

CORN 1997 Missouri Crop Performance



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TABLE OF CONTENTS

COMPARING HYBRIDS	3
EXPERIMENTAL PROCEDURES	4
Entries	4
Plot Management	4
Data Recorded	4
Electronic Accessibility of Data	4
PART I - STANDARD CORN TRIALS	5
EXPERIMENTAL PROCEDURES	5
Field Plot Design	5
Locations	5
Map of Test Locations	5
SUMMARY OF RESULTS	5
1997 Summary of Standard Corn Trial Yields (Table 1)	6
NON-IRRIGATED TRIALS	
NORTHERN LOCATIONS	
Osborn (Table 2)	7
Chillicothe (Table 3)	9
Novelty (Table 4)	11
Summary of Northern Locations (Table 5)	13
Fairfax (Table 6)	15
Albany (Table 7)	17
Summary of Extension Locations (Table 8)	19
CENTRAL LOCATIONS	
Marshall (Table 9)	21
Columbia (Table 10)	23
High Hill (Table 11)	25
Summary of Central Locations (Table 12)	27
IRRIGATED TRIALS	
CENTRAL LOCATIONS	
Columbia (Table 13)	29
Laddonia (Table 14)	30
Summary of Central Locations (Table 15)	31
SOUTHWEST LOCATIONS	
Garden City (Table 16)	32
Lamar (Table 17)	33
Summary of Southwest Locations (Table 18)	34

SOUTHEAST LOCATIONS

Oran (Table 19) 35
Charleston (Table 20) 37
Summary of Southeast Locations (Table 21) 39

PART II - SPECIAL CORN TRIALS 41

EXPERIMENTAL PROCEDURES 41

Field Plot Design 41
Locations 41
Map of Test Locations 41

SUMMARY OF RESULTS

1997 Summary of Special Corn Trial Yields (Table 22) 41

EARLY MATURING HYBRIDS

NORTH-CENTRAL LOCATIONS

Albany (Table 23) 43
Columbia (Table 24) 44
Summary of North-Central Locations (Table 25) 45

SOUTHWEST LOCATIONS

Garden City (Table 26) 46
Lamar (Table 27) 47
Summary of Southwest Locations (Table 28) 48

WHITE CORN HYBRIDS

Fairfax (Table 29) 49

HYBRID RESPONSE TO TILLAGE SYSTEMS

Slater (Table 30) 50

SEED CORN COMPANY ADDRESSES (Table 31) 51

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MISSOURI CROP PERFORMANCE

1997

CORN

This report is a contribution of the Department of Agronomy, University of Missouri Agricultural Experiment Station. The work was supported by fees provided by companies submitting hybrids for evaluation.

The University of Missouri's hybrid performance testing program began in the mid-1930s, with results first published in 1937. The number of entries in the program has grown from fewer than 50 in the early years to 252 today.

The large number of commercial hybrids available makes selection of a superior hybrid difficult. To select intelligently, producers need a reliable, unbiased, up-to-date source of information that will permit valid comparisons among available hybrids. The objective of the University of Missouri's performance testing program is to provide this information. The tests are conducted under as uniform conditions as possible. Small plots are used to reduce the chance of soil and climatic variations occurring between one hybrid plot and another. Results obtained should aid the individual grower in judging the relative merits of many of the commercial corn hybrids available in Missouri today.

COMPARING HYBRIDS

The performance of a hybrid cannot be measured with absolute precision. Uncontrollable variability is involved in the determination of each yield average. This variability sometimes occurs because the soil is not uniform, but many other conditions may contribute to it. Because variability exists in all field experimentation, statistics are used as a tool to assist in making decisions. The statistical tool used in these trials is the test of least significant difference (L.S.D.). The L.S.D. is quite simple to apply. When two entries are compared and the difference between them is greater than the L.S.D., the entries are judged to be significantly different. Differences smaller than the L.S.D. may have occurred by chance and are judged to be nonsignificant.

Hybrid performance may seem inconsistent from location to location and from year to year because of differences in rainfall, temperature, soil fertility, diseases, insects, and other factors. To obtain an improved estimate of relative hybrid performance, readers should consider results from more than one location or year. In this publication, the authors have tried to facilitate comparisons across years and locations.

In each trial, the "top yielding" hybrids have been identified. These hybrids are those that did not yield significantly less than the highest yielding hybrid in the test. They are denoted in the tables by an asterisk (*) next to their yields. Thus, by going down a column, readers can readily identify the highest yielding hybrids in a trial. By going across, readers can evaluate the relative performance of a hybrid during several years or at several locations. From the standpoint of yield, the most desirable hybrids will be those that are among the "top yielding" hybrids (that is, have an asterisk) the greatest number of times.

Although yield usually receives first consideration, other agronomic characteristics may be equally important when selecting a corn hybrid. Stalk strength, maturity and resistance to insects and diseases are among the hybrid characteristics that deserve careful consideration. Later maturing hybrids may require more drying. The maturity classification listed for each hybrid in this bulletin is based solely on information supplied by the entry's sponsor. A hybrid with an abnormally low or high moisture content within a maturity group may be incorrectly classified for Missouri conditions. Poor stalk strength and/or susceptibility to pests may decrease harvestable yield because of lodging or stand loss.

The Missouri Agricultural Experiment Station does not make specific recommendations for hybrids. Farmers growing a new hybrid for the first time should consider all the information available and then grow a small acreage to determine adaptability. This should be the practice for all new hybrids regardless of origin.

EXPERIMENTAL PROCEDURES

Three types of tests were conducted. Full-season hybrids (101-140 day maturity classification) were evaluated in irrigated and non-irrigated tests. In one of these tests evaluation of white corn hybrids was emphasized. Early maturing hybrids (less than 100 day maturity classification) were evaluated in non-irrigated tests. These latter tests were made part of the program in 1988 to provide information to growers interested in production of early maturing hybrids.

Entries. All producers of hybrid seed were eligible to enter the 1997 corn evaluation trials. Participation was voluntary and the test coordinators exercised no control over which, or how many hybrids were entered. To help finance the evaluation program, the participants paid \$100 per location for each hybrid entered.

Plot Management. All tests were planted and harvested with commercial equipment modified for small plot work. Preplant fertilizer was applied at each site at the discretion of the farmer or the station manager. Sidedress fertilizer was applied as needed. Pre-emergence herbicides were used to control weeds, and additional hand weeding was done as required. Management details varied from location to location and are specified after the heading of each table of results.

Data Recorded. Plant stands were counted near the time of tasseling. Lodging was determined immediately before harvest. Plants leaning more than 30 degrees from vertical and those bent or broken below the ear were counted as lodged. During harvest, plot grain weights were measured and an electronic moisture tester was used to determine the moisture percentage of the grain. Yields were calculated from the data collected and reported in bushels (56 pounds) per acre at a moisture content of 15.5 percent. All hybrids listed in the tables are single crosses unless otherwise stated. Guidelines provided by the University of Missouri for placement in a maturity group are shown below.

MATURITY GROUP	# DAYS TO MATURITY	GROWING DEGREE DAYS
1	101-110	< 2600
2	111-120	2600-2699
3	121-130	2700-2799
4	131-140	> 2799

Electronic Accessibility of Data. Results of the Missouri Crop Performance Trials are available in two forms: this printed Special Report and Missouri's Agricultural Electronic Bulletin Board (AgEBB). Variety test information is accessible from the MAIN MENU of the AgEBB under "CROP PERFORMANCE TESTING". The telephone number for AgEBB is 573/882-8289. If you need assistance in accessing the system call 573/882-4827 for the system staff's help.

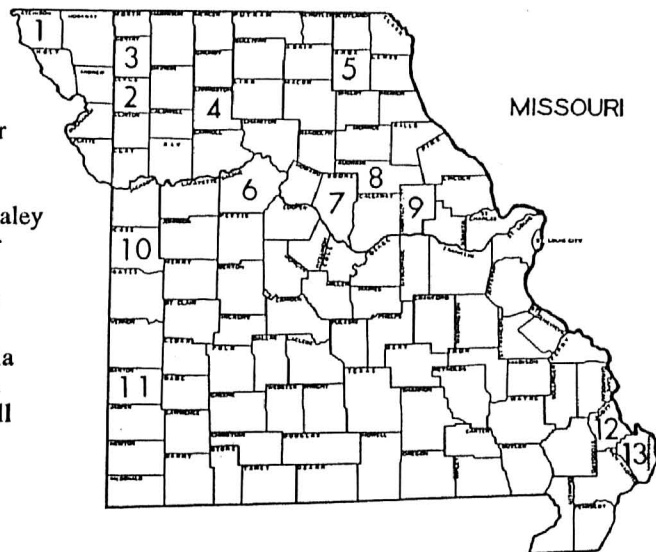
PART I

STANDARD CORN TRIALS

EXPERIMENTAL PROCEDURES

Field Plot Design. Full-season hybrids (101-140 day maturity classification) were evaluated in irrigated and non-irrigated tests. All dryland and irrigated tests were arranged in lattice field plot designs with three replications. At all locations, plots were four rows wide and 25 feet long with a between-row spacing of 30 inches. Only the center two rows were harvested to determine yield. Two tests in this year's program, those in Atchison and Gentry Counties, represent a cooperative effort between Extension Centers and the State program. The objective of this effort is to increase the usefulness and accessibility of variety test information.

Locations. On the basis of geographical characteristics, the state was divided into regions. Corn hybrid valuation trials were located in the northern, central, southwestern and southeastern regions of the state. Trial locations are shown on the adjacent map. In 1997, the locations for these trials were on (1) the Graves Memorial Plot near Fairfax in Atchison Co.; (2) the Gene Millard farm near Osborn in Dekalb Co.; (3) the Hundley-Whaley Farm near Albany in Gentry Co.; (4) the Galon Potter farm near Chillicothe in Livingston Co.; (5) the Greenley Memorial Center near Novelty in Knox Co.; (6) the Frank Swisher farm near Marshall in Saline Co.; (7) the Agronomy Research Center near Columbia in Boone Co.; (8) the Jake Freyer farm near Laddonia in Audrain Co.; (9) the John Cobb farm near High Hill in Montgomery Co.; (10) the Dennis Roth farm near Garden City in Cass Co.; (11) the Sherrell Bean farm near Lamar in Barton Co.; (12) the Glenn Nothdurft farm near Oran in Scott Co.; and (13) the Dale Glenn farm near Charleston in Mississippi Co.



SUMMARY OF RESULTS

Results are presented by region within the state. For each location, data on final plant stand, total (root plus stalk) lodging, moisture content at harvest, and yield adjusted for moisture are given for each hybrid. Because harvest was delayed until the latest hybrids in the test were mature, moisture differences among many of the early maturing entries may be small. In this report, hybrids are ranked according to yield. When hybrids having similar yields differ greatly in percent moisture, it most likely indicates that these hybrids differ in maturity classification or dry-down rate.

Corn hybrids were evaluated in eight full-season dryland and six full-season irrigated tests in 1997. Management was as uniform as possible across locations. Growing season (April-August) rainfall and irrigation applied at each location are shown on individual data tables.

Average yields and yield ranges observed at each location are summarized in Table 1. The ranges give the values of the lowest and highest yielding corn hybrids in each test. These values indicate the wide variation in yield potential among hybrids available in Missouri today. The use of data presented in this Special Report should increase the probability of selecting hybrids that combine high yield potential with other agronomic characteristics beneficial to specific farming situations.

TABLE 1. 1997 SUMMARY OF STANDARD CORN TRIAL YIELDS

LOCATION	NUMBER OF ENTRIES	TEST TYPE	YIELD (BU/ACRE)		DATA TABLE
			RANGE	AVERAGE	
Osborn	121	Dryland	133-194	165	2
Chillicothe	121	Dryland	146-197	171	3
Novelty	121	Dryland	85-150	121	4
Fairfax	72	Dryland	126-196	161	6
Albany	72	Dryland	115-172	144	7
Marshall	98	Dryland	168-229	202	9
Columbia	98	Dryland	96-153	127	10
High Hill	98	Dryland	24-109	61	11
Columbia	45	Irrigated	177-236	203	13
Ladonia	45	Irrigated	177-242	198	14
Garden City	45	Irrigated	142-195	176	16
Lamar	45	Irrigated	166-225	196	17
Oran	64	Irrigated	163-236	198	19
Charleston	64	Irrigated	151-221	196	20

The growing season of 1997 was characterized by above normal rainfall in the spring and below normal rainfall in the summer for most of Missouri. Temperatures throughout most of the spring were below normal.

TABLE 2. Performance of Corn Hybrids evaluated near Osborn (DeKalb County) on the Gene Millard Farm during 1995-97.

Planted: 6 May 1997
 Harvested: 29 September 1997
 Planted Population: 24,400
 Row Spacing: 30 inches
 Soil Type: Grundy Silt Loam
 Soil Test: pH=6.5, OM=2.8%, P=77, K=273

Fertilizer: N=150; P₂O₅=70; K₂O=100
 Herbicide: Harness Extra, Buctril
 Insecticide: Lorsban
 Irrigation: 0.0 inches
 Previous Crop: Soybean

Growing Season Rainfall: Apr.=7.1, May=2.6, June=3.8, July=3.1, Aug.=3.4 TOTAL=20.0"

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1996	1995	2 Yr.	3 Yr.
Midwest Seed Genetics G8699	2	23400	20.4	2.0	194.0**	--	--	--	--
Kruger K-9915	2	23500	18.7	2.0	188.5*	--	--	--	--
Middlekoop 915	2	24000	19.6	1.0	186.8*	221.3*	--	204.1	--
Kruger K-9618+	2	22600	20.0	1.6	186.1*	--	--	--	--
Wilson 2335	2	23400	22.7	0.5	184.6*	225.5**	--	205.1	--
Kruger K-9818+	2	22800	20.6	1.1	184.0*	--	--	--	--
Kruger K-9716B	2	24300	18.1	1.4	183.8*	--	--	--	--
AgriPro AP 619	1	23900	17.8	0.5	183.6*	197.4	94.6	190.5	158.5
Mycogen 2828	2	23200	16.8	0.5	180.9*	--	--	--	--
Novartis Seeds N6800	3	23800	17.5	0.0	180.5*	193.2	--	186.9	--
Golden Harvest H-2581	2	23700	20.0	1.0	180.5*	208.5*	103.1	194.5	164.0
Kruger K-9620	2	23500	22.1	1.0	178.8*	213.3*	123.6*	196.1	171.9
Renze 6397	2	24300	18.5	1.8	178.7*	--	--	--	--
Bo-Jac 415	2	24100	15.6	1.4	177.8*	--	--	--	--
Mycogen 2787	2	22300	17.8	0.5	177.8*	--	--	--	--
Midwest Seed Genetics G8452	2	23900	18.1	1.0	177.3*	213.2*	105.8	195.3	165.4
Lewis 5584	2	24000	19.3	0.0	176.1*	202.9	96.5	189.5	158.5
Merschman M-5117	2	23200	20.3	1.5	176.1*	199.1	131.7*	187.6	169.0
Novartis Seeds N7070	3	23800	18.0	1.5	176.0*	191.6	118.9*	183.8	162.2
Renze 6506	2	23100	20.3	1.9	175.2*	208.7*	--	192.0	--
Renze 6416	2	23900	19.1	0.9	175.2*	201.6	110.8	188.4	162.5
Kruger K-9819	2	23400	21.7	0.5	174.8*	207.7*	--	191.3	--
Kruger K-9816	2	24200	19.3	1.4	174.0*	--	--	--	--
Terra TR702	2	23500	23.9	0.5	173.8*	218.0*	--	195.9	--
Crow's 496	1	24200	18.4	0.9	173.6*	220.8*	--	197.2	--
Kruger K-9818	2	24100	20.2	1.4	173.0	205.9	--	189.5	--
Garst 8342	3	23300	18.2	1.0	172.9	208.2*	--	190.6	--
Pfister 3049	2	24100	18.8	1.4	172.9	202.0	--	187.5	--
Rainbow X1166	2	24200	19.0	1.9	172.5	195.9	--	184.2	--
Rainbow X1176	2	23700	20.4	1.5	172.5	--	--	--	--
AgriPro AP 9565	1	24300	17.0	0.5	172.4	212.9*	--	192.7	--
Asgrow RX 760	2	23800	17.9	1.0	172.1	199.8	--	186.0	--
Asgrow RX 730	2	23600	17.6	0.0	172.0	--	--	--	--
Merschman M-7115	2	24100	17.5	0.0	171.9	--	--	--	--
Pfister 3977	2	22600	18.2	0.5	171.7	--	--	--	--
AgriPro AP 9707	3	21900	20.4	1.1	171.6	216.4*	--	194.0	--
Midland 96117A	2	24400	18.1	1.4	171.5	--	--	--	--
Pioneer Hybrid 32K61	2	24100	17.4	1.4	171.5	--	--	--	--
Pioneer Hybrid 3260	2	22200	19.1	1.1	171.0	199.2	--	185.1	--
Pfister 2680	2	23100	17.8	0.5	169.6	206.4	--	188.0	--
NC+ 4880	2	24300	18.6	0.4	169.4	--	--	--	--
Merschman M-6114	2	23300	19.5	0.9	169.1	--	--	--	--
Merschman M-3117	2	21700	20.1	0.0	168.9	191.4	115.9*	180.2	158.7
Fontanelle 5786	2	23700	19.0	0.5	168.7	--	--	--	--
Renze 6386	2	23500	17.7	1.5	168.6	194.8	112.1*	181.7	158.5
Cargill 6888	1	23800	17.6	2.9	168.6	214.0*	--	191.3	--
Middlekoop 813	2	23100	15.3	3.0	168.2	188.3	114.2*	178.3	156.9
Pioneer Hybrid 32J55	2	23400	20.2	1.0	168.2	--	--	--	--
Merschman M-5113	1	23600	16.3	2.4	167.5	184.8	--	176.2	--
Midland 96118A	2	24100	20.3	0.9	167.2	--	--	--	--
Dekalb DK641	2	23700	17.5	1.5	167.2	211.0*	--	189.1	--
AgriPro AP 9616	1	23500	18.6	2.0	167.1	207.2*	--	187.1	--
Dekalb DK642	2	23800	17.2	1.0	167.0	215.9*	--	191.5	--
Patriot 6142	2	23300	17.5	3.0	166.6	--	--	--	--
Merschman M-6117	2	23600	19.1	1.9	166.5	--	--	--	--
Middlekoop 916	2	23300	17.6	1.0	166.2	215.9*	--	191.1	--
Burrus 488	1	23900	17.7	2.3	166.0	--	--	--	--
LG Seeds LG2579	2	23200	17.4	0.5	165.9	--	--	--	--
Kruger K-9818A	2	23700	19.0	0.0	165.9	201.9	--	183.9	--
Hawkeye Hybrids SX66	2	24300	20.6	0.9	165.9	--	--	--	--

TABLE 2. Continued.

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1996	1995	2 Yr.	3 Yr.
Lewis 5446	2	23400	18.9	0.5	165.8	--	--	--	--
Burrus 720	2	23900	17.5	1.0	165.7	208.6*	--	187.1	--
Middlekoop 817	2	23500	20.2	1.5	165.6	195.4	109.7	180.5	156.9
Middlekoop 1014	2	22200	18.0	2.1	165.2	--	--	--	--
Pioneer Hybrid 3394	1	24400	16.2	1.4	165.2	175.9	128.6*	170.6	156.6
Terra TR1136	2	24400	18.0	1.4	165.1	--	--	--	--
Cargill 7770	2	23800	17.7	3.9	164.8	204.2	--	184.5	--
LG Seeds LG2726	2	23700	19.1	0.5	164.2	--	--	--	--
Fontanelle 5676	1	21800	18.2	2.7	163.8	210.4*	--	187.1	--
Dekalb DK626	2	22900	17.3	2.0	163.7	--	101.9	--	--
Kruger K-9614A	1	24000	18.1	1.9	163.3	--	--	--	--
Terra TR1176	2	24400	19.7	0.5	163.2	--	--	--	--
Golden Harvest H-2547	2	23100	17.2	1.0	162.6	210.3*	119.4*	186.5	164.1
NC+ 5697	2	23500	18.5	2.4	162.4	--	--	--	--
Rainbow 3128	2	23900	16.4	1.0	161.9	--	--	--	--
Fontanelle 5335(msx)	1	22900	16.8	0.5	161.7	195.5	122.2*	178.6	159.8
Wilson E975305	2	22500	24.2	1.1	161.6	--	--	--	--
Garst 8366	2	23600	17.8	1.0	161.4	--	--	--	--
Mycogen 2888	2	22000	22.5	4.8	161.3	217.7*	--	189.5	--
Wilson 2330	2	24100	23.8	0.5	161.1	191.6	113.2*	176.4	155.3
Freedom 5680	1	23100	20.9	1.6	160.4	--	--	--	--
Patriot 6168	2	23500	20.3	0.5	160.3	--	--	--	--
Merschman M-5110	1	24200	17.9	0.5	159.9	192.3	--	176.1	--
Patriot 5093	1	24100	17.1	0.0	159.5	--	--	--	--
Pioneer Hybrid 3335	2	24500	17.3	3.1	159.2	203.7	105.1	181.5	156.0
Asgrow RX 670	1	23700	16.8	1.0	159.1	--	--	--	--
Stauffer 2792	2	23200	18.7	2.0	159.1	--	--	--	--
Bo-Jac 544	3	23000	16.1	2.0	158.6	--	--	--	--
Lewis 6294	2	24200	19.2	1.4	158.4	200.9	114.8*	179.7	158.0
Wilson 1792	2	22600	21.3	2.6	158.3	--	--	--	--
Lewis 3586	1	23100	15.6	2.0	158.2	--	--	--	--
Burrus 442	1	21100	18.4	1.7	158.0	--	--	--	--
Patriot 7197	2	24100	20.7	0.9	157.6	--	--	--	--
Triumph 2010	2	22800	22.3	0.6	157.2	207.0*	114.3*	182.1	159.5
Freedom 5695	2	23500	20.9	0.5	156.6	186.7	--	171.6	--
Crow's 550	1	24300	17.7	2.8	156.4	--	--	--	--
Kruger K-9716+	2	24500	16.8	1.0	156.0	210.1*	--	183.1	--
Patriot 7172	2	23500	21.9	2.0	155.8	--	--	--	--
NC+ 6959	2	23200	21.7	0.5	155.5	175.9	--	165.7	--
Novartis Seeds N6423	2	23200	16.2	0.5	155.4	195.0	--	175.2	--
Wilson E975307	2	22300	25.6	1.1	153.1	--	--	--	--
Patriot 5120	2	22700	18.0	1.0	152.4	--	--	--	--
Terra TR1167	2	22000	23.6	0.6	150.9	204.4	105.6	177.7	153.6
Golden Harvest H-2515	1	22900	16.3	1.5	150.5	188.1	--	169.3	--
LG Seeds LG2624	2	22600	18.5	1.5	150.0	217.1*	--	183.6	--
Freedom 5555	1	22700	16.5	2.1	149.8	--	--	--	--
NC+ 5445	2	23000	19.5	0.5	149.8	194.2	--	172.0	--
Kruger K-9715	2	24100	18.6	1.0	149.3	208.2*	--	178.8	--
Novartis Seeds N69-R1	3	24200	17.5	0.5	149.0	--	--	--	--
Patriot 5072	1	22800	16.9	2.5	148.0	--	--	--	--
Terra TR1157	2	23400	21.8	1.0	147.8	192.1	--	170.0	--
Cargill 6997	1	23000	17.1	0.5	147.3	186.8	115.3*	167.1	149.8
Bo-Jac 614	3	22700	20.0	1.6	145.8	195.6	--	170.7	--
Rainbow 3100	1	22500	17.9	2.1	144.9	205.3	--	175.1	--
Pioneer Hybrid 3489	1	24000	16.8	0.0	144.9	194.5	111.4	169.7	150.3
Cargill 7997	2	22500	20.3	2.7	144.4	196.0	125.6*	170.2	155.3
Burrus 511	1	22000	17.4	3.2	144.0	--	--	--	--
Hawkeye Hybrids SX81	2	23600	20.9	1.5	143.0	223.7*	--	183.4	--
Terra TR1185(spx)	2	23500	22.6	2.0	142.3	199.7	132.7*	171.0	158.2
Fontanelle 5567(msx)	1	23400	17.6	3.5	137.0	--	--	--	--
Terra TR1154	2	21600	19.0	0.6	132.8	205.5	108.9	169.2	149.1
TRIAL AVERAGE		23415	18.9	1.3	164.7	198.5	107.6	181.6	156.9
L.S.D. AT .10		1379	1.7	1.6	20.8	19.0	22.1		
C.V. %		4.3	6.6		9.2	7.0	14.9		

-- Data not available.

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

TABLE 3. Performance of Corn Hybrids evaluated near Chillicothe (Livingston County) on the Gaylon Potter Farm during 1997 and the Harry Hayden Farm during 1995-96.

