reports for variety performance are available for each district shown in fig. 1. These publications are available at your county extension office or from Publications Distribution, Printing and Publications Building, Iowa State University, Ames, Iowa 50011.

### The 1975 Iowa Corn Yield Test Report:

- Pm-660-1 District 1
- Pm-660-2 District 2
- Pm-660-3 District 3
- Pm-660-4U District 4 Upland
- Pm-660-4B District 4 Bottomland
- Pm-660-5 District 5
- Pm-660-6 District 6

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