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THE 1975 IOWA CORN YIELD TEST REPORT

District 1

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. Twenty-four 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 74 entries made by seed producers.

Each entry was replicated four times in 4-row plots at a planting rate of 21,000 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 and 1975 and of one location in 1974. Yield in bushels per acre and percentage of moisture, root lodging, dropped ears, and stand are shown for all varieties 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.

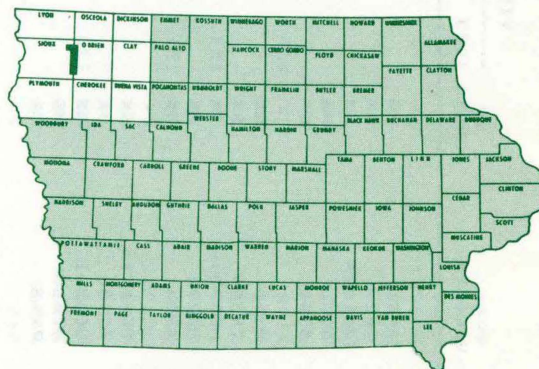


TABLE 1. AVERAGE PERFORMANCE OF VARIETIES TESTED IN DISTRICT 1.
MODERATE POPULATION - 21,000 PLANTING RATE. LSD FOR 1975 YIELD IN BUSHELS IS 14.

BRAND	VARIETY	CROSS	YIELD BU./A			MOISTURE PCT.			ROOT LODGING PCT.			STALK LODGING PCT.			DROPPED EARS PCT.			STAND PCT.			
			1973	1974	1975	1975	1974	1973	1975	1974	1973	1975	1974	1973	1975	1974	1973	1975	1974	1973	
SUPER CROST	1610	MS			99	18.5			2			0								79	
FARMERS	2222	SX			104	18.9			1			0								84	
SAR	SX102A	SX		100	115	19.0	16.9		1	0		1	2			0	0			92	95
FS	096	MS			106	19.3			0			0								89	
*PICNEER	3785	SX			108	19.3			0			0								87	
HULTING	X310	SX			106	19.5			0			0								82	
TROJAN	TXS99	SX			107	19.6			0			0								87	
GOLDEN HARVEST	H2370	SX			101	20.4			0			0								75	
GOLDEN HARVEST	H2290	MS			83	20.5			0			0								70	
*PIONEER	3764	3X			114	20.7			0			0								84	
NC+	EXP1141	SX			111	20.9			0			0								85	
CURRY	TC338	3X			118	21.2			1			0								86	
ACCO	UC2301	SX			115	21.2			1			0								90	
PICNEER	3780B	MS			134	21.4			0			0								92	
NORTHRUP KING	PX46	SX			123	21.5			0			0								85	
*PIONEER	3710	SX			114	21.6			0			0								80	
NORTHRUP KING	PX32	SX			114	21.7			0			0								88	
GOLDEN HARVEST	H2385	3X			102	21.9			0			0								82	
FS	216	SX			106	22.0			0			0								89	
TROJAN	TXS105A	SX			125	22.1			0			1								89	
FUNKS	G4321A	SX	139	100	137	22.1	21.0	22.3	0	0	0	0	1	1	0	0	0	0	93	93	85
PRIDE	5565	SX			114	22.2			0			0								88	
WILSON	1500	SX		101	112	22.8	22.0		0	0		0	1			0	0			80	92
TEKSEED	SPX332	3X			99	22.8			0			2								84	
*SAR	SX132A	SX	126	98	125	22.9	24.1	24.0	0	0	0	0	7	2	0	0	0	0	90	93	96
*FUNKS	G4404	SX	135	92	128	22.9	21.5	22.6	0	1	0	0	3	4	0	0	0	0	91	103	91
AMERICANA	D248	SX			110	23.0			1			0								90	
*PICNEER	3780	SX	126	109	119	23.0	18.1	22.6	0	0	0	0	0	2	0	0	0	0	91	96	90
FEDERAL	FX6	SX	133	94	124	23.2	22.1	23.3	0	0	0	0	1	10	0	1	0	0	89	94	93
*DEKALB	XL42	SX			117	23.4			0			0								89	
*SAR	SX200	SX	128	108	123	23.4	23.6	23.9	0	0	0	0	0	1	0	0	0	0	89	93	95
LYNKS	4200	SX		115	132	23.4	24.6		0	0		0	1			0	0			90	96
WILSON	1400	MS			131	23.4			2			0								87	
NC+	35	SX			125	23.5			0			0								90	
END	3X35	3X	117	85	120	23.6	22.8	24.4	0	0	0	0	1	3	0	0	0	0	85	84	96
PRAIRIE VALLEY	PV21SL	SX			117	23.7			0			1								88	
*O'S GOLD	SX1100	SX	129	112	116	23.8	23.1	24.0	0	2	0	0	1	1	0	0	0	0	90	100	93
MC CURDY	MSX44A	SX		108	117	23.8	24.8		0	2		0	1			0	0			87	96
WILSON	1016	SX	125	103	118	23.8	22.4	24.4	1	6	0	0	1	4	0	0	0	0	82	87	84
*BLANEY	B606	SX			129	23.9			0			0								93	
*FUNKS	G4444	SX	126	121	119	23.9	23.6	24.1	1	0	0	0	3	2	0	0	0	0	86	95	92
PRIDE	5525	SX			118	24.1			0			0								83	
SUPER CROST	S27	SX		100	118	24.1	24.0		1	0		1	1			0	0			80	91
FONTANELLE	425SC	SX			117	24.1			1			0								92	
MC CURDY	MSX46	SX		93	129	24.2	20.4		1	0		0	1			0	0			92	91
HULTING	X537	SX	125	95	122	24.2	24.7	24.3	0	0	1	1	1	3	0	0	0	0	91	99	84
NC+	33	SX	130	112	125	24.2	22.9	23.5	5	5	0	0	4	4	0	0	0	0	89	96	90