Planted: 6 May 1997
 Harvested: 3 October 1997
 Planted Population: 24,400
 Row Spacing: 30 inches
 Soil Type: Grundy Silt Loam
 Soil Test: pH=6.7, OM=3.8%, P=68, K=232

Fertilizer: N=200; P₂O₅=50; K₂O=100
 Herbicide: Bullet + Bladex + Roundup
 Insecticide: Lorsban
 Irrigation: 0.0 inches
 Previous Crop: Soybean

Growing Season Rainfall: Apr.=7.3, May=3.8, June=5.9, July=1.6, Aug.=4.5 TOTAL=23.1"

Brand-Hybrid	Maturity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1996	1995	2 Yr.	3 Yr.
AgriPro AP 9565	1	22500	17.5	1.0	196.6**	176.3	--	186.5	--
Pioneer Hybrid 3260	2	24100	18.7	2.5	192.0*	205.5*	--	198.8	--
Rainbow X1176	2	24200	19.9	2.5	191.0*	--	--	--	--
Asgrow RX 760	2	23400	18.1	0.0	190.2*	177.5	--	183.9	--
Asgrow RX 730	2	22600	18.7	1.1	190.2*	--	--	--	--
Kruger K-9818+	2	22500	21.0	0.0	189.4*	--	--	--	--
Kruger K-9915	2	23200	20.4	1.0	188.5*	--	--	--	--
Mycogen 2787	2	22500	18.6	0.0	188.1*	--	--	--	--
Renze 6386	2	23200	19.1	2.1	187.1*	197.0*	75.6	192.1	153.2
Hawkeye Hybrids SX81	2	24300	18.9	1.5	186.8*	188.7*	--	187.8	--
Pioneer Hybrid 3335	2	24000	19.3	1.5	186.4*	199.3*	92.3	192.9	159.3
Kruger K-9618+	2	23700	20.7	2.1	186.2*	--	--	--	--
Garst 8342	3	24300	20.4	1.5	185.7*	186.3*	--	186.0	--
Dekalb DK642	2	24100	20.9	1.5	183.3*	191.9*	--	187.6	--
LG Seeds LG2726	2	23700	19.0	1.5	182.8*	--	--	--	--
Pfister 3977	2	22700	20.0	2.1	182.4*	--	--	--	--
Kruger K-9620	2	20700	20.5	1.2	182.1*	200.3*	83.7	191.2	155.4
Fontanelle 5335(msx)	1	22700	18.6	1.1	182.0*	172.9	85.4	177.5	146.8
Patriot 6168	2	23200	19.9	1.6	181.9*	--	--	--	--
Kruger K-9614A	1	23400	19.0	2.6	181.7*	--	--	--	--
Cargill 7770	2	23000	17.8	1.0	181.6*	199.2*	--	190.4	--
Pioneer Hybrid 3394	1	24200	16.2	1.0	181.5*	207.3**	96.5	194.4	161.8
Cargill 7997	2	23600	20.9	0.5	180.9*	188.0*	129.1**	184.5	166.0
Pfister 2680	2	23200	19.9	0.5	180.4*	161.1	--	170.8	--
Mycogen 2888	2	23700	20.7	2.0	180.1*	201.3*	--	190.7	--
Novartis Seeds N6800	3	24200	17.8	1.0	179.5	173.6	--	176.6	--
Merschman M-5110	1	23800	19.8	0.0	179.3	188.0*	--	183.7	--
Pioneer Hybrid 3489	1	23100	16.2	3.6	178.9	197.6*	85.3	188.3	153.9
Renze 6506	2	23100	22.0	1.6	178.7	202.4*	--	190.6	--
AgriPro AP 619	1	23800	17.9	0.0	178.6	193.5*	65.3	186.1	145.8
Golden Harvest H-2547	2	23200	19.2	0.5	178.5	178.5	60.3	178.5	139.1
Terra TR1154	2	22600	18.4	0.0	178.3	197.8*	79.3	188.1	151.8
Dekalb DK626	2	21400	16.7	1.1	178.1	--	91.5	--	--
Merschman M-5117	2	23200	19.6	2.6	177.6	176.9	91.7	177.3	148.7
Hawkeye Hybrids SX66	2	24600	21.1	1.5	177.4	--	--	--	--
Midwest Seed Genetics G8699	2	23000	17.5	2.4	177.2	--	--	--	--
NC+ 4880	2	23800	19.5	0.0	177.1	--	--	--	--
Merschman M-6117	2	23800	18.2	0.5	177.1	--	--	--	--
Merschman M-6114	2	23500	19.6	0.5	176.7	--	--	--	--
Kruger K-9816	2	23500	18.1	1.1	175.9	--	--	--	--
Lewis 6294	2	23600	19.1	0.0	175.6	195.4*	85.8	185.5	152.3
Novartis Seeds N6423	2	23800	15.3	0.5	175.3	161.6	--	168.5	--
Terra TR1176	2	24200	21.3	0.0	175.2	--	--	--	--
NC+ 5697	2	24400	16.8	1.5	175.2	--	--	--	--
Midwest Seed Genetics G8452	2	23400	19.0	1.0	175.2	193.6*	78.2	184.4	149.0
Middlekoop 817	2	24400	21.2	1.0	175.0	172.7	115.7*	173.9	154.5
Rainbow 3100	1	23400	18.5	1.6	174.3	185.1*	--	179.7	--
Middlekoop 1014	2	22300	19.0	1.7	174.0	--	--	--	--
Kruger K-9715	2	23400	19.5	1.0	174.0	186.1*	--	180.1	--
Midland 96118A	2	23400	18.7	1.0	173.9	--	--	--	--
Burrus 720	2	24200	17.5	0.5	173.8	178.1	--	176.0	--
Kruger K-9819	2	21500	21.0	2.2	173.4	204.0*	--	188.7	--
Golden Harvest H-2581	2	22300	17.6	0.0	173.3	183.0	87.8	178.2	148.0
Terra TR1157	2	22400	20.0	1.1	173.2	182.0	--	177.6	--
Renze 6416	2	23600	19.4	1.0	173.1	182.2	114.7*	177.6	156.7
Pioneer Hybrid 32J55	2	23600	19.9	1.0	173.0	--	--	--	--
Dekalb DK641	2	23100	18.6	2.7	172.9	202.3*	--	187.6	--
Wilson 2330	2	23000	23.0	0.5	172.7	177.7	90.7	175.2	147.0
Cargill 6997	1	24000	17.0	0.0	172.4	176.2	72.3	174.3	140.3
Rainbow X1166	2	22900	18.4	0.0	171.9	173.7	--	172.8	--

TABLE 3. Continued.

Brand-Hybrid	Mat- urity Group	Plants #/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1996	1995	2 Yr.	3 Yr.
Merschman M-5113	1	22500	16.5	1.7	171.6	167.9	--	169.8	--
Golden Harvest H-2515	1	23700	16.0	0.5	171.3	177.6	--	174.5	--
LG Seeds LG2579	2	22600	18.6	0.5	171.2	--	--	--	--
Middlekoop 813	2	24200	16.7	1.0	171.2	173.1	94.6	172.1	146.3
AgriPro AP 9616	1	23400	18.1	1.1	171.2	181.0	--	176.1	--
AgriPro AP 9707	3	23400	19.6	1.5	170.4	197.1*	--	183.8	--
Asgrow RX 670	1	23800	15.5	0.5	169.9	--	--	--	--
Fontanelle 5567(msx)	1	22600	18.8	1.7	169.7	--	--	--	--
Merschman M-3117	2	21900	19.5	1.6	169.6	172.1	97.3	170.9	146.3
Lewis 5584	2	22400	18.7	0.0	169.2	192.8*	85.9	181.0	149.3
Patriot 7172	2	20900	20.2	1.1	168.7	--	--	--	--
Renze 6397	2	23800	18.3	1.0	168.6	--	--	--	--
Merschman M-7115	2	22000	18.1	0.5	168.3	--	--	--	--
Burrus 442	1	22300	17.2	1.6	168.2	--	--	--	--
Burrus 511	1	22400	16.2	3.8	167.8	--	--	--	--
Fontanelle 5676	1	20600	19.0	0.6	167.5	176.7	--	172.1	--
Terra TR702	2	23600	22.8	1.0	167.4	178.0	--	172.7	--
Terra TR1136	2	24000	18.5	0.0	167.3	--	--	--	--
Kruger K-9716+	2	23200	19.0	0.5	167.0	182.6	--	174.8	--
Lewis 3586	1	23500	15.5	1.5	166.7	--	--	--	--
Stauffer 2792	2	22900	17.3	0.0	166.3	--	--	--	--
Patriot 6142	2	21400	18.0	1.1	165.3	--	--	--	--
Wilson 2335	2	23700	21.7	0.0	165.1	162.5	--	163.8	--
Patriot 5093	1	23200	17.0	1.0	164.9	--	--	--	--
Garst 8366	2	23500	17.7	0.0	164.7	--	--	--	--
Rainbow 3128	2	23000	17.3	1.0	164.4	--	--	--	--
Crow's 496	1	23200	16.4	0.5	164.3	192.0*	--	178.2	--
NC+ 6959	2	21400	21.6	0.0	163.8	174.2	--	169.0	--
Patriot 5072	1	23100	14.9	1.6	163.7	--	--	--	--
NC+ 5445	2	23400	18.6	0.5	163.2	174.4	--	168.8	--
Novartis Seeds N69-R1	3	21200	18.4	0.0	163.1	--	--	--	--
Burrus 488	1	22600	17.2	1.0	162.5	--	--	--	--
Bo-Jac 614	3	22400	19.5	0.5	162.2	184.2*	--	173.2	--
Freedom 5680	1	21700	20.8	1.7	162.1	--	--	--	--
Bo-Jac 544	3	22300	16.5	1.7	162.0	--	--	--	--
LG Seeds LG2624	2	22500	18.0	0.5	161.5	171.8	--	166.7	--
Pioneer Hybrid 32K61	2	22100	17.2	1.0	161.5	--	--	--	--
Freedom 5695	2	22400	20.3	0.5	161.4	196.7*	--	179.1	--
Cargill 6888	1	23100	20.0	1.6	161.3	202.5*	--	181.9	--
Bo-Jac 415	2	23700	16.0	1.0	161.2	--	--	--	--
Middlekoop 915	2	21900	18.7	0.6	160.8	180.1	--	170.5	--
Terra TR1167	2	21500	19.4	0.5	160.8	197.3*	99.6	179.1	152.6
Lewis 5446	2	22100	19.5	1.6	160.6	--	--	--	--
Terra TR1185(spx)	2	23400	21.6	1.5	158.9	187.5*	97.5	173.2	148.0
Novartis Seeds N7070	3	23400	18.1	0.5	158.8	184.6*	80.4	171.7	141.3
Mycogen 2828	2	21400	17.5	1.1	158.0	--	--	--	--
Wilson E975305	2	21500	22.0	1.1	157.9	--	--	--	--
Patriot 5120	2	22300	16.5	0.0	157.4	--	--	--	--
Pfister 3049	2	24100	18.4	1.0	157.1	179.6	--	168.4	--
Wilson E975307	2	21800	22.2	1.6	156.2	--	--	--	--
Kruger K-9716B	2	22500	17.8	2.7	155.5	--	--	--	--
Middlekoop 916	2	19200	18.1	0.0	153.5	163.1	--	158.3	--
Kruger K-9818	2	23100	19.0	2.1	152.9	198.6*	--	175.8	--
Fontanelle 5786	2	23000	20.2	1.1	152.8	--	--	--	--
Wilson 1792	2	21100	21.5	1.1	152.6	--	--	--	--
Crow's 550	1	22900	19.7	1.0	152.3	--	--	--	--
Patriot 7197	2	23000	19.8	1.6	152.1	--	--	--	--
Triumph 2010	2	18000	19.7	0.8	151.9	184.2*	87.4	168.1	141.2
Midland 96117A	2	20900	18.8	1.1	151.3	--	--	--	--
Kruger K-9818A	2	20000	21.1	0.0	147.3	182.7	--	165.0	--
Freedom 5555	1	22600	16.4	1.6	146.2	--	--	--	--
TRIAL AVERAGE		22888	18.8	1.1	171.0	179.5	88.8	175.2	146.4
L.S.D. AT .10		1839	1.8	1.8	16.8	23.2	19.0		
C.V. %		5.9	7.0		7.2	9.4	15.5		

-- Data not available.

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

TABLE 4. Performance of Corn Hybrids evaluated near Novelty (Knox County) on the Greenley Memorial Center during 1995-97.

Planted: 7 May 1997
 Harvested: 26 September 1997
 Planted Population: 24,400
 Row Spacing: 30 inches
 Soil Type: Putnam Silt Loam
 Soil Test: pH=7.0, OM=2.3%, P=28, K=136

Fertilizer: N=320; P₂O₅=80; K₂O=160
 Herbicide: Bicept
 Insecticide: Lorsban
 Irrigation: 0.0 inches
 Previous Crop: Soybean

Growing Season Rainfall: Apr.=4.3, May=7.9, June=6.0, July=3.2, Aug.=2.7 TOTAL=24.1"

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1996	1995	2 Yr.	3 Yr.
Pioneer Hybrid 3489	1	23900	22.7	1.9	149.8**	178.8	137.3*	164.3	155.3
Rainbow 3100	1	21800	24.7	0.0	149.2*	179.3	--	164.3	--
Merschman M-6117	2	21600	25.2	0.0	148.2*	--	--	--	--
Pioneer Hybrid 3260	2	23300	24.5	1.0	145.6*	174.8	--	160.2	--
AgriPro AP 9565	1	23000	24.9	0.5	145.4*	175.5	--	160.5	--
Pioneer Hybrid 3394	1	24300	22.4	0.0	144.5*	173.4	124.1	159.0	147.3
Kruger K-9816	2	23000	26.4	1.0	144.0*	--	--	--	--
Asgrow RX 730	2	22800	25.7	1.5	142.0*	--	--	--	--
Bo-Jac 614	3	22000	29.1	1.0	141.4*	172.3	--	156.9	--
Cargill 7770	2	22900	26.9	0.0	140.1*	160.2	--	150.1	--
Golden Harvest H-2547	2	23000	24.9	0.5	139.8*	174.6	139.5*	157.2	151.3
Mycogen 2787	2	21300	26.9	0.6	139.5*	--	--	--	--
Rainbow X1176	2	22700	27.0	1.5	139.4*	--	--	--	--
NC+ 4880	2	23400	24.9	1.0	138.4*	--	--	--	--
Cargill 7997	2	22100	29.2	0.0	137.8*	162.0	135.6*	149.9	145.1
Wilson 1792	2	21700	28.6	2.1	137.1*	--	--	--	--
Kruger K-9915	2	23700	29.7	1.0	136.1*	--	--	--	--
Asgrow RX 670	1	21200	24.3	0.0	135.6*	--	--	--	--
Terra TR1154	2	23400	24.4	2.0	134.8*	168.5	114.6	151.7	139.3
LG Seeds LG2579	2	22200	23.3	1.1	134.5*	--	--	--	--
Pfister 2680	2	22400	24.7	0.0	134.4*	181.2	--	157.8	--
Pioneer Hybrid 3335	2	23100	26.0	2.9	133.5*	174.0	138.7*	153.8	148.7
Wilson 2335	2	22300	29.4	1.1	133.4*	156.0	--	144.7	--
Burrus 488	1	21100	23.4	1.1	133.4*	--	--	--	--
Patriot 7197	2	21700	27.9	0.6	133.4*	--	--	--	--
Terra TR1167	2	20400	28.3	2.5	133.2*	181.4	114.4	157.3	143.0
Pfister 3977	2	21500	28.0	0.5	133.1	--	--	--	--
Merschman M-6114	2	21800	27.4	1.6	133.1	--	--	--	--
Midland 96118A	2	23500	26.2	1.0	132.7	--	--	--	--
Merschman M-3117	2	22500	27.3	0.0	132.6	178.5	146.8*	155.6	152.6
Novartis Seeds N69-R1	3	23600	23.8	1.0	132.5	--	--	--	--
Merschman M-5110	1	21500	23.6	0.6	132.4	185.9*	--	159.2	--
Merschman M-5117	2	20000	30.1	1.8	132.4	173.8	128.4	153.1	144.9
Kruger K-9620	2	19600	28.5	1.9	132.2	184.4*	142.8*	158.3	153.1
NC+ 6959	2	23500	30.1	1.0	131.5	162.4	--	147.0	--
Patriot 5072	1	22200	23.9	2.1	131.1	--	--	--	--
Asgrow RX 760	2	22400	26.1	0.0	131.0	177.5	--	154.3	--
Kruger K-9618+	2	22100	27.6	1.0	131.0	--	--	--	--
Cargill 6888	1	21900	24.1	0.0	131.0	180.3	--	155.7	--
Renze 6386	2	22600	26.0	1.0	130.9	186.0*	122.9	158.5	146.6
Mycogen 2888	2	23400	29.3	0.5	130.6	176.1	--	153.4	--
Novartis Seeds N7070	3	23000	26.1	0.5	130.3	173.5	144.9*	151.9	149.6
Renze 6506	2	23200	26.4	0.5	130.2	168.6	--	149.4	--
Fontanelle 5335(msx)	1	22500	24.9	0.5	129.3	173.7	148.0*	151.5	150.3
LG Seeds LG2726	2	20300	28.2	1.2	129.0	--	--	--	--
Terra TR702	2	22400	31.8	0.5	128.6	171.5	--	150.1	--
Terra TR1157	2	20600	27.7	0.7	128.5	151.0	--	139.8	--
Rainbow 3128	2	22200	26.0	1.0	128.2	--	--	--	--
Garst 8342	3	21200	28.1	0.6	128.0	161.7	--	144.9	--
Merschman M-5113	1	22300	24.8	0.6	127.8	159.8	--	143.8	--
Dekalb DK641	2	21400	26.2	0.5	127.4	180.7	--	154.1	--
Middlekoop 813	2	23500	24.3	1.5	127.3	176.5	152.2*	151.9	152.0
Patriot 7172	2	21500	29.2	0.6	127.0	--	--	--	--
Pioneer Hybrid 32J55	2	23800	30.0	2.2	126.6	--	--	--	--
Wilson 2330	2	22700	29.3	1.0	126.4	160.8	105.2	143.6	130.8
Hawkeye Hybrids SX66	2	24300	26.4	0.5	126.1	--	--	--	--
AgriPro AP 9707	3	21800	30.7	2.7	125.7	170.5	--	148.1	--
Lewis 3586	1	19000	22.1	2.0	125.7	--	--	--	--
Kruger K-9818+	2	21200	32.3	0.6	125.3	--	--	--	--
Fontanelle 5786	2	22000	27.0	0.0	124.1	--	--	--	--

TABLE 4. Continued.

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1997	1996	1995	2 Yr.
Novartis Seeds N6800	3	24400	26.5	0.5	123.6	183.7*	--	153.6	--
Triumph 2010	2	20400	29.9	1.1	123.5	164.2	100.6	143.9	129.4
Freedom 5695	2	23000	29.6	1.0	123.2	173.8	--	148.5	--
Bo-Jac 415	2	22900	23.7	0.0	123.1	--	--	--	--
Terra TR1176	2	22400	27.2	1.0	123.1	--	--	--	--
Kruger K-9614A	1	23900	24.6	0.0	122.5	--	--	--	--
Novartis Seeds N6423	2	21600	24.4	1.0	122.5	164.6	--	143.6	--
Lewis 6294	2	23200	31.1	1.4	121.8	161.6	124.6	141.7	136.0
Patriot 6168	2	22700	31.2	2.0	121.8	--	--	--	--
Burrus 442	1	22400	27.2	0.0	121.7	--	--	--	--
Freedom 5680	1	22000	29.4	0.5	121.5	--	--	--	--
Kruger K-9715	2	23500	27.0	0.0	121.2	203.6**	--	162.4	--
Golden Harvest H-2581	2	23400	28.4	0.0	120.8	158.6	138.0*	139.7	139.1
Golden Harvest H-2515	1	22200	23.7	0.0	120.2	185.2*	--	152.7	--
Wilson E975307	2	21400	30.6	1.6	120.1	--	--	--	--
Dekalb DK626	2	23000	27.1	1.0	119.3	--	109.2	--	--
Kruger K-9818	2	20700	28.0	0.5	119.1	159.2	--	139.1	--
Patriot 5093	1	21600	22.4	1.0	118.8	--	--	--	--
Hawkeye Hybrids SX81	2	21500	30.0	1.0	118.6	172.5	--	145.6	--
Cargill 6997	1	23000	25.2	0.0	118.0	168.0	161.0**	143.0	149.0
Pioneer Hybrid 32K61	2	23100	29.1	3.9	118.0	--	--	--	--
Middlekoop 817	2	21700	29.9	2.2	117.9	187.5*	146.0*	152.7	150.5
Burrus 511	1	21200	26.2	1.1	117.8	--	--	--	--
Kruger K-9819	2	20900	32.4	0.5	117.4	168.1	--	142.8	--
Fontanelle 5567(msx)	1	22200	25.7	1.1	116.0	--	--	--	--
NC + 5445	2	22100	28.4	0.6	114.0	177.9	--	146.0	--
Lewis 5584	2	22900	26.5	0.0	114.0	171.5	127.1	142.8	137.5
Kruger K-9818A	2	19300	28.2	0.6	113.5	170.9	--	142.2	--
Terra TR1185(spx)	2	21600	33.1	4.1	112.8	145.9	95.3	129.4	118.0
Middlekoop 915	2	21400	28.7	0.0	112.5	178.1	--	145.3	--
Patriot 5120	2	21500	25.9	1.7	110.6	--	--	--	--
Wilson E975305	2	22100	34.3	2.0	110.6	--	--	--	--
Middlekoop 1014	2	20500	27.5	0.0	110.3	--	--	--	--
Dekalb DK642	2	22800	27.4	3.5	109.5	178.6	--	144.1	--
Midwest Seed Genetics G8699	2	23000	28.2	2.0	107.3	--	--	--	--
Bo-Jac 544	3	22600	25.8	0.5	107.3	--	--	--	--
Crow's 496	1	22900	27.7	0.5	106.9	189.0*	--	148.0	--
Pfister 3049	2	21700	28.3	1.0	106.8	172.2	--	139.5	--
Terra TR1136	2	23000	28.3	0.0	106.4	--	--	--	--
Middlekoop 916	2	20000	28.0	1.2	106.0	173.0	--	139.5	--
Mycogen 2828	2	22100	31.0	1.7	104.0	--	--	--	--
Freedom 5555	1	23100	26.4	1.5	103.2	--	--	--	--
Garst 8366	2	22700	27.5	0.5	103.2	--	--	--	--
Midwest Seed Genetics G8452	2	22700	27.3	0.0	100.3	186.2*	128.6	143.3	138.4
Crow's 550	1	23400	29.8	1.6	98.8	--	--	--	--
Midland 96117A	2	21500	29.9	0.6	98.1	--	--	--	--
Lewis 5446	2	23100	30.0	0.5	96.9	--	--	--	--
Fontanelle 5676	1	19400	28.5	0.0	96.8	173.7	--	135.3	--
NC + 5697	2	21500	29.6	0.5	96.6	--	--	--	--
LG Seeds LG2624	2	21500	32.4	0.6	95.9	185.0*	--	140.5	--
AgriPro AP 619	1	23700	28.1	0.0	95.6	182.5	131.3	139.1	136.5
AgriPro AP 9616	1	22000	28.1	0.5	95.1	162.1	--	128.6	--
Renze 6416	2	23900	25.5	0.5	94.8	179.7	148.7*	137.3	141.1
Kruger K-9716B	2	22200	29.1	1.6	94.0	--	--	--	--
Burrus 720	2	23200	28.0	0.5	93.5	177.2	--	135.4	--
Stauffer 2792	2	22600	27.6	1.0	92.7	--	--	--	--
Kruger K-9716+	2	22900	28.8	1.5	91.5	194.7*	--	143.1	--
Renze 6397	2	23300	30.2	0.0	88.8	--	--	--	--
Merschman M-7115	2	22500	28.6	0.9	87.6	--	--	--	--
Rainbow X1166	2	22700	26.5	1.0	86.4	167.2	--	126.8	--
Patriot 6142	2	23600	29.6	0.5	85.2	--	--	--	--
TRIAL AVERAGE		22269	27.4	0.9	121.3	171.0	125.6	146.2	139.3
L.S.D. AT .10		2054	2.4	1.8	16.6	20.4	28.8		
C.V. %		6.7	6.4		10.0	8.8	16.7		

-- Data not available.

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

TABLE 5. Performance Summary for Corn Hybrids evaluated at Three Northern Missouri Locations (Osborn, Chillicothe, Novelty) during 1997.

Brand-Hybrid	Mat- urity Group	Lodging (%)				Yield (Bu/Acre)			
		Osborn	Chilicoth	Novelty	Mean	Osborn	Chilicoth	Novelty	Mean
						Osborn	Chilicoth	Novelty	Mean
AgriPro AP 9565	1	0.5	1.0	0.5	0.7	172.4	196.6**	145.4*	171.5**
Kruger K-9915	2	2.0	1.0	1.0	1.3	188.5*	188.5*	136.1*	171.0*
Pioneer Hybrid 3260	2	1.1	2.5	1.0	1.5	171.0	192.0*	145.6*	169.5*
Mycogen 2787	2	0.5	0.0	0.6	0.4	177.8*	188.1*	139.5*	168.5*
Asgrow RX 730	2	0.0	1.1	1.5	0.9	172.0	190.2*	142.0*	168.1*
Kruger K-9618+	2	1.6	2.1	1.0	1.6	186.1*	186.2*	131.0	167.8*
Rainbow X1176	2	1.5	2.5	1.5	1.8	172.5	191.0*	139.4*	167.6*
Kruger K-9###+	2	1.1	0.0	0.6	0.6	184.0*	189.4*	125.3	166.2*
Kruger K-9816	2	1.4	1.1	1.0	1.2	174.0*	175.9	144.0*	164.6*
Kruger K-9620	2	1.0	1.2	1.9	1.4	178.8*	182.1*	132.2	164.4*
Asgrow RX 760	2	1.0	0.0	0.0	0.3	172.1	190.2*	131.0	164.4*
Merschman M-6117	2	1.9	0.5	0.0	0.8	166.5	177.1	148.2*	163.9*
Pioneer Hybrid 3394	1	1.4	1.0	0.0	0.8	165.2	181.5*	144.5*	163.7*
Pfister 3977	2	0.5	2.1	0.5	1.0	171.7	182.4*	133.1	162.4*
Garst 8342	3	1.0	1.5	0.6	1.0	172.9	185.7*	128.0	162.2*
Renze 6386	2	1.5	2.1	1.0	1.5	168.6	187.1*	130.9	162.2*
Cargill 7770	2	3.9	1.0	0.0	1.6	164.8	181.6*	140.1*	162.2*
Merschman M-5117	2	1.5	2.6	1.8	2.0	176.1*	177.6	132.4	162.0*
NC+ 4880	2	0.4	0.0	1.0	0.5	169.4	177.1	138.4*	161.6*
Pfister 2680	2	0.5	0.5	0.0	0.3	169.6	180.4*	134.4*	161.5*
Renze 6506	2	1.9	1.6	0.5	1.3	175.2*	178.7	130.2	161.4*
Novartis Seeds N6800	3	0.0	1.0	0.5	0.5	180.5*	179.5	123.6	161.2*
Wilson 2335	2	0.5	0.0	1.1	0.5	184.6*	165.1	133.4*	161.0*
Golden Harvest H-2547	2	1.0	0.5	0.5	0.7	162.6	178.5	139.8*	160.3*
Pioneer Hybrid 3335	2	3.1	1.5	2.9	2.5	159.2	186.4*	133.5*	159.7
Merschman M-6114	2	0.9	0.5	1.6	1.0	169.1	176.7	133.1	159.6
Midwest Seed Genetics G8699	2	2.0	2.4	2.0	2.1	194.0**	177.2	107.3	159.5
LG Seeds LG2726	2	0.5	1.5	1.2	1.1	164.2	182.8*	129.0	158.7
Golden Harvest H-2581	2	1.0	0.0	0.0	0.3	180.5*	173.3	120.8	158.2
Midland 96118A	2	0.9	1.0	1.0	1.0	167.2	173.9	132.7	157.9
Pioneer Hybrid 3489	1	0.0	3.6	1.9	1.8	144.9	178.9	149.8**	157.9
Fontanelle 5335(msx)	1	0.5	1.1	0.5	0.7	161.7	182.0*	129.3	157.7
Mycogen 2888	2	4.8	2.0	0.5	2.4	161.3	180.1*	130.6	157.3
LG Seeds LG2579	2	0.5	0.5	1.1	0.7	165.9	171.2	134.5*	157.2
Merschman M-5110	1	0.5	0.0	0.6	0.4	159.9	179.3	132.4	157.2
Merschman M-3117	2	0.0	1.6	0.0	0.5	168.9	169.6	132.6	157.0
Terra TR702	2	0.5	1.0	0.5	0.7	173.8*	167.4	128.6	156.6
Hawkeye Hybrids SX66	2	0.9	1.5	0.5	1.0	165.9	177.4	126.1	156.5
Rainbow 3100	1	2.1	1.6	0.0	1.2	144.9	174.3	149.2*	156.1
Pioneer Hybrid 32J55	2	1.0	1.0	2.2	1.4	168.2	173.0	126.6	155.9
AgriPro AP 9707	3	1.1	1.5	2.7	1.8	171.6	170.4	125.7	155.9
Kruger K-9614A	1	1.9	2.6	0.0	1.5	163.3	181.7*	122.5	155.8
Dekalb DK641	2	1.5	2.7	0.5	1.6	167.2	172.9	127.4	155.8
Middlekoop 813	2	3.0	1.0	1.5	1.8	168.2	171.2	127.3	155.6
Merschman M-5113	1	2.4	1.7	0.6	1.6	167.5	171.6	127.8	155.6
Kruger K-9819	2	0.5	2.2	0.5	1.1	174.8*	173.4	117.4	155.2
Novartis Seeds N7070	3	1.5	0.5	0.5	0.8	176.0*	158.8	130.3	155.0
Asgrow RX 670	1	1.0	0.5	0.0	0.5	159.1	169.9	135.6*	154.9
Patriot 6168	2	0.5	1.6	2.0	1.4	160.3	181.9*	121.8	154.7
Cargill 7997	2	2.7	0.5	0.0	1.1	144.4	180.9*	137.8*	154.4
Burrus 488	1	2.3	1.0	1.1	1.5	166.0	162.5	133.4*	154.0
Bo-Jac 415	1	1.4	1.0	0.0	0.8	177.8*	161.2	123.1	154.0
Terra TR1176	2	0.5	0.0	1.0	0.5	163.2	175.2	123.1	153.8
Dekalb DK626	2	2.0	1.1	1.0	1.4	163.7	178.1	119.3	153.7
Cargill 6888	1	2.9	1.6	0.0	1.5	168.6	161.3	131.0	153.6
Middlekoop 915	2	1.0	0.6	0.0	0.5	186.8*	160.8	112.5	153.4
Wilson 2330	2	0.5	0.5	1.0	0.7	161.1	172.7	126.4	153.4
Dekalb DK642	2	1.0	1.5	3.5	2.0	167.0	183.3*	109.5	153.3
Lewis 5584	2	0.0	0.0	0.0	0.0	176.1*	169.2	114.0	153.1
Middlekoop 817	2	1.5	1.0	2.2	1.6	165.6	175.0	117.9	152.8
AgriPro AP 619	1	0.5	0.0	0.0	0.2	183.6*	178.6	95.6	152.6
Lewis 6294	2	1.4	0.0	1.4	0.9	158.4	175.6	121.8	151.9

TABLE 5. Continued.

