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THE 1983 IOWA CORN YIELD TEST REPORT

District 2

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

The presentation of data for the entries 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.

1983 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 the entries were determined to be widely grown and were entered by Iowa State University. A widely grown entry was planted on 0.53 percent or more of the corn acreage in the district according to a 1982 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 28,500 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 three locations in 1981, 1982, and 1983. Yield in bushels per acre and percentage of moisture, root lodging, stalk lodging, dropped ears, and stand are shown for all entries in 1983 and for those tested in 1981 and 1982 that were in the 1983 test.

Interpretation of Results

Yield differences due to variation in soil, fertility, moisture availability, insect infestation, and diseases, plus any variation due

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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.

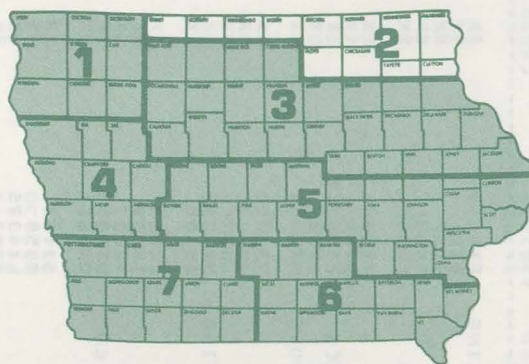
Grain moistures shown in tables 1 and 2 are indicators of maturity and natural drying rate. Maturity of varieties entered generally ranged from early to full season. Yield comparisons should be made among varieties of similar maturity.

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.

1983 Field Data

The District 2 test was conducted on farms operated by Clifford Branstad near Thompson in Winnebago County, Elvin Toppin near Rudd in Floyd County, and Harold Kerndt near Waukon in Allamakee County. Field data are presented in table A.

Subsoil moisture for the district was favorable to wet at planting time. Rainfall was variable in May with the Winnebago County location well below normal, the Floyd County location well above normal, and the Allamakee County location near normal. For the district rainfall was well above normal in June and well below normal in July. In August rainfall varied again with the Winnebago County location below normal and the other two locations above normal. All locations received above normal rainfall in September. Temperatures were well below normal in May and June, well above normal in July and August, and variable in September with the monthly average near normal. The average district yield was 15 bushels per acre lower than the mean of the five preceding years' averages.



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

Cooperative Extension Service
Iowa State University
Ames, Iowa 50011

TABLE 1. AVERAGE PERFORMANCE OF VARIETIES TESTED IN DISTRICT 2.
28,500 PLANTING RATE. LSD FOR 1983 YIELD IN BUSHELS IS 9.