MELLOWDENT	16	SX		109	124	24.3	23.2		0	1	0	2	0	0	91	96				
FEDERAL	FT23	3X		92	133	24.4	23.9		0	1	0	4	0	0	92	96				
GOLDEN HARVEST	H2450	SX		99	121	24.4	24.7		0	0	0	2	0	0	86	92				
FONTANELLE	400SC	SX		102	129	24.5	23.4		0	2	0	1	0	0	90	93				
TEKSEED	SPX1A	SX			122	24.5			1		0		0		85					
CARGILL	875	SX			123	24.5			0		0		0		89					
PRIDE	R545	3X			111	24.5			0		0		0		89					
*ACCC	UC3301	SX	137	83	128	24.6	25.8	24.7	0	1	0	0	1	1	0	0	0	87	91	91
AMERICANA	2800	SX			123	24.6			1		2		0		0			87		
*CROWS	226	SX			115	24.8			0		0		0		0			84		
PRAIRIE VALLEY	PV21S	SX			128	24.8			1		1		1		93					
MELLOWDENT	16A	SX		106	116	24.8	21.8		0	0	0	3	0	0	87	98				
*TROJAN	TXS102	SX	142	108	132	24.8	23.6	24.5	0	5	0	0	0	4	0	0	0	91	97	96
ASGROW	RX70A	SX			133	24.8			0		0		0		89					
*DEKALB	XL45A	SX	96	92	104	24.9	22.2	26.4	0	0	0	0	2	6	0	0	1	90	99	83
IOWA STATE UNIV	SX40(A239XH99)	SX			121	24.9			0		0		0		93					
FS	222	SX			126	24.9			0		0		0		92					
*NORTHROP KING	PX50A	SX	126	88	120	24.9	24.4	24.6	1	0	0	1	4	2	0	0	0	84	97	96
SAR	SX205	SX			123	24.9			0		0		0		90					
CURRY	TC343	3X			88	25.1			0		0		0		83					
*ASGROW	RX58	SX	132	108	127	25.1	23.8	24.5	2	2	0	0	2	3	0	0	0	87	97	91
AMERICANA	3898	SX			127	25.3			0		0		0		88					
TEKSEED	SPX8	SX			131	25.4			0		0		0		91					
O'S GOLD	SX1200	SX			121	25.5			0		0		0		91					
HULTING	X770	SX	122	95	138	25.5	23.8	25.0	0	4	0	0	3	2	0	0	0	93	88	74
IOWA STATE UNIV	SX37(A632XH99)	SX			133	25.6			0		0		0		89					
END	SX14	SX	120	99	129	25.6	23.7	23.8	3	1	0	0	2	3	0	0	0	93	92	90
*PAG	SX397	SX		109	131	25.8	25.9		0	2		1	4	0	0			86	94	
FARMERS	4425	SX	129	103	123	25.9	24.6	24.2	0	1	0	0	1	2	0	0	0	82	90	88
CORN KING	1122	SX	130	101	121	25.9	23.4	25.1	0	1	2	0	2	1	0	1	0	85	95	92
FUNKS	G4366	3X	131	88	124	26.0	21.0	23.5	1	2	1	0	9	6	0	0	0	89	92	88
CARGILL	890	SX		87	118	26.0	24.2		0	1		1	18		0	0		91	90	
FS	242	SX			131	26.0			1		0		0		90					
PRAIRIE VALLEY	PV25S	SX			104	26.1			1		0		0		78					
TEKSEED	SPX314	3X			119	26.2			0		0		0		90					
*PAG	SX69	SX	130	108	122	26.2	23.8	24.3	1	2	0	0	1	4	0	0	0	83	93	93
MC CURDY	MSX42	SX		89	120	26.3	22.2		0	1		0	9		0	0		89	99	
ACCO	UC3201	SX			119	26.8			1		0		0		90					
FARMERS	4525	SX	130	99	123	27.4	23.7	24.6	0	0	0	0	3	3	0	0	0	90	94	90
HULTING	X322	SX		95	128	27.5	24.3		0	0	0	0	10		0	0	0	84	93	
*TROJAN	TXS108A	SX	139	94	132	27.7	24.1	24.1	0	0	0	0	2	1	0	0	0	89	92	89
*DEKALB	XL54	SX			125	28.1			0		0		0		82					
*DEKALB	XL43	SX	110	108	123	28.2	24.4	25.3	0	0	0	0	11	2	0	0	0	89	100	83
CARGILL	920	SX			132	28.7			0		1		0		83					
PAG	SX424	SX			124	29.0			1		0		0		90					
*NORTHROP KING	PX610A	3X		75	124	29.1	26.0		0	1		0	9		0	0		89	94	
PRAIRIE VALLEY	PV34S	SX			116	29.4			0		0		0		88					
ACCO	UC3601	SX	131	107	129	29.6	25.7	26.4	0	2	0	0	2	1	0	0	0	91	91	90
*DEKALB	XL64	SX	132	106	132	29.9	26.7	27.0	0	0	0	0	15	3	0	0	0	88	96	84
PRAIRIE VALLEY	PV76S	SX			141	31.1			0		0		0		89					
PRIDE	6694	SX			114	32.0			0		0		0		88					

