



- Crops
- Soils
- Climate

THE 1981 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 sixty-second 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. Entries in tables 1 and 2 are designated by brand name and variety.

1981 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 six entries per district. All entries had to be available in a quantity of at least 10 bushels of seed.

One hundred thirty-two entries were compared in this test. Fifteen of them were determined to be widely grown and were entered by Iowa State University. A widely grown entry was planted on 0.94 percent or more of the corn acreage in the district according to a 1980 survey of Iowa corn growers. Iowa State University entered a maximum of three widely grown varieties of any given brand. These entries were given priority over the remaining 117 entries made by seed producers.

Each entry was replicated four times in four-row plots at a planting rate of 25,500 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.

How Information Is Presented

The data presented are averages of two locations in 1979, one location in 1980, and two locations in 1981. Yield in bushels per acre and percentage of moisture, root lodging, stalk lodging, dropped ears, and stand are shown for all entries in 1981 and for those tested in 1979 and 1980 that were in the 1981 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.

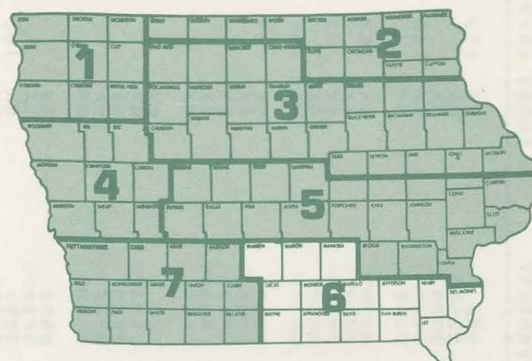
Grain moistures shown in tables 1 and 2 are indicators of maturity and natural drying rate. Maturity of varieties entered generally ranged from early to full season. Yield comparisons should be made among varieties of similar maturity.

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.

1981 Field Data

The District 6 test was conducted on farms operated by Robert Cruzen near Cedar in Wapello County, and by Charles Fricke near Mount Union in Henry County. The field data are presented in table A.

Subsoil moisture for the district was favorable at planting time. Rainfall was well below normal in May and August, below normal at the Cedar location and well above normal at the Mount Union location in June, well above normal at the Cedar location and near normal at the Mount Union location in July, and near normal at both locations in September. Temperatures were well below normal in May, well above normal in June, near normal in July and September, and below normal in August. The average district yield was 25 bushels per acre above the mean of the five preceeding years' averages.



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Cooperative Extension Service,
Agriculture and Home Economics Experiment Station,
Iowa Crop Improvement Association, and the
United States Department of Agriculture cooperating

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TABLE 1. AVERAGE PERFORMANCE OF VARIETIES TESTED IN DISTRICT 6.
25,500 PLANTING RATE. LSD FOR 1981 YIELD IN BUSHELS IS 14.

