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A supplement to the December 16, 1995 issue of *Iowa Farmer Today*

The 1995 Corn Yield Test Report District 2

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

These data are first released on Iowa State University Extension's electronic information delivery system (EXNET), usually around the end of November. Anyone can access the information on EXNET and receive the data as soon as they are released. Information provided on EXNET can be accessed in three ways: by modem at (515) 294-8354 and logging in as "guest," through Internet using World Wide Web (WWW) at URL:http://www.exnet.iastate.edu, or through Internet using telnet to exnet.iastate.edu and logging in as "guest." For additional information about EXNET, contact EXNET, 110 EES Bldg., Haber Rd., Iowa State University, Ames, Iowa 50011-3070, telephone number (515) 294-8658.

The next released format of the data is on computer diskettes, which include a hybrid selection computer program described in another section of this report. These diskettes are usually available a week to 10 days after the data are released on EXNET.

The final format is the printed version, which is being printed and distributed by *Iowa Farmer Today* in its Dec. 16, 1995 issue. A few days later, the reports are also available from county extension offices.

The presentation of data for the hybrids tested does not imply approval or endorsement by the authors or the agencies sponsoring or conducting the test. Entries in Tables 1 and 2 are designated by brand name and variety.

Use of the Data in Advertisements

Iowa State University desires to maintain the credibility of data from the Iowa Corn Yield Test. Misuse of these data in advertisements can have a negative effect on the perception of the value of these data. For advertising purposes, brand to brand comparisons should not be made unless more than one competitor brand is used in the ad and all entries of those brands in a given table are included in the ad. Advertisement statements by an individual company about the performance of its entries can be made as long as they are accurate statements about the data as published with no reference to other companies' hybrids. A statement similar to: "See the official Iowa State University Extension Corn Yield Test Report, Pm-660-(1-7)-95, for details," should be included in the ad.

1995 Procedure

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

In 1995, 196 entries were evaluated in this district. Fifteen of the entries determined to be widely grown were entered by Iowa State University. In June, survey cards are mailed to a random sample of corn growers in Iowa. Based on the survey results, the 15 hybrids grown on the most acres in a district are classified as widely grown for that district. The widely grown hybrids (*) in this report were determined by the 1994 survey. Iowa State University entered a maximum of three widely grown hybrids of any given brand. These entries were given priority over the remaining 181 entries made by seed producers.

Each entry was replicated four times in four-row plots at a planting rate of 29,000 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 15.0 percent moisture for shelled corn.

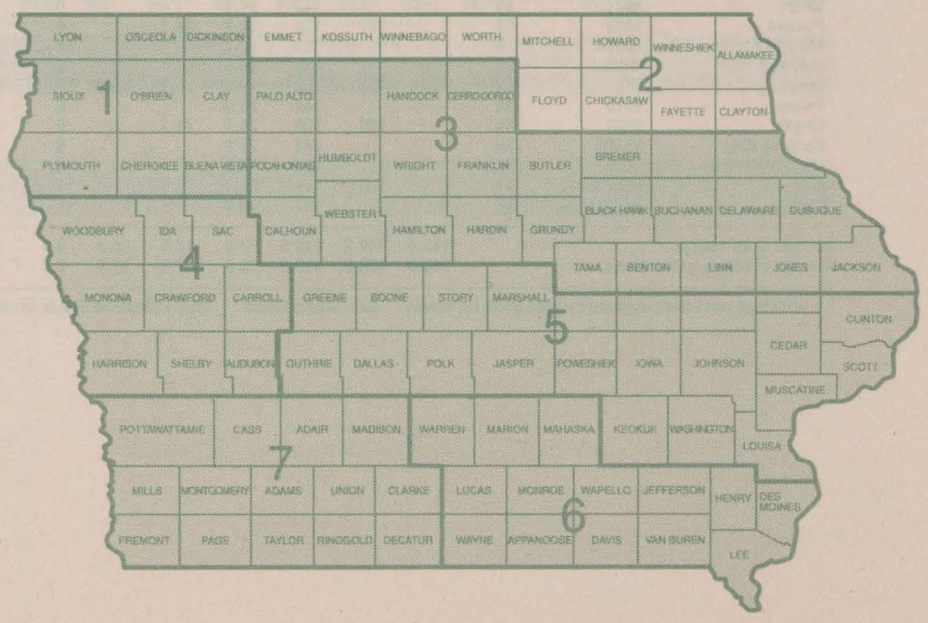
Since 1988, data for protein, oil, and starch percentages have been included in the Iowa Corn Yield Test Reports. Protein, oil, and starch were measured on an Infratec 1225 near-infrared transmittance analyzer calibrated against accepted chemical methods as done by Woodson-Tenant Labs, Des Moines, Iowa. Dr. Charles R. Hurburgh, Jr. of the ISU Department of Agricultural and Biosystems Engineering was responsible for analyzing the samples. Samples for nutrient analysis were collected from one field in each district. Data presented are averages of the four replicated plots in that field. To be consistent with the yield data, the protein, oil, and starch data were corrected to 15.0 percent moisture.

How Information Is Presented

The agronomic data presented are averages of two locations in 1993 and 1994 and three locations in 1995. Yield in bushels per acre and percentages of moisture, root lodging, stalk lodging, dropped ears, stand, protein, oil, and starch are shown for all entries in 1995 and for those tested in 1993 and 1994 that were in the 1995 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 for yield shown in Tables 1 and 2 represent, in bushels per acre, the amount 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.



Iowa Crop Improvement Association

IOWA STATE UNIVERSITY
University Extension
Ames, Iowa

Table 2. Averages of 1994-94 and 1993-95 of varieties tested in District 2.
LSD for yields are 5 bushels for 93-95 and 6 bushels for 94-95.

93-95 protein LSD = 0.2. 93-95 oil LSD = 0.1. 93-95 starch LSD = 0.2.
94-95 protein LSD = 0.2. 94-95 oil LSD = 0.1. 94-95 starch LSD = 0.3.

