1967
Missouri Hybrid
Corn Yield Trials

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The 1967 estimated average corn yield for Missouri is 69 bushels per acre. The average yield of all hybrids testing at the seven locations where tests were successful was 103.0 bushels per acre. The test in District 2 (Spickard) was abandoned because of poor stand and water and weed damage. The District 6 test (Washington) was abandoned due to flooding. Yields ranged from 47.4 to 171.4 bushels per acre.

The growing season was marked by below normal temperatures and excessive rainfall during June north of the river. Rainfall was limiting in central western and southern areas of the state during late July and August. Dry periods defined as at least 15 consecutive days with less than 0.25 inch precipitation on any one day, were recorded in each district. The number of days with temperatures equalling or exceeding 90° varied from 9 to 28. There were no days with temperatures reaching or exceeding 100°.

Stalk lodging was moderate at all locations except for District 5 (Columbia) where average lodging exceeded 25 percent. Root lodging was important only in District 3 (Wayland) where excessive rains combined with high winds caused considerable root lodging (28.4% in the test planted at the normal population and 75.3% in the high population test).

Testing Procedures

Testing Areas:

The State was divided into 9 districts with one test site located in each. Figure 1 shows the districts and locations of testing fields. The 9 districts match the geographical area currently used for reporting the Missouri Farm Census.

Seed Source:

All producers and distributors of hybrid seed corn were eligible to enter hybrids in these tests. No limit was placed on the number of hybrids any one seed producer could enter and any hybrid could be entered in as many districts as desired. Fifteen pounds of processed seed for one district, or 1/2 bushel for more than one was supplied for each entry. Seed for the open-pedigree hybrids was furnished by the state agricultural experiment stations and/or by certified seed producers. In addition, Extension entries were included in some tests since some seed companies do not participate with voluntary fee-assessed entries and others do not include hybrids that are grown in Missouri. These hybrids were suggested by Extension personnel on the basis of extent of use and interest in the various areas of the state.

Type of Field Design:

The number of hybrids tested in each district ranged from 44 in District 8 to 84 in District 1. Each hybrid was planted in 4 plots at each testing location. Plots consisted of 2 rows of 5 hills and were located at random over the testing areas to minimize cultural and soil differences.

Stand:

All test plots except thick planting experiments were planted at the rate of 5 seeds per hill. Hills were thinned to 3 or 4 plants depending upon anticipated environmental conditions at a particular location. Thick planting tests (approximately 20,400

plants per acre) were conducted at 3 locations (Wayland, Washington, and Portageville) in addition to the regular tests. The stand percentages for each test were computed on the basis of the total plants present divided by the number required for a perfect stand.

Lodging:

A plant was classified as root-lodged if it leaned more than 30 degrees from the vertical through the first several internodes and stalk-lodged if it was broken below the ear. A plant that was both root and stalk-lodged was recorded in both categories. The percent was calculated on the total number of plants present.

Dropped Ears:

The total number of ears dropped by each hybrid was recorded at harvest. Dividing this number by the total number of plants present and multiplying by 100 gave the percent of ears dropped. It was assumed that each plant produced one ear.

Ear Height:

The ear-height grade was determined from averages of the 4 plots of a hybrid at a location. The grade consisted of the approximate number of feet from the ground level to the point of attachment of the upper ear.

Moisture:

The grain moisture of each entry was determined at harvest by removing 2 rows of kernels from each of 10 randomly selected ears in the first and fourth replication. Grain from each replication was thoroughly mixed and the moisture content was determined with a Steinlite moisture meter. The moisture percentage reported is the average of the 2 replications.

Yield:

The ear corn from each plot was hand harvested and weighed. Yield was determined on the basis of

shelled corn with a moisture content of 15.5 percent. Adjustments were made for missing hills, but not for other variations in stand. The reported yield for each location is the average yield of 4 plots after all adjustments were made.

1967 Results

Results are reported on a relative maturity group basis: Group 1, approximately 90-110 days; group 2, 110-120 days; group 3, 120-130 days; group 4, 130-140 days.

Results reported for each district are for tests conducted in 1967. Period-of-years summaries are also presented.

Period of Years Performance Records

A number of hybrids have been tested for periods of three or more years either in a single district or in groups of districts (regions). These performance records are presented in tables for the respective districts.