BRAND	VARIETY	CROSS	YIELD BU./A			MOISTURE PCT.			ROOT LODGING PCT.			STALK LODGING PCT.			DRGPPED EARS PCT.			STAND PCT.		
			1979	1980	1981	1981	1980	1979	1981	1980	1979	1981	1980	1979	1981	1980	1979	1981	1980	1979
EMBRO	X36	SX	170	112	150	16.6	16.4	17.9	0	0	5	13	3	2	1	1	0	90	83	84
GSA	2260	SX			142	17.6			1	0		14			2			83		
GSA	2020	SX			143	17.8			0			4			0			89		
DOCKENDORFF	7100	SX	163	129	153	17.9	17.5	18.8	0	0	6	10	1	2	1	0	0	83	87	78
*PIONEER	3541	SX		113	150	18.1	17.3		0	0		4	0		1	1		87	83	
PAG	SX397	SX	163	126	158	18.4	19.8	19.6	0	4	1	21	5	21	0	1	0	87	89	85
FS	675	SX			173	18.9			0			6			0			87		
NORTHROP KING	PX69A	SX		139	167	19.1	18.5		2	0		13	0		0	0		89	89	
LEWIS	X53B	SX		111	172	19.2	18.6		1	0		6	0		0	0		90	90	
FUNK	G4435	MSX			158	19.3			0			9	0		1			87		
DOCKENDORFF	7338	SX		122	177	19.4	18.7		0	0		6	0		1	1		83	86	
PFISTER	2800	SX			164	19.4			0			4			0			81		
MIGRO	HP470	SX			173	19.4			0			6			0			86		
LYNKS	LX4315	SX		126	174	19.5	19.3		0	0		5	0		1	0		84	92	
KRUGER	8110	SX			167	19.5			0			6			1			85		
EMBRO	X50	SX		105	168	19.6	19.0		0	2		5	2		1	0		88	88	
TROJAN	T1100	SX		127	162	19.6	18.6		0	0		3	2		0	0		77	85	
AMERICANA	3100	SX			175	19.6			0			3			1			88		
SUPER CROST	4337	SX		113	167	19.7	18.5		1	1		6	2		0	0		83	67	
STAUFFER	S6596	SX			170	19.7			0			6			0			80		
O'S GOLD	6882	SX			168	19.7			1			8			1			84		
PRIDE	7712	SX			152	19.8			1			13			3			93		
*CARGILL	921	SX	168	117	157	19.8	20.0	21.2	0	4	4	5	1	9	1	0	0	89	91	81
FRUNDT	SX50	SX			167	19.8			0			5			0			82		
MCCURDY	7440	SX	191	135	162	19.9	20.3	24.3	1	10	13	16	2	4	1	0	0	83	82	85
MCALLISTER	SX8008	SX			172	19.9			0			4			1			81		
GOLDEN HARVEST	H2535	SX			159	20.0			0			4			1			81		
MIDDLEKOOP	M330	SX		121	156	20.0	18.9		0	1		4	0		0	0		75	85	
AMES BEST	AB113A	SX			160	20.0			0			2			1			90		
CARGILL	924	SX			153	20.0			0			10			0			85		
*FUNK	G4507	SX	196	80	158	20.0	20.7	23.7	0	7	9	11	1	2	6	0	0	89	82	79
NORTHROP KING	PX74	SX	192	112	166	20.0	21.7	24.4	1	4	11	20	1	2	5	0	0	88	88	83
*MIDDLEKOOP	M339	SX	176	136	148	20.1	21.1	22.8	0	1	0	15	3	4	5	1	0	80	90	79
RO	2510	SX		131	157	20.1	20.0		0	1		22	4		1	0		88	83	
FEDERAL	FX39	SX	190	123	142	20.1	20.5	24.7	2	3	9	10	1	1	6	0	0	82	83	85
RO	2450	SX			165	20.1			0			5			0			88		
CARGILL	934	SX			164	20.1			0			8			1			86		
PFISTER	75	SX	194	119	164	20.2	21.7	24.0	1	2	7	11	1	2	4	0	0	86	85	80
LYNKS	LX4364	SX			168	20.2			0			9			1			85		
ACCO	UC8201	SX			167	20.2			0			11			6			88		
MIDDLEKOOP	M335	SX	195	159	161	20.2	20.2	23.7	0	1	8	15	3	2	3	1	1	85	86	85
LEWIS	X588	SX			163	20.2			0			5			1			90		
EK PREMIUM	EK7770	SX		126	155	20.2	19.9		0	0		5	0		1	1		84	78	
GSA	2300	SX	176	127	164	20.3	21.6	23.8	1	0	4	10	2	1	4	1	0	84	78	72
LEWIS	X528	SX			166	20.3			0			5			1			85		
ARMSTRONG	SX61	SX			152	20.3			0			6			1			77		
*CARGILL	949	SX	188	121	160	20.4	21.1	24.1	0	0	5	15	0	1	4	1	0	86	85	79
RBA	SU80	SX			170	20.4			0			9			0			84		
*PAG	SX333	SX	207	127	157	20.4	20.8	24.0	1	5	8	14	1	1	2	0	0	84	89	86
*MCALLISTER	SX7300	SX	191	99	163	20.4	22.1	23.9	1	2	8	13	0	1	8	0	1	89	78	80
ARMSTRONG	SX72	SX			168	20.4			0			5			3			91		
PRIDE	7715	SX	186	122	164	20.4	20.5	23.8	1	9	7	11	0	2	6	0	0	84	86	84
SUPER CROST	5440	SX	191	72	164	20.5	21.0	23.9	1	1	5	9	2	0	2	0	0	86	76	79
DEKALB	XL67	SX			172	20.5			3			8			1			87		
MFA	5802	SX	186	107	167	20.6	21.1	24.3	1	0	1	6	0	2	4	1	0	85	90	83
KRUGER	8109	SX			156	20.6			0			2			0			74		
*O'S GOLD	5500A	SX	192	129	153	20.6	21.1	24.2	1	2	5	8	1	1	4	1	0	86	91	78
MIGRO	HP44	SX	184	105	160	20.6	22.1	23.9	1	3	6	8	2	0	4					