			Yield Bu/A		Moisture Pct		Root Ldg Pct		Stalk Ldg Pct		Drop Ear Pct		Stand Pct		Protein Pct		Oil Pct		Starch Pct			
Brand	Variety	Cross	93-95	94-95	94-95	93-95	93-95	94-95	93-95	94-95	93-95	94-95	93-95	94-95	93-95	94-95	93-95	94-95	93-95	94-95	Variety	Brand
DeKalb	DK471	SX	137	145	17.3	18.9	11	17	2	3	0	0	91	91	8.1	8.5	3.4	3.4	60.7	60.4	DK471	DeKalb
Golden Harvest	H2292	SX	128	131	17.5	18.6	9	13	2	3	0	0	92	93	8.7	9.2	3.5	3.4	60.2	59.7	H2292	Golden Harvest
Payco	614	SX		128	17.7			6		3		0		87		8.8		3.5		59.9	614	Payco
*DeKalb	DK493	SX	134	146	17.7	19.4	11	17	2	3	0	0	91	94	7.9	8.4	3.5	3.4	60.7	60.2	DK493	*DeKalb
*Pioneer	3751	SX	131	138	17.8	19.3	8	11	5	7	1	2	91	92	8.4	8.7	3.4	3.4	60.4	60.1	3751	*Pioneer
*Northrup King	N4242	SX	138	146	18.0	19.0	14	21	2	2	0	0	90	89	8.2	8.5	3.2	3.2	61.1	60.7	N4242	*Northrup King
*Cargill	3777	SX		127	18.0			15		4		1		90		8.7		3.3		60.3	3777	*Cargill
*Pioneer	3769	SX	132	135	18.1	20.5	11	16	4	5	1	1	94	96	8.4	8.7	3.4	3.3	60.5	60.1	3769	*Pioneer
*ICI Seeds	8700	SX	125	134	18.1	19.6	4	7	3	5	2	2	93	95	8.5	8.9	3.3	3.3	60.5	60.2	8700	*ICI Seeds
Payco	531	SX	128	137	18.2	19.7	7	11	3	4	0	0	89	91	8.2	8.5	3.6	3.6	60.5	60.1	531	Payco
*Golden Harvest	H2343	SX	142	147	18.2	20.5	12	17	5	6	0	0	91	92	8.9	9.2	3.5	3.5	60.1	59.6	H2343	*Golden Harvest
Dairyland	ST1198	SX	134	142	18.2	19.7	4	6	4	6	0	0	91	94	8.2	8.5	3.7	3.7	60.3	59.9	ST1198	Dairyland
Crows	180	SX		138	18.3			23		6		1		94		8.6		3.2		60.4	180	Crows
Cornelius	C265	SX		144	18.5			23		5		0		92		8.2		3.3		60.6	C265	Cornelius
Kruger	9501	SX		144	18.8			25		4		0		95		8.0		3.2		60.7	9501	Kruger
Viking	6100	SX	128	135	18.8	20.8	10	16	4	7	1	1	91	92	8.1	8.5	3.2	3.2	60.8	60.4	6100	Viking
Kline	KSXA	SX		142	18.9			26		2		0		90		8.1		3.4		60.4	KSXA	Kline
*DeKalb	DK512	SX	142	160	19.0	21.1	7	11	2	3	0	0	92	95	7.8	8.0	3.4	3.4	60.7	60.3	DK512	*DeKalb
Mycogen	4970	SX	133	141	19.1	21.0	12	18	5	5	0	0	90	91	8.4	8.8	3.4	3.4	60.6	60.3	4970	Mycogen
Ciba	4273	SX	136	147	19.3	21.3	15	23	2	3	0	0	93	96	8.6	9.1	3.4	3.3	60.4	60.0	4273	Ciba
DeKalb	DK527	SX		138	19.4			13		5		0		87		8.5		3.3		60.4	DK527	DeKalb
Kruger	9402A	SX	132	141	19.5	20.5	7	10	4	6	0	0	90	92	8.3	8.5	3.3	3.2	60.5	60.2	9402A	Kruger
Bioseed	9400	SX		138	19.5			19		6		0		91		8.6		3.3		60.1	9400	Bioseed
Mark	MRK95099	SX		137	19.6			13		6		0		89		8.3		3.4		60.4	MRK95099	Mark
Golden Harvest	H2441	SX	136	143	19.7	22.1	9	14	4	6	0	0	90	94	8.3	8.7	3.5	3.5	60.5	59.8	H2441	Golden Harvest
*Golden Harvest	H2390	SX	138	149	19.7	22.6	12	17	1	2	0	0	93	96	8.6	9.0	3.4	3.4	60.4	60.0	H2390	*Golden Harvest
Dairyland	ST1203	SX		143	19.8			21		5		0		94		8.7		3.4		59.8	ST1203	Dairyland
Lynks	2494	SX		138	19.8			15		3		0		93		8.6		3.3		60.4	2494	Lynks
Pfister	1563	SX		139	19.9			13		4		0		94		8.6		3.3		60.2	1563	Pfister
Mycogen	5150CB	SX		128	19.9			3		4		1		87		9.1		3.2		59.9	5150CB	Mycogen
*Pioneer	3563	SX	141	157	20.0	21.8	3	5	2	2	0	0	94	95	7.8	8.2	3.6	3.6	60.9	60.3	3563	*Pioneer
Terra	TR1031	SX		138	20.0			16		4		1		91		8.5		3.5		60.2	TR1031	Terra
FS	2492	SX	133	148	20.0	22.4	4	6	3	4	0	0	92	94	8.0	8.2	3.2	3.2	61.1	60.8	2492	FS
NC+	2844	SX	134	144	20.0	22.7	9	14	2	3	1	1	95	96	8.8	9.1	3.3	3.3	60.1	59.7	2844	NC+
Renze	6093	SX		140	20.1			10		5		1		94		8.6		3.2		60.5	6093	Renze
Golden Harvest	H2382	SX		140	20.2			16		4		0		92		8.9		3.1		60.4	H2382	Golden Harvest
Renze	6105	SX		140	20.3			20		3		1		95		8.6		3.6		60.1	6105	Renze
*Golden Harvest	H2404	SX	135	142	20.3	22.2	18	26	4	6	0	0	93	95	8.9	9.1	3.4	3.4	60.1	59.7	H2404	*Golden Harvest
Dairyland	ST1200	SX		142	20.3			12		4		0		96		8.5		3.4		60.2	ST1200	Dairyland
*DeKalb	DK554	SX	135	149	20.4	24.1	2	3	2	2	0	0	87	87	7.9	8.1	3.5	3.5	60.5	60.1	DK554	*DeKalb