BRAND	VARIETY	CROSS	YIELD BU./A			MOISTURE PCT.			ROOT LODGING PCT.			STALK LODGING PCT.			DROPPED EARS PCT.			STAND PCT.		
			1981	1982	1983	1983	1982	1981	1983	1982	1981	1983	1982	1981	1983	1982	1981	1983	1982	1981
NORTHROP KING	FX9144	SX			120	18.5			0			3			C			92		
KRUGER	8101	SX	117	120	124	19.6	20.4	25.2	1	0	0	7	17	1	0	0	0	88	80	64
STAUFFER	4402	SX	149	123	125	19.9	19.6	25.0	2	0	1	6	43	3	0	0	0	91	92	84
TALL CORN	SX104	SX			130	20.1			2			9			1			88		
FEDERAL	FX15	SX			110	20.2			2			4			C			75		
CENEX	2106	SX		134	122	20.4	19.8		1	1		6	28		C	0		90	87	
NC+	2305	SX			118	20.4			2			7			C			85		
LAND O LAKES	M1051TY	SX	153	129	122	20.5	19.7	25.9	3	0	0	5	38	3	1	0	0	83	88	85
KALTENBERG	KX55	SX	137	126	121	20.5	19.8	24.7	1	0	0	7	27	2	0	0	0	87	85	87
HICKORY GROVE	HX3	SX		129	123	20.5	20.1		3	0		6	28		C	0		87	80	
O'S GOLD	2330	SX	131	123	126	20.5	19.4	25.5	2	0	0	7	37	3	C	0	0	87	89	81
CROWS	198	SX			113	20.5			2			9			1			84		
JACQUES	JX77	SX			121	20.5			0			2			C			90		
NORTHROP KING	PX9353	SX		123	120	20.6	20.1		1	0		4	17		1	0		87	86	
AMES BEST	AB105	SX	131	124	121	20.7	20.1	24.1	3	0	1	5	35	4	0	0	0	87	85	81
CORNELIUS	C28SX	SX			128	20.7			5			7			C			89		
PAYCO	SX619	SX			127	20.8			0			1			1			84		
TRACY	T2001	SX		134	126	20.9	21.5		0	0		3	18		0	0		90	86	
DAIRYLAND	DX1003	SX			122	20.9			2			5			0			85		
CORNELIUS	C31SX	SX	136	121	127	21.0	20.3	24.6	0	0	0	6	29	3	1	0	0	91	90	86
SAR	SX103	SX	142	127	122	21.0	19.9	24.8	1	0	0	6	32	3	1	0	0	90	92	82
DEKALP	T950	SX	117	118	123	21.0	19.5	25.4	1	0	0	8	47	2	C	0	0	89	88	65
LYNKS	LX4075	SX	137	117	124	21.1	20.3	25.2	1	0	3	8	30	1	1	0	0	90	90	76
*PIONEER	3780	SX	131	121	116	21.2	20.2	25.7	1	0	0	7	38	1	1	C	0	92	90	81
FUNK	G4256	3X			109	21.2			1			5			1			87		
RENK	FK18	SX	146	121	125	21.2	19.9	24.0	2	1	0	6	37	1	C	0	1	91	87	84
SOKOTA	620	SX			129	21.2			1			4			1			89		
MCCURDY	4664	SX	138	132	121	21.4	20.4	25.1	1	0	4	4	25	3	C	0	0	89	89	85
DEKALP	DK484	SX			125	21.5			2			7			C			89		
CROWS	199	SX		130	112	21.6	20.8		2	0		9	25		0	0		90	92	
PIONEER	3726	SX			127	21.6			0			5			C			90		
*PIONEER	3747	SX	142	143	132	21.8	21.3	26.1	2	0	10	3	7	1	1	0	1	90	89	87
MCCURDY	X047	SX			113	21.8			0			5			1			87		
GOLD TAG	1906	MSX		139	114	21.9	21.5		0	0		6	15		1	0		87	88	
RENK	RK19	SX			123	21.9			1			7			1			87		
FEDERAL	FX6	SX	144	122	114	22.0	21.4	26.8	7	1	1	15	36	4	1	0	1	89	91	85
ASGROW	FX532	SX			126	22.0			1			8			0			86		
MCCURDY	4855	SX	142	140	121	22.2	22.3	26.6	3	0	0	8	20	2	1	0	1	93	92	83
*PIONEER	3732	SX	146	145	127	22.3	22.3	26.3	2	0	0	4	8	1	0	0	0	88	92	86
SAR	SX123	SX	131	123	125	22.4	20.8	25.6	2	0	0	5	36	3	1	0	1	90	91	84
PAG	SX193	SX			116	22.4			0			6			1			90		
GOLD TAG	1822	SX		123	107	22.5	20.4		2	0		6	30		0	0		84	85	
RIVERSIDE	RS40	3X		136	119	22.5	24.1		1	0		5	7		C	0		87	87	
EMBRO	X36	SX			122	22.6			3			6			1			89		
*FUNK	G4315	MSX	146	118	122	22.6	21.5	24.9	2	0	1	5	42	3	0	0	1	91	89	85
CARGILL	861	SX		132	119	22.6	22.1		2	0		4	26		0	0		91	90	
DAIRYLAND	DX1006	SX		146	130	22.7	22.6		1	0		6	13		0	0		88	91	
PAYMASTER	2890	SX		140	128	22.8	21.5		2	1		5	25		0	0		87	90	
PAG	SX239	SX			130	22.8			1			5			1			92		
TRACY	T205SXI	SX			116	22.9			2			8			1			79		
NORTHROP KING	PX9415	SX			118	22.9			1			6			0			91		
RENK	RK60	SX			132	23.0			4			5			1			87		
NC+	2747	SX			123	23.0			4			3			1			93		
PAYCO	SX788	SX	140	133	131	23.1	21.9	26.0	0	0	1	6	20	3	0	0	0	83	89	85
*SUPERCROST	2396	SX	138	133	127	23.1	21.3	25.9	2	0	0	7	26	3	1	0	1	89	89	85
AMES BEST	AB107	SX	136	144	127	23.1	2													