Brand-Hybrid	Mat- urity Group	Lodging (%)				Yield (Bu/Acre)			
		Osborn	Chilicoth	Novelty	Mean	Osborn	Chilicoth	Novelty	Mean
Rainbow 3128	2	1.0	1.0	1.0	1.0	161.9	164.4	128.2	151.5
Novartis Seeds N6423	2	0.5	0.5	1.0	0.7	155.4	175.3	122.5	151.1
Midwest Seed Genetics G8452	2	1.0	1.0	0.0	0.7	177.3*	175.2	100.3	150.9
Patriot 7172	2	2.0	1.1	0.6	1.2	155.8	168.7	127.0	150.5
NC+ 6959	2	0.5	0.0	1.0	0.5	155.5	163.8	131.5	150.3
Pioneer Hybrid 32K61	2	1.4	1.0	3.9	2.1	171.5	161.5	118.0	150.3
Lewis 3586	1	2.0	1.5	2.0	1.8	158.2	166.7	125.7	150.2
Bo-Jac 614	3	1.6	0.5	1.0	1.0	145.8	162.2	141.4*	149.8
Terra TR1157	2	1.0	1.1	0.7	0.9	147.8	173.2	128.5	149.8
Middlekoop 1014	2	2.1	1.7	0.0	1.3	165.2	174.0	110.3	149.8
Hawkeye Hybrids SX81	2	1.5	1.5	1.0	1.3	143.0	186.8*	118.6	149.5
Wilson 1792	2	2.6	1.1	2.1	1.9	158.3	152.6	137.1*	149.3
Burrus 442	1	1.7	1.6	0.0	1.1	158.0	168.2	121.7	149.3
Terra TR1154	2	0.6	0.0	2.0	0.9	132.8	178.3	134.8*	148.6
Fontanelle 5786	2	0.5	1.1	0.0	0.5	168.7	152.8	124.1	148.5
Crow's 496	1	0.9	0.5	0.5	0.6	173.6*	164.3	106.9	148.3
Terra TR1167	2	0.6	0.5	2.5	1.2	150.9	160.8	133.2*	148.3
Kruger K-9818	2	1.4	2.1	0.5	1.3	173.0	152.9	119.1	148.3
Novartis Seeds N69-R1	3	0.5	0.0	1.0	0.5	149.0	163.1	132.5	148.2
Kruger K-9715	2	1.0	1.0	0.0	0.7	149.3	174.0	121.2	148.2
Freedom 5680	1	1.6	1.7	0.5	1.3	160.4	162.1	121.5	148.0
Patriot 5093	1	0.0	1.0	1.0	0.7	159.5	164.9	118.8	147.7
Renze 6416	2	0.9	1.0	0.5	0.8	175.2*	173.1	94.8	147.7
Patriot 7197	2	0.9	1.6	0.6	1.0	157.6	152.1	133.4*	147.7
Patriot 5072	1	2.5	1.6	2.1	2.1	148.0	163.7	131.1	147.6
Mycogen 2828	2	0.5	1.1	1.7	1.1	180.9*	158.0	104.0	147.6
Golden Harvest H-2515	1	1.5	0.5	0.0	0.7	150.5	171.3	120.2	147.3
Freedom 5695	2	0.5	0.5	1.0	0.7	156.6	161.4	123.2	147.1
Terra TR1136	2	1.4	0.0	0.0	0.5	165.1	167.3	106.4	146.3
Cargill 6997	1	0.5	0.0	0.0	0.2	147.3	172.4	118.0	145.9
Pfister 3049	2	1.4	1.0	1.0	1.1	172.9	157.1	106.8	145.6
Renze 6397	2	1.8	1.0	0.0	0.9	178.7*	168.6	88.8	145.4
NC+ 5697	2	2.4	1.5	0.5	1.5	162.4	175.2	96.6	144.7
AgriPro AP 9616	1	2.0	1.1	0.5	1.2	167.1	171.2	95.1	144.5
Kruger K-9716B	2	1.4	2.7	1.6	1.9	183.8*	155.5	94.0	144.4
Burrus 720	2	1.0	0.5	0.5	0.7	165.7	173.8	93.5	144.3
Triumph 2010	2	0.6	0.8	1.1	0.8	157.2	151.9	123.5	144.2
Rainbow X1166	2	1.9	0.0	1.0	1.0	172.5	171.9	86.4	143.6
Wilson E975305	2	1.1	1.1	2.0	1.4	161.6	157.9	110.6	143.4
Burrus 511	1	3.2	3.8	1.1	2.7	144.0	167.8	117.8	143.2
Wilson E975307	2	1.1	1.6	1.6	1.4	153.1	156.2	120.1	143.1
Garst 8366	2	1.0	0.0	0.5	0.5	161.4	164.7	103.2	143.1
Fontanelle 5676	1	2.7	0.6	0.0	1.1	163.8	167.5	96.8	142.7
Merschman M-7115	2	0.0	0.5	0.9	0.5	171.9	168.3	87.6	142.6
Bo-Jac 544	3	2.0	1.7	0.5	1.4	158.6	162.0	107.3	142.6
NC+ 5445	2	0.5	0.5	0.6	0.5	149.8	163.2	114.0	142.3
Kruger K-9818A	2	0.0	0.0	0.6	0.2	165.9	147.3	113.5	142.2
Middlekoop 916	2	1.0	0.0	1.2	0.7	166.2	153.5	106.0	141.9
Lewis 5446	2	0.5	1.6	0.5	0.9	165.8	160.6	96.9	141.1
Fontanelle 5567(msx)	1	3.5	1.7	1.1	2.1	137.0	169.7	116.0	140.9
Midland 96117A	2	1.4	1.1	0.6	1.0	171.5	151.3	98.1	140.3
Patriot 5120	2	1.0	0.0	1.7	0.9	152.4	157.4	110.6	140.1
Stauffer 2792	2	2.0	0.0	1.0	1.0	159.1	166.3	92.7	139.4
Patriot 6142	2	3.0	1.1	0.5	1.5	166.6	165.3	85.2	139.0
Kruger K-9716+	2	1.0	0.5	1.5	1.0	156.0	167.0	91.5	138.2
Terra TR1185(spx)	2	2.0	1.5	4.1	2.5	142.3	158.9	112.8	138.0
LG Seeds LG2624	2	1.5	0.5	0.6	0.9	150.0	161.5	95.9	135.8
Crow's 550	1	2.8	1.0	1.6	1.8	156.4	152.3	98.8	135.8
Freedom 5555	1	2.1	1.6	1.5	1.7	149.8	146.2	103.2	133.1
AVERAGE		1.3	1.1	0.9	1.1	164.7	171.0	121.3	152.3
L.S.D. AT .10		1.6	1.8	1.8	1.0	20.8	16.8	16.6	11.7
C.V. %						9.2	7.2	10.0	9.9

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

TABLE 6. Performance of Corn Hybrids evaluated by Extension near Fairfax (Atchison County) on the Graves Memorial Plot during 1995-97.

Planted: 5 May 1997
 Harvested: 6 October 1997
 Planted Population: 24,400
 Row Spacing: 30 inches
 Soil Type: Haynie Silt Loam
 Soil Test: pH=6.0, OM=3.2%, P=55, K=585

Fertilizer: N=180; P₂O₅=60; K₂O=50
 Herbicide: Dual, Bicep, Buctril
 Insecticide: Lorsban
 Irrigation: 0.0 inches
 Previous Crop: Soybean

Growing Season Rainfall: Apr.=4.6, May=3.3, June=2.5, July=4.2, Aug.=2.8 TOTAL=17.4"

Brand-Hybrid	Maturity Group	Plants	Moisture	Lodging	Yield			Means	
		(#/Acre)	(%)	(%)	(Bu/Acre)	1996	1995	2 Yr.	3 Yr.
Pioneer Hybrid 3335	2	23900	16.3	6.7	196.0**	228.3*	--	212.2	--
Pioneer Hybrid 32K61	2	24600	17.2	22.7	186.7*	--	--	--	--
Pioneer Hybrid 32J55	2	21100	17.3	19.3	185.0*	--	--	--	--
Patriot Seed 6168	2	21400	18.2	14.7	184.1*	229.7*	--	206.9	--
Dekalb DK642	2	25100	16.5	14.0	183.2*	217.2*	--	200.2	--
Mycogen 2888	2	24200	20.6	15.3	181.4*	--	--	--	--
Renze 6386	2	24600	16.6	16.0	178.2*	--	--	--	--
Merschman M-6114	2	23900	17.9	12.7	178.0*	--	--	--	--
Fontanelle 5676	1	22300	16.5	14.7	177.7*	--	--	--	--
Producers 714	1	24200	15.7	8.7	176.5	--	--	--	--
Renze 6416	2	23700	16.7	10.0	175.8	194.8	--	185.3	--
Burrus BX86	2	24400	22.5	21.3	175.4	228.9	--	202.2	--
Merschman M-5117	2	22500	17.9	11.3	174.7	--	--	201.8	--
Wilson 2335	2	24200	22.6	16.0	174.5	190.5	--	182.5	--
Hoegemeyer 2693	2	24600	16.3	13.3	173.4	190.4	165.8	181.9	176.5
Kruger K-9620	2	22100	21.6	15.3	172.7	--	--	--	--
Merschman M-5113	1	24200	15.5	18.7	170.3	--	--	--	--
Kruger K-9614A	1	24400	16.2	15.3	168.9	--	--	--	--
Dekalb DK595	1	24400	16.2	14.7	167.8	--	--	--	--
Fontanelle 5567(msx)	1	24400	16.4	14.0	166.7	--	--	--	--
Wilson 1833	2	24400	19.1	8.7	166.6	210.3*	--	188.5	--
Wilson 1792	2	19700	20.1	12.0	166.6	--	--	--	--
Asgrow RX 730	2	23900	17.0	20.0	165.8	--	--	--	--
Lewis 6294	1	23500	18.3	12.7	165.7	--	143.4	--	--
Kruger K-9716+	2	23000	16.8	22.0	165.1	--	--	--	--
Midwest Seed Genetics G8771	2	21800	18.6	13.3	164.7	--	--	--	--
AgriPro AP 9565	1	23500	16.0	8.7	163.7	--	--	--	--
Garst 8366	2	24200	15.5	9.3	163.6	--	--	--	--
AgriPro AP 9616	1	23200	16.3	14.7	163.6	214.2*	--	188.9	--
Producers 729	2	24200	15.8	18.0	163.4	--	--	--	--
Hoegemeyer 2730	2	22800	20.0	13.3	163.3	--	--	--	--
Midwest Seed Genetics G8511	2	23900	18.2	10.7	163.1	--	--	--	--
Producers 807	2	24400	21.7	10.7	162.9	--	--	--	--
Burrus 720	2	23900	16.6	13.3	162.3	215.7*	--	189.0	--
Burrus 488	1	25100	16.2	24.7	162.3	--	--	--	--
AgriPro AP 619	1	23900	16.6	14.7	161.9	--	169.0	--	--
Stauffer 2820	2	25300	19.7	5.2	161.8	--	--	--	--
Golden Harvest H-2581	2	22300	15.7	10.0	161.1	235.9**	--	198.5	--
Patriot Seed 6142	2	24200	17.4	11.3	160.3	--	--	--	--
Golden Harvest H-2547	2	23500	16.2	16.0	159.8	221.5*	--	190.7	--
Lewis 5446	1	23700	18.9	15.3	159.5	--	--	--	--
Renze 6397	2	22500	16.8	12.7	159.3	--	--	--	--
Pioneer Hybrid 3489	1	23700	16.5	8.0	158.9	--	--	--	--
Patriot Seed 6130	2	22500	17.8	16.7	158.1	--	--	--	--
Renze 6349	2	22800	16.1	24.0	157.8	--	--	--	--
Bo-Jac 415	2	24200	16.3	15.3	157.4	--	--	--	--
Asgrow RX 670	1	22500	16.7	18.7	157.3	--	--	--	--
Merschman M-7115	2	24400	15.7	13.3	156.4	--	--	--	--
Merschman M-4109	1	23900	15.4	21.3	156.1	--	--	--	--
Patriot Seed 7172	2	20200	20.3	19.3	155.1	--	--	--	--
Dekalb DK641	2	22300	16.4	11.3	154.2	--	--	--	--
Hoegemeyer 2666	2	24600	16.3	14.7	154.1	150.4	--	152.3	--
Hoegemeyer 2652LL	2	23000	16.4	23.3	153.9	--	--	--	--
Cargill 6888	1	23700	16.8	16.0	153.5	--	--	--	--
Hoegemeyer 2682	2	23000	16.8	14.7	152.4	185.7	--	169.1	--
Merschman M-5110	1	20900	15.2	8.7	152.4	--	--	--	--
Lewis 5584	1	24900	17.9	17.3	152.2	--	156.7	--	--
Cargill 7770	2	24900	18.3	22.0	152.2	--	--	--	--

TABLE 6. Continued.

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1996	1995	2 Yr.	3 Yr.
Hoegemeyer 2647	1	22800	16.0	14.7	151.7	--	--	--	--
Patriot Seed 7187	2	21800	20.5	16.0	150.2	--	--	--	--
Bo-Jac 629	3	23000	20.7	15.3	148.4	--	132.2	--	--
Fontanelle 5786	2	23000	18.8	10.7	147.0	--	--	--	--
Mycogen 2787	2	22500	18.9	26.0	146.8	--	--	--	--
Bo-Jac 544	2	22500	15.9	12.7	146.4	--	--	--	--
Kruger K-9716B	2	22500	19.0	10.7	144.4	--	--	--	--
Mycogen 2828	2	23000	18.5	13.3	143.0	--	--	--	--
AgriPro AP 9707	3	23700	20.1	17.3	141.9	--	--	--	--
Vanderslice OV 632	1	23000	15.7	12.7	141.6	205.3	160.1	173.5	169.0
Wilson E975305	2	20900	26.3	12.7	132.5	--	--	--	--
Vanderslice OV 762	2	17900	18.4	14.0	132.1	155.0	--	143.6	--
NC+ 5445	2	20400	16.3	12.0	126.8	205.5	--	166.2	--
Merschman M-6117	2	21800	21.1	14.7	125.7	--	--	--	--
TRIAL AVERAGE		23214	17.7	14.7	161.0	198.4	152.0	179.7	170.5
L.S.D. AT .10		2450	0.4	9.0	19.1	24.8	14.9		
C.V. %		7.8	1.5		8.7	11.2	12.4		

-- Data not available.

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

TABLE 7. Performance of Corn Hybrids evaluated near Albany (Gentry County) on the Hundley-Whaley Farm during 1996-97.

Planted: 13 May 1997
 Harvested: 6 October 1997
 Planted Population: 24,400
 Row Spacing: 30 inches
 Soil Type: Grundy Silt Loam
 Soil Test: pH=6.8, OM=2.9%, P=94, K=303

Fertilizer: N=150; P₂O₅=70; K₂O=100
 Herbicide: Fulltime, Beacon, Gramoxone, Permit
 Insecticide: Lorsban
 Irrigation: 0.0 inches
 Previous Crop: Soybean

Growing Season Rainfall: Apr.=5.0, May=3.8, June=1.8, July=1.9, Aug.=3.5 TOTAL=16.0"

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1996	1995	2 Yr.	3 Yr.
Burrus BX86	2	18900	27.5	0.0	172.4**	221.1*	138.0**	196.8	177.2
Midwest Seed Genetics G8771	2	17900	23.0	1.0	171.1*	--	--	--	--
Patriot Seed 7187	2	18800	21.6	0.5	164.6*	--	--	--	--
Pioneer Hybrid 3335	2	18500	20.7	1.2	163.4*	205.7	113.6	184.6	160.9
Wilson 2335	2	19900	27.2	0.0	159.2*	189.4	--	174.3	--
Patriot Seed 7172	2	17200	23.7	0.5	158.4*	184.5	--	171.5	--
Bo-Jac 629	3	17900	23.8	0.0	158.3*	173.1	130.0*	165.7	153.8
Lewis 5584	1	18100	20.1	0.0	157.5*	217.3*	103.2	187.4	159.3
Producers 807	2	17100	24.0	0.0	157.1*	--	--	--	--
Renze 6349	2	18800	17.9	1.1	155.3*	--	--	--	--
Kruger K-9614A	1	15900	18.7	0.5	154.4	--	--	--	--
Golden Harvest H-2581	2	18100	20.6	0.0	154.0	219.3*	127.8*	186.7	167.0
Hoegemeyer 2730	2	18300	24.1	0.0	152.7	208.9*	--	180.8	--
Mycogen 2888	2	17100	28.1	0.6	152.6	--	--	--	--
AgriPro AP 9707	3	18500	23.6	0.0	152.5	181.9	--	167.2	--
Hoegemeyer 2693	2	18500	21.6	0.5	152.2	230.9**	129.2*	191.6	170.8
Kruger K-9620	2	15600	26.9	0.0	152.0	210.1*	131.7*	181.1	164.6
Lewis 6294	1	18200	25.2	0.5	151.6	193.3	135.2*	172.5	160.0
Hoegemeyer 2666	2	18100	18.6	0.5	151.1	--	--	--	--
Burrus 488	1	18100	17.9	0.0	150.8	--	--	--	--
Pioneer Hybrid 3489	1	18200	17.5	0.5	150.7	--	--	--	--
Asgrow RX 730	2	18500	19.3	0.0	150.6	--	--	--	--
Dekalb DK641	2	17800	20.6	0.0	150.2	--	--	--	--
Wilson 1833	2	18300	23.5	0.5	150.2	--	--	--	--
Cargill 6888	1	19000	19.0	0.5	149.8	--	--	--	--
Renze 6397	2	18800	21.2	0.5	149.0	--	--	--	--
AgriPro AP 9565	1	18100	19.1	0.0	148.4	--	--	--	--
Pioneer Hybrid 32K61	2	17600	22.4	0.5	148.0	--	--	--	--
Merschman M-5110	1	18400	18.6	0.0	147.9	--	--	--	--
Merschman M-6117	2	17200	19.1	0.0	147.7	--	--	--	--
Merschman M-5117	2	17400	22.5	2.6	147.4	--	--	--	--
Vanderslice OV 762	2	15900	20.5	0.6	146.8	142.6	112.2	144.7	133.9
Patriot Seed 6168	2	17800	22.3	0.6	146.5	--	--	--	--
Kruger K-9716B	2	18300	20.6	0.0	146.2	--	--	--	--
Garst 8366	2	19600	19.0	0.0	145.8	--	--	--	--
NC+ 5445	2	18100	18.5	0.0	145.7	--	--	--	--
Burrus 720	2	18900	20.4	0.0	145.5	212.5*	--	179.0	--
Pioneer Hybrid 32J55	2	18300	25.0	0.0	144.0	--	--	--	--
Bo-Jac 415	2	18800	17.9	0.0	143.7	--	--	--	--
Cargill 7770	2	17500	23.6	0.0	142.2	184.4	--	163.3	--
Bo-Jac 544	2	18200	18.9	0.0	142.1	--	--	--	--
Merschman M-7115	2	18700	20.6	0.0	141.8	--	--	--	--
Patriot Seed 6130	2	18400	17.8	0.0	141.8	--	--	--	--
AgriPro AP 619	1	18200	20.5	0.0	141.5	188.4	110.4	165.0	146.8
Mycogen 2787	2	14400	19.5	0.8	140.6	--	--	--	--
Producers 714	1	17000	18.4	0.0	140.0	211.2*	--	175.6	--
Golden Harvest H-2547	2	18000	19.4	1.0	139.9	221.7*	--	180.8	--
Renze 6386	2	17100	19.1	0.6	139.5	--	62.3	--	--
Hoegemeyer 2682	2	17000	21.6	0.0	138.8	--	--	--	--
Merschman M-4109	1	16900	17.4	0.0	137.8	--	--	--	--
Hoegemeyer 2647	1	18600	19.4	0.5	136.6	--	--	--	--
Fontanelle 5567(msx)	1	17800	20.6	0.5	136.3	--	--	--	--
Stauffer 2820	2	17500	21.7	0.0	136.2	--	--	--	--
Dekalb DK642	2	19400	20.9	1.0	134.9	211.5*	--	173.2	--
Renze 6416	2	17700	20.7	1.5	134.9	211.9*	101.6	173.4	149.5
Fontanelle 5786	2	17200	22.4	0.0	134.5	--	--	--	--
Dekalb DK595	1	17100	17.5	1.1	134.1	--	--	--	--
Asgrow RX 670	1	19700	17.6	0.0	133.9	--	--	--	--

TABLE 7. Continued.

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1996	1995	2 Yr.	3 Yr.
Producers 729	2	17400	21.0	0.0	133.9	--	--	--	--
Lewis 5446	1	18600	21.0	0.5	133.5	--	--	--	--
Wilson 1792	2	16900	23.9	1.1	133.2	--	--	--	--
Merschman M-6114	2	15200	21.5	0.9	132.6	--	--	--	--
Patriot Seed 6142	2	18700	20.6	0.0	132.5	--	--	--	--
Wilson E975305	2	17200	26.6	0.0	132.0	--	--	--	--
Hoegemeyer 2652LL	2	17800	18.5	0.5	130.6	--	--	--	--
AgriPro AP 9616	1	17800	19.8	0.0	130.4	--	--	--	--
Kruger K-9716+	2	16600	21.4	0.0	129.6	--	--	--	--
Mycogen 2828	2	17600	20.6	0.6	129.4	--	--	--	--
Midwest Seed Genetics G8511	2	17200	21.7	0.0	128.5	--	--	--	--
Merschman M-5113	1	17800	17.7	1.1	127.4	--	--	--	--
Fontanelle 5676	1	13700	20.9	0.0	126.2	210.0*	--	168.1	--
Vanderslice OV 632	1	16400	19.5	0.0	114.7	175.8	95.4	145.3	128.6
TRIAL AVERAGE		17775	21.0	0.3	144.3	202.0	109.6	173.2	151.9
L.S.D. AT .10		2303	1.8	NS	17.7	24.8	14.9		
C.V. %		9.5	6.3		9.0	12.3			

-- Data not available.

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

NS Not significant.

TABLE 8. Performance Summary for Corn Hybrids evaluated by Extension at Two Northern Locations (Fairfax and Albany) during 1997.