Payco	734	SX		142	20.6			19		3		0		90		8.1		3.5		60.3	734	Payco
Cornelius	C397	MSX	133	145	20.6	22.5	10	15	3	4	0	0	90	91	8.2	8.3	3.4	3.4	60.7	60.4	C397	Cornelius
Fontanelle	4865	SX		143	20.6			22		3		0		96		8.2		3.5		60.3	4865	Fontanelle
Cornelius	C498	SX		145	20.6			21		2		0		92		8.2		3.4		60.5	C498	Cornelius
Kruger	9407	SX	137	148	20.7	23.0	16	24	2	3	0	0	92	93	7.7	7.8	3.5	3.5	60.9	60.3	9407	Kruger
Cenex/Land O'Lake	534	SX		145	20.8			23		3		0		96		8.4		3.5		60.1	534	Cenex/Land O'Lake
Pfister	2020	SX		147	20.8			20		3		1		96		8.0		3.3		60.7	2020	Pfister
Kline	KSX14	SX		144	20.8			22		2		0		95		7.9		3.5		60.3	KSX14	Kline
Fontanelle	4824	SX		145	20.8			23		3		0		97		8.2		3.3		60.4	4824	Fontanelle
Ciba	4303	SX		144	20.8			23		2		0		89		9.2		3.3		60.0	4303	Ciba
Mark	MRK94108	SX	138	150	20.9	23.0	13	20	2	2	0	0	90	93	7.8	8.0	3.4	3.4	60.8	60.3	MRK94108	Mark
FS	2372	SX		149	20.9			22		4		0		94		8.0		3.4		60.4	2372	FS
Asgrow	RX510	SX	137	154	20.9	23.5	9	13	4	4	0	1	94	96	8.3	8.7	3.3	3.4	60.7	60.2	RX510	Asgrow
Viking	4420	SX		144	20.9			24		5		0		92		7.9		3.4		60.4	4420	Viking
DeKalb	DK566	SX		153	20.9			12		3		0		95		8.4		3.6		60.0	DK566	DeKalb
Ottilie	2431	SX		147	20.9			22		4		1		96		8.1		3.4		60.3	2431	Ottilie
Lynks	2595	SX		147	20.9			22		3		1		95		7.9		3.4		60.5	2595	Lynks
Renze	6221	SX		150	20.9			22		3		1		94		7.8		3.5		60.4	6221	Renze
Dairyland	ST1108	SX	135	145	21.0	22.7	14	21	3	4	0	0	90	93	7.6	7.8	3.5	3.5	60.9	60.4	ST1108	Dairyland
Agripro	AP422	SX		146	21.0			20		3		1		96		8.0		3.4		60.3	AP422	Agripro
Bioseed	9450	SX		149	21.0			14		5		0		88		8.7		3.4		60.1	9450	Bioseed
Agripro	AP398	SX	130	145	21.0	22.8	12	17	2	2	0	0	86	91	8.9	9.2	3.2	3.1	60.6	60.4	AP398	Agripro
*Cargill	4277	SX	139	151	21.0	23.6	13	20	3	4	1	1	94	96	8.7	9.0	3.3	3.3	60.3	60.0	4277	*Cargill
ICI Seeds	8570	SX		149	21.0			11		2		1		93		9.0		3.3		60.2	8570	ICI Seeds
Hawkeye Hybrid	SX15	SX	139	150	21.0	23.0	15	22	3	4	0	0	91	93	7.7	8.0	3.4	3.4	60.9	60.5	SX15	Hawkeye Hybrid
Patriot	5080	SX		149	21.0			23		4		0		95		8.0		3.5		60.5	5080	Patriot
Dairyland	ST1405	SX		149	21.1			20		3		0		96		8.8		3.3		60.1	ST1405	Dairyland
Cornelius	C442	SX	141	151	21.2	23.1	15	22	3	4	0	0	93	95	7.9	8.0	3.5	3.5	60.7	60.4	C442	Cornelius
Profiseed	PSI5685	SX	136	149	21.2	23.2	14	21	2	2	0	0	92	95	7.8	8.1	3.4	3.4	60.8	60.3	PSI5685	Profiseed
Renze	6246	SX		140	21.2			21		3		0		92		8.1		3.5		60.4	6246	Renze
*Cargill	4327	SX	141	152	21.2	24.4	8	12	3	4	0	1	94	95	8.1	8.5	3.5	3.6	60.5	60.1	4327	*Cargill
Agventure	626	SX		148	21.3			22		3		0		95		8.0		3.4		60.4	626	Agventure
Golden Harvest	H2408	SX		141	21.3			19		5		0		94		8.8		3.4		60.1	H2408	Golden Harvest
Viking	4300	SX	131	145	21.5	24.0	11	17	3	4	0	0	88	88	8.4	8.6	3.3	3.3	60.4	59.8	4300	Viking
Cargill	5677	SX		160	22.0			13		5		0		89		8.8		3.3		60.0	5677	Cargill
ICI Seeds	8541	SX		161	22.1			18		2		1		92		8.2		3.5		60.5	8541	ICI Seeds
Crows	435	SX		146	22.2			13		2		0		93		8.4		3.5		59.9	435	Crows
Pioneer	3489	SX		160	22.4			18		1		0		90		8.3		3.8		59.9	3489	Pioneer
LG Seeds	LG-2541	SX	135	154	22.9	27.1	14	21	2	2	0	0	90	91	7.8	8.0	3.5	3.4	60.8	60.4	LG-2541	LG Seeds
Mark	MRK95110	SX		148	23.3			18		2		0		90		8.2		3.4		60.4	MRK95110	Mark
Cargill	6303	SX		155	23.4			23		2		0		95		8.3		3.4		60.1	6303	Cargill
Crows	445	SX	142	164	23.5	27.3	11	17	2	3	0	1	93	95	8.0	8.2	3.3	3.3	60.8	60.4	445	Crows
Average of all entries			135.2	145.0	20.2	22.0	10	17	2.9	3.7	0.3	0.4	91.4	93.0	8.2	8.4	3.4	3.4	60.6	60.2	Average of all entries	
Average of widely grown entries			136.4	145.3	19.1	21.4	9.5	14	2.8	3.9	0.4	0.6	92.2	93.4	8.3	8.6	3.4	3.4	60.5	60.1	Average of widely grown entries	