Table A. Field Data

Branstad Farm Clarion loam				Toppin Farm Floyd loam			Kerndt Farm Fayette silt loam		
Fertilizer applied, lbs.	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
Plowdown	—	—	—	—	—	140	17.5	45	145
Preplant	150	—	—	130	—	—	150	—	—
Starter	7	23	5	—	—	—	—	—	—
Sidedress	—	—	—	10	34	—	—	—	—
TOTAL	157	23	5	140	34	140	167.5	45	145
1982 crop	Soybeans			Soybeans			Alfalfa		
Row width	30 inches			30 inches			38 inches		
Planting date	May 10			May 5			May 4		
Harvest date	Oct. 5			Oct. 8			Oct. 10 & 14		

District 2

Designations Identifying Brands in the Yield Test

*Ames Best	Ames Best Hybrids, Ames, IA 50010
Asgrow	Asgrow Seed Company, Kalamazoo, MI 49001
*Cargill	Cargill, Inc., Minneapolis, MN 55440
Cenex	Cenex Seed Corn Plant, Cedar Falls, IA. 50613
CFS	Custom Farm Seed, Momence, IL 60954
Cornelius	Cornelius Seed Corn Co., Bellevue, IA 52031
*Crows	Crows Hybrid Corn Co., Milford, IL 60953
Dairyland	Dairyland Seed Co., Inc., West Bend, WI 53095
*DeKalb	DeKalb AgResearch, Inc., DeKalb, IL 60115
E K Premium	E K Premium, Berwick, IL 61417
Embro	Embro Seed Company, Mankato, MN 56001
ENO	ENO Farms Inc., Sheffield, IA 50475
Federal	Federal Hybrids, Marion, IA 52302
Fontanelle	Fontanelle Hybrids, Nickerson, NE 68044
FS	Growmark, Inc., Bloomington, IL 61701
*Funk	Funk Seeds International, Inc., Bloomington, IL 61701
Gold Tag	Ferry-Morse Seed Co., Geneseo, IL 61254
Golden Harvest	The J. C. Robinson Seed Company, Waterloo, NE 68069
Hickory Grove	Jay Ranor Hoffman, Aurora, IA 50607
*Jacques	Jacques Seed Company, Prescott, WI 54021
Kaltenberg	Kaltenberg Seed Farms, Waunakee, WI 53597
Kruger	Kruger Seed Company, Cedar Falls, IA 50613
Land O'Lakes	Land O'Lakes Inc., Fort Dodge, IA 50501
Lynks	Lynks Hybrids, Marshalltown, IA 50158
McCurdy	McCurdy Seed Co., Fremont, IA 52561
NC+	NC+ Hybrids, Lincoln, NE 68504
Northrup King	Northrup King Co., Minneapolis, MN 55440
O's Gold	O's Gold Seed Co., Parkersburg, IA 50665
Otilie	Otilie Seed Farms, Marshalltown, IA 50158
*PAG	PAG Seeds, Minneapolis, MN 55440
Payco	Payco Seeds, Inc., Dassel, MN 55325
Paymaster	Paymaster Seeds, Belmond, IA 50421
Pfister	Pfister Hybrid Corn Co., El Paso, IL 61738
*Pioneer	Pioneer Hi-Bred International, Inc., Des Moines, IA 50308
Renk	Renk Seed Co., Sun Prairie, WI 53590
Riverside	Lynnville Seed Co., Lynnville, IA 50153
Sar	Sar Hybrids, Inc., Charles City, IA 50616
Sokota	Sokota Hybrid Producers, Brookings, SD 57006
Stauffer	Stauffer Seeds, Springfield, IL 62704
*Super Crost	Edward J. Funk & Sons, Inc., Kentland, IN 47951
Tall Corn	Tall Corn Hybrids, Inc., Grinnell, IA 50112
Tracy	Tracy & Son Farms, Inc., Janesville, WI 53545

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

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 1983 Iowa Corn Yield Test Report:

Pm-660-1-83 District 1	Pm-660-5-83 District 5
Pm-660-2-83 District 2	Pm-660-6-83 District 6
Pm-660-3-83 District 3	Pm-660-7-83 District 7
Pm-660-4-83 District 4	

TABLE 2. AVERAGES OF 1982-83 AND 1981-83 OF VARIETIES TESTED IN DISTRICT 2. LSD FOR YIELDS ARE 6 BUSHELS FOR 81-83 AND 6 BUSHELS FOR 82-83.