Fairfax
Planted: 5 May 1997
Harvested: 6 October 1997
Growing Season Rainfall: 17.4"

Albany
Planted: 13 May 1997
Harvested: 6 October 1997
Growing Season Rainfall: 16.0"

Brand-Hybrid	Mat- urity Group	Lodging (%)			Yield (Bu/Acre)		
		Fairfax	Albany	Mean	Fairfax	Albany	Mean
Pioneer Hybrid 3335	2	6.7	1.2	4.0	196.0**	163.4*	179.7**
Burrus BX86	2	21.3	0.0	10.6	175.4	172.4**	173.9*
Midwest Seed Genetics G8771	2	13.3	1.0	7.2	164.7	171.1*	167.9*
Pioneer Hybrid 32K61	2	22.7	0.5	11.6	186.7*	148.0	167.4*
Mycogen 2888	2	15.3	0.6	8.0	181.4*	152.6	167.0*
Wilson 2335	2	16.0	0.0	8.0	174.5	159.2*	166.8*
Patriot Seed 6168	2	14.7	0.6	7.6	184.1*	146.5	165.3
Pioneer Hybrid 32J55	2	19.3	0.0	9.6	185.0*	144.0	164.5
Hoegemeyer 2693	2	13.3	0.5	6.9	173.4	152.2	162.8
Kruger K-9620	2	15.3	0.0	7.6	172.7	152.0	162.4
Kruger K-9614A	1	15.3	0.5	7.9	168.9	154.4	161.6
Merschman M-5117	2	11.3	2.6	7.0	174.7	147.4	161.0
Producers 807	2	10.7	0.0	5.4	162.9	157.1*	160.0
Dekalb DK642	2	14.0	1.0	7.5	183.2*	134.9	159.0
Renze 6386	2	16.0	0.6	8.3	178.2*	139.5	158.8
Lewis 6294	1	12.7	0.5	6.6	165.7	151.6	158.6
Wilson 1833	2	8.7	0.5	4.6	166.6	150.2	158.4
Producers 714	1	8.7	0.0	4.4	176.5	140.0	158.2
Asgrow RX 730	2	20.0	0.0	10.0	165.8	150.6	158.2
Hoegemeyer 2730	2	13.3	0.0	6.6	163.3	152.7	158.0
Golden Harvest H-2581	2	10.0	0.0	5.0	161.1	154.0	157.6
Patriot Seed 7187	2	16.0	0.5	8.2	150.2	164.6*	157.4
Patriot Seed 7172	2	19.3	0.5	9.9	155.1	158.4*	156.8
Renze 6349	2	24.0	1.1	12.6	157.8	155.3*	156.6
Burrus 488	1	24.7	0.0	12.4	162.3	150.8	156.6
AgriPro AP 9565	1	8.7	0.0	4.4	163.7	148.4	156.0
Renze 6416	2	10.0	1.5	5.8	175.8	134.9	155.4
Merschman M-6114	2	12.7	0.9	6.8	178.0*	132.6	155.3
Pioneer Hybrid 3489	1	8.0	0.5	4.2	158.9	150.7	154.8
Lewis 5584	1	17.3	0.0	8.6	152.2	157.5*	154.8
Garst 8366	2	9.3	0.0	4.6	163.6	145.8	154.7
Renze 6397	2	12.7	0.5	6.6	159.3	149.0	154.2
Burrus 720	2	13.3	0.0	6.6	162.3	145.5	153.9
Bo-Jac 629	3	15.3	0.0	7.6	148.4	158.3*	153.4
Hoegemeyer 2666	2	14.7	0.5	7.6	154.1	151.1	152.6
Dekalb DK641	2	11.3	0.0	5.6	154.2	150.2	152.2
Fontanelle 5676	1	14.7	0.0	7.4	177.7*	126.2	152.0
AgriPro AP 619	1	14.7	0.0	7.4	161.9	141.5	151.7
Cargill 6888	1	16.0	0.5	8.2	153.5	149.8	151.6
Fontanelle 5567(msx)	1	14.0	0.5	7.2	166.7	136.3	151.5
Dekalb DK595	1	14.7	1.1	7.9	167.8	134.1	151.0
Bo-Jac 415	2	15.3	0.0	7.6	157.4	143.7	150.6
Merschman M-5110	1	8.7	0.0	4.4	152.4	147.9	150.2
Patriot Seed 6130	2	16.7	0.0	8.4	158.1	141.8	150.0
Wilson 1792	2	12.0	1.1	6.6	166.6	133.2	149.9
Golden Harvest H-2547	2	16.0	1.0	8.5	159.8	139.9	149.8
Merschman M-7115	2	13.3	0.0	6.6	156.4	141.8	149.1
Stauffer 2820	2	5.2	0.0	2.6	161.8	136.2	149.0
Merschman M-5113	1	18.7	1.1	9.9	170.3	127.4	148.8
Producers 729	2	18.0	0.0	9.0	163.4	133.9	148.6
Kruger K-9716+	2	22.0	0.0	11.0	165.1	129.6	147.4
Cargill 7770	2	22.0	0.0	11.0	152.2	142.2	147.2
AgriPro AP 9707	3	17.3	0.0	8.6	141.9	152.5	147.2
Merschman M-4109	1	21.3	0.0	10.6	156.1	137.8	147.0
AgriPro AP 9616	1	14.7	0.0	7.4	163.6	130.4	147.0
Lewis 5446	1	15.3	0.5	7.9	159.5	133.5	146.5
Patriot Seed 6142	2	11.3	0.0	5.6	160.3	132.5	146.4
Midwest Seed Genetics G8511	2	10.7	0.0	5.4	163.1	128.5	145.8
Asgrow RX 670	1	18.7	0.0	9.4	157.3	133.9	145.6
Hoegemeyer 2682	2	14.7	0.0	7.4	152.4	138.8	145.6

TABLE 8. Continued.

Brand-Hybrid	Mat- urity Group	Lodging (%)			Yield (Bu/Acre)		
		Fairfax	Albany	Mean	Fairfax	Albany	Mean
Kruger K-9716B	2	10.7	0.0	5.4	144.4	146.2	145.3
Hoegemeyer 2647	1	14.7	0.5	7.6	151.7	136.6	144.2
Bo-Jac 544	2	12.7	0.0	6.4	146.4	142.1	144.2
Mycogen 2787	2	26.0	0.8	13.4	146.8	140.6	143.7
Hoegemeyer 2652LL	2	23.3	0.5	11.9	153.9	130.6	142.2
Fontanelle 5786	2	10.7	0.0	5.4	147.0	134.5	140.8
Vanderslice OV 762	2	14.0	0.6	7.3	132.1	146.8	139.4
Merschman M-6117	2	14.7	0.0	7.4	125.7	147.7	136.7
Mycogen 2828	2	13.3	0.6	7.0	143.0	129.4	136.2
NC+ 5445	2	12.0	0.0	6.0	126.8	145.7	136.2
Wilson E975305	2	12.7	0.0	6.4	132.5	132.0	132.2
Vanderslice OV 632	1	12.7	0.0	6.4	141.6	114.7	128.2
AVERAGE		14.7	0.3	7.5	161.0	144.3	152.6
L.S.D. AT .10		9.0	NS	4.5	19.1	17.7	13.4
C.V. %					8.7	9.0	9.3

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

NS Not Significant.

TABLE 9. Performance of Corn Hybrids evaluated near Marshall (Saline County) on the Frank Swisher Farm during 1995-97.

Planted: 25 April 1997
 Harvested: 19 September 1997
 Planted Population: 24,400
 Row Spacing: 30 inches
 Soil Type: Monona Silt Loam
 Soil Test: pH=5.6, OM=3.0%, P=74, K=402

Fertilizer: N=200; P₂O₅=50; K₂O=50
 Herbicide: Harness Extra, Buctril
 Insecticide: Lorsban
 Irrigation: 0.0 inches
 Previous Crop: Soybeans

Growing Season Rainfall: Apr.=4.8, May=4.6, June=5.0, July=0.3, Aug.=3.4, TOTAL=18.1"

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1996	1995	2 Yr.	3 Yr.
Pioneer Hybrid 32J55	2	23600	20.6	3.4	228.5**	--	--	--	--
Pioneer Hybrid 3335	2	23200	17.3	4.9	225.9*	234.0*	167.3*	230.0	209.1
Patriot 7187	2	23200	22.1	2.6	222.6*	--	--	--	--
Burrus BX86	2	24300	19.9	3.8	221.0*	228.1*	174.9*	224.6	208.0
Kruger K-9716B	2	22400	17.5	3.1	220.7*	--	--	--	--
Garst 8366	2	23700	16.4	11.3	219.8*	--	--	--	--
Mycogen 2888	2	22300	20.0	6.0	219.6*	223.5*	--	221.6	--
Cargill 6997	1	23500	17.7	2.9	219.1*	212.4	139.0	215.8	190.2
Dekalb DK626	2	22300	17.2	3.6	218.4*	193.1	153.0	205.8	188.2
Pioneer Hybrid 32K61	2	23000	18.5	1.4	218.3*	--	--	--	--
Crow's 550	1	23100	17.1	1.0	215.7*	--	--	--	--
Kruger K-9716+	2	21300	18.8	3.8	215.6*	217.6	--	216.6	--
Ottifile 5550	2	22100	18.7	2.6	215.6*	--	--	--	--
NC+ 6387	2	23100	20.2	2.0	215.3*	--	--	--	--
NC+ 4880	2	22800	18.0	3.7	214.4*	--	--	--	--
Cargill 6888	1	21900	17.4	1.1	214.0*	--	--	--	--
Mycogen 2815	2	22900	18.1	2.5	213.7*	200.7	153.4	207.2	189.3
Garst 8342	3	23900	18.9	2.9	213.2*	227.5*	--	220.4	--
Middlekoop 718	2	22500	21.2	0.5	212.8*	216.8	159.8	214.8	196.5
Kruger K-9818A	2	22900	18.6	1.5	212.2*	--	--	--	--
AgriPro AP 9707	3	24000	18.1	3.8	212.2*	201.4	--	206.8	--
Kruger K-9716	2	22800	18.9	2.6	212.0*	216.0	--	214.0	--
Terra TR702	2	22100	21.4	2.1	211.8*	225.7*	--	218.8	--
Golden Harvest H-2581	2	23400	18.4	1.5	211.7*	207.4	180.0*	209.6	199.7
NC+ 5697	2	23200	17.8	3.5	211.3*	--	--	--	--
Triumph 1514	2	23400	18.2	1.5	209.7*	212.7	--	211.2	--
Merschman M-7115	2	22900	18.3	3.5	209.3*	--	--	--	--
Kruger K-9819	2	22400	20.3	4.2	208.9*	--	--	--	--
Patriot 6168	2	21500	19.1	3.4	208.6*	--	163.1*	--	--
Novartis Seeds 5221X	3	23100	17.4	2.1	208.3*	--	--	--	--
Terra TR1157	2	23000	18.9	4.5	208.1*	204.7	--	206.4	--
Asgrow RX 670	1	23500	15.9	5.4	207.8*	--	--	--	--
Burrus 442	1	22700	17.5	1.5	207.4	--	--	--	--
Patriot 5093	1	21800	15.9	2.1	207.1	--	--	--	--
LG Seeds LG2726	2	21400	20.1	3.3	207.1	237.2**	--	222.2	--
Lewis 5446	2	22400	17.5	4.1	207.0	215.9	--	211.5	--
Middlekoop 915	2	21600	18.3	2.7	206.8	197.6	--	202.2	--
Middlekoop 1014	2	21500	17.9	1.6	206.6	--	--	--	--
Midland 96117A	2	23800	17.1	2.4	206.4	--	--	--	--
Burrus 720	2	22100	18.0	2.1	206.1	218.8	--	212.5	--
Merschman M-6114	2	22700	16.8	1.5	205.6	--	--	--	--
Crow's 496	1	23600	16.6	2.6	205.4	--	--	--	--
Cargill 7770	2	23700	16.8	3.9	204.6	197.3	142.0	201.0	181.3
LG Seeds LG2624	2	23300	18.4	3.0	204.4	--	--	--	--
Cargill 8327	2	23700	20.4	4.9	204.3	--	167.6*	--	--
Midland 96118A	2	22500	19.5	4.1	204.3	--	--	--	--
Terra TR1176	2	22800	20.4	4.6	203.0	--	--	--	--
Patriot 8230	3	21600	21.8	1.0	202.9	--	--	--	--
AgriPro AP 619	1	23200	18.3	1.5	202.8	204.7	157.6	203.8	188.4
Burrus 488	1	21900	16.0	3.2	202.5	--	--	--	--
Freedom 5680	1	22100	19.2	3.9	202.1	--	--	--	--
Pioneer Hybrid 3260	2	21200	18.6	8.6	202.0	213.2	--	207.6	--
Kruger K-9620	2	20400	19.4	7.6	201.9	231.4*	171.6*	216.7	201.6
AgriPro AP 9616	1	22100	18.4	2.7	201.8	208.3	--	205.1	--
Dekalb DK668	2	24100	19.9	3.3	201.8	200.7	152.1	201.3	184.9
Terra TR1136	2	23500	16.5	14.5	201.6	--	--	--	--
Middlekoop 817	2	22100	17.8	8.5	201.6	209.8	153.1	205.7	188.2

TABLE 9. Continued.

Brand-Hybrid	Mat- urity Group	Plants	Moisture	Lodging	Yield			Means	
		(#/Acre)	(%)	(%)	(Bu/Acre)	1996	1995	2 Yr.	3 Yr.
Kruger K-9618+	2	23700	18.0	3.0	199.8	--	--	--	--
Asgrow RX 730	2	22400	17.3	3.1	199.5	--	--	--	--
Middlekoop 813	2	21200	16.1	4.4	199.4	192.5	155.4	196.0	182.4
Lewis 8356	2	23400	20.3	3.6	199.2	197.8	--	198.5	--
Patriot 7172	2	22000	19.6	5.6	199.1	194.6	--	196.9	--
Golden Harvest H-2515	1	23100	16.6	2.0	198.8	215.3	--	207.1	--
Merschman M-3120	2	22200	18.5	0.5	198.3	195.4	163.8*	196.9	185.8
Kruger K-9915	2	21200	17.5	2.8	197.0	--	--	--	--
Ottilie 5460	2	23600	17.3	4.1	196.6	--	--	--	--
LG Seeds LG2707	2	22700	19.8	3.2	195.9	200.7	--	198.3	--
Terra TR1185(spx)	2	22800	19.9	1.5	195.8	203.9	180.5**	199.9	193.4
Hubner H3615	2	21800	21.1	7.4	195.4	--	--	--	--
Cargill 8311	2	23000	19.2	15.2	195.2	--	--	--	--
Patriot 6142	2	22600	17.2	3.5	195.1	207.7	--	201.4	--
Novartis Seeds N6800	3	21900	17.8	1.2	194.9	198.7	--	196.8	--
Novartis Seeds N7590	3	22600	17.2	7.7	194.3	--	139.1	--	--
Freedom 5695	2	22800	18.6	4.9	193.7	--	170.7*	--	--
Middlekoop 916	2	18800	18.7	1.2	192.9	202.4	--	197.7	--
Golden Harvest H-2547	2	22000	17.0	3.1	192.7	212.0	136.0	202.4	180.2
Asgrow RX 760	2	22500	16.6	1.0	191.9	--	--	--	--
AgriPro AP 9565	1	21600	17.2	3.7	191.8	215.2	--	203.5	--
Dekalb DK641	2	22300	17.3	3.7	191.6	199.8	--	195.7	--
Hubner H3809	1	21500	17.7	4.8	191.5	--	--	--	--
NC+ 5445	2	22500	17.2	1.5	191.4	202.7	--	197.1	--
Novartis Seeds N7070	3	23500	18.1	1.5	190.9	175.9	128.2	183.4	165.0
Merschman M-5117	2	22700	19.8	1.6	190.8	201.7	157.1	196.3	183.2
Lewis 6294	2	22200	18.2	6.3	190.6	207.6	172.4*	199.1	190.2
Crow's 685	2	23100	19.3	7.9	190.5	--	--	--	--
Pioneer Hybrid 3489	1	22200	16.1	1.5	188.4	--	145.3	--	--
NC+ 5007	2	22600	20.2	3.1	188.1	--	--	--	--
Patriot 7197	2	23800	21.0	14.6	186.4	--	--	--	--
Novartis Seeds 5218X	3	21300	16.8	2.2	185.3	--	--	--	--
Terra TR1167	2	22500	18.9	3.6	185.1	198.0	167.5*	191.6	183.5
Burrus 511	1	22000	17.2	2.7	184.4	--	--	--	--
Novartis Seeds N7333	3	20500	16.2	2.7	183.7	191.2	--	187.5	--
Pioneer Hybrid 3394	1	21900	15.9	1.5	183.0	176.3	148.1	179.7	169.1
Patriot 8250	3	21200	22.2	3.4	182.5	--	--	--	--
Cargill 7997	2	21600	18.0	5.9	180.4	183.1	154.2	181.8	172.6
Terra TR1154	2	20100	18.7	21.3	179.1	203.4	150.9	191.3	177.8
Mycogen 2787	2	15600	16.2	5.2	173.1	--	--	--	--
Triumph 2010	2	20900	20.7	2.2	168.5	205.4	161.7*	187.0	178.5
TRIAL AVERAGE		22418	18.4	3.9	202.1	204.7	153.8	203.4	186.9
L.S.D. AT .10		1887	1.6	5.7	20.7	17.2	19.1		
C.V. %		6.1	6.3		7.5	6.2	9.1		

-- Data not available.

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

TABLE 10. Performance of Corn Hybrids evaluated near Columbia (Boone County) on the Agronomy Research Center during 1995-97.

Planted: 17 April 1997
 Harvested: 16 September 1997
 Planted Population: 24,400
 Row Spacing: 30 inches
 Soil Type: Mexico Silt Loam
 Soil Test: pH=6.6, OM=2.4%, P=145, K=562

Fertilizer: N=195; P₂O₅=0; K₂O=0
 Herbicide: Guardman + Bladex
 Insecticide: Lorsban
 Irrigation: 0.0 inches
 Previous Crop: Soybeans

Growing Season Rainfall: Apr.=3.5, May=4.9, June=5.6, July=0.3, Aug.=4.5, TOTAL=18.8"

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1996	1995	2 Yr.	3 Yr.
Pioneer Hybrid 32K61	2	23900	23.2	0.4	152.8**	--	--	--	--
Garst 8342	3	18000	23.7	0.1	151.0*	173.9*	--	162.5	--
NC+ 5007	2	18000	24.5	2.6	147.9*	--	--	--	--
AgriPro AP 619	1	19300	22.8	0.0	146.2*	175.5*	111.2*	160.9	144.3
Patriot 7187	2	19900	22.4	0.3	144.5*	--	--	--	--
AgriPro AP 9707	3	20400	24.4	0.0	144.1*	176.2*	--	160.1	--
Middlekoop 718	2	20600	24.9	0.9	144.0*	177.9*	102.1	161.0	141.3
Novartis Seeds N7070	3	19500	23.9	0.0	142.6*	157.7	102.8	150.1	134.4
Burrus BX86	2	21500	23.9	3.0	142.5*	178.5*	113.3*	160.5	144.8
Kruger K-9620	2	20100	27.1	1.2	142.2*	177.6*	109.5*	159.9	143.1
Midland 96118A	2	21300	25.7	1.2	141.6*	--	--	--	--
Pioneer Hybrid 3260	2	21700	23.9	1.1	141.2*	182.6*	--	161.9	--
Mycogen 2815	2	20700	23.9	0.0	140.6*	169.4*	97.9	155.0	136.0
Kruger K-9818A	2	21700	23.9	2.2	140.4*	--	--	--	--
NC+ 5445	2	20400	22.5	0.8	140.4*	163.6	--	152.0	--
Terra TR1136	2	21000	24.8	1.2	140.3*	--	--	--	--
Lewis 8356	2	19500	26.1	0.8	140.2*	159.9	--	150.1	--
Kruger K-9716B	2	19800	21.3	0.7	140.2*	--	--	--	--
Burrus 720	2	19300	21.3	3.2	138.7*	165.0	--	151.9	--
Freedom 5680	1	21500	28.1	0.8	137.1*	--	--	--	--
Freedom 5695	2	19700	24.1	0.2	136.8	--	94.0	--	--
Kruger K-9819	2	20000	26.5	0.0	136.4	--	--	--	--
Middlekoop 915	2	20800	22.2	0.0	136.1	168.6*	--	152.4	--
Mycogen 2888	2	22200	24.9	4.2	136.1	174.9*	--	155.5	--
Otilie 5550	2	21800	23.3	0.5	136.0	--	--	--	--
Burrus 442	1	19000	22.9	1.1	135.9	--	--	--	--
Triumph 1514	2	19400	22.1	0.1	135.7	160.8	--	148.3	--
Terra TR1167	2	19500	26.9	0.1	135.2	172.6*	92.7	153.9	133.5
Patriot 8230	3	21000	26.9	0.4	135.0	--	--	--	--
Patriot 6142	2	19800	20.5	3.1	135.0	164.8	--	149.9	--
Cargill 8311	2	17900	25.3	0.1	134.1	--	--	--	--
LG Seeds LG2707	2	21600	26.8	0.5	133.6	175.6*	--	154.6	--
Novartis Seeds 5218X	3	21200	20.6	0.0	133.1	--	--	--	--
Merschman M-3120	2	19100	26.6	0.0	133.0	173.1*	109.5*	153.1	138.5
Terra TR1176	2	19900	25.9	3.0	132.6	--	--	--	--
Merschman M-6114	2	20500	22.9	0.0	132.3	--	--	--	--
Kruger K-9716+	2	20800	22.0	2.3	132.0	175.1*	--	153.6	--
NC+ 5697	2	20500	21.6	2.2	131.8	--	--	--	--
AgriPro AP 9616	1	20000	22.6	2.0	131.6	180.3*	--	156.0	--
Novartis Seeds 5221X	3	22900	19.2	0.0	131.3	--	--	--	--
Dekalb DK668	2	22200	26.5	0.6	131.3	151.9	107.3*	141.6	130.2
Patriot 7172	2	20600	26.6	0.5	130.8	180.4*	--	155.6	--
Merschman M-7115	2	21200	23.8	0.0	130.4	--	--	--	--
Lewis 5446	2	18300	22.4	3.5	130.2	171.9*	--	151.1	--
Kruger K-9716	2	19100	22.8	1.9	129.9	180.2*	--	155.1	--
Dekalb DK626	2	17700	20.5	0.7	129.6	184.1**	108.9*	156.9	140.9
Middlekoop 813	2	19900	17.7	1.3	129.2	172.9*	107.2*	151.1	136.4
Golden Harvest H-2581	2	20900	23.5	0.6	128.9	170.5*	110.5*	149.7	136.6
Cargill 8327	2	18600	28.5	0.7	128.9	--	101.1	--	--
Kruger K-9915	2	20000	23.0	2.5	128.8	--	--	--	--
Crow's 685	2	19400	24.1	1.3	127.9	--	--	--	--
Lewis 6294	2	20500	26.1	0.3	127.5	165.3	102.7	146.4	131.8
Crow's 550	1	20600	22.5	2.3	127.1	--	--	--	--
Garst 8366	2	21300	22.4	1.0	127.1	--	--	--	--
Pioneer Hybrid 3394	1	21400	18.6	0.9	126.1	174.8*	116.9*	150.5	139.3
Terra TR1157	2	20100	25.8	3.2	125.7	162.0	--	143.9	--
NC+ 6387	2	20100	25.3	1.6	125.7	--	--	--	--

TABLE 10. Continued.

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1996	1995	2 Yr.	3 Yr.
LG Seeds LG2726	2	19100	27.1	4.1	125.4	179.2*	--	152.3	--
LG Seeds LG2624	2	20400	22.3	1.6	125.1	--	--	--	--
Terra TR702	2	19300	28.3	0.0	124.8	179.0*	--	151.9	--
Middlekoop 1014	2	21200	24.0	0.0	124.3	--	--	--	--
Midland 96117A	2	19900	24.1	0.6	124.1	--	--	--	--
Cargill 7770	2	18100	24.3	2.1	124.1	175.9*	108.3*	150.0	136.1
Novartis Seeds N6800	3	21700	20.3	2.2	123.6	169.7*	--	146.6	--
Cargill 6888	1	18600	20.4	0.0	123.5	--	--	--	--
Cargill 6997	1	20500	20.6	0.1	122.7	179.6*	102.0	151.2	134.8
Asgrow RX 730	2	19600	19.1	0.0	122.6	--	--	--	--
Hubner H3809	1	18400	22.9	1.5	121.8	--	--	--	--
Hubner H3615	2	20300	25.5	1.8	121.4	--	--	--	--
Golden Harvest H-2515	1	19600	19.0	1.6	121.2	169.8*	--	145.5	--
Crow's 496	1	19100	23.3	1.1	120.3	--	--	--	--
Pioneer Hybrid 32J55	2	20900	29.4	2.8	120.3	--	--	--	--
Patriot 6168	2	19500	23.6	0.7	120.2	--	93.6	--	--
NC+ 4880	2	19400	17.7	1.3	120.1	--	--	--	--
Middlekoop 817	2	20000	23.5	0.8	119.3	151.9	99.2	135.6	123.5
Mycogen 2787	2	18200	20.2	0.0	118.3	--	--	--	--
Middfekoop 916	2	17400	22.2	0.1	117.9	162.9	--	140.4	--
Cargill 7997	2	18700	24.8	0.3	117.9	172.5*	110.8*	145.2	133.7
Burrus 511	1	17200	21.0	1.4	117.8	--	--	--	--
Dekalb DK641	2	17500	22.7	0.4	115.9	170.4*	--	143.2	--
Kruger K-9618+	2	19700	24.4	2.0	115.1	--	--	--	--
Terra TR1154	2	17100	24.2	0.4	114.7	167.9*	97.5	141.3	126.7
Terra TR1185(spx)	2	19700	33.1	1.7	114.6	168.7*	88.6	141.6	124.0
Otilie 5460	2	19200	22.4	6.1	114.0	--	--	--	--
Triumph 2010	2	16100	27.7	0.0	114.0	171.9*	108.0*	143.0	131.3
Merschman M-5117	2	18900	25.5	2.7	113.2	154.0	106.3*	133.6	124.5
AgriPro AP 9565	1	19400	19.9	0.2	112.2	182.1*	--	147.2	--
Novartis Seeds N7590	3	17600	26.0	0.5	110.5	--	108.9*	--	--
Patriot 8250	3	19100	25.3	0.9	109.6	--	--	--	--
Golden Harvest H-2547	2	18200	19.3	1.7	108.2	176.0*	109.7*	142.1	131.3
Pioneer Hybrid 3335	2	21000	23.5	0.1	107.6	162.2	96.4	134.9	122.1
Pioneer Hybrid 3489	1	23200	17.4	2.7	105.7	--	106.0*	--	--
Burrus 488	1	19000	20.5	1.1	105.4	--	--	--	--
Patriot 5093	1	19400	19.0	0.9	105.2	--	--	--	--
Asgrow RX 670	1	20600	16.6	0.6	105.0	--	--	--	--
Asgrow RX 760	2	20000	17.8	1.2	99.4	--	--	--	--
Novartis Seeds N7333	3	16500	21.9	2.5	98.3	159.8	--	129.1	--
Patriot 7197	2	20300	23.9	20.0	96.4	--	--	--	--
TRIAL AVERAGE		19869	23.8	1.4	127.2	168.8	103.7	148.0	133.3
L.S.D. AT .10		1911	2.5	3.1	15.8	17.5	17.8		
C.V. %		7.0	7.7		9.1	7.6	12.4		

-- Data not available.

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

TABLE 11. Performance of Corn Hybrids evaluated near High Hill (Montgomery County) on the John Cobb Farm during 1995-97.