* = Widely grown variety entered by Iowa State University. SX = Single Cross. MSX = Modified Single Cross. 3X = 3-Way Cross. 4X = 4-Way Cross. SXB = Blend of Single Crosses.

able 1. Average performance of varieties tested in District 2. 29,000 planting rate. LSD for 1995 yield in bushels is 9; for 1994 is 11; and for 1993 is 9. 1995 protein pct LSD = 0.3. 1995 oil pct LSD = 0.1. 1995 starch pct LSD = 0.4.

			Yield Bu/A			Moisture Pct			Root Ldg Pct			Stalk Ldg Pct			Drop Ear Pct			Stand Pct			Protein Pct			Oil Pct			Starch Pct				
Brand	Variety	Cross	1993	1994	1995	1995	1994	1993	1995	1994	1993	1995	1994	1993	1995	1994	1993	1995	1994	1993	1995	1994	1993	1995	1994	1993	1995	1994	1993	Variety	Brand
Crows	170	SX			118	17.4			0			10			3			90			9.0			3.3			60.4			170	Crows
Epley	EX1100	SX			130	18.4			0			7			2			92			9.0			3.7			59.9			EX1100	Epley
DeKalb	DK442	SX			141	18.4			0			9			1			91			8.7			3.8			59.9			DK442	DeKalb
Cenex/Land O'Lake	357	SX			132	18.6			0			10			2			92			8.5			3.3			60.4			357	Cenex/Land O'Lake
DeKalb	DK471	SX	120	143	148	18.8	15.8	22.0	0	33	0	7	0	1	0	0	0	91	91	92	8.1	8.9	7.4	3.5	3.2	3.5	60.4	60.3	61.5	DK471	DeKalb
Cenex/Land O'Lake	345	SX			125	18.9			0			11			2			87			8.4			3.5			60.4			345	Cenex/Land O'Lake
Renze	6056	SX			131	19.1			0			3			1			88			8.6			3.6			60.0			6056	Renze
*Pioneer	3751	SX	119	141	135	19.1	16.4	22.3	0	22	0	10	5	1	2	1	0	93	91	89	8.7	8.6	8.0	3.5	3.4	3.3	60.1	60.1	61.0	3751	*Pioneer
Asgrow	RX484	SX			132	19.3			0			5			2			91			8.9			3.5			60.0			RX484	Asgrow
Golden Harvest	H2292	SX	123	133	130	19.3	15.7	20.9	0	26	0	4	2	0	0	0	0	90	97	89	8.9	9.4	7.8	3.5	3.4	3.6	59.8	59.5	61.2	H2292	Golden Harvest
Cargill	3797	SX			131	19.3			0			8			1			81			8.3			3.3			60.7			3797	Cargill
*ICI Seeds	8700	SX	107	146	121	19.4	16.9	22.4	0	13	0	8	2	0	4	1	0	90	100	90	8.8	9.0	7.8	3.4	3.2	3.2	60.3	60.1	61.2	8700	*ICI Seeds
*Northrup King	N4242	SX	120	158	135	19.4	16.6	20.9	0	42	1	3	1	0	0	0	0	79	100	90	8.3	8.6	7.6	3.3	3.0	3.3	60.6	60.9	61.7	N4242	*Northrup King
*Cargill	3777	SX		125	130	19.4	16.6		0	29		6	1		1	0		90	90		8.6	8.9		3.5	3.1		60.2	60.4		3777	*Cargill
Crows	180	SX		147	128	19.5	17.2		1	45		9	2		1	1		89	100		8.4	8.8		3.4	3.1		60.4	60.4		180	Crows
*DeKalb	DK493	SX	109	148	144	19.5	16.0	22.8	0	33	1	4	1	1	1	0	0	90	99	85	8.2	8.5	7.0	3.5	3.3	3.6	60.4	60.1	61.6	DK493	*DeKalb
Cargill	3677	SX			145	19.5			2			5			1			91			8.6			3.8			59.9			3677	Cargill
Prairie Gold	PG1521	SX			132	19.5			0			8			2			94			8.5			3.4			60.5			PG1521	Prairie Gold
Payco	605	SX			131	19.7			0			5			1			87			8.5			3.5			60.0			605	Payco
Wilson	E4103	SX			128	19.8			0			4			2			94			8.3			3.6			60.3			E4103	Wilson
Ames Best	AB1001	SX			134	19.8			0			6			2			89			8.6			3.6			59.9			AB1001	Ames Best
Payco	614	SX		125	131	19.8	15.5		0	12		7	0		1	0		85	90		8.3	9.2		3.6	3.3		59.9	60.0		614	Payco
*Pioneer	3769	SX	125	140	130	19.9	16.2	25.5	2	30	1	8	3	1	2	0	0	94	98	90	8.7	8.8	7.7	3.3	3.3	3.5	60.3	59.9	61.3	3769	*Pioneer
Cornelius	C265	SX		148	140	19.9	17.0		0	45		8	1		0	0		92	92		7.9	8.5		3.4	3.1		60.6	60.7		C265	Cornelius
Lynks	2451	SX			130	20.0			0			4			2			92			8.5			3.6			59.8			2451	Lynks
Epley	EX1450	SX			144	20.0			1			8			0			93			7.9			3.6			60.4			EX1450	Epley
Payco	635	SX			142	20.0			0			8			1			90			8.8			3.5			60.0			635	Payco
Hill Seed	HSX1006	SX			134	20.1			0			6			3			86			8.3			3.5			60.3			HSX1006	Hill Seed
Epley	EX1400	SX			127	20.1			0			5			3			87			8.5			3.5			60.2			EX1400	Epley