AVERAGE OF ALL ENTRIES 127.6 99.9 120.1 24.3 23.4 24.4 0.4 1.1 0.2 0.1 3.5 2.8 0.0 0.0 0.0 87.5 94.2 89.5

SX = SINGLE CROSS. MS = MODIFIED SINGLE CROSS. 3X = 3-WAY CROSS. 4X = 4-WAY CROSS.
*WIDELY GROWN VARIETY.

1975 Field Data

The District 1 test was conducted on farms operated by William Morris near Sheldon in Sioux County and by Raymond Paulsen near Everly in Clay County. The field data are presented in Table A.

Subsoil moisture was adequate at planting time. Rainfall was normal during May and June, below normal during 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 above normal in the district.

Table A. Field Data

	Morris Farm Marcus silty clay loam			Paulsen Farm Primghar silty clay loam		
	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
Fertilizer applied, lbs.						
Plowdown	45	46	60	100	60	60
Preplant	115	—	—	—	—	—
TOTAL	160	46	60	100	60	60
1974 Crop	Soybeans			Soybeans		
Row Width	30 inches			30 inches		
Planting date	May 7			May 16		
Harvest date	Oct. 7			Oct. 8		

District 1

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
*Blaney	Blaney Farms, Inc., Madison, Wis. 53713
Cargill	Cargill, Inc., Minneapolis, Minn. 55402
Corn King	Malcolm H. Grieve, Pierson, Ia. 51048
*Crows	Crows Hybrid Corn Co., Milford, Ill. 60953
Curry	Curry Seed Co., Elk Point, S. D. 57025
*DeKalb	DeKalb Ag. Research, Inc., DeKalb, Ill. 60115
Eno	Eno Farms, Inc., Sheffield, Ia. 50475
Farmers	Farmers Hybrid Companies, Inc., Hampton, Ia. 50441
Federal	Federal Hybrids, Marion, Ia. 52302
Fontanelle	Fontanelle Hybrids, Nickerson, Neb. 68044
F.S.	F.S. Services, Inc., Bloomington, Ill. 61701
*Funks	Funk Seeds International, Inc., Bloomington, Ill. 61701
Golden Harvest	The J.C. Robinson Seed Co., Waterloo, Neb. 68069
Hulting	Hulting Hybrids, Div. of Ferry-Morse, Geneseo, Ill. 61254
Iowa State University	Department of Agronomy, Ia. State University, Ames, Ia. 50011
Lynks	Lynk Bros. & Baird, Inc., Marshalltown, Ia. 50158
McCurdy	McCurdy Seed Co., Fremont, Ia. 52561
Mellowdent	Mellowdent Industries, Inc., Alta, Ia. 51002
NC+	NC+ Hybrids, Lincoln, Neb. 68054
*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
Prairie Valley	Prairie Valley, Inc., Phillips, Neb. 68865