Table A. Field Data

	Cruzen Farm			Fricke Farm		
	Taintor silty clay loam			Taintor silty clay loam		
Fertilizer applied, lbs.	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
Plowdown	40	90	100	—	70	90
Preplant	130	—	—	200	—	—
TOTAL	170	90	100	200	70	90
1980 crop	Soybeans			Soybeans		
Row width	30 inches			30 inches		
Planting date	May 1			May 6 & 7		
Harvest date	Oct. 19 & 20			Oct. 8 & 9		

District 6

Designations Identifying Brands in the Yield Test

ACCO	ACCO Paymaster, Belmond, Ia. 50421
Americana	Americana Seeds, Bowen, Ill. 62316
Ames Best	Ames Best Hybrids, Ames, Ia. 50010
Armstrong	Armstrong Seed Company, Atlanta, Ill. 61723
*Asgrow	Asgrow Seed Company, Kalamazoo, Mich. 49001
*Cargill	Cargill, Inc., Minneapolis, Minn. 55440
Cyclone	Elm Grove Farms, Inc., Winfield, Ia. 52659
*DeKalb	DeKalb AgResearch, Inc., DeKalb, Ill. 60115
Dockendorff	Dockendorff Hybrids, Danville, Ia. 52623
EK Premium	EK Premium Hybrid Corn, Berwick, Ill. 61417
Embro	Embro Seed Company, Mankato, Minn. 56001
Federal	Federal Hybrids, Marion, Ia. 52302
Fruntd	Fruntd Seed Co. Inc., Pella, Ia. 50219
FS	Growmark, Inc., Bloomington, Ill. 61701
*Funk	Funk Seeds International, Inc., Bloomington, Ill. 61701
GSA	Growers Seed Association, Lubbock, Tex. 79408
Golden Harvest	The J. C. Robinson Seed Company, Waterloo, Neb. 68069
Iowa-Missouri	Iowa-Missouri Hybrid Corn Co., Keosauqua, Ia. 52565
Jacques	Jacques Seed Company, Prescott, Wis., 54021
Kruger	Kruger Seed Company, Cedar Falls, Ia. 50613
Lewis	Frank W. Lewis & Son Seed Farms, Inc., Ursa, Ill. 62376
Lynks	Lynks Hybrids, Marshalltown, Ia. 50158
*McAllister	McAllister Seed Farms, Mt. Pleasant, Ia. 52641
McCurdy	McCurdy Seed Co., Fremont, Ia. 52561
MFA	Missouri Farmers Association, Inc., Columbia, Mo. 65201
*Middlekoop	Middlekoop Seed Corn Co., Packwood, Ia. 52580
Migro	North American Plant Breeders, Ames, Ia. 50010
Northrup King	Northrup King Co., Minneapolis, Minn. 55440
*O's Gold	O's Gold Seed Co., Parkersburg, Ia. 50665
*PAG	PAG Seeds, Minneapolis, Minn. 55440
Payco	Payco Seeds, Inc., Dassel, Minn. 55325
Pfister	Pfister Hybrid Corn Co., El Paso, Ill. 61738
*Pioneer	Pioneer Hi-Bred International, Inc., Des Moines, Ia. 50308
Pride	Pride Company, Inc., Glen Haven, Wis. 53810
RBA	Stauffer Seeds, Springfield, Ill. 62704
Riverside	Lynnville Seed Company, Lynnville, Ia. 50153
RO	Ottile Seed Farms, Marshalltown, Ia. 50158
Stauffer	Stauffer Seeds, Springfield, Ill. 62704
Super Crost	Edward J. Funk & Sons, Inc., Kentland, Ind. 47951
Trojan	Pfizer Genetics, Inc., Eldora, Ia. 50627
Winterset	Winterset Hybrid Company, Winterset, Ia. 50273

*Companies with one or more widely grown entries made by Iowa State University.

TABLE 2. AVERAGES OF 1980-81 AND 1979-81 OF VARIETIES TESTED IN DISTRICT 6. LSD FOR YIELDS ARE 9 BUSHELS FOR 79-81 AND 11 BUSHELS FOR 80-81.