*Golden Harvest	H2343	SX	131	152	143	20.1	16.3	25.1	0	35	1	10	3	2	0	0	0	91	94	89	9.1	9.3	8.2	3.6	3.4	3.5	59.7	59.6	60.9	H2343	*Golden Harvest
*Northrup King	N3808	SX			140	20.2			0			4			0			88			8.2			3.4			60.7			N3808	*Northrup King
Kruger	9501	SX		142	146	20.2	17.4		2	48		7	1		0	0		91	100		7.8	8.3		3.4	3.0		60.7	60.7		9501	Kruger
Dairyland	ST1198	SX	116	146	139	20.3	16.2	22.7	1	12	0	11	1	0	0	0	0	91	98	83	8.5	8.4	7.7	3.7	3.7	3.6	59.8	60.0	61.2	ST1198	Dairyland
Terra	TR990	SX			141	20.3			0			6			0			91			8.8			3.6			59.6			TR990	Terra
Kline	KSXA	SX		143	140	20.4	17.5		0	51		5	0		0	0		86	95		7.9	8.2		3.4	3.3		60.4	60.5		KSXA	Kline
CFS	W4457	SX			130	20.4			1			10			0			90			8.2			3.5			60.2			W4457	CFS
Payco	531	SX	111	138	136	20.4	15.9	22.9	1	21	0	6	2	1	1	0	0	86	95	86	8.4	8.5	7.7	3.6	3.6	3.5	60.0	60.2	61.2	531	Payco
Northrup King	N4640	SX			143	20.5			1			3			0			89			8.5			3.5			60.3			N4640	Northrup King
Hill Seed	HSX1035	SX			136	20.6			1			7			0			87			7.8			3.5			60.5			HSX1035	Hill Seed
Cargill	4127	SX			143	20.6			0			4			2			94			8.4			3.6			60.0			4127	Cargill
Ciba	4285	SX			141	20.6			0			4			1			88			8.6			3.4			60.1			4285	Ciba
Viking	6100	SX	116	135	135	20.7	17.0	24.6	0	31	0	9	4	0	2	0	0	91	94	88	8.4	8.6	7.4	3.2	3.1	3.4	60.7	60.1	61.6	6100	Viking
Mycogen	4970	SX	116	148	134	20.7	17.6	24.6	0	36	0	8	2	4	0	0	0	89	93	89	8.5	9.2	7.4	3.7	3.0	3.6	59.9	60.6	61.4	4970	Mycogen
ISU	A881XSD46	SX			126	20.8			0			10			0			79			8.4			3.7			60.2			A881XSD46	ISU
Terra	TR1031	SX		139	136	20.9	18.2		0	32		8	1		1	0		88	93		8.5	8.6		3.7	3.4		59.8	60.5		TR1031	Terra
Golden Harvest	H2377	SX			137	20.9			0			6			0			89			8.9			3.4			60.1			H2377	Golden Harvest
*DeKalb	DK512	SX	107	169	152	21.0	16.9	25.3	0	21	0	4	1	0	0	0	0	91	99	85	7.7	8.3	7.4	3.7	3.2	3.3	60.1	60.4	61.7	DK512	*DeKalb
Bioseed	9400	SX		149	128	21.1	17.9		0	38		8	3		0	0		88	95		8.4	8.8		3.3	3.3		60.4	59.9		9400	Bioseed
Terra	TR1014	SX			131	21.1			0			8			0			92			8.6			3.5			60.0			TR1014	Terra
Pioneer	3730	SX			143	21.1			0			7			0			90			8.4			3.4			60.7			3730	Pioneer
Kruger	9402A	SX	115	152	129	21.1	17.8	22.6	0	19	0	7	4	1	0	0	0	88	96	86	8.3	8.8	7.7	3.5	3.0	3.4	60.2	60.1	61.3	9402A	Kruger
Hill Seed	HSX1025	SX			134	21.2			0			5			1			89			8.5			3.6			60.0			HSX1025	Hill Seed
Mark	MRK95099	SX		147	127	21.2	18.0		0	27		9	2		1	0		81	97		8.3	8.3		3.5	3.3		60.2	60.6		MRK95099	Mark
Renze	6235	SX			133	21.2			0			5			1			95			8.8			3.5			59.7			6235	Renze
Hughes	3485	SX			135	21.3			0			5			1			88			8.6			3.8			59.9			3485	Hughes
Kline	KSX10	SX			132	21.3			0			2			1			88			7.9			3.5			60.2			KSX10	Kline
Lynks	2494	SX		141	135	21.3	18.2		0	29		5	1		1	0		89	97		8.4	8.8		3.6	3.0		60.1	60.6		2494	Lynks
Prairie Gold	PG1530	SX			138	21.4			1			6			1			92			8.3			3.4			60.4			PG1530	Prairie Gold
Dairyland	ST1203	SX		147	140	21.4	18.1		4	38		6	4		0	0		89	99		8.5	8.9		3.4	3.3		59.8	59.8		ST1203	Dairyland
Agripro	AP343	SX			133	21.5			0			5			1			88			8.1			3.5			60.2			AP343	Agripro
Pfister	1563	SX		149	130	21.5	18.2		0	26		7	2		1	0		88	100		8.5	8.8		3.5	3.1		60.1	60.4		1563	Pfister
Renze	6105	SX		146	135	21.6	19.0		0	40		4	3		1	0		93	96		8.3	8.8		3.8	3.4		59.9	60.3		6105	Renze
DeKalb	DK527	SX		132	144	21.6	17.1		2	25		8	2		1	0		90	85		8.1	8.9		3.4	3.2		60.7	60.2		DK527	DeKalb
Profiseed	PSI5355	SX			142	21.6			0			3			0			87			8.3			3.6			60.0			PSI5355	Profiseed
Fontanelle	4445	SX			147	21.7			0			8			0			94			8.3			3.2			60.4			4445	Fontanelle
Kline	KSX14	SX		146	143	21.7	19.9		0	43		3	1		0	0		90	100		7.7	8.0		3.7	3.3		60.0	60.7		KSX14	Kline