Planted: 28 April 1997
 Harvested: 25 September 1997
 Planted Population: 24,400
 Row Spacing: 30 inches
 Soil Type: Mexico Silt Loam
 Soil Test: pH=6.2, OM=2.6%, P=36, K=293

Fertilizer: N=150; P₂O₅=80; K₂O=80
 Herbicide: Suprass + Bladex
 Insecticide: Pounce
 Irrigation: 0.0 inches
 Previous Crop: Soybean

Growing Season Rainfall: Apr.=2.1, May=5.4, June=4.1, July=0.5, Aug.=3.7, TOTAL=15.8"

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1996	1995	2 Yr.	3 Yr.
Cargill 7997	2	22400	24.6	0.0	109.2**	152.6	158.5*	130.9	140.1
Burrus 442	1	22800	23.0	0.0	97.4*	--	--	--	--
Middlekoop 813	2	23200	21.2	2.1	92.9*	174.1*	145.9	133.5	137.6
Hubner H3615	2	22300	26.0	0.0	89.7	--	--	--	--
AgriPro AP 9565	1	22600	22.8	1.1	88.0	153.2	--	120.6	--
LG Seeds LG2726	2	22200	26.7	1.6	88.0	174.9*	--	131.5	--
Golden Harvest H-2515	1	22700	21.5	1.0	87.2	169.9*	--	128.6	--
Burrus BX86	2	22300	25.4	1.5	86.8	188.7**	159.7*	137.8	145.1
NC+ 4880	2	22700	22.4	0.5	84.2	--	--	--	--
Asgrow RX 730	2	22200	21.8	0.5	82.9	--	--	--	--
Kruger K-9620	2	21800	26.5	0.5	82.8	162.2	148.1	122.5	131.0
Kruger K-9915	2	22700	23.1	0.0	80.3	--	--	--	--
Mycogen 2888	2	23600	26.8	0.0	80.1	148.9	--	114.5	--
Golden Harvest H-2547	2	22700	22.2	0.0	79.0	142.6	146.8	110.8	122.8
Mycogen 2787	2	21100	22.9	3.1	78.8	--	--	--	--
Patriot 5093	1	23000	21.8	1.6	78.7	--	--	--	--
Middlekoop 718	2	22700	26.4	1.5	76.5	150.5	158.9*	113.5	128.6
Terra TR1176	2	22700	25.2	1.5	75.9	--	--	--	--
Asgrow RX 760	2	22600	22.5	0.5	75.7	--	--	--	--
Cargill 7770	2	22900	24.5	0.0	75.3	166.6	146.7	121.0	129.5
Novartis Seeds 5218X	3	22300	24.8	1.5	75.3	--	--	--	--
Novartis Seeds 5221X	3	23700	23.8	1.5	73.1	--	--	--	--
Triumph 2010	2	20600	26.3	0.6	72.3	160.8	152.1	116.6	128.4
Pioneer Hybrid 3489	1	23900	24.1	0.5	72.2	--	152.4	--	--
Terra TRI167	2	22500	28.5	0.5	71.4	163.5	154.3	117.5	129.7
Novartis Seeds N7070	3	23300	23.9	0.0	71.2	143.9	155.9*	107.6	123.7
Pioneer Hybrid 3260	2	21100	26.9	3.4	70.6	171.3*	--	121.0	--
Merschman M-6114	2	22800	24.6	2.5	70.2	--	--	--	--
Terra TR1157	2	21400	26.4	1.6	69.5	162.3	--	115.9	--
Pioneer Hybrid 3394	1	23500	21.0	1.0	68.6	160.4	162.2*	114.5	130.4
Pioneer Hybrid 32J55	2	22800	25.5	1.5	68.6	--	--	--	--
Cargill 8311	2	23300	26.0	1.0	68.4	--	--	--	--
Pioneer Hybrid 3335	2	23000	23.6	3.1	67.9	156.0	140.0	112.0	121.3
Dekalb DK641	2	21600	24.2	0.0	67.5	156.8	--	112.2	--
Burrus 511	1	21800	24.3	2.7	67.2	--	--	--	--
Novartis Seeds N6800	3	22700	22.2	0.5	66.9	140.4	--	103.7	--
LG Seeds LG2707	2	21300	28.1	2.2	66.9	157.2	--	112.1	--
NC+ 6387	2	22600	26.3	0.5	66.3	--	--	--	--
Merschman M-3120	2	22200	26.8	1.1	65.7	168.3*	147.5	117.0	127.2
Middlekoop 1014	2	21400	25.1	1.6	64.9	--	--	--	--
Patriot 7187	2	23600	26.2	1.5	62.6	--	--	--	--
Lewis 8356	2	21500	27.4	0.5	62.3	158.2	--	110.3	--
Patriot 7172	2	21500	27.4	1.1	61.5	161.3	--	111.4	--
Cargill 6888	1	21900	23.2	0.6	61.3	--	--	--	--
Freedom 5680	1	22300	26.0	0.5	59.5	--	--	--	--
Terra TR1136	2	23200	27.1	1.5	59.5	--	--	--	--
Terra TR702	2	22900	27.9	1.0	59.4	157.1	--	108.3	--
Middlekoop 915	2	22900	25.5	0.5	59.2	143.3	--	101.3	--
Midland 96118A	2	23400	26.7	2.0	58.2	--	--	--	--
AgriPro AP 9616	1	22500	25.4	0.0	57.6	151.5	--	104.6	--
Dekalb DK626	2	21800	24.3	2.1	57.3	144.0	150.4	100.7	117.2
Pioneer Hybrid 32K61	2	22100	26.5	0.5	57.1	--	--	--	--
Asgrow RX 670	1	24000	22.2	1.5	56.7	--	--	--	--
Novartis Seeds N7590	3	22900	24.5	0.0	56.4	--	154.4	--	--
Patriot 8250	3	21000	26.0	0.5	55.9	--	--	--	--
Patriot 7197	2	22600	24.9	1.6	54.7	--	--	--	--
Kruger K-9818A	2	22300	27.1	2.6	54.5	--	--	--	--

TABLE 11. Continued.

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1996	1995	2 Yr.	3 Yr.
Ottillie 5460	2	22100	24.2	0.6	54.4	--	--	--	--
Terra TR1185(spx)	2	20100	30.2	0.5	54.0	144.3	151.1	99.2	116.5
Lewis 6294	2	23000	28.4	0.5	53.0	163.4	170.9*	108.2	129.1
Dekalb DK668	2	23700	28.0	0.5	52.7	154.0	150.1	103.4	118.9
Patriot 8230	3	23400	28.2	0.5	52.7	--	--	--	--
Hubner H3809	1	20700	25.4	1.7	52.6	--	--	--	--
Kruger K-9716B	2	22800	24.4	1.6	52.6	--	--	--	--
Crow's 496	1	23000	23.4	1.5	52.1	--	--	--	--
Garst 8342	3	22800	23.9	0.5	51.7	172.7*	--	112.2	--
Triumph 1514	2	22000	23.9	0.0	51.4	178.7*	--	115.1	--
Burrus 488	1	23200	23.4	0.5	50.8	--	--	--	--
Patriot 6142	2	22200	24.7	0.0	50.8	147.2	--	99.0	--
Ottillie 5550	2	23100	23.9	0.5	50.7	--	--	--	--
Merschman M-7115	2	22500	24.8	1.0	50.6	--	--	--	--
Crow's 685	2	23500	28.4	0.0	50.5	--	--	--	--
Novartis Seeds N7333	3	21400	24.1	2.7	49.9	146.7	--	98.3	--
LG Seeds LG2624	2	23300	25.2	3.4	49.7	--	--	--	--
NC+ 5007	2	22100	25.9	1.1	49.5	--	--	--	--
Middlekoop 916	2	21900	23.4	1.6	49.5	144.3	--	96.9	--
Lewis 5446	2	22800	25.0	0.0	49.4	152.1	--	100.8	--
NC+ 5697	2	23100	25.1	0.9	49.2	--	--	--	--
Cargill 8327	2	23200	26.1	1.5	48.4	--	144.6	--	--
Burrus 720	2	23400	24.1	0.5	48.4	154.4	--	101.4	--
Kruger K-9819	2	21400	27.7	1.6	48.3	--	--	--	--
Terra TR1154	2	22300	26.2	0.5	47.5	155.8	154.8	101.7	119.4
Cargill 6997	1	23000	23.0	0.5	46.9	136.0	145.0	91.5	109.3
Midland 96117A	2	23500	26.2	1.4	46.8	--	--	--	--
Crow's 550	1	23800	26.0	1.0	46.8	--	--	--	--
Kruger K-9716+	2	23200	26.1	1.0	46.4	137.4	--	91.9	--
Mycogen 2815	2	23700	25.0	0.0	46.0	179.9*	150.7	113.0	125.5
Golden Harvest H-2581	2	24100	25.8	0.9	44.3	153.2	155.6	98.8	117.7
NC+ 5445	2	23300	25.7	0.0	44.2	170.1*	--	107.2	--
Merschman M-5117	2	22600	25.4	2.5	42.7	161.9	159.1*	102.3	121.2
Kruger K-9716	2	22900	25.4	1.5	42.4	157.9	--	100.2	--
AgriPro AP 619	1	23600	24.5	0.0	40.0	172.6*	142.9	106.3	118.5
Garst 8366	2	23600	24.2	0.9	38.8	--	--	--	--
AgriPro AP 9707	3	22800	28.7	0.5	37.3	144.4	--	90.9	--
Freedom 5695	2	23400	26.6	0.0	35.6	--	146.5	--	--
Patriot 6168	2	23400	24.4	1.0	35.0	--	160.1*	--	--
Middlekoop 817	2	22900	23.9	0.5	29.7	156.0	162.9*	92.9	116.2
Kruger K-9618+	2	23100	24.1	0.0	24.3	--	--	--	--
TRIAL AVERAGE		22626	25.1	1.0	61.1	155.2	151.9	108.2	122.7
L.S.D. AT .10		1481	1.7	2.0	16.9	22.0	17.8		
C.V. %		4.8	5.1		20.0	10.4	8.6		

-- Data not available.

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

TABLE 12. Performance Summary for Corn Hybrids evaluated at Three Central Locations (Marshall, Columbia, and High Hill) during 1997.

Brand-Hybrid	Mat- urity Group	Lodging (%)				Yield (Bu/Acre)			
		Marshall	Columba	HighHl	Mean	Marshall	Columba	HighHl	Mean
Burrus BX86	2	3.8	3.0	1.5	2.8	221.0*	142.5*	86.8	150.1**
Burrus 442	1	1.5	1.1	0.0	0.9	207.4	135.9	97.4*	146.9*
Mycogen 2888	2	6.0	4.2	0.0	3.4	219.6*	136.1	80.1	145.3*
Middlekoop 718	2	0.5	0.9	1.5	1.0	212.8*	144.0*	76.5	144.4*
Patriot 7187	2	2.6	0.3	1.5	1.5	222.6*	144.5*	62.6	143.2*
Pioneer Hybrid 32K61	2	1.4	0.4	0.5	0.8	218.3*	152.8**	57.1	142.7*
Kruger K-9620	2	7.6	1.2	0.5	3.1	201.9	142.2*	82.8	142.3*
Middlekoop 813	2	4.4	1.3	2.1	2.6	199.4	129.2	92.9*	140.5*
LG Seeds LG2726	2	3.3	4.1	1.6	3.0	207.1	125.4	88.0	140.2*
NC+ 4880	2	3.7	1.3	0.5	1.8	214.4*	120.1	84.2	139.6*
Pioneer Hybrid 32J55	2	3.4	2.8	1.5	2.6	228.5**	120.3	68.6	139.1
Garst 8342	3	2.9	0.1	0.5	1.2	213.2*	151.0*	51.7	138.6
Pioneer Hybrid 3260	2	8.6	1.1	3.4	4.4	202.0	141.2*	70.6	137.9
Kruger K-9716B	2	3.1	0.7	1.6	1.8	220.7*	140.2*	52.6	137.8
Novartis Seeds 5221X	3	2.1	0.0	1.5	1.2	208.3*	131.3	73.1	137.6
Terra TR1176	2	4.6	3.0	1.5	3.0	203.0	132.6	75.9	137.2
Merschman M-6114	2	1.5	0.0	2.5	1.3	205.6	132.3	70.2	136.0
Cargill 7997	2	5.9	0.3	0.0	2.1	180.4	117.9	109.2**	135.8
NC+ 6387	2	2.0	1.6	0.5	1.4	215.3*	125.7	66.3	135.8
Golden Harvest H-2515	1	2.0	1.6	1.0	1.5	198.8	121.2	87.2	135.7
Kruger K-9818A	2	1.5	2.2	2.6	2.1	212.2*	140.4*	54.5	135.7
Hubner H3615	2	7.4	1.8	0.0	3.1	195.4	121.4	89.7	135.5
Kruger K-9915	2	2.8	2.5	0.0	1.8	197.0	128.8	80.3	135.4
Dekalb DK626	2	3.6	0.7	2.1	2.1	218.4*	129.6	57.3	135.1
Asgrow RX 730	2	3.1	0.0	0.5	1.2	199.5	122.6	82.9	135.0
Novartis Seeds N7070	3	1.5	0.0	0.0	0.5	190.9	142.6*	71.2	134.9
Midland 96118A	2	4.1	1.2	2.0	2.4	204.3	141.6*	58.2	134.7
Cargill 7770	2	3.9	2.1	0.0	2.0	204.6	124.1	75.3	134.7
Terra TR1157	2	4.5	3.2	1.6	3.1	208.1*	125.7	69.5	134.4
Ottillie 5550	2	2.6	0.5	0.5	1.2	215.6*	136.0	50.7	134.1
Middlekoop 915	2	2.7	0.0	0.5	1.1	206.8	136.1	59.2	134.0
Lewis 8356	2	3.6	0.8	0.5	1.6	199.2	140.2*	62.3	133.9
Pioneer Hybrid 3335	2	4.9	0.1	3.1	2.7	225.9*	107.6	67.9	133.8
Terra TR1136	2	14.5	1.2	1.5	5.7	201.6	140.3*	59.5	133.8
Mycogen 2815	2	2.5	0.0	0.0	0.8	213.7*	140.6*	46.0	133.4
Cargill 6888	1	1.1	0.0	0.6	0.6	214.0*	123.5	61.3	132.9
Freedom 5680	1	3.9	0.8	0.5	1.7	202.1	137.1*	59.5	132.9
Cargill 8311	2	15.2	0.1	1.0	5.4	195.2	134.1	68.4	132.6
Merschman M-3120	2	0.5	0.0	1.1	0.5	198.3	133.0	65.7	132.3
Triumph 1514	2	1.5	0.1	0.0	0.5	209.7*	135.7	51.4	132.3
LG Seeds LG2707	2	3.2	0.5	2.2	2.0	195.9	133.6	66.9	132.1
Terra TR702	2	2.1	0.0	1.0	1.0	211.8*	124.8	59.4	132.0
Middlekoop 1014	2	1.6	0.0	1.6	1.1	206.6	124.3	64.9	131.9
Kruger K-9716+	2	3.8	2.3	1.0	2.4	215.6*	132.0	46.4	131.3
Kruger K-9819	2	4.2	0.0	1.6	1.9	208.9*	136.4	48.3	131.2
AgriPro AP 9707	3	3.8	0.0	0.5	1.4	212.2*	144.1*	37.3	131.2
Novartis Seeds 5218X	3	2.2	0.0	1.5	1.2	185.3	133.1	75.3	131.2
Burrus 720	2	2.1	3.2	0.5	1.9	206.1	138.7*	48.4	131.1
NC+ 5697	2	3.5	2.2	0.9	2.2	211.3*	131.8	49.2	130.8
AgriPro AP 9565	1	3.7	0.2	1.1	1.7	191.8	112.2	88.0	130.7
Terra TR1167	2	3.6	0.1	0.5	1.4	185.1	135.2	71.4	130.6
Patriot 7172	2	5.6	0.5	1.1	2.4	199.1	130.8	61.5	130.5
AgriPro AP 9616	1	2.7	2.0	0.0	1.6	201.8	131.6	57.6	130.3
Patriot 5093	1	2.1	0.9	1.6	1.5	207.1	105.2	78.7	130.3
Patriot 8230	3	1.0	0.4	0.5	0.6	202.9	135.0	52.7	130.2
Merschman M-7115	2	3.5	0.0	1.0	1.5	209.3*	130.4	50.6	130.1
Crow's 550	1	1.0	2.3	1.0	1.4	215.7*	127.1	46.8	129.9
AgriPro AP 619	1	1.5	0.0	0.0	0.5	202.8	146.2*	40.0	129.7
Cargill 6997	1	2.9	0.1	0.5	1.2	219.1*	122.7	46.9	129.6
Lewis 5446	2	4.1	3.5	0.0	2.5	207.0	130.2	49.4	128.9

TABLE 12. Continued.

Brand-Hybrid	Mat- urity Group	Lodging (%)				Yield (Bu/Acre)			
		Marshall	Columba	HighHI	Mean	Marshall	Columba	HighHI	Mean
Dekalb DK668	2	3.3	0.6	0.5	1.5	201.8	131.3	52.7	128.6
Garst 8366	2	11.3	1.0	0.9	4.4	219.8*	127.1	38.8	128.6
Novartis Seeds N6800	3	1.2	2.2	0.5	1.3	194.9	123.6	66.9	128.5
NC+ 5007	2	3.1	2.6	1.1	2.3	188.1	147.9*	49.5	128.5
Golden Harvest H-2581	2	1.5	0.6	0.9	1.0	211.7*	128.9	44.3	128.3
Kruger K-9716	2	2.6	1.9	1.5	2.0	212.0*	129.9	42.4	128.1
Cargill 8327	2	4.9	0.7	1.5	2.4	204.3	128.9	48.4	127.2
Patriot 6142	2	3.5	3.1	0.0	2.2	195.1	135.0	50.8	127.0
Golden Harvest H-2547	2	3.1	1.7	0.0	1.6	192.7	108.2	79.0	126.6
LG Seeds LG2624	2	3.0	1.6	3.4	2.7	204.4	125.1	49.7	126.4
Pioneer Hybrid 3394	1	1.5	0.9	1.0	1.1	183.0	126.1	68.6	125.9
Crow's 496	1	2.6	1.1	1.5	1.7	205.4	120.3	52.1	125.9
Midland 96117A	2	2.4	0.6	1.4	1.5	206.4	124.1	46.8	125.8
NC+ 5445	2	1.5	0.8	0.0	0.8	191.4	140.4*	44.2	125.3
Dekalb DK641	2	3.7	0.4	0.0	1.4	191.6	115.9	67.5	125.0
Lewis 6294	2	6.3	0.3	0.5	2.4	190.6	127.5	53.0	123.7
Mycogen 2787	2	5.2	0.0	3.1	2.8	173.1	118.3	78.8	123.4
Asgrow RX 670	1	5.4	0.6	1.5	2.5	207.8*	105.0	56.7	123.2
Burrus 511	1	2.7	1.4	2.7	2.3	184.4	117.8	67.2	123.1
Crow's 685	2	7.9	1.3	0.0	3.1	190.5	127.9	50.5	123.0
Asgrow RX 760	2	1.0	1.2	0.5	0.9	191.9	99.4	75.7	122.3
Pioneer Hybrid 3489	1	1.5	2.7	0.5	1.6	188.4	105.7	72.2	122.1
Freedom 5695	2	4.9	0.2	0.0	1.7	193.7	136.8	35.6	122.0
Hubner H3809	1	4.8	1.5	1.7	2.7	191.5	121.8	52.6	122.0
Otilie 5460	2	4.1	6.1	0.6	3.6	196.6	114.0	54.4	121.7
Terra TR1185(spx)	2	1.5	1.7	0.5	1.2	195.8	114.6	54.0	121.5
Patriot 6168	2	3.4	0.7	1.0	1.7	208.6*	120.2	35.0	121.3
Novartis Seeds N7590	3	7.7	0.5	0.0	2.7	194.3	110.5	56.4	120.4
Middlekoop 916	2	1.2	0.1	1.6	1.0	192.9	117.9	49.5	120.1
Burrus 488	1	3.2	1.1	0.5	1.6	202.5	105.4	50.8	119.6
Triumph 2010	2	2.2	0.0	0.6	0.9	168.5	114.0	72.3	118.3
Middlekoop 817	2	8.5	0.8	0.5	3.3	201.6	119.3	29.7	116.9
Patriot 8250	3	3.4	0.9	0.5	1.6	182.5	109.6	55.9	116.0
Merschman M-5117	2	1.6	2.7	2.5	2.3	190.8	113.2	42.7	115.6
Terra TR1154	2	21.3	0.4	0.5	7.4	179.1	114.7	47.5	113.8
Kruger K-9618+	2	3.0	2.0	0.0	1.7	199.8	115.1	24.3	113.1
Patriot 7197	2	14.6	20.0	1.6	12.1	186.4	96.4	54.7	112.5
Novartis Seeds N7333	3	2.7	2.5	2.7	2.6	183.7	98.3	49.9	110.6
AVERAGE		3.9	1.4	1.0	2.1	202.1	127.2	61.1	130.1
L.S.D. AT .10		5.7	3.1	2.0	2.2	20.7	15.8	16.9	10.8
C.V. %						7.5	9.1	20.0	10.7

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

TABLE 13. Performance of Irrigated Corn Hybrids evaluated near Columbia (Boone County) on the Agronomy Research Center during 1995-97.

Planted: 28 April 1997
 Harvested: 16 September 1997
 Planted Population: 30,700
 Row Spacing: 30 inches
 Soil Type: Mexico Silt Loam
 Soil Test: pH=6.6, OM=2.4%, P=145, K=562

Fertilizer: N=330; P₂O₅=0; K₂O=0
 Herbicide: Dual + Extrazine
 Insecticide: Lorsban
 Irrigation: 8.4 inches
 Previous Crop: Soybean

Growing Season Rainfall: Apr.=3.5, May=4.9, June=5.6, July=0.3, Aug.=4.5., TOTAL=18.8"

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1997	1996	1995	2 Yr.
Pioneer Hybrid 32K61	2	29800	26.4	0.9	235.8**	--	--	--	--
AgriPro AP 9565	1	28600	25.5	0.8	233.9*	--	--	--	--
Middlekoop 817	2	29000	25.9	0.0	225.2*	225.8	185.1**	225.5	212.0
Dekalb DK641	2	28900	24.4	2.9	222.5*	210.6	--	216.6	--
Cargill 6888	1	29300	22.3	1.0	219.7*	--	--	--	--
Pioneer Hybrid 3260	2	28600	25.9	1.7	218.1*	237.6*	--	227.9	--
AgriPro AP 9616	1	28800	27.3	0.1	217.4*	213.5	--	215.5	--
Mycogen 2787	2	28100	26.7	0.3	217.3*	--	--	--	--
Mycogen 2888	2	29300	27.2	0.4	215.6*	243.0*	--	229.3	--
Triumph 1522	2	29300	22.3	2.3	213.4	204.6	143.2	209.0	187.1
Cargill 7770	2	29500	26.8	0.0	212.9	228.4	148.0	220.7	196.4
Middlekoop 915	2	28400	26.5	0.0	212.2	232.0*	--	222.1	--
Pioneer Hybrid 3335	2	30800	28.7	1.3	210.5	224.9	142.3	217.7	192.6
Golden Harvest H-2547	2	28600	25.3	0.0	210.5	--	--	--	--
Golden Harvest H-2515	1	29000	23.8	0.5	210.5	209.3	--	209.9	--
Wilson 1792	2	25100	24.0	3.0	207.5	--	--	--	--
Middlekoop 813	2	29100	23.4	1.3	206.9	200.4	148.5	203.7	185.3
Pioneer Hybrid 3489	1	30600	22.6	0.5	206.7	--	146.7	--	--
Dekalb DK626	2	28000	25.1	0.5	206.3	223.6	148.6	215.0	192.8
Terra TR1136	2	28600	27.2	0.5	206.2	--	--	--	--
Middlekoop 718	2	29000	26.1	0.8	206.0	240.8*	181.6*	223.4	209.5
Cargill 8311	2	30200	30.3	0.7	205.7	--	--	--	--
Lewis 6294	2	29300	27.1	0.0	204.5	248.8**	184.8*	226.7	212.7
NC+ 7237	2	29000	26.3	1.9	202.8	--	--	--	--
Freedom 5695	2	28800	24.6	0.4	202.3	--	--	--	--
Middlekoop 916	2	26300	29.2	0.8	202.1	210.4	--	206.3	--
NC+ 5007	2	27500	27.3	0.0	201.4	--	--	--	--
Terra TR1176	2	27700	27.0	0.5	198.4	--	--	--	--
Golden Harvest H-2581	2	29200	24.4	0.5	196.6	230.2*	165.5	213.4	197.4
Middlekoop 1014	2	27600	26.9	0.0	195.5	--	--	--	--
AgriPro AP 9707	3	28900	27.8	0.6	194.5	239.9*	--	217.2	--
Terra TR1154	2	23200	25.6	0.1	194.5	--	--	--	--
Cargill 8011	2	28100	30.7	0.0	194.0	--	--	--	--
Freedom 5680	1	29600	30.1	0.9	191.6	--	--	--	--
AgriPro AP 619	1	29000	27.6	0.0	190.9	235.7*	--	213.3	--
Mycogen 7660	2	26400	26.1	0.0	190.1	238.7*	159.8	214.4	196.2
Terra TR1185(spx)	2	28700	32.4	2.8	188.8	--	--	--	--
Lewis 5446	2	28700	28.2	0.0	188.1	--	--	--	--
Cargill 8327	2	29600	29.1	0.3	185.9	238.9*	151.3	212.4	192.0
Terra TR1157	2	25600	29.0	2.8	184.5	--	--	--	--
Triumph 2010	2	26300	27.5	0.0	182.9	231.3*	171.4*	207.1	195.2
Wilson E945062	2	28000	26.8	0.3	182.7	--	--	--	--
Terra TR1167	2	26900	30.8	0.5	182.2	--	--	--	--
Terra TR702	2	29300	27.7	1.3	179.6	--	--	--	--
Wilson 2330	2	27700	32.6	0.0	176.8	232.5*	--	204.7	--
TRIAL AVERAGE		28400	26.9	0.7	202.9	221.5	154.6	212.2	193.0
L.S.D. AT .10		1663	3.7	1.4	20.9	20.1	19.4		
C.V. %		4.3	10.2		7.6	6.6	9.2		

-- Data not available.
 ** Highest yielding hybrid in the test.
 * Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

TABLE 14. Performance of Corn Hybrids evaluated near Laddonia (Audrain County) on the Freyer Farm during 1995-97.