BRAND	VARIETY	CROSS	YIELD 79-81	BU./A 80-81	MOISTURE 80-81	PCT. 79-81
EMBR0	X36	SX	144	131	16.5	17.0
*PIONEER	3541	SX	148	132	17.7	18.1
DOCKENDORFF	7100	SX	148	141	17.7	18.1
NORTHUP KING	PX69A	SX	148	153	18.8	18.9
LEWIS	X53B	SX	148	142	18.8	18.9
PAYCO	SX990	SX	149	137	18.9	19.3
DOCKENDORFF	7338	SX	149	150	19.0	19.3
PAG	SX397	SX	149	142	19.1	19.3
TROJAN	T1100	SX	149	145	19.1	19.3
SUPER CROST	4337	SX	149	140	19.1	19.3
EMBR0	X50	SX	147	136	19.3	20.3
LYNKS	LX4315	SX	147	150	19.4	20.3
MIDDLEKOOP	M330	SX	147	139	19.4	20.3
*CARGILL	921	SX	147	137	19.9	20.3
EK PREMIUM	EK7770	SX	147	140	20.0	20.3
RO	2510	SX	147	144	20.0	20.3
MCCURDY	7440	SX	147	149	20.1	21.5
MIDDLEKOOP	M335	SX	147	160	20.2	21.4
MFA	5104	SX	147	138	20.2	20.9
FEDERAL	FX39	SX	147	132	20.3	21.8
*FUNK	G4507	SX	144	119	20.3	21.5
PRIDE	7715	SX	144	143	20.4	21.6
STAUFFER	S767	SX	144	139	20.5	21.7
*PAG	SX333	SX	144	142	20.6	21.7
*MIDDLEKOOP	M339	SX	144	142	20.6	21.3
*CARGILL	949	SX	156	140	20.7	21.9
SUPER CROST	5440	SX	142	118	20.8	21.8
MCCURDY	84	SX	159	137	20.8	21.9
AMERICANA	3200	SX	151	128	20.8	22.0
MFA	5802	SX	153	137	20.8	22.0
*O'S GOLD	5500A	SX	158	141	20.8	22.0
MFA	6707	SX	158	155	20.8	22.0
NORTHUP KING	PX74	SX	157	139	20.8	22.0
GSA	2300	SX	156	145	20.9	21.9
*DEKALB	XL72AA	SX	131	104	20.9	21.9
PFISTER	75	SX	159	141	20.9	22.0
FUNK	G4606	MSX	158	140	20.9	21.7
FS	680	SX	155	144	21.0	22.1
RO	2500	SX	162	143	21.1	22.3
*MIDDLEKOOP	M315	SX	162	143	21.1	22.3
*CARGILL	967	SX	167	155	21.2	21.8
STAUFFER	S7795	SX	151	156	21.2	22.1
*MCALLISTER	SX7300	SX	151	131	21.2	22.1
*ASGROW	FX90	SX	152	132	21.2	22.3
EMBR0	X60	SX	155	145	21.3	22.2
DOCKENDORFF	7700	SX	159	140	21.3	22.6
MIGRO	HP44	SX	150	132	21.3	22.2
*PIONEER	3382	SX	155	144	21.3	21.8
TROJAN	TXS115A	SX	140	121	21.4	22.5
GOLDEN HARVEST	H2500	SX	159	140	21.4	22.4
PAG	SX351	SX	157	139	21.5	22.5
WINTERSET	SX68	SX	157	142	21.5	22.5
ASGROW	FX777	SX	168	142	21.5	22.2
PRIDE	7759	SX	157	133	21.7	22.2
DEKALB	XL71	SX	157	143	22.2	22.2
FEDERAL	FX59	SX	157	137	22.5	23.5
ASGROW	RX909	SX	150	128	22.6	23.5
MIGRO	M0707	SX	154	134	22.8	24.2
MCALLISTER	SX7300B	SX	165	158	23.2	23.6
SUPER CROST	7801	SX	150	150	23.4	23.4
SUPER CROST	7600	SX	165	155	23.4	23.4
AMES BEST	V1KE300	SX	162	152	23.5	23.5
GSA	2340	SX	175	153	23.6	23.6
LYNKS	LX4500	SX	170	156	23.6	24.9
AMERICANA	4730	SX	153	153	23.6	24.9
MIGRO	HP87	SX	174	156	23.7	24.7
*PIONEER	3183	SX	154	156	23.8	24.7
EMBR0	X72	SX	169	156	23.8	24.9
MCCURDY	84AA	SX	169	155	23.8	24.9
EK PREMIUM	EK9920	SX	151	151	23.9	24.9
LEWIS	X81B	SX	167	157	23.9	24.5
AMES BEST	SX24	SX	173	158	24.0	25.1
WINTERSET	SX89	SX	152	162	24.1	25.1
EK PREMIUM	EK9900	SX	152	152	24.1	25.1
JACQUES	JX247	SX	152	152	24.1	25.1

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 1981 Iowa Corn Yield Test Report:

- Pm-660-1-81 District 1
- Pm-660-2-81 District 2
- Pm-660-3-81 District 3
- Pm-660-4-81 District 4
- Pm-660-5-81 District 5
- Pm-660-6-81 District 6
- Pm-660-7-81 District 7



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