Patriot	4024	SX			138	21.7			1			8			1			84			8.8			3.7			59.6			4024	Patriot
NC+	2844	SX	115	151	138	21.7	18.4	27.9	0	28	0	4	1	1	1	0	0	93	100	92	8.9	9.3	8.2	3.5	3.1	3.4	59.6	59.8	60.8	2844	NC+
Ciba	4273	SX	116	147	147	21.7	16.9	25.2	0	46	0	5	1	1	1	0	0	91	100	88	9.0	9.1	7.7	3.6	3.1	3.5	59.7	60.2	61.4	4273	Ciba
Cornelius	C398	SX			144	21.7			0			4			0			92			8.1			3.7			60.0			C398	Cornelius
Ottilie	2265	SX			135	21.7			0			4			0			92			8.5			3.5			60.1			2265	Ottilie
Hill Seed	HSX1046	SX			139	21.7			0			7			0			90			7.9			3.6			60.2			HSX1046	Hill Seed
Wyffels	W401	SX			138	21.7			0			3			0			85			8.3			3.4			60.5			W401	Wyffels
FS	2492	SX	105	155	140	21.8	18.3	27.1	0	11	0	6	1	1	0	0	0	89	98	88	8.0	8.4	7.5	3.4	3.0	3.3	60.6	61.0	61.8	2492	FS
Renze	6093	SX		149	131	21.8	18.4		0	19		8	2		1	0		90	98		8.5	8.6		3.5	2.9		60.0	60.9		6093	Renze
M/W Genetics	G7121	SX			132	21.9			0			4			1			88			8.6			3.7			59.9			G7121	M/W Genetics
Golden Harvest	H2382	SX		143	138	21.9	18.5		0	31		5	3		0	0		90	94		8.2	9.5		3.1	3.1		60.7	60.1		H2382	Golden Harvest
*Golden Harvest	H2390	SX	118	155	143	21.9	17.6	28.4	0	35	0	3	1	0	0	0	0	94	97	89	9.1	8.9	7.9	3.5	3.3	3.5	59.8	60.2	61.2	H2390	*Golden Harvest
Agripro	HY9341	SX			142	21.9			0			6			2			89			8.5			3.8			59.9			HY9341	Agripro
Crows	207	SX			131	21.9			0			6			1			87			9.1			3.6			59.6			207	Crows
Kaltenberg	K5309	SX			140	22.0			0			6			0			89			8.3			3.4			60.3			K5309	Kaltenberg
KSC/Challenger	9606A	SX			133	22.0			0			6			1			82			8.7			3.9			59.5			9606A	KSC/Challenger
Hughes	5393	SX			143	22.0			0			3			1			89			8.7			3.7			59.9			5393	Hughes
Dairyland	ST1200	SX		150	134	22.0	18.6		0	24		6	2		0	0		93	100		8.5	8.4		3.5	3.3		60.0	60.4		ST1200	Dairyland
Mark	MRK94108	SX	116	154	145	22.1	19.7	27.1	0	40	0	4	1	1	0	0	0	90	95	86	7.7	8.3	7.3	3.6	3.2	3.3	60.3	60.4	61.6	MRK94108	Mark
Dairyland	ST1108	SX	115	145	144	22.1	19.8	26.3	0	41	1	6	3	1	0	0	0	92	95	85	7.5	8.1	7.1	3.8	3.3	3.5	60.1	60.7	62.0	ST1108	Dairyland
Pfister	2020	SX		146	149	22.1	19.4		1	39		5	2		1	0		95	98		7.8	8.2		3.5	3.1		60.2	61.1		2020	Pfister
Cornelius	C397	MSX	110	153	136	22.1	19.0	26.3	0	30	0	4	3	2	0	0	0	89	94	88	8.3	8.3	7.9	3.5	3.2	3.5	60.1	60.7	61.2	C397	Cornelius
*Golden Harvest	H2404	SX	123	143	141	22.1	18.5	26.0	1	51	1	8	3	1	0	0	0	91	99	91	8.6	9.7	8.3	3.6	3.2	3.4	60.0	59.4	61.0	H2404	*Golden Harvest
Patriot	4054	SX			131	22.2			0			7			1			90			8.3			3.7			60.0			4054	Patriot
Patriot	5080	SX		153	146	22.2	19.9		0	46		5	3		0	1		91	99		7.7	8.3		3.5	3.4		60.3	60.6		5080	Patriot
Renk	RK708	SX			135	22.2			0			5			1			77			8.2			3.6			59.8			RK708	Renk
LG Seeds	LG-2511	SX			153	22.2			0			4			1			90			7.7			3.6			60.3			LG-2511	LG Seeds
*Pioneer	3563	SX	110	158	157	22.2	17.8	25.4	0	10	0	4	0	1	0	0	0	92	98	92	7.8	8.5	7.1	3.8	3.5	3.6	60.4	60.2	62.0	3563	*Pioneer
Agripro	AP422	SX		150	141	22.2	19.7		0	40		5	1		1	0		92	100		7.7	8.3		3.5	3.2		60.3	60.4		AP422	Agripro
Lynks	2595	SX		147	147	22.2	19.6		0	45		5	1		1	1		92	99		7.6	8.1		3.7	3.1		60.2	60.8		2595	Lynks
Trelay	7200	SX			143	22.3			0			6			0			91			8.0			3.6			60.3			7200	Trelay
Asgrow	RX510	SX	102	162	147	22.3	19.5	28.8	0	27	0	5	2	4	0	1	0	91	100	90	8.4	8.9	7.5	3.6	3.2	3.2	60.0	60.4	61.7	RX510	Asgrow
Cenex/Land O'Lake	D5073	SX			141	22.3			0			4			1			92			7.6			3.5			60.1			D5073	Cenex/Land O'Lake
Ciba	4303	SX		154	134	22.3	19.4		1	45		3	1		0	0		83	95		9.0	9.4		3.6	2.9		59.7	60.4		4303	Ciba
Renk	RK696	SX			140	22.3			0			6			1			88			7.7			3.6			60.1			RK696	Renk