Planted: 18 April 1997
 Harvested: 22 September 1997
 Planted Population: 30,700
 Row Spacing: 30 inches
 Soil Type: Mexico Silt Loam
 Soil Test: pH=6.9, OM=2.4%, P=132, K=250

Fertilizer: N=230; P₂O₅=0; K₂O=0
 Herbicide: Lasso + Extrazine
 Insecticide: Lorsban
 Irrigation: 5.0 inches
 Previous Crop: Corn

Growing Season Rainfall: Apr. =1.8, May=4.6, June=6.9, July=1.4, Aug.=4.2, TOTAL=18.9"

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1996	1995	2 Yr.	3 Yr.
Mycogen 2888	2	27000	22.1	0.9	242.5**	224.1	--	233.3	--
Pioneer Hybrid 32K61	2	28500	18.3	0.8	219.9*	--	--	--	--
Middlekoop 817	2	23400	23.3	1.1	213.5	220.5	171.6*	217.0	201.9
Freedom 5680	1	23900	23.3	2.0	213.4	--	--	--	--
NC+ 7237	2	24900	25.4	0.9	212.7	--	--	--	--
Dekalb DK626	2	22200	19.7	0.5	212.7	224.2	163.7*	218.5	200.2
Terra TR1136	2	27400	23.3	0.8	210.0	--	--	--	--
Middlekoop 916	2	23800	20.3	0.5	208.2	198.9	--	203.6	--
Wilson E945062	2	24800	22.5	0.0	207.6	--	--	--	--
AgriPro AP 9616	1	25200	21.8	0.0	207.5	236.0*	--	221.8	--
Cargill 8311	2	23300	22.0	0.5	207.5	--	--	--	--
AgriPro AP 9565	1	23400	19.0	1.7	206.5	--	--	--	--
Pioneer Hybrid 3260	2	26200	21.7	1.4	206.4	253.4*	--	229.9	--
AgriPro AP 9707	3	24400	21.8	0.5	204.6	253.9**	--	229.3	--
Lewis 5446	2	27100	23.8	0.9	204.2	--	--	--	--
Freedom 5695	2	26900	22.5	0.0	203.3	--	--	--	--
Lewis 6294	2	24200	23.4	1.5	203.3	231.9*	158.7	217.6	198.0
Terra TR1157	2	21900	21.8	0.0	200.8	--	--	--	--
Wilson 1792	2	23100	25.5	1.4	200.2	--	--	--	--
Cargill 8011	2	24800	25.9	0.0	200.1	--	--	--	--
Cargill 7770	2	23100	20.0	1.0	199.6	243.8*	165.2*	221.7	202.9
Golden Harvest H-2581	2	25100	22.0	0.0	199.5	233.3*	156.2	216.4	196.3
AgriPro AP 619	1	27000	21.5	0.0	199.3	222.5	--	210.9	--
Cargill 8327	2	22700	24.6	0.0	199.0	236.6*	168.1*	217.8	201.2
Middlekoop 915	2	24000	20.5	1.5	197.7	221.6	--	209.7	--
Terra TR1176	2	23500	25.1	0.6	197.1	--	--	--	--
Terra TR1185(spx)	2	22500	25.4	1.1	194.4	--	--	--	--
Dekalb DK641	2	23200	20.2	1.7	194.3	213.5	--	203.9	--
Terra TR1167	2	22100	23.6	1.0	193.9	--	--	--	--
NC+ 5007	2	21200	26.0	0.0	193.7	--	--	--	--
Terra TR1154	2	20400	20.9	0.0	193.1	--	--	--	--
Cargill 6888	1	23500	18.9	1.5	191.1	--	--	--	--
Triumph 2010	2	21900	22.2	0.0	190.4	225.5	151.8	208.0	189.2
Middlekoop 718	2	23700	24.0	0.0	190.0	236.8*	167.8*	213.4	198.2
Pioneer Hybrid 3489	1	29100	17.5	5.4	188.4	--	153.3	--	--
Middlekoop 1014	2	24800	25.2	0.0	188.2	--	--	--	--
Pioneer Hybrid 3335	2	28100	20.6	2.2	186.5	203.7	172.1*	195.1	187.4
Triumph I522	2	23200	21.2	2.0	183.0	241.5*	175.0*	212.3	199.8
Mycogen 2787	2	20900	19.9	0.0	182.0	--	--	--	--
Golden Harvest H-2515	1	24200	18.8	1.0	180.4	217.5	--	199.0	--
Mycogen 7660	2	19900	21.8	0.0	179.6	203.2	167.8*	191.4	183.5
Wilson 2330	2	25500	27.5	0.5	178.5	182.2	--	180.4	--
Terra TR702	2	25100	26.7	0.5	177.9	--	--	--	--
Middlekoop 813	2	23000	20.0	0.6	176.8	223.7	181.4**	200.3	194.0
Golden Harvest H-2547	2	23800	21.0	1.6	176.6	--	--	--	--
TRIAL AVERAGE		24176	22.3	0.8	198.1	223.5	153.9	210.8	191.8
L.S.D. AT .10		2636	2.8	NS	24.1	23.6	22.0		
C.V. %		8.0	9.2		8.9	7.7	10.6		

-- Data not available.
 ** Highest yielding hybrid in the test.
 * Hybrid which did not yield significantly less than the highest yielding hybrid in the test.
 NS Not significant.

TABLE 15. Performance Summary for Irrigated Corn Hybrids evaluated at Two Central Missouri locations (Columbia and Laddonia) during 1997.

Columbia
 Planted: 28 April 1997
 Harvested: 16 September 1997
 Growing Season Rainfall: 18.8 inches
 Irrigation: 8.4 inches

Laddonia
 Planted: 18 April 1997
 Harvested: 22 September 1997
 Growing Season Rainfall: 18.9 inches
 Irrigation: 5.0 inches

Brand-Hybrid	Mat- urity Group	Lodging (%)			Yield (Bu/Acre)		
		Columbia	Laddonia	Mean	Columbia	Laddonia	Mean
Mycogen 2888	2	0.4	0.9	0.6	215.6*	242.5**	229.0**
Pioneer Hybrid 32K61	2	0.9	0.8	0.8	235.8**	219.9*	227.8*
AgriPro AP 9565	1	0.8	1.7	1.2	233.9*	206.5	220.2*
Middlekoop 817	2	0.0	1.1	0.6	225.2*	213.5	219.4*
AgriPro AP 9616	1	0.1	0.0	0.0	217.4*	207.5	212.4
Pioneer Hybrid 3260	2	1.7	1.4	1.6	218.1*	206.4	212.2
Dekalb DK626	2	0.5	0.5	0.5	206.3	212.7	209.5
Dekalb DK641	2	2.9	1.7	2.3	222.5*	194.3	208.4
Terra TR1136	2	0.5	0.8	0.6	206.2	210.0	208.1
NC+ 7237	2	1.9	0.9	1.4	202.8	212.7	207.8
Cargill 8311	2	0.7	0.5	0.6	205.7	207.5	206.6
Cargill 7770	2	0.0	1.0	0.5	212.9	199.6	206.2
Cargill 6888	1	1.0	1.5	1.2	219.7*	191.1	205.4
Middlekoop 916	2	0.8	0.5	0.6	202.1	208.2	205.2
Middlekoop 915	2	0.0	1.5	0.8	212.2	197.7	205.0
Lewis 6294	2	0.0	1.5	0.8	204.5	203.3	203.9
Wilson 1792	2	3.0	1.4	2.2	207.5	200.2	203.8
Freedom 5695	2	0.4	0.0	0.2	202.3	203.3	202.8
Freedom 5680	1	0.9	2.0	1.4	191.6	213.4	202.5
Mycogen 2787	2	0.3	0.0	0.2	217.3*	182.0	199.6
AgriPro AP 9707	3	0.6	0.5	0.6	194.5	204.6	199.6
Pioneer Hybrid 3335	2	1.3	2.2	1.8	210.5	186.5	198.5
Triumph 1522	2	2.3	2.0	2.2	213.4	183.0	198.2
Middlekoop 718	2	0.8	0.0	0.4	206.0	190.0	198.0
Golden Harvest H-2581	2	0.5	0.0	0.2	196.6	199.5	198.0
Terra TR1176	2	0.5	0.6	0.6	198.4	197.1	197.8
Pioneer Hybrid 3489	1	0.5	5.4	3.0	206.7	188.4	197.6
NC+ 5007	2	0.0	0.0	0.0	201.4	193.7	197.6
Cargill 8011	2	0.0	0.0	0.0	194.0	200.1	197.0
Lewis 5446	2	0.0	0.9	0.4	188.1	204.2	196.2
Golden Harvest H-2515	1	0.5	1.0	0.8	210.5	180.4	195.4
Wilson E945062	2	0.3	0.0	0.2	182.7	207.6	195.2
AgriPro AP 619	1	0.0	0.0	0.0	190.9	199.3	195.1
Terra TR1154	2	0.1	0.0	0.0	194.5	193.1	193.8
Golden Harvest H-2547	2	0.0	1.6	0.8	210.5	176.6	193.6
Terra TR1157	2	2.8	0.0	1.4	184.5	200.8	192.6
Cargill 8327	2	0.3	0.0	0.2	185.9	199.0	192.4
Middlekoop 813	2	1.3	0.6	1.0	206.9	176.8	191.8
Middlekoop 1014	2	0.0	0.0	0.0	195.5	188.2	191.8
Terra TR1185(spx)	2	2.8	1.1	2.0	188.8	194.4	191.6
Terra TR1167	2	0.5	1.0	0.8	182.2	193.9	188.0
Triumph 2010	2	0.0	0.0	0.0	182.9	190.4	186.6
Mycogen 7660	2	0.0	0.0	0.0	190.1	179.6	184.8
Terra TR702	2	1.3	0.5	0.9	179.6	177.9	178.8
Wilson 2330	2	0.0	0.5	0.2	176.8	178.5	177.6
AVERAGE		0.7	0.8	0.8	202.9	198.1	200.5
L.S.D. AT .10		1.4	NS	1.2	20.9	24.1	15.6
C.V. %					7.6	8.9	7.2

** Highest yielding hybrid in the test.
 * Hybrid which did not yield significantly less than the highest yielding hybrid in the test.
 NS Not significant.

TABLE 16. Performance of Irrigated Corn Hybrids evaluated near Garden City (Cass County) on the Roth Farm during 1997 and the Richard Schrock Farm during 1994-95.

Planted: 29 April 1997
 Harvested: 30 September 1997
 Planted Population: 30,700
 Row Spacing: 30 inches
 Soil Type: Parsons Silt Loam
 Soil Test: pH=6.9, OM=2.8%, P=125, K=421

Fertilizer: N=240; P₂O₅=60; K₂O=120
 Herbicide: Bicep
 Insecticide: Lorsban
 Irrigation: 6.0 inches
 Previous Crop: Soybean

Growing Season Rainfall: Apr.=4.6, May=9.8, June=3.6, July=0.8, Aug.=4.0, TOTAL=22.8"

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1997	1996	1995	2 Yr.
Terra TR1136	2	28900	15.7	0.0	194.8**	--	--	--	--
Golden Harvest H-2581	2	28900	15.7	0.8	192.6*	223.2*	143.4	207.9	186.4
Midland 96117A	2	27200	15.9	0.0	191.7*	--	--	--	--
Pioneer Hybrid 3489	1	28800	14.2	0.0	191.2*	--	124.0	--	--
Middlekoop 817	2	26700	17.8	0.4	190.2*	238.9**	--	214.6	--
Triumph 1514	2	26500	15.1	0.0	190.1*	223.5*	--	206.8	--
Middlekoop 916	2	27400	16.1	0.4	190.0*	222.3	--	206.2	--
Cargill 8011	2	25500	15.8	0.4	187.6*	--	--	--	--
Golden Harvest H-2641	2	26700	17.5	0.8	187.6*	224.0*	165.3**	205.8	192.3
AgriPro AP 9616	1	28100	16.8	0.0	187.6*	--	--	--	--
Triumph 1522	2	28300	15.4	2.9	185.2*	229.0*	125.6	207.1	179.9
Mycogen 2815	2	26700	16.0	0.0	183.9*	236.5*	139.4	210.2	186.6
Middlekoop 915	2	29100	16.6	0.0	182.7*	238.0*	--	210.4	--
Golden Harvest H-2564	2	26900	16.3	2.2	182.6*	231.3*	--	207.0	--
Golden Harvest H-2547	2	27900	14.9	0.9	182.5*	--	123.3	--	--
Terra TR1185(spx)	2	27400	19.3	2.6	181.5*	220.5	155.6*	201.0	185.9
Cargill 8327	2	26600	17.1	1.2	180.8*	227.4*	157.2*	204.1	188.5
Pioneer Hybrid 3260	2	26100	15.6	0.5	180.7*	237.7*	--	209.2	--
AgriPro AP 9707	3	28700	15.6	1.7	180.6*	--	--	--	--
Middlekoop 718	2	29500	18.5	0.4	178.3*	214.3	--	196.3	--
Mycogen 2888	2	26400	18.9	1.6	178.1*	226.6*	--	202.4	--
Lewis 6294	2	27500	17.0	3.0	178.0*	223.2*	152.4*	200.6	184.5
Cargill 6888	1	28300	14.7	0.4	176.8*	--	--	--	--
Cargill 8311	2	29100	17.3	1.7	176.6*	--	--	--	--
Cargill 7770	2	26700	16.3	1.3	176.4*	223.0	--	199.7	--
Garst N5250	3	29400	17.1	0.4	176.3	--	--	--	--
Dekalb DK642	2	27000	16.2	2.3	176.2	226.8*	--	201.5	--
Midland 96118A	2	29200	18.0	0.4	175.7	--	--	--	--
Mycogen 2787	2	27900	15.5	0.0	175.5	--	--	--	--
Triumph 1141	1	27000	15.4	2.4	175.0	--	--	--	--
NC+ 6387	2	28100	17.5	2.1	172.2	--	--	--	--
Terra TR1176	2	27000	16.8	1.7	170.8	--	--	--	--
Freedom 5695	2	26600	18.2	1.0	169.7	--	--	--	--
Terra TR1167	2	27700	18.8	0.0	169.3	212.5	140.4	190.9	174.1
Pioneer Hybrid 3335	2	27900	14.8	9.8	168.5	233.0*	126.5	200.8	176.0
AgriPro AP 619	1	27400	15.3	0.4	168.2	--	--	--	--
Dekalb DK641	2	25200	16.7	0.8	167.8	232.3*	--	200.1	--
Terra TR1157	2	26600	17.6	0.9	166.1	229.3*	--	197.7	--
Freedom 5680	1	29200	18.0	0.4	165.9	--	--	--	--
Terra TR702	2	29100	20.1	1.6	162.7	211.8	153.5*	187.3	176.0
AgriPro AP 9565	1	28900	15.2	0.8	161.1	--	--	--	--
NC+ 5007	2	27900	17.2	3.6	157.7	--	--	--	--
NC+ 7237	2	28500	18.8	1.2	157.5	--	--	--	--
Pioneer Hybrid 32K61	2	29000	14.3	6.9	155.8	--	--	--	--
Terra TR1154	2	29200	16.5	1.2	141.5	220.1	153.5*	180.8	171.7
TRIAL AVERAGE		27749	16.6	1.4	176.5	221.5	137.0	199.0	178.3
L.S.D. AT .10		NS	1.2	NS	18.4	15.8	18.3		
C.V. %		7.8	5.3		7.7	5.2	9.8		

-- Data not available.
 ** Highest yielding hybrid in the test.
 * Hybrid which did not yield significantly less than the highest yielding hybrid in the test.
 NS Not significant.

TABLE 17. Performance of Irrigated Corn Hybrids evaluated near Lamar (Barton County) on the Sherrell Bean Farm during 1995-97.

Planted: 3 April 1997
 Harvested: 12 September 1997
 Planted Population: 30,700
 Row Spacing: 30 inches
 Soil Type: Parsons Silt Loam
 Soil Test: pH=7.2, OM=1.8%, P=137, K=504

Fertilizer: N=230; P₂O₅=45; K₂O=70
 Herbicide: Bullet + Bladex, Buctril
 Insecticide: Force
 Irrigation: 5.5 inches
 Previous Crop: Soybean

Growing Season Rainfall: Apr.=1.3, May=4.4, June=5.5, July=1.9, Aug.=3.2, TOTAL=16.3"

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1996	1995	2 Yr.	3 Yr.
Pioneer Hybrid 3335	2	29200	17.7	0.8	224.8**	181.4*	129.6	203.1	178.6
Pioneer Hybrid 3260	2	26500	17.3	0.4	211.9*	185.8*	--	198.9	--
Pioneer Hybrid 32K61	2	27100	17.3	0.8	211.5*	--	--	--	--
Midland 96117A	2	24000	17.5	0.0	210.5*	--	--	--	--
NC+ 5007	2	21900	19.8	0.0	209.0*	--	--	--	--
Mycogen 2815	2	23800	17.4	0.0	208.4*	189.9*	166.0*	199.2	188.1
Triumph 1514	2	24200	16.6	0.0	207.5*	180.5	--	194.0	--
Middlekoop 817	2	23600	17.3	1.4	206.9*	153.8	--	180.4	--
AgriPro AP 9707	3	23500	17.6	1.1	206.9*	--	--	1.1	--
AgriPro AP 9616	1	26900	17.3	0.4	206.5*	--	--	--	--
Pioneer Hybrid 3489	1	27300	15.5	0.0	203.6	--	132.3	--	--
NC+ 7237	2	25500	19.0	0.0	203.5	--	--	--	--
Middlekoop 916	2	23800	17.2	0.0	201.9	160.1	--	181.0	--
Mycogen 2787	2	23100	16.5	0.0	201.4	--	--	--	--
Freedom 5680	1	22900	19.5	0.0	200.9	--	--	--	--
Cargill 8011	2	25500	18.9	0.0	200.8	--	--	--	--
Mycogen 2888	2	24100	18.2	1.1	200.7	167.7	--	184.2	--
Triumph 1141	1	24400	17.0	1.1	198.3	--	--	--	--
Cargill 8311	2	20100	19.0	2.4	197.8	--	--	--	--
AgriPro AP 9565	1	22400	17.2	0.0	197.5	--	--	--	--
Garst N5250	3	21700	18.9	0.5	197.1	--	--	--	--
Dekalb DK641	2	24600	16.7	0.6	196.9	157.9	--	177.4	--
Terra TR1136	2	24100	17.9	0.0	196.4	--	--	--	--
AgriPro AP 619	1	23600	16.4	0.0	195.9	--	--	--	--
Middlekoop 915	2	22400	17.1	0.0	195.3	182.3*	--	188.8	--
Cargill 8327	2	22900	19.2	1.0	194.6	193.3*	145.2	194.0	177.7
Terra TR1157	2	22500	19.2	0.5	193.1	183.1*	--	188.1	--
NC+ 6387	2	22900	17.1	0.0	192.9	--	--	--	--
Terra TR702	2	23700	21.9	0.0	191.7	198.4**	145.0	195.1	178.4
Freedom 5695	2	24800	18.0	0.0	191.6	--	--	--	--
Midland 96118A	2	24200	19.1	1.5	191.3	--	--	--	--
Triumph 1522	2	21700	16.8	0.0	191.0	172.1	134.8	181.6	166.0
Terra TR1154	2	26400	17.8	0.4	190.9	164.8	156.2*	177.9	170.6
Cargill 6888	1	23100	17.3	0.6	190.8	--	--	--	--
Terra TR1176	2	22500	19.0	0.0	189.1	--	--	--	--
Golden Harvest H-2547	2	22500	17.5	0.0	188.1	--	129.6	--	--
Golden Harvest H-2564	2	21900	17.1	0.7	188.0	172.6	--	180.3	--
Dekalb DK642	2	25000	17.1	0.0	187.9	185.8*	--	186.9	--
Middlekoop 718	2	21900	19.4	0.6	187.2	163.8	--	175.5	--
Golden Harvest H-2581	2	21100	16.6	0.0	185.4	193.3*	169.2*	189.4	182.6
Golden Harvest H-2641	2	23400	18.2	0.0	182.9	179.2	156.2*	181.1	172.8
Lewis 6294	2	23700	18.2	0.0	181.3	187.7*	166.3*	184.5	178.4
Cargill 7770	2	21300	18.6	0.0	175.4	186.9*	--	181.2	--
Terra TR1167	2	23700	19.0	0.0	169.8	180.2	146.0	175.0	165.3
Terra TR1185(spx)	2	19700	21.0	1.1	166.5	166.1	157.9*	166.3	163.5
TRIAL AVERAGE		23669	18.0	0.4	196.0	174.7	149.0	185.4	173.2
L.S.D. AT .10		3917	1.2	1.0	20.7	17.3	19.7		
C.V. %		12.1	4.9		7.7	7.2	9.7		

-- Data not available.

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

TABLE 18. Performance Summary for Irrigated Corn Hybrids evaluated at Two Southwestern Missouri locations (Garden City and Lamar) during 1997.

Brand-Hybrid	Mat- urity Group	Lodging (%)			Yield (Bu/Acre)		
		Gdn Cty	Lamar	Mean	Gdn Cty	Lamar	Mean

Midland 96117A	2	0.0	0.0	0.0	191.7*	210.5*	201.1**
Triumph 1514	2	0.0	0.0	0.0	190.1*	207.5*	198.8*
Middlekoop 817	2	0.4	1.4	0.9	190.2*	206.9*	198.6*
Pioneer Hybrid 3489	1	0.0	0.0	0.0	191.2*	203.6	197.4*
AgriPro AP 9616	1	0.0	0.4	0.2	187.6*	206.5*	197.0*
Pioneer Hybrid 3335	2	9.8	0.8	5.3	168.5	224.8**	196.6*
Pioneer Hybrid 3260	2	0.5	0.4	0.4	180.7*	211.9*	196.3*
Mycogen 2815	2	0.0	0.0	0.0	183.9*	208.4*	196.2*
Middlekoop 916	2	0.4	0.0	0.2	190.0*	201.9	196.0*
Terra TR1136	2	0.0	0.0	0.0	194.8**	196.4	195.6*
Cargill 8011	2	0.4	0.0	0.2	187.6*	200.8	194.2*
AgriPro AP 9707	3	1.7	1.1	1.4	180.6*	206.9*	193.8*
Mycogen 2888	2	1.6	1.1	1.4	178.1*	200.7	189.4*
Middlekoop 915	2	0.0	0.0	0.0	182.7*	195.3	189.0*
Golden Harvest H-2581	2	0.8	0.0	0.4	192.6*	185.4	189.0*
Mycogen 2787	2	0.0	0.0	0.0	175.5	201.4	188.4
Triumph 1522	2	2.9	0.0	1.4	185.2*	191.0	188.1
Cargill 8327	2	1.2	1.0	1.1	180.8*	194.6	187.7
Cargill 8311	2	1.7	2.4	2.0	176.6*	197.8	187.2
Garst N5250	3	0.4	0.5	0.4	176.3	197.1	186.7
Triumph 1141	1	2.4	1.1	1.8	175.0	198.3	186.6
Golden Harvest H-2564	2	2.2	0.7	1.4	182.6*	188.0	185.3
Golden Harvest H-2547	2	0.9	0.0	0.4	182.5*	188.1	185.3
Golden Harvest H-2641	2	0.8	0.0	0.4	187.6*	182.9	185.2
Cargill 6888	1	0.4	0.6	0.5	176.8*	190.8	183.8
Pioneer Hybrid 32K61	2	6.9	0.8	3.8	155.8	211.5*	183.6
Midland 96118A	2	0.4	1.5	1.0	175.7	191.3	183.5
Freedom 5680	1	0.4	0.0	0.2	165.9	200.9	183.4
NC+ 5007	2	3.6	0.0	1.8	157.7	209.0*	183.4
Middlekoop 718	2	0.4	0.6	0.5	178.3*	187.2	182.8
NC+ 6387	2	2.1	0.0	1.0	172.2	192.9	182.6
Dekalb DK641	2	0.8	0.6	0.7	167.8	196.9	182.4
AgriPro AP 619	1	0.4	0.0	0.2	168.2	195.9	182.0
Dekalb DK642	2	2.3	0.0	1.2	176.2	187.9	182.0
Freedom 5695	2	1.0	0.0	0.5	169.7	191.6	180.6
NC+ 7237	2	1.2	0.0	0.6	157.5	203.5	180.5
Terra TR1176	2	1.7	0.0	0.8	170.8	189.1	180.0
Terra TR1157	2	0.9	0.5	0.7	166.1	193.1	179.6
Lewis 6294	2	3.0	0.0	1.5	178.0*	181.3	179.6
AgriPro AP 9565	1	0.8	0.0	0.4	161.1	197.5	179.3
Terra TR702	2	1.6	0.0	0.8	162.7	191.7	177.2
Cargill 7770	2	1.3	0.0	0.6	176.4*	175.4	175.9
Terra TR1185(spx)	2	2.6	1.1	1.8	181.5*	166.5	174.0
Terra TR1167	2	0.0	0.0	0.0	169.3	169.8	169.6
Terra TR1154	2	1.2	0.4	0.8	141.5	190.9	166.2
AVERAGE		1.4	0.4	0.9	176.5	196.0	186.3
L.S.D. AT .10		NS	1.0	1.9	18.4	20.7	12.1
C.V. %					7.7	7.7	7.6

** Highest yielding hybrid in the test.
 * Hybrid which did not yield significantly less than the highest yielding hybrid in the test.
 NS Not significant.

TABLE 19. Performance of Irrigated Corn Hybrids evaluated near Oran (Scott County) on the Glenn Nothdurft Farm during 1995-97.