BRAND	VARIETY	CROSS	YIELD BU./A		MOISTURE PCT.	
			81-83	82-83	82-83	81-83
STAUFFER	4402	SX	132	124	19.7	21.5
O'S GOLD	2330	SX	127	125	19.9	21.8
KRUGER	6101	SX	120	122	20.0	21.7
LAND O LAKES	M10517Y	SX	134	125	20.1	21.7
CENEX	2106	SX		128	20.1	
KALTENBERG	KX55	SX	128	123	20.1	21.7
DEKALB	1950	SX	119	121	20.3	22.0
HICKORY GROVE	HX3	SX		126	20.3	
NORTHUP KING	PX9353	SX		121	20.3	
AMES BEST	AB105	SX	125	122	20.4	21.6
SAR	SX103	SX	130	125	20.4	21.9
RENK	RK18	SX	131	123	20.5	21.7
CORNELIUS	C315X	SX	128	124	20.6	22.0
LYNKS	LX4075	SX	126	120	20.7	22.2
*PIONEER	3780	SX	123	118	20.7	22.4
MCCURDY	4664	SX	130	126	20.9	22.3
CROWS	199	SX		121	21.2	
TRACY	T2001	SX		130	21.2	
GOLD TAG	1822	SX		115	21.4	
*PIONEER	3747	SX	139	138	21.5	23.1
SAR	SX123	SX	126	124	21.6	22.9
FEDERAL	FX6	SX	126	118	21.7	23.4
GOLD TAG	1906	MSX		126	21.7	
*FUNK	G4315	MSX	129	120	22.0	23.0
PAYMASTER	2890	SX		134	22.1	
*SUPERCROST	2396	SX	133	130	22.2	23.4
PIONEER	3707	SX		131	22.2	
MCCURDY	4855	SX	134	130	22.2	23.7
*PIONEER	3732	SX	139	136	22.3	23.6
CARGILL	661	SX		126	22.3	
PAYCO	SX788	SX	134	132	22.5	23.7
*DEKALB	XL25A	SX	128	124	22.5	23.6
DAIRYLAND	DX1006	SX		138	22.5	
ASGROW	FX610	SX		125	22.6	
*DEKALB	T1000	SX	134	129	22.7	23.8
*JACQUES	JX151	SX	136	130	22.7	23.9
AMES BEST	AB107	SX	136	135	22.8	24.1
CFS	4003	SX		129	22.8	
SAR	SX4900	SX		128	22.9	
FS	275	SX		136	23.0	
SUPERCROST	2410	SX		138	23.1	
CORNELIUS	SX34	SX	139	135	23.1	24.0
SAR	SX200A	SX	138	134	23.1	24.2
CARGILL	862	SX	121	120	23.1	24.0
HICKORY GROVE	HX4	SX		131	23.2	
FONTANELLE	370	SX		133	23.2	
*AMES BEST	SX37	SX	141	137	23.3	24.2
PAYMASTER	2990	SX		137	23.3	
*O'S GOLD	6880	SX	141	133	23.3	24.0
AMES BEST	AB108A	SX	136	131	23.3	24.5
DAIRYLAND	DX1105	SX		129	23.3	
RIVERSIDE	RS40	SX		128	23.3	
STAUFFER	5602	SX	135	132	23.4	24.6
PFISTER	1720	SX		130	23.4	
CENEX	2108	SX		127	23.4	
FUNK	G4342	SX		137	23.4	
LAND O LAKES	M1061	SX		125	23.5	
CORNELIUS	C445X	SX	140	134	23.6	25.2
RENK	RK24	SX	134	128	23.6	24.3
LYNKS	LX4225	SX		128	24.2	
PAYCO	SX722	SX		132	24.5	
DAIRYLAND	DX1008	SX	136	126	24.7	25.1
SOKOTA	660	SX	132	126	24.8	26.1
LYNKS	LX4210	SX	133	122	25.0	29.5
CFS	6007	SX		135	25.7	
CFS	WS410	SX		125	25.8	
DAIRYLAND	DX1012	SX	143	133	27.2	28.3
LAND O LAKES	M1131	SX		130	27.8	

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