Bioseed	9460	SX			136	22.3			0			5			2			79			8.5			3.6			60.3			9460	Bioseed
Renk	RK714	SX			137	22.3			0			5			1			83			8.6			3.7			60.0			RK714	Renk
Kruger	9407	SX	114	148	148	22.3	19.1	27.6	0	48	0	5	2	1	1	0	0	91	95	91	7.7	8.0	7.3	3.7	3.4	3.4	60.2	60.5	61.9	9407	Kruger
Ottilie	2431	SX		150	144	22.3	19.5		0	43		6	2		1	1		92	100		7.7	8.4		3.8	3.1		60.0	60.6		2431	Ottilie
AG+ Seeds	4102	SX			150	22.3			0			5			0			95			7.7			3.6			60.1			4102	AG+ Seeds
*Cargill	4327	SX	119	162	142	22.3	20.1	30.8	0	23	0	5	2	1	1	0	0	91	100	91	8.4	8.5	7.5	3.7	3.5	3.4	60.1	60.1	61.4	4327	*Cargill
Agripro	EX9395	SX			145	22.3			1			4			0			84			8.6			3.6			59.6			EX9395	Agripro
DeKalb	DK560	SX			152	22.4			0			6			1			91			8.2			3.7			60.2			DK560	DeKalb
Cargill	4177	SX			133	22.4			0			7			3			86			8.3			3.5			60.3			4177	Cargill
NC+	3711	SX			137	22.4			0			6			1			88			8.5			3.7			60.2			3711	NC+
Dairyland	ST1407	SX			150	22.4			1			5			2			92			7.9			3.7			60.1			ST1407	Dairyland
Renze	6221	SX		155	146	22.4	19.5		0	43		5	2		1	1		91	97		7.6	8.0		3.6	3.4		60.3	60.6		6221	Renze
Cenex/Land O'Lake	492	SX			139	22.4			0			5			1			86			8.2			3.8			59.8			492	Cenex/Land O'Lake
Ames Best	AB1081	SX			144	22.4			0			5			1			91			7.7			3.8			59.8			AB1081	Ames Best
Payco	734	SX		146	138	22.4	18.7		1	37		4	2		0	0		89	91		7.8	8.4		3.5	3.5		60.2	60.3		734	Payco
Epley	EX1500	SX			148	22.4			0			3			0			91			8.6			3.8			59.8			EX1500	Epley
Dairyland	ST1405	SX		161	137	22.4	19.8		1	40		5	1		0	0		91	100		8.6	9.0		3.4	3.2		60.4	59.8		ST1405	Dairyland
Bioseed	9450	SX		156	142	22.5	19.5		1	28		6	4		0	0		85	90		8.3	9.0		3.6	3.2		60.1	60.1		9450	Bioseed
FS	2372	SX		154	145	22.5	19.3		0	45		5	2		1	0		91	97		7.8	8.2		3.6	3.2		60.1	60.7		2372	FS
Fontanelle	4824	SX		145	145	22.5	19.2		0	47		5	1		0	0		93	100		8.0	8.4		3.8	3.1		60.1	60.8		4824	Fontanelle
KSC/Challenger	9606	SX			145	22.5			0			5			1			92			8.0			3.5			60.0			9606	KSC/Challenger
Trelay	6002	SX			141	22.5			0			6			1			90			7.6			3.7			60.2			6002	Trelay
Prairie Gold	PG1538	SX			132	22.5			0			5			1			89			8.2			3.5			60.4			PG1538	Prairie Gold
Cenex/Land O'Lake	550PT	SX			136	22.6			0			4			0			80			9.0			3.8			59.3			550PT	Cenex/Land O'Lake
M/W Genetics	G7370	SX			146	22.6			0			4			1			94			7.6			3.5			60.5			G7370	M/W Genetics
CFS	5525	SX			146	22.6			0			4			0			88			7.8			3.5			60.3			5525	CFS
Agventure	626	SX		153	143	22.6	20.0		0	45		5	1		0	0		92	98		7.9	8.1		3.6	3.2		60.1	60.7		626	Agventure
Wilson	E4150	SX			149	22.6			0			4			0			88			8.4			3.9			59.8			E4150	Wilson
Kaltenberg	K5109	SX			140	22.6			0			5			1			86			8.0			3.6			60.0			K5109	Kaltenberg
Cornelius	C442	SX	122	156	147	22.6	19.7	27.1	0	44	1	5	2	1	1	0	0	91	99	90	7.8	8.2	7.6	3.6	3.4	3.4	60.2	60.5	61.3	C442	Cornelius
SOI	9045	SX			150	22.6			2			3			0			91			7.9			3.6			60.0			9045	SOI
Profiseed	PSI5685	SX	109	154	144	22.6	19.7	27.2	0	42	1	4	1	1	1	0	0	92	99	85	7.7	8.5	7.2	3.6	3.2	3.4	60.2	60.4	61.9	PSI5685	Profiseed
Wyffels	W275	SX			132	22.6			0			3			0			81			8.2			3.5			60.3			W275	Wyffels
ICI Seeds	8570	SX		157	142	22.6	19.4		0	22		4	1		1	0		90	97		8.7	9.3		3.6	3.0		60.0	60.4		8570	ICI Seeds
Fontanelle	4865	SX		143	144	22.7	18.5		1	43		4	2		1	0		92	100		7.7	8.6		3.6	3.4		60.3	60.2		4865	Fontanelle
Viking	4420	SX		147	141	22.7	19.1		0	48		6	4		0	0		88	97		7.5	8.2		3.6	3.2		60.3	60.5		4420	Viking
DeKalb	DK566	SX		153	154	22.7	19.1		0	24		4	3		0	1		91	100		8.2	8.5		3.7	3.4		59.8	60.1		DK566	DeKalb
Agripro	AP398	SX	99	151	140	22.7	19.3	26.5	0	35	0	2	1