Pride	Pride Company, Inc., Glenn Haven, Wis. 58810
*Sar	Sar Seed Farms, Charles City, Iowa 50616
Super Crost	Edward J. Funk & Sons, Inc., Kentland, Ind. 47951
Tekseed	Tekseed Hybrid Co., Tekamah, Neb. 68061
*Trojan	Trojan Seed Co., Olivia, Minn. 56277
Wilson	Wilson Hybrids, Inc., Harlan, Ia. 51537

*Widely grown entries made by Iowa State University.

TABLE 2. AVERAGES OF 1974-75 AND 1973-75 OF VARIETIES TESTED IN DISTRICT 1. LSD FOR YIELDS ARE 9 BUSHEL FOR 73-75 AND 11 BUSHEL FOR 74-75.

BRAND	VARIETY	YIELD BU./A		MOISTURE PCT.	
		CROSS 73-75	74-75	74-75	73-75
SAR	SX102A	SX	107	17.9	
*PIONEER	3790	SX	118	114	21.2
FUNKS	G4321A	SX	125	118	21.6
*FUNKS	G4404	SX	118	110	22.3
MC CURDY	MSX46	SX		111	22.3
WILSON	1500	SX		106	22.4
FEDERAL	FX6	SX	117	109	22.6
WILSON	1016	SX	115	110	23.1
ENO	3X35	3X	107	102	23.2
MELLOWDENT	16A	SX		111	23.3
*O'S GOLD	SX1100	SX	119	114	23.4
*SAR	SX200	SX	119	115	23.5
*SAR	SX132A	SX	116	111	23.5
FUNKS	G4366	3X	114	106	23.5
*DEKALB	XL45A	SX	97	99	23.6
NC+	33	SX	122	118	23.6
MELLOWDENT	16	SX		116	23.7
*FUNKS	G4444	SX	122	120	23.8
FONTANELLE	4005C	SX		115	23.9
SUPER CROST	527	SX		109	24.0
LYNKS	4200	SX		123	24.0
FEDERAL	FT23	3X		112	24.2
*TROJAN	TXS102	SX	127	120	24.2
MC CURDY	MSX42	SX		104	24.2
MC CURDY	MSX44A	SX		112	24.3
CURRY	SC142	SX	119	118	24.4
*ASGROW	QX5R	SX	122	117	24.4
HULTING	X537	SX	114	108	24.5
GOLDEN HARVEST	H2450	SX		110	24.5
ENO	SX14	SX	116	114	24.7
HULTING	X770	SX	118	116	24.7
*NORTHROP KING	PX50A	SX	111	104	24.7
CORN KING	1122	SX	117	111	24.7
*PAG	SX69	SX	120	115	25.0
CARGILL	890	SX		102	25.1
*ACCO	UC3301	SX	116	105	25.2
FARMERS	4425	SX	118	113	25.3
FARMERS	4525	SX	117	111	25.6
*PAG	SX397	SX		120	25.9
*TROJAN	TXS108A	SX	121	113	25.9
HULTING	X322	SX		111	25.9
*DEKALB	XL43	SX	113	115	26.3
*NORTHROP KING	OX610A	3X		99	27.6
ACCO	UC1601	SX	122	118	27.6
*DEKALB	XL54	SX	123	119	28.3

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

... AND JUSTICE FOR ALL

Programs and activities of Cooperative Extension Service are available to all potential clientele without regard to race, color, sex or national origin. Anyone who feels discriminated against should send a complaint within 180 days to the Secretary of Agriculture, Washington, D.C. 20250.