Planted: 2 April 1997
 Harvested: 10 September 1997
 Planted Population: 30,700
 Row Spacing: 30 inches
 Soil Type: Commerce Silt Loam
 Soil Test: pH=6.4, OM=2.5%, P=90, K=281

Fertilizer: N=205; P₂O₅=45; K₂O=80
 Herbicide: Bicep II
 Insecticide: Lorsban
 Irrigation: 5.0 inches
 Previous Crop: Soybean

Growing Season Rainfall: Apr.=6.1, May=5.2, June=2.8, July=1.8, Aug.=5.0, TOTAL=20.9"

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1996	1995	2 Yr.	3 Yr.
Pioneer Hybrid 3245	2	29200	21.2	0.0	236.0**	211.9	218.9*	224.0	222.3
Pioneer Hybrid 32K61	2	27800	20.9	0.0	233.8*	--	--	--	--
Dekalb DK642	2	26300	22.4	0.0	230.6*	209.9	--	220.3	--
Cargill 8011	2	24900	22.9	0.0	226.9*	--	--	--	--
Pfister 3049	2	26200	22.6	0.0	224.3*	225.4*	--	224.9	--
Pioneer Hybrid 3279	2	22500	22.1	0.0	221.1*	204.6	186.9	212.9	204.2
Dekalb DK626	2	20700	21.4	0.0	220.4*	206.1	180.7	213.3	202.4
Pioneer Hybrid 3335	2	29300	22.4	0.0	216.8*	234.1***	229.5**	225.5	226.8
Pioneer Hybrid 3260	2	21900	21.2	0.0	216.4*	211.0	190.7	213.7	206.0
Asgrow RX897	2	27500	23.7	0.0	215.5*	--	--	--	--
Pioneer Hybrid 3223	2	24800	21.8	0.0	215.1	220.5*	184.9	217.8	206.8
Pioneer 3395IR	2	25100	19.3	0.0	213.2	209.9	--	211.6	--
AgriPro AP 9616	2	24900	23.7	0.0	212.9	--	--	--	--
Terral TV2100	1	22400	22.5	0.0	211.8	--	--	--	--
Asgrow XP9292	2	22900	22.9	0.0	211.6	--	--	--	--
Garst 8342	3	24100	24.0	0.0	210.7	216.7*	--	213.7	--
AgraTech ATX700	1	22100	22.3	0.0	210.0	217.5*	--	213.8	--
Pfister 3977	2	23900	24.0	0.0	207.8	--	--	--	--
Mycogen 2725	2	22800	22.6	0.6	206.9	209.2	--	208.1	--
Pioneer Hybrid 3394	1	27600	18.3	0.0	206.8	207.7	194.7	207.3	203.1
Terral TVX21570	2	23300	25.2	0.0	206.1	--	--	--	--
HyPerformer HY 9646	2	25400	24.6	0.0	206.1	207.6	--	206.9	--
Terra TR1136	2	25900	23.8	0.0	205.6	--	--	--	--
Mycogen 2888	2	25900	25.1	0.0	205.4	222.4*	--	213.9	--
Dekalb DK618	2	25600	20.1	0.0	204.4	--	--	--	--
Pfister 2680	2	23000	21.2	0.0	204.2	--	--	--	--
Pioneer Hybrid 3163	2	20500	27.1	0.0	203.9	214.1*	189.2	209.0	202.4
Terra TR1157	2	25800	25.4	0.0	203.9	212.1	--	208.0	--
AgriPro AP 9707	2	24300	23.1	0.0	203.2	216.7*	165.0	210.0	195.0
Terral TVX21370	2	25500	24.8	0.0	202.9	--	--	--	--
AgriPro AP 9909	3	24100	25.4	0.0	202.0	--	--	--	--
Asgrow RX760	2	22900	21.5	0.0	201.9	--	--	--	--
AgraTech ATX770	2	23700	21.6	0.0	201.8	208.9	--	205.4	--
AgraTech X7772	2	23500	23.5	0.0	198.1	--	--	--	--
Cargill 7770	2	21700	24.3	0.0	195.9	201.6	191.0	198.8	196.2
Garst N5250	3	23100	23.1	0.0	195.2	--	--	--	--
AgraTech AT721	2	19900	22.8	0.0	194.1	215.6*	--	204.9	--
AgriPro AP 619	2	22800	22.2	0.0	193.3	224.3*	--	208.8	--
Mycogen 7250	2	22500	22.1	0.0	192.8	222.6*	--	207.7	--
Funks DG5516	2	22100	23.9	0.0	192.5	--	175.9	--	--
Cargill 8311	2	21000	24.2	0.0	192.4	--	--	--	--
Triumph 1522	2	21200	22.0	0.0	192.0	222.9*	183.7	207.5	199.5
Asgrow RX813	2	21400	24.4	0.0	191.0	--	--	--	--
Mycogen 2815	2	23400	23.5	0.0	188.5	224.9*	176.7	206.7	196.7
Funks DG5510A	2	22300	31.3	0.0	188.4	--	--	--	--
Triumph 1220	2	20500	18.9	0.0	184.9	--	--	--	--
Terra TR1154	2	21400	22.5	0.0	184.4	204.8	--	194.6	--
Dekalb DK658	2	21800	21.7	0.0	184.1	--	--	--	--
Pioneer 3245IR	2	20800	21.8	0.0	183.2	196.1	--	189.6	--
Dekalb DK683	2	18700	24.5	0.0	183.0	210.4	165.4	196.7	186.3
Mycogen 2828	2	19900	22.4	0.0	182.4	--	--	--	--
Terra TR1176	2	19500	24.1	0.0	181.9	--	--	--	--
Cargill 8327	2	22500	24.2	0.0	181.6	206.4	187.5	194.0	191.8
HyPerformer HS 9843	2	21100	23.7	0.0	178.0	216.8*	196.8	197.4	197.2
AgraTech X6714	2	25000	23.9	0.0	177.0	--	--	--	--
HyPerformer HS 9502	1	18100	21.5	0.0	176.2	220.1*	181.1	198.1	192.5

TABLE 19. Continued.

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)		Means		
					1997	1997	1996	1995	2 Yr.
Terra TR702	2	19600	24.1	0.0	175.9	173.1	194.5	174.5	181.2
Terral TV2140	2	17000	24.6	0.0	174.6	203.1	--	188.9	--
Dekalb DK687	2	20200	25.1	0.0	173.7	--	--	--	--
Terra TR1167	2	20000	24.3	0.0	172.1	213.1*	183.7	192.6	189.6
Delta Genetics DG175	3	18900	24.2	0.6	171.2	203.7	169.0	187.5	181.3
Terra TR1185(spx)	2	21300	26.2	0.0	171.1	214.3*	189.6	192.7	191.7
Triumph 2010	2	19800	23.5	0.0	166.0	192.3	185.2	179.2	181.2
Asgrow RX938	2	15200	29.0	0.0	162.6	--	--	--	--
TRIAL AVERAGE		22797	23.3	0.0	198.1	209.4	182.1	203.8	196.5
L.S.D. AT .10		3854	1.9	NS	20.6	21.8	27.8		
C.V. %		12.1	5.9		7.6	7.7	11.2		

-- Data not available.

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

NS Not significant.

TABLE 20. Performance of Irrigated Corn Hybrids evaluated near Charleston (Mississippi County) on the C & D Glenn-Helan Byrd Farm during 1997 and near New Madrid on the Hunter Farm 1994-95.

Planted: 1 April 1997
 Harvested: 9 September 1997
 Planted Population: 30,700
 Row Spacing: 30 inches
 Soil Type: Commerce Silt Loam
 Soil Test: pH=5.8, OM=1.3%, P=119, K=439

Fertilizer: N=270; P₂O₅=150; K₂O=60
 Herbicide: Bullet + Roust
 Insecticide: Pounce
 Irrigation: 12.0 inches
 Previous Crop: Soybean

Growing Season Rainfall: Apr.=7.1, May=5.7, June=5.3, July=1.8, Aug.=6.7, TOTAL=26.6"

Brand-Hybrid	Maturity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1995	1994	2 Yr.	3 Yr.
Pioneer Hybrid 3260	2	25800	21.1	1.4	220.9**	218.4**	--	219.7	--
Pioneer Hybrid 3245	2	27600	21.3	0.9	220.8*	166.8	198.5*	193.8	195.4
Dekalb DK642	2	24400	20.6	0.5	218.5*	--	--	--	--
Pfister 3977	2	26300	23.2	0.9	216.5*	--	--	--	--
Pioneer Hybrid 32K61	2	28000	20.3	1.3	216.3*	--	--	--	--
Asgrow RX813	2	26000	21.9	1.3	215.5*	--	--	--	--
Pioneer Hybrid 3335	2	26000	24.6	1.4	214.7*	198.7*	--	206.7	--
Terral TV2100	1	24300	21.6	1.1	213.8*	--	--	--	--
Asgrow RX897	2	26900	21.9	0.0	213.7*	--	209.8*	--	--
AgraTech X7772	2	25400	21.7	2.9	211.3*	--	--	--	--
HyPerformer HS 9843	2	27000	21.5	0.9	208.3*	190.0	194.6*	199.2	197.6
Pioneer Hybrid 3394	1	25000	18.4	0.9	208.0*	189.6	176.5	198.8	191.4
AgriPro AP 619	2	26600	22.1	0.5	207.1*	--	--	--	--
AgriPro AP 9616	2	23400	22.3	0.0	206.6*	--	--	--	--
Funks DG5516	2	25800	21.7	0.5	205.9*	185.5	192.1	195.7	194.5
Garst N5250	3	26500	22.1	0.4	205.6*	--	--	--	--
Terra TR1157	2	27200	22.3	2.1	204.3*	--	--	--	--
AgraTech ATX700	1	24300	20.7	1.0	203.4*	--	--	--	--
Pfister 3049	2	26300	22.8	0.4	203.3*	--	--	--	--
Pioneer Hybrid 3163	2	24200	23.2	1.1	202.6*	205.8*	189.1	204.2	199.2
Mycogen 2815	2	26000	22.4	0.0	202.6*	188.9	--	195.8	--
HyPerformer HY 9646	2	25500	21.5	0.4	201.9*	--	--	--	--
Pioneer 32451R	2	24300	22.7	0.5	201.5*	--	--	--	--
Terra TR1136	2	25900	21.5	0.0	201.4*	--	--	--	--
Pioneer Hybrid 3223	2	24200	21.6	0.5	200.2	203.8*	209.4*	202.0	204.5
Pioneer Hybrid 3279	2	21500	20.6	1.1	200.0	175.0	196.2*	187.5	190.4
Cargill 8011	2	24600	22.8	0.0	199.8	--	--	--	--
Asgrow RX760	2	25900	20.7	0.0	199.8	--	--	--	--
Mycogen 2725	2	23500	21.4	0.0	199.7	--	--	--	--
Garst 8342	3	23000	21.7	1.0	199.3	--	--	--	--
Dekalb DK658	2	25200	20.2	0.5	198.8	--	--	--	--
Mycogen 2888	2	27600	22.7	3.1	198.5	--	--	--	--
AgriPro AP 9707	2	23600	21.4	0.6	198.4	181.7	--	190.1	--
Pioneer 33951R	2	26900	19.9	1.3	197.9	--	--	--	--
Terral TVX21370	2	26500	22.5	2.8	197.6	--	--	--	--
Triumph 1522	2	22700	20.7	1.1	197.3	178.9	--	188.1	--
Terra TR1185(spx)	2	22000	23.9	2.1	197.2	212.4*	208.9*	204.8	206.2
Funks DG5510A	2	23800	25.3	2.5	196.9	--	--	--	--
Pfister 2680	2	22700	21.9	0.5	195.5	--	--	--	--
AgriPro AP 9909	3	25200	22.3	0.5	195.5	--	--	--	--
Asgrow XP9292	2	22400	21.4	0.0	195.4	--	--	--	--
Triumph 1220	2	23500	19.4	2.0	194.6	--	--	--	--
AgraTech AT721	2	24100	22.0	1.1	192.7	--	--	--	--
AgraTech X6714	2	26700	22.4	0.0	191.5	--	--	--	--
Cargill 8311	2	23500	23.0	0.5	190.4	--	--	--	--
Mycogen 7250	2	23800	20.9	0.5	190.2	--	--	--	--
Terral TVX21570	2	24100	23.1	1.4	190.0	--	--	--	--
Dekalb DK626	2	20900	20.0	0.0	189.8	185.7	--	187.8	--
Cargill 8327	2	24900	21.1	0.0	189.8	183.6	193.8*	186.7	189.1
AgraTech ATX770	2	24900	23.1	1.5	187.5	--	--	--	--
Dekalb DK618	2	25200	19.5	0.5	187.1	--	--	--	--
Terral TV2140	2	21200	21.9	2.2	184.9	--	--	--	--
Terra TR1176	2	23400	23.1	0.0	184.3	--	--	--	--
Terra TR702	2	24000	23.4	0.0	184.3	188.0	--	186.2	--
Terra TR1154	2	22300	20.3	4.6	184.1	--	--	--	--
Dekalb DK687	2	21700	22.7	0.0	182.8	--	--	--	--

TABLE 20. Continued.

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)		Means		
					1997	1997	1995	1994	2 Yr.
HyPerformer HS 9502	1	24600	19.7	1.0	181.5	168.8	188.6	175.2	179.6
Asgrow RX938	2	21300	27.4	0.7	175.4	--	--	--	--
Cargill 7770	2	21300	22.1	0.0	174.4	181.2	--	177.8	--
Dekalb DK683	2	19100	24.1	0.0	173.5	180.2	199.3*	176.9	184.3
Mycogen 2828	2	21700	21.6	0.0	170.7	--	--	--	--
Terra TR1167	2	21700	22.4	0.0	168.4	201.6*	201.2*	185.0	190.4
Delta Genetics DG175	3	16100	21.8	0.0	159.1	173.2	192.4*	166.1	174.9
Triumph 2010	2	16800	22.1	0.0	151.4	179.0	192.3	165.2	174.2
TRIAL AVERAGE		24169	21.9	0.8	196.4	183.1	191.7	189.7	190.4
L.S.D. AT .10		2679	1.6	NS	19.5	25.2	31.5		
C.V. %		8.1	5.3		7.2	10.1	10.1		

-- Data not available.
 ** Highest yielding hybrid in the test.
 * Hybrid which did not yield significantly less than the highest yielding hybrid in the test.
 NS Not significant.

TABLE 21. Performance Summary for Irrigated Corn Hybrids evaluated at Two Southeast Missouri Locations (Oran and New Madrid) during 1997.

Oran
Planted: 2 April 1997
Harvested: 10 September 1997
Growing Season Rainfall: 20.9 inches
Irrigation: 5.0 inches

Charleston
Planted: 1 April 1997
Harvested: 9 September 1997
Growing Season Rainfall: 26.6 inches
Irrigation: 12.0 inches

Brand-Hybrid	Mat- urity Group	Lodging (%)			Yield (Bu/Acre)		
		Oran	Charleston	Mean	Oran	Charleston	Mean
Pioneer Hybrid 3245	2	0.0	0.9	0.4	236.0**	220.8*	228.4**
Pioneer Hybrid 32K61	2	0.0	1.3	0.6	233.8*	216.3*	225.0*
Dekalb DK642	2	0.0	0.5	0.2	230.6*	218.5*	224.6*
Pioneer Hybrid 3260	2	0.0	1.4	0.7	216.4*	220.9**	218.6*
Pioneer Hybrid 3335	2	0.0	1.4	0.7	216.8*	214.7*	215.8*
Asgrow RX897	2	0.0	0.0	0.0	215.5*	213.7*	214.6*
Pfister 3049	2	0.0	0.4	0.2	224.3*	203.3*	213.8*
Cargill 8011	2	0.0	0.0	0.0	226.9*	199.8	213.4
Terral TV2100	1	0.0	1.1	0.6	211.8	213.8*	212.8
Pfister 3977	2	0.0	0.9	0.4	207.8	216.5*	212.2
Pioneer Hybrid 3279	2	0.0	1.1	0.6	221.1*	200.0	210.6
AgriPro AP 9616	2	0.0	0.0	0.0	212.9	206.6*	209.8
Pioneer Hybrid 3223	2	0.0	0.5	0.2	215.1	200.2	207.6
Pioneer Hybrid 3394	1	0.0	0.9	0.4	206.8	208.0*	207.4
AgraTech ATX700	1	0.0	1.0	0.5	210.0	203.4*	206.7
Pioneer 3395IR	2	0.0	1.3	0.6	213.2	197.9	205.6
Dekalb DK626	2	0.0	0.0	0.0	220.4*	189.8	205.1
Garst 8342	3	0.0	1.0	0.5	210.7	199.3	205.0
AgraTech X7772	2	0.0	2.9	1.4	198.1	211.3*	204.7
Terra TR1157	2	0.0	2.1	1.0	203.9	204.3*	204.1
HyPerformer HY 9646	2	0.0	0.4	0.2	206.1	201.9*	204.0
Asgrow XP9292	2	0.0	0.0	0.0	211.6	195.4	203.5
Terra TR1136	2	0.0	0.0	0.0	205.6	201.4*	203.5
Mycogen 2725	2	0.6	0.0	0.3	206.9	199.7	203.3
Pioneer Hybrid 3163	2	0.0	1.1	0.6	203.9	202.6*	203.2
Asgrow RX813	2	0.0	1.3	0.6	191.0	215.5*	203.2
Mycogen 2888	2	0.0	3.1	1.6	205.4	198.5	202.0
AgriPro AP 9707	2	0.0	0.6	0.3	203.2	198.4	200.8
Asgrow RX760	2	0.0	0.0	0.0	201.9	199.8	200.8
Garst N5250	3	0.0	0.4	0.2	195.2	205.6*	200.4
AgriPro AP 619	2	0.0	0.5	0.2	193.3	207.1*	200.2
Terral TVX21370	2	0.0	2.8	1.4	202.9	197.6	200.2
Pfister 2680	2	0.0	0.5	0.2	204.2	195.5	199.8
Funks DG5516	2	0.0	0.5	0.2	192.5	205.9*	199.2
AgriPro AP 9909	3	0.0	0.5	0.2	202.0	195.5	198.8
Terral TVX21570	2	0.0	1.4	0.7	206.1	190.0	198.0
Dekalb DK618	2	0.0	0.5	0.2	204.4	187.1	195.8
Mycogen 2815	2	0.0	0.0	0.0	188.5	202.6*	195.6
AgraTech ATX770	2	0.0	1.5	0.8	201.8	187.5	194.6
Triumph 1522	2	0.0	1.1	0.6	192.0	197.3	194.6
AgraTech AT721	2	0.0	1.1	0.6	194.1	192.7	193.4
HyPerformer HS 9843	2	0.0	0.9	0.4	178.0	208.3*	193.2
Funks DG5510A	2	0.0	2.5	1.2	188.4	196.9	192.6
Pioneer 3245IR	2	0.0	0.5	0.2	183.2	201.5*	192.4
Mycogen 7250	2	0.0	0.5	0.2	192.8	190.2	191.5
Cargill 8311	2	0.0	0.5	0.2	192.4	190.4	191.4
Dekalb DK658	2	0.0	0.5	0.2	184.1	198.8	191.4
Triumph 1220	2	0.0	2.0	1.0	184.9	194.6	189.8
Cargill 8327	2	0.0	0.0	0.0	181.6	189.8	185.7
Cargill 7770	2	0.0	0.0	0.0	195.9	174.4	185.2
Terra TR1185(spx)	2	0.0	2.1	1.0	171.1	197.2	184.2
AgraTech X6714	2	0.0	0.0	0.0	177.0	191.5	184.2
Terra TR1154	2	0.0	4.6	2.3	184.4	184.1	184.2
Terra TR1176	2	0.0	0.0	0.0	181.9	184.3	183.1
Terra TR702	2	0.0	0.0	0.0	175.9	184.3	180.1
Terral TV2140	2	0.0	2.2	1.1	174.6	184.9	179.8
HyPerformer HS 9502	1	0.0	1.0	0.5	176.2	181.5	178.8

TABLE 21. Continued.

Brand-Hybrid	Mat- urity Group	Lodging (%)			Yield (Bu/Acre)		
		Oran	Charleston	Mean	Oran	Charleston	Mean
Dekalb DK683	2	0.0	0.0	0.0	183.0	173.5	178.2
Dekalb DK687	2	0.0	0.0	0.0	173.7	182.8	178.2
Mycogen 2828	2	0.0	0.0	0.0	182.4	170.7	176.6
Terra TR1167	2	0.0	0.0	0.0	172.1	168.4	170.2
Asgrow RX938	2	0.0	0.7	0.4	162.6	175.4	169.0
Delta Genetics DG175	3	0.6	0.0	0.3	171.2	159.1	165.2
Triumph 2010	2	0.0	0.0	0.0	166.0	151.4	158.7
TRIAL AVERAGE		0.0	0.8	0.4	198.1	196.4	197.3
L.S.D. AT .10		NS	NS	NS	20.6	19.5	14.7
C.V. %					7.6	7.2	7.6

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

NS Not significant.

PART II

SPECIAL CORN TRIALS

EXPERIMENTAL PROCEDURES

Field Plot Design. Early maturing (90-100 day maturity) and white hybrids (101-140 day maturity) were evaluated in non-irrigated tests. Early maturing hybrids were made part of the program in 1988 to provide information to growers interested in production of short season hybrids. White corn test was made part of the program in 1995 to provide information to growers interested in production of white corn hybrids. A no-till variable was included this year in one test to measure hybrid response to tillage system.

All tests were arranged in lattice field plot designs with three replications. At all locations, plots were four rows wide and 25 feet long with a between-row spacing of 30 inches. Only the center two rows were harvested to determine yield.

Locations. In 1997, trial locations are shown on the adjacent map: (1) the Graves Memorial Plot near Fairfax in Atchison Co.; (2) the Hundly-Whaley Farm near Albany in Gentry Co., (3) the Klassing farm near Slater in Saline Co. (4) the Agronomy Research Center near Columbia in Boone Co.; (5) the Bill Cook farm near Garden City in Cass Co.; and (6) the Sherrell Bean farm near Lamar in Barton Co.



SUMMARY OF RESULTS

Results are presented by region within the state. For each location, data on final plant stand, total (root plus stalk) lodging, moisture content at harvest, and yield adjusted for moisture are given for each hybrid. Because harvest was delayed until the latest hybrids in the test were mature, moisture differences among many of the early maturing entries may be small. In this report, hybrids are ranked according to yield. When hybrids having similar yields differ greatly in percent moisture, it most likely indicates that these hybrids differ in maturity classification or dry-down rate.

Average yields and yield ranges observed at each location are summarized in Table 22. The ranges give the values of the lowest and highest yielding corn hybrids in each test. These values indicate the wide variation in yield potential among hybrids available in Missouri today. The use of data presented in this Special Report should increase the probability of selecting hybrids that combine high yield potential with other agronomic characteristics beneficial to specific farming situations.

TABLE 22. 1997 SUMMARY OF SPECIAL CORN TRIAL YIELDS

LOCATION	NUMBER OF ENTRIES	TEST TYPE	YIELD (BU/ACRE)		DATA TABLE
			RANGE	AVERAGE	
Albany	5	Early Maturing	122-173	144	23
Columbia	5	Early Maturing	78-105	92	24
Garden City	17	Early Maturing	106-142	125	26
Lamar	17	Early Maturing	84-132	109	27
Fairfax	24	White	102-199	138	29
Slater	25	No-Till	101-145	122	30

The growing season of 1997 was characterized by above normal rainfall in the spring and below normal rainfall in the summer for most of Missouri. Temperatures throughout most of the year were near or below normal.

TABLE 23. Performance of Early Maturing Corn Hybrids evaluated near Albany (Gentry County) on the Hundley-Whaley Farm during 1997.

Planted: 13 May 1997
 Harvested: 2 October 1997
 Planted Population: 29,200
 Row Spacing: 30 inches
 Soil Type: Grundy Silt Loam
 Soil Test: pH=6.8, OM=2.9%, P=94, K=303

Fertilizer: N=220; P₂O₅=0; K₂O=55
 Herbicide: Fulltime, Gramoxone, Beacon, Permit
 Insecticide: Lorsban
 Irrigation: 0.0 inches
 Previous Crop: Soybean

Growing Season Rainfall: Apr.=5.0, May=3.8, June=1.8, July=1.9, Aug.=3.5, TOTAL=16.0"

Brand-Hybrid	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)		Means		
	1997			1997	1996	1995	2 Yr.	3 Yr.
Early Full Season (101-110 days) ⁺								
Dekalb DK595	22600	20.0	0.4	172.7**	--	--	--	--
Terra TR1087	24600	20.6	0.2	148.4	--	--	--	--
Terra TR1066	24100	22.2	1.1	137.4	--	--	--	--
Terra TR1026	23400	17.5	0.2	133.6	--	--	--	--
Terra TR1106	23800	23.0	0.4	121.6	--	--	--	--
Mid Full Season (111-120 days) ⁺								
Pioneer Hybrid 3279 ^{##}	22600	22.1	0.3	147.7	--	--	--	--
TRIAL AVERAGE	23517	20.6	0.4	143.6				
L.S.D. AT .10	1135	1.0	NS	19.2				
C.V.%	3.5	3.3		9.4				

^{##} Mid-full season check hybrid (111-120 day relative maturity).
⁺ Only hybrids classified as 100 days or less in maturity are considered "early maturing" in this test. Hybrids classified as 101-110 days and 111-120 days are considered early- and mid-full season hybrids, respectively.
 -- Data not available.
 ** Highest yielding hybrid in the test.
 * Hybrid which did not yield significantly less than the highest yielding hybrid in the test.
 NS Not significant.

TABLE 24. Performance of Early Maturing Corn Hybrids evaluated near Columbia (Boone County) on the Agronomy Research Center during 1995-97.

Planted: 28 April 1997
 Harvested: 18 September 1997
 Planted Population: 29,200
 Row Spacing: 30 inches
 Soil Type: Mexico Silt Loam
 Soil Test: pH=6.6, OM=2.4%, P=145, K=562

Fertilizer: N=200; P₂O₅=0; K₂O=00
 Herbicide: Dual + ExtraZine
 Insecticide: Lorsban
 Irrigation: 0.0 inches
 Previous Crop: Soybean

Growing Season Rainfall: Apr.=3.5, May=4.9, June=5.6, July=0.3, Aug.=4.5, TOTAL=18.8"

Brand-Hybrid	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
	1997			1997	1996	1995	2 Yr.	3 Yr.
Early Full Season (101-110 days) ⁺								
Terra TR1026	25400	18.6	0.0	105.2**	126.4	--	115.8	--
Dekalb DK595	27600	23.8	0.0	102.5*	--	--	--	--
Terra TR1066	25500	25.1	0.0	91.9	111.2	--	101.6	--
Terra TR1087	27700	24.5	14.0	86.3	147.5*	--	116.9	--
Terra TR1106	28400	29.7	0.0	78.1	--	--	--	--
Mid Full Season (111-120 days) ⁺								
Pioneer Hybrid 3279 ^{##}	25400	28.8	0.0	85.8	--	--	--	--

TRIAL AVERAGE	26667	25.1	2.3	91.6	119.7	124.3	105.6	111.8
L.S.D. AT .10	1756	3.0	2.1	7.7	17.2	19.2		
C.V.%	4.8	8.6		6.0	10.7	11.4		

^{##} Mid-full season check hybrid (111-120 day relative maturity).
⁺ Only hybrids classified as 100 days or less in maturity are considered "early maturing" in this test. Hybrids classified as 101-110 days and 111-120 days are considered early- and mid-full season hybrids, respectively.
 -- Data not available.
^{**} Highest yielding hybrid in the test.
^{*} Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

TABLE 25. Performance Summary for Early Maturing Corn Hybrids evaluated at Two North-Central Locations (Albany and Columbia) during 1997.