Grain moistures shown in Tables 1 and 2 are indications of maturity and natural drying rate. Maturity of varieties entered generally ranged from short 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 seed corn dealers, crop consultants, and from neighbors who have grown these varieties.

The protein, oil, and starch percentage data (Tables 1 and 2) are quality traits important to different end-users of corn. For feed, protein is of primary interest; for wet-mill processing (ethanol and sweeteners), oil and starch content are important. Several firms have begun testing these characteristics on an exploratory basis. In 1995, a network of 15 Iowa grain elevators acquired near-infrared equipment and tested inbound corn at their facilities.

Whole-grain near-infrared equipment measures composition of unground corn kernels in 1 to 1.5 minutes per sample. They measure moisture simultaneously with composition. Using these instruments, country elevators can test and segregate grain as it is received. Obviously all compositional factors cannot be high in the same hybrid. The grain market is exploring segmentation (identity preservation)—the production and marketing of certain hybrids for specific uses. This is an important change from the generic commodity approach now used.

The economic impact of compositional factors can be significant. Corn protein trades off with other protein sources in many feed rations. At $200 per ton for 44 percent protein soybean meal, the value of a 1 percent increase (e.g. from 8 percent to 9 percent) in corn protein is about 12 cents per bushel of corn. Likewise, an additional percent of oil yields about 14 cents per bushel in increased oil output in a wet processing plant or when substituted for white grease in feed rations. The additional ethanol or sweetener from an extra percent of starch provides 8 to 10 cents per bushel more revenue. Producers feeding livestock are in the best position to capture immediate benefits from these composition data. Country elevators with feed mills also have the ability to capitalize on increased protein in corn. The Iowa Corn Growers Association has prepared a publication to aid growers in using the nutrient data in the Iowa Corn Yield Test Reports: *Nutrient Content and Feeding Value of Iowa Corn*, Iowa Corn Growers Association, Des Moines, Iowa 50265.

Hybrids with similar yields and agronomic characteristics may not be identical in corn protein. Therefore, feed costs can be reduced by selecting higher protein hybrids from a group with similar yield potential. Weather and soil conditions affect composition, but the relative ranking of hybrids does not change greatly. A higher protein hybrid will be higher than average regardless of environmental conditions that raise or lower the averages. The protein percentages reported are measures of crude protein and may not give an accurate indication of feed value if feed rations are balanced on individual amino acids rather than crude protein content.

Order Form: Iowa Corn Yield Test Hybrid Selection Program

Please send me computer diskettes of the following districts of the Iowa Corn Yield Test Results.

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1995 Field Data

The District 2 test was planted on farms operated by Mike Branstad and Gary Wunder near Thompson in Winnebago County, Louis Peters near Colwell in Floyd County, and Brian Herman near Waukon in Allamakee County. Field data are presented in Table A.

At planting time, subsoil moisture for the district was adequate. Rainfall was variable for the district. At the Winnebago County location, rainfall was above normal in April and May, well above normal in June, near normal in August and September, and well below normal in July. At the Floyd County location, rainfall was above normal in April and June, well below normal in May, well above normal in July and near normal in August and September. At the Allamakee County location, rainfall was above normal in April and August, near normal in May, well below normal in June, well above normal in July, and below normal in September. Temperatures for the district were well below normal in April and May, above normal in June, near normal in July, far above normal in August, and below normal in September. The average district yield was 4 bushels per acre above the mean of the five preceding years' averages. Average location yields are listed in Table A.

Table A. Field Data

	Branstad Farm Webster silty clay loam			Peters Farm* Oran loam			Herman Farm Downs silt loam		
Fertilizer applied, lb.	N	P_2O_5	K_2O	N	P_2O_5	K_2O	N	P_2O_5	K_2O
Plowdown	—	—	—	160	23	60	18	46	60
Preplant	100	—	—	—	—	—	—	—	—
Preemerge	—	—	—	—	—	—	28	—	—
Starter	5	15	5	—	—	—	14	42	14
Total	105	15	5	160	23	60	60	88	74
1994 crop	Soybeans			Soybeans			Soybeans		
Row width	30 inches			30 inches			30 inches		
Planting date	May 12			May 1			May 1		
Harvest date	Oct. 12 & 13			Oct. 4 & 5			Oct. 2 & 3		
Average yield	136 bu/a			147 bu/a			138 bu/a		

*Field sampled for protein, oil, and starch percentage data.

Other Reports

Separate reports for variety performance are available for each district shown in Figure 1. A limited supply of these publications is available at your county extension office or from Extension Distribution Center, Printing and Publications Building, Iowa State University, Ames, Iowa 50011. Also, an IBM compatible diskette containing these data along with a hybrid selection program is available from Extension Software Services, 110 EES Bldg., Haber Road, Iowa State University, Ames, Iowa 50011-3070. Along with all of the information as it appears in the written reports, the computer diskettes include computer programs that allow farmers to insert their own drying and shrink costs, expected price of corn, and final moisture percentage after drying. Using these specific criteria, the program calculates an adjusted economic value for each hybrid in the test. Farmers can then determine which hybrids might best fit their own production practices and provide the most profit. The computer program also can sort the hybrids by yield, moisture, adjusted value, root lodging, stalk lodging, dropped ears, protein, oil, starch, or brand and then print the data as sorted. An IBM personal or compatible computer supporting MS-DOS 2.0 or higher, with at least 512K memory is required. The cost of this diskette is $25. All seven districts can be purchased for $150. Order forms, Pm-660-OF-95, are available from county extension offices and included in the printed reports.

The 1995 Iowa Corn Yield Test Report:
Pm-660-1-95 District 1
Pm-660-2-95 District 2
Pm-660-3-95 District 3
Pm-660-4-95 District 4
Pm-660-5-95 District 5
Pm-660-6-95 District 6
Pm-660-7-95 District 7

File: Agronomy 2-2

Prepared by K. E. Ziegler, W. H. Vinson, and D. E. Carroll, instructor in agronomy and technicians.

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