Albany
Planted: 13 May 1997
Harvested: 2 October 1997
Growing Season Rainfall: 16.0"

Columbia
Planted: 28 April 1997
Harvested: 18 September 1997
Growing Season Rainfall: 18.8"

Brand-Hybrid	Lodging (%)			Yield (Bu/Acre)		
	Albany	Columbia	Mean	Albany	Columbia	Mean
Early Full Season Hybrids (101-110 days) ⁺						
Dekalb DK595	0.4	0.0	0.2	172.7**	102.5*	137.6**
Terra TR1026	0.2	0.0	0.1	133.6	105.2**	119.4
Terra TR1087	0.2	14.0	7.1	148.4	86.3	117.4
Terra TR1066	1.1	0.0	0.6	137.4	91.9	114.6
Terra TR1106	0.4	0.0	0.2	121.6	78.1	99.8
Mid Full Season Hybrids (111-120 days) ⁺						
Pioneer Hybrid 3279 ^{##}	0.3	0.0	0.2	147.7	85.8	116.8
AVERAGE	0.4	2.3	1.3	143.6	91.6	117.6
L.S.D. AT .10	NS	2.1	0.8	19.2	7.7	10.7
C.V. %				9.4	6.0	9.2

^{##} Mid-full season check hybrid (111-120 day relative maturity).
⁺ Only hybrids classified as 100 days or less in maturity are considered "early maturing" in this test. Hybrids classified as 101-110 days and 111-120 days are considered early- and mid-full season hybrids, respectively.
^{**} Highest yielding hybrid in the test.
^{*} Hybrid which did not yield significantly less than the highest yielding hybrid in the test.
NS Not significant.

TABLE 26. Performance of Early Maturing Corn Hybrids evaluated near Garden City (Cass County) on the Bill Cook Farm during 1995-97.

Planted: 29 April 1997
 Harvested: 29 September 1997
 Planted Population: 30,400
 Row Spacing: 30 inches
 Soil Type: Monona Silt Loam
 Soil Test: pH=5.8, OM=2.4%, P=120, K=432

Fertilizer: N=185; P₂O₅=90; K₂O=120
 Herbicide: Harness Extra
 Insecticide: Lorsban
 Irrigation: 0.0 inches
 Previous Crop: Wheat

Growing Season Rainfall: Apr.=4.6, May=9.8, June=3.6, July=0.8, Aug.=4.0, TOTAL=22.8"

Brand-Hybrid	Plants	Moisture	Lodging	Yield			Means	
	(#/Acre)	(%)	(%)	(Bu/Acre)			2 Yr.	3 Yr.
	1997			1997	1996	1995		
Early Maturing (90-100 days) ⁺								
Dekalb DK527	25300	13.5	0.5	120.2	152.6	--	136.4	--
Pioneer Hybrid 3751	26200	13.0	0.5	117.4	--	75.7	--	--
Cargill 3797	25200	12.9	0.9	113.7	148.2	--	131.0	--
NC+ 1585	27600	13.1	2.0	106.3	--	--	--	--
Early Full Season (101-110 days) ⁺								
Terra TR1106	30400	16.7	1.9	141.6**	--	--	--	--
Dekalb DK595	23600	14.1	1.4	132.7*	--	--	--	--
Mycogen 2689	27700	15.3	1.2	131.9*	--	--	--	--
Pioneer Hybrid 3563	28800	14.2	1.6	131.5*	173.1*	78.1	152.3	127.6
Cargill 4111	27600	12.8	0.4	130.7*	--	--	--	--
Mycogen 2545	24300	14.1	2.2	129.6	--	--	--	--
Terra TR1026	26000	13.2	0.0	127.8	154.1	--	141.0	--
Cargill 4811	26400	14.0	1.0	127.5	--	--	--	--
Terra TR1087	28700	15.0	1.6	127.3	167.1*	--	147.2	--
Terra TR1066	25800	15.1	0.9	124.8	158.9	--	141.9	--
Dekalb DK586	24800	13.5	2.0	114.8	--	--	--	--
NC+ 3544	26400	14.4	0.4	108.0	165.8*	--	136.9	--
Mid Full Season (111-120 days) ⁺								
Pioneer Hybrid 3394	27300	14.0	1.7	137.0*	154.9	86.2	146.0	126.0
Pioneer Hybrid 3279 ^{##}	25400	15.2	0.0	128.7	--	--	--	--
TRIAL AVERAGE	26538	14.1	1.1	125.1	158.1	81.4	141.6	121.5
L.S.D. AT .10	NS	0.6	1.8	11.7	14.7	14.5		
C.V. %	11.3	3.2		6.8	6.9	13.1		

^{##} Mid-full season check hybrid (111-120 day relative maturity).
⁺ Only hybrids classified as 100 days or less in maturity are considered "early maturing" in this test. Hybrids classified as 101-110 days and 111-120 days are considered early- and mid-full season hybrids, respectively.
 -- Data not available.
^{**} Highest yielding hybrid in the test.
^{*} Hybrid which did not yield significantly less than the highest yielding hybrid in the test.
 NS Not significant.

TABLE 27. Performance of Early Maturing Corn Hybrids evaluated near Lamar (Barton County) on the Sherrell Bean Farm during 1995-97.

Planted: 3 April 1997
 Harvested: 12 September 1997
 Planted Population: 30,700
 Row Spacing: 30 inches
 Soil Type: Parsons Silt Loam
 Soil Test: pH=7.2, OM=1.8%, P=137, K=504

Fertilizer: N=200; P₂O₅=45; K₂O=70
 Herbicide: Bullet + Bladex, Buctril
 Insecticide: Lorsban
 Irrigation: 0.0 inches
 Previous Crop: Soybean

Growing Season Rainfall: Apr.=1.3, May=4.4, June=5.5, July=1.9, Aug.=3.2, TOTAL=16.3"

Brand-Hybrid	Plants	Moisture	Lodging	Yield			Means	
	(#/Acre)	(%)	(%)	1997	1996	1995	2 Yr.	3 Yr.
Early Maturing Hybrids (90-100 days) ⁺								
Pioneer Hybrid 3751	23800	12.0	0.0	132.3**	--	83.9	--	--
Dekalb DK527	21700	12.6	0.5	115.4	136.1	--	125.8	--
NC+ 1585	22900	12.4	1.6	100.0	--	--	--	--
Cargill 3797	23700	11.9	2.0	96.3	125.3	--	110.8	--
Early Full Season Hybrids (101-110 days) ⁺								
Mycogen 2545	22000	12.5	0.0	122.3*	--	--	--	--
Pioneer Hybrid 3563	26000	12.7	0.9	118.8	138.7	119.7*	128.8	125.7
Cargill 4111	21900	12.1	1.1	116.8	--	--	--	--
Terra TR1106	24900	15.2	0.5	115.6	--	--	--	--
Dekalb DK586	22900	12.5	0.5	114.3	--	--	--	--
Terra TR1087	22900	13.5	0.5	112.6	140.3	--	126.5	--
Cargill 4811	22100	12.0	0.5	108.7	--	--	--	--
Dekalb DK595	23500	12.8	1.0	107.7	--	--	--	--
Terra TR1026	24300	12.1	0.5	107.6	127.3	--	117.5	--
Mycogen 2689	20900	13.1	0.6	103.4	--	--	--	--
Terra TR1066	24200	12.7	1.1	90.7	126.9	--	108.8	--
NC+ 3544	22400	12.6	0.5	83.7	127.0	--	105.4	--
Mid Full Season Hybrids (111-120 days) ⁺								
Pioneer Hybrid 3394	26400	13.9	0.9	107.5	168.0**	120.4**	137.8	132.0
Pioneer Hybrid 3279 ^{##}	24100	16.5	2.1	112.3	--	--	--	--
TRIAL AVERAGE	23367	13.0	0.8	109.2	135.5	90.8	122.4	111.8
L.S.D. AT .10	2633	1.6	NS	13.3	23.7	21.2		
C.V. %	8.1	9.3		8.9	12.4	16.4		

^{##} Mid-full season check hybrid (111-120 day relative maturity).
⁺ Only hybrids classified as 100 days or less in maturity are considered "early maturing" in this test. Hybrids classified as 101-110 days and 111-120 days are considered early- and mid-full season hybrids, respectively.
 -- Data not available.
 ** Highest yielding hybrid in the test.
 * Hybrid which did not yield significantly less than the highest yielding hybrid in the test.
 NS Not significant.

TABLE 28. Performance of Early Maturing Corn Hybrids evaluated near Garden City (Cass County) on the Bill Cook Farm and near Lamar (Barton County) on the Sherrell Bean Farm during 1997.

Garden City
Planted: 29 April 1997
Harvested: 29 September 1997
Growing Season Rainfall: 22.8"

Lamar
Planted: 3 April 1997
Harvested: 12 September 1997
Growing Season Rainfall: 16.3"

Brand-Hybrid	Lodging (%)			Yield (Bu/Acre)		
	Garden City	Lamar	Mean	Garden City	Lamar	Mean
Early Maturing Hybrids (90-100 days) ⁺						
Pioneer Hybrid 3751	0.5	0.0	0.2	117.4	132.3**	124.8*
Dekalb DK527	0.5	0.5	0.5	120.2	115.4	117.8
Cargill 3797	0.9	2.0	1.4	113.7	96.3	105.0
NC+ 1585	2.0	1.6	1.8	106.3	100.0	103.2
Early Full Season Hybrids (101-110 days) ⁺						
Terra TR1106	1.9	0.5	1.2	141.6**	115.6	128.6**
Mycogen 2545	2.2	0.0	1.1	129.6	122.3*	126.0*
Pioneer Hybrid 3563	1.6	0.9	1.2	131.5*	118.8	125.2*
Cargill 4111	0.4	1.1	0.8	130.7*	116.8	123.8*
Dekalb DK595	1.4	1.0	1.2	132.7*	107.7	120.2*
Terra TR1087	1.6	0.5	1.0	127.3	112.6	120.0*
Cargill 4811	1.0	0.5	0.8	127.5	108.7	118.1
Terra TR1026	0.0	0.5	0.2	127.8	107.6	117.7
Mycogen 2689	1.2	0.6	0.9	131.9*	103.4	117.6
Dekalb DK586	2.0	0.5	1.2	114.8	114.3	114.6
Terra TR1066	0.9	1.1	1.0	124.8	90.7	107.8
NC+ 3544	0.4	0.5	0.4	108.0	83.7	95.8
Mid Full Season Hybrids (111-120 days) ⁺						
Pioneer Hybrid 3394	1.7	0.9	1.3	137.0*	107.5	122.2*
Pioneer Hybrid 3279##	0.0	2.1	1.0	128.7	112.3	120.5*
AVERAGE						
L.S.D. AT .10	1.1	0.8	1.0	125.1	109.2	117.2
C.V. %	1.8	NS	1.2	11.7	13.3	9.4
				6.8	8.9	8.3

Mid-full season check hybrid (111-120 day relative maturity).

+ Only hybrids classified as 100 days or less in maturity are considered "early maturing" in this test. Hybrids classified as 101-110 days and 111-120 days are considered early- and mid-full season hybrids, respectively.

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

NS Not significant.

TABLE 29. Performance of White Corn Hybrids evaluated by Extension near Fairfax (Atchison County) on the Graves Memorial Plot during 1995-97.

Planted: 5 May 1997
 Harvested: 30 September 1997
 Planted Population: 24,400
 Row Spacing: 30 inches
 Soil Type: Haynie Silt Loam
 Soil Test: pH=6.0, OM=3.0%, P=77, K=516

Fertilizer: N=180; P₂O₅=60; K₂O=50
 Herbicide: Dual,Bicep,Buctril
 Insecticide: Lorsban
 Irrigation: 0.0 inches
 Previous Crop: Soybean

Growing Season Rainfall: Apr.=4.6, May=3.3, June=2.5, July=4.2, Aug.=2.8 TOTAL=17.4"

Brand-Hybrid	Mat- urity Group	Plants (#/Acre)	Moisture (%)	Lodging (%)	Yield (Bu/Acre)			Means	
					1997	1996	1995	2 Yr.	3 Yr.
Zimmerman Z72W	2	18600	17.6	22.7	198.8**	199.6*	--	199.2	--
Wilson 1780W	2	17900	18.7	16.0	178.3	190.7	116.3	184.5	161.8
Pioneer Hybrid 32H39	2	20900	18.0	15.7	164.7	--	--	--	--
Wilson 1790W	2	22800	18.2	12.7	156.3	192.4*	130.3*	174.4	159.7
Wilson 1732W	2	20400	15.3	28.0	150.0	181.1	--	165.6	--
Wilson E9360	2	15300	18.3	12.0	144.7	--	--	--	--
Wilson E9352	2	18400	18.8	14.7	144.2	--	--	--	--
Hoegemeyer 1142W	3	14200	24.1	25.3	142.5	188.0	155.9*	165.2	162.1
Asgrow RX 816	2	20700	20.8	22.0	140.5	--	--	--	--
Cargill V448W	2	17200	20.1	32.7	140.4	--	129.6*	--	--
Hoegemeyer 1123W	2	19300	18.1	20.7	137.8	--	--	--	--
Wilson E1744	2	19700	18.2	14.7	137.3	--	--	--	--
Pioneer Hybrid 3203W	2	18600	20.9	16.7	134.6	186.2	--	160.4	--
Cargill V449W	2	21800	20.1	20.7	130.3	213.4*	123.0*	171.8	155.6
Hoegemeyer 1125W	2	20200	20.5	31.3	128.2	190.8	122.2*	159.5	147.1
Renze 814	2	14900	18.3	16.0	126.5	181.5	--	154.0	--
Cargill V453W	2	22800	18.8	16.7	123.8	208.9*	100.3	166.4	144.3
AgriPro AP 543W	1	17700	18.0	21.3	121.9	--	131.4*	--	--
Cargill V438W	2	20000	18.9	12.7	121.4	--	--	--	--
Wilson E5003	2	15600	19.7	18.7	120.9	--	--	--	--
Wilson 1789W	2	21600	20.2	15.3	120.2	187.9	--	154.0	--
Renze Ex815W	2	20200	25.3	22.7	120.1	--	--	--	--
Zimmerman Z62W	2	20200	16.5	12.7	118.0	209.7*	144.4*	163.8	157.4
Zimmerman Z73W	2	16700	18.4	26.0	101.6	170.7	--	136.2	--
TRIAL AVERAGE		18988	19.2	19.5	137.6	190.4	119.3	164.0	149.1
L.S.D. AT .10		4071	0.3	19.2	19.8	25.0	36.0		
C.V. %		15.5	0.9		10.6	11.6	22.2		

-- Data not available.

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

TABLE 30. Performance of Corn Hybrids evaluated near Slater (Saline County) on the Jim Klasing Farm during 1997.

Planted: 29 April 1997
 Harvested: 13 September 1997
 Planted Population: 24,400
 Row Spacing: 30 inches
 Soil Type: Macksburg Silt Loam
 Soil Test: pH=6.6, OM=3.2%, P=51, K=300

Fertilizer: N=170; P₂O₅=60; K₂O=100
 Herbicide: Guardsman + Bladex, Basagran
 Insecticide: Lorsban
 Irrigation: 0.0 inches
 Previous Crop: Soybeans

Growing Season Rainfall: Apr.=4.8, May=4.6, June=5.0, July=0.3, Aug.=3.4, TOTAL=18.1"

Brand-Hybrid	Mat- urity Group	Lodging (%)			Yield (Bu/Acre)		
		Till	NoTill	Mean	Till	NoTill	Mean
Mycogen 2787	2	2.1	0.0	1.0	156.1**	134.6*	145.4**
Pioneer Hybrid 3335	2	3.2	2.7	3.0	154.3*	128.8*	141.6*
Asgrow RX 760	2	2.7	2.3	2.5	139.3*	132.6*	136.0*
Golden Harvest H-2547	2	4.2	1.6	2.9	141.7*	129.2*	135.4*
Wilson 2330	2	0.0	1.6	0.8	130.6	135.7**	133.2*
Pioneer Hybrid 32K61	2	1.7	2.5	2.1	145.1*	120.4*	132.8*
Cargill 8311	2	0.5	1.1	0.8	140.7*	118.7*	129.7
AgriPro AP 9707	3	3.9	2.1	3.0	133.6*	124.7*	129.2
Garst 8342	3	2.5	1.1	1.8	138.5*	119.9*	129.2
Burrus BX86	2	2.3	1.5	1.9	127.2	126.9*	127.0
Terra TR1154	2	1.2	0.5	0.8	127.7	122.4*	125.0
Middlekoop 813	2	4.1	2.7	3.4	124.4	123.7*	124.0
Crow's 550	1	2.0	3.0	2.5	126.4	117.1*	121.8
Hubner H3615	2	3.1	1.6	2.4	124.5	118.1*	121.3
Kruger K-9819	2	1.3	0.5	0.9	127.8	114.4	121.1
Novartis Seeds N6800	3	1.7	0.5	1.1	124.3	115.8	120.0
Dekalb DK626	2	2.7	0.6	1.6	116.7	118.2*	117.4
Terra TR1026	2	1.7	1.7	1.7	122.2	111.2	116.7
Cargill 3797	1	2.6	2.1	2.4	114.6	118.7*	116.6
Patriot 7172	2	1.9	0.6	1.2	102.0	123.4*	112.7
Dekalb DK527	2	4.1	4.7	4.4	114.3	105.6	110.0
Triumph 2010	2	1.2	0.0	0.6	112.5	100.1	106.3
Lewis 6294	2	2.3	1.7	2.0	112.1	100.1	106.1
NC+ 3544	2	0.7	1.3	1.0	104.4	100.2	102.3
Pioneer Hybrid 3751	1	1.1	0.0	0.6	94.3	107.7	101.0
TRIAL AVERAGE		2.2	1.5	1.9	126.2	118.7	122.5
L.S.D. AT .10		3.0	3.0	2.1	19.2	19.2	13.6
C.V. %							11.7

** Highest yielding hybrid in the test.

* Hybrid which did not yield significantly less than the highest yielding hybrid in the test.

Note Tillage*Hybrid interaction was not significant.

TABLE 31. SOURCE OF COMMERCIAL SEED CORN ENTERED IN THE 1997 MISSOURI YIELD TRIALS.

BRAND	HYBRIDS ENTERED	FIRM AND ADDRESS
AgraTech	ATX700, ATX721, ATX770, X6714, X7772	AgraTech Seeds, Inc., 5559 N. 500 W., McCordsville, IN 46055 (800-382-7333)
AgriPro	AP 619, AP 9565, AP 9616, AP 9707	AgriPro Seeds, Inc., Rt. 2, Hwy 30 East, Ames, IA 50010 (515-232-0691)
AgriPro	AP 619, AP 543W, AP 9616, AP 9707, AP 9909	AgriPro Seed, Inc., 6075 Poplar Suite 435, Memphis, TN 38119 (901-756-8640)
Asgrow	RX670, RX730, RX760, RX813, RX816W, RX897, RX938, XP9292	Asgrow Seed Co., 2605 E. Kilgore Rd., Kalamazoo, MI 49002 (616-384-5596)
Bo-Jac	415, 544, 614, 629	Bo-Jac Seed Co., 245 1500th Ave., Mt. Pulaski, IL 62548 (800-397-2069)
Burrus	BX86, 442, 488, 511, 720	Burrus Bros. & Assoc. Growers, 826 Arenzville Rd., 62611 Arenzville, IL (217-997-5511)
Cargill	3797, 4111, 4811, 6888, 6997, 7770, 7997, 8011, 8311, 8327, V438W, V448W, V449W, V453W	Cargill Hybrid Seeds, Box 5645, Minneapolis, MN 55440 (612-742-6731)
Crow's	496, 550, 685	Crow's Hybrid Corn Co., Box 306, Milford, IL 60953 (815-889-4151)
Dekalb	DK527, DK586, DK595, DK618, DK626, DK641, DK642, DK658, DK668, DK683, DK687	Dekalb Genetics Corp., 3100 Sycamore Road, DeKalb, IL 60115 (815-756-7333)
Delta Genetics	DG 175	Delta Genetics, Inc., Box 572, Blytheville, AR 72316 (501-763-1547)
Fontanelle	5335, 5567, 5676, 5786	Fontanelle Hybrids, Rt. 1, Box 18, Nickerson, NE 68044 (402-721-1410)
Freedom	5555, 5680, 5695	Freedom Seed Co., US Rt 24 E. Box 710, Astoria, IL 61501 (309-759-4480)
Funks	DG5510A, DG5516,	Tri-State Delta Chem., Inc., Box 382550, 6800 Poplar Ave., Suite 100, Memphis, TN 38183 (901-755-7566)
Garst	8342, 8366, N5250	Garst Seeds Co., 2360 330th St., Slater, IA 50244 (515-685-5000)
Golden Harvest	H-2515, H-2547, H-2564, H-2581, H-2641	The J.C. Robinson Seed Co., 100 J.C. Robinson Blvd., Waterloo, NE 68069 (800-228-9906)
Hawkeye Hybrids	SX66, SX81	Hawkeye Hybrids Inc., 2165 Idaho Dr., Pella, IA 50219 (515-628-3827)
Hoegemeyer	1123W, 1125W, 1142W, 2647, 2666, 2682, 2693, 2730, 2652LL,	Hoegemeyer Hybrids, 1755 Hoegemeyer Rd., Hooper, NE 68031
Hubner	H3615, H3809	Hubner Seed Co., Inc., 10280 W. St. Rd 28, West Lebanon, IN 47991 (317-893-4428)
HyPerformer	HS 9843, HS 9502, HY 9646	Hyperperformer Seed Co., One Hy Crop Row, Memphis, TN 38120 (901-756-1771)
Kruger	K-9614A, K-9618+, K-9620, K-9715, K-9716, K-9716+, K-9716B, K-9816, K-9818, K-9818A, K-9818+, K-9819, K-9915	Kruger Seed Co., Hwy 20 E., Box A, Dike, IA 50624 (319-989-2414)
Lewis	3586, 5446, 5584, 6294, 8356	Lewis Hybrids, Inc., Box 38, Ursa, IL 62376 (217-964-2131)
LG Seeds	LG2579, LG2624, LG2707, LG2726	LG Seeds, Mt. Pleasant Service Center, Old Hwy 218N., Box 28 Mt. Pleasant, IA 52641 (800-397-5010)
Merschman	M-3117, M-3120, M-4109, M-5110, M-5113, M-5117, M-6114, M-6117, M-7115	Merschman Seed Co., 103 Ave. D., West Point, IA 52656 (319-837-6111)

TABLE 31. CONTINUED.

BRAND	HYBRIDS ENTERED	FIRM AND ADDRESS
Middlekoop	718, 813, 817, 915, 916, 1014	Middlekoop Seed Corn, Inc., 1637-155th St., Packwood, IA 52580 (319-695-3266)
Midland	96118A, 96117A	Midland Genetics Group, 1960 Kingman Rd., Ottawa, KS 66067 (913-242-3598)
M/W Genetics	G8452, G8699, G8511, G8771	Midwest Seed Genetics, Inc., 213 E. 6th St., Box 518, Carroll, IA 51401 (712-792-6691)
Mycogen	2545, 2689, 2725, 2787, 2815, 2828, 2888, 7250, 7660	Mycogen Seeds, Box 21428, St. Paul, MN 55121 (715-262-3223)
NC+	1585, 3544, 4880, 5007, 5445, 5697, 6387, 6959, 7237	NC+ Hybrids, 3820 N. 56th St., Box 4408, Lincoln, NE 68504 (402-467-2517)
Novartis	N6423, N6800, N7070, N7333, N7590, N69-R1, 5218X, 5221X	Novartis Seeds, 4874 East Ridge Rd., Columbia, MO 65202 (800-248-4767)
Ottilie	5550, 5460	Ottilie Hybrids, 1462 Sanford Ave., Marshalltown, IA 50158 (515-253-5561)
Patriot	5072, 5093, 5120, 6130, 6142, 6168, 7172, 7187, 7197, 8230, 8250	Patriot Seed Inc., 208 S. Worrell, Box 97, Bowen, IL 62316 (217-842-5612)
Pfister	2680, 3049, 3977	Pfister Hybrid Corn Co., Box 187, El Paso, IL 61738 (309-527-6000)
Pioneer Hybrid	3245IR, 3395IR	American Cyanamid, 916 Flicher D., Dyersburg, TN 38024 (901-286-2629)
Pioneer Hybrid	3163, 3223, 3245, 3260, 3279, 3335, 3394, 32K61	Pioneer Hi-Bred Int., Inc., 6767 Old Madison Pike #110, Huntsville, AL 35806 (205-971-0760)
Pioneer Hybrid	3203W, 3260, 3335, 3394, 3489, 3563, 3751, 32H39, 32K55, 32K61	Pioneer Hi-Bred Int., Inc., Box 1536, O'Fallon, IL 62269 (618-624-8222)
Producers	714, 729, 807	Producers Hybrids, Inc., PO Box C, Battle Creed, NE 68715 (402-675-2975)
Rainbow	3100, 3128, X1166, X1176	Rainbow Seed Co., 1816 Hwy. 163, Oskaloosa, IA 52577 (515-673-9471)
Renze	6349, 6386, 6397, 6416, 6506, 814W, Ex815W	Renze Hybrids, Inc., Rt 3, Box 235, Carroll, IA 51401 (712-669-3301)
Stauffer	2792, 2820	Stauffer Seeds, PO Box 68, Aurora, NE 68818 (402-694-4062)
Terra	TR702, TR1026, TR1066, TR1087, TR1106, TR1136, TR1136, TR1154, TR1157, TR1167, TR1176, TR1185	Terra Int., Inc., Box 6000, Sioux City, IA 51102 (712-233-3609)
Terral	TV2100, TV2140, TVX21370, TVX21570	Terral Seed Inc., Box 826, Lake Providence, LA 71254 (318-559-2840)
Triumph	1141, 1220, 1514, 1522, 2010	Triumph Seed Co., Inc., Box 1050, Ralls, TX 79357 (806-253-2584)
Vanderslice	OV 632, OV 762	Vanderslice Enterprises, RR #3, Box 194, Gallatin, MO 64640 (816-663-2946)
Wilson	1732W, 1780W, 1789W, 1790W, 1792, 1833, 2330, 2335, E1744, E5003, E9352, E9360, E975305, E975307, E945062	Wilson Seeds, Inc., Box 391, Harlan, IA 51537 (712-755-3841)
Zimmerman	Z62W, Z72W, Z73W	Zimmerman Hybrids, INC., 5147 W. Franklin Rd., Evansville IN 47712 (812-985-2449)



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