It should be emphasized that the results of tests for a period of more than one year are of greater value in selecting hybrids than the results from any single year. However, if one must rely on results from any one year, it is best to use the average performance from as many testing locations as possible in the area where the hybrid is to be grown.

Three-year summaries of test results for hybrids grown in all of the 9 districts are presented within the writeup for each district. Regional summaries are shown in Tables 10 to 12.

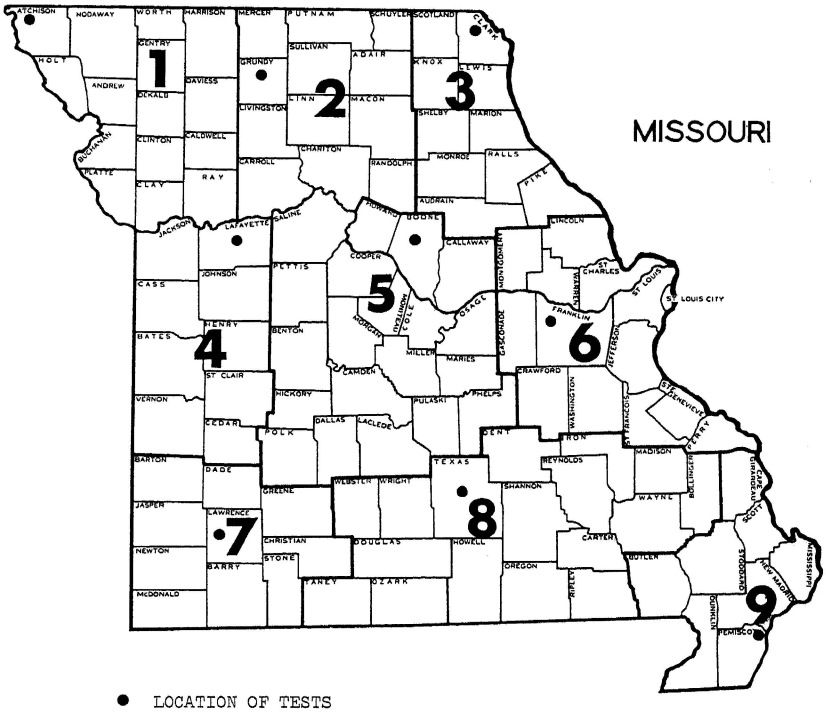
Pedigrees of open-pedigree hybrids tested in 1967 are listed in Table 13.

Numerous closed-pedigree hybrids have been tested during the period 1957 through 1967. The Missouri Agricultural Experiment Station does not

make specific recommendations for these hybrids, but it is suggested that farmers growing a new hybrid for the first time grow a small acreage to determine whether the hybrid is adapted before they plant a large acreage of it. This recommendation should be practiced for all new hybrids, whether of closed- or open-pedigree origin.

Table 14 gives the districts in which different open-pedigree hybrids were entered in 1967. Table 15 presents the same information for the closed-pedigree hybrids. Table 16 shows the seed sources of commercial hybrids.

FIGURE 1. MAP SHOWING THE 9 DISTRICTS AND THE HYBRID CORN TESTING LOCATIONS.



● LOCATION OF TESTS

Table A. Total rainfall, number of days with rain, and dry periods from May 1 to September 15 at each testing location.

District	Testing Location	Total Rainfall	No. of days with rain						Dry Periods*
			May	June	July	Aug.	Sept. 1-15	Total	
1	Tarkio	17.90	7	15	6	6	3	37	(5/6-5/27)(7/12-7/26)(8/9-8/31)
2	Spickard	21.43	14	16	7	3	4	44	(5/7-5/27)(8/17-9/12)
3	Wayland	15.52	8	16	5	4	3	36	(5/12-5/27)(7/3-7/23)(8/10-8/29)(8/31-9/14)
4	Higginsville	20.50	12	15	4	2	3	36	(5/8-5/28)(6/29-7/24)(8/10-9/13)
5	Columbia	12.08	8	7	6	4	3	28	(5/18-6/2)(6/27-7/14)(8/11-9/2)
6	Washington	19.59	12	9	10	4	3	37	(7/29-8/18)(8/31-9/14)
7	Mt. Vernon	18.16	8	11	11	7	3	40	(7/29-8/18)(8/24-9/15)
8	Summersville	11.13	9	7	8	2	5	31	(7/6-7/24)(8/2-9/6)
9	Portageville	23.55	12	10	9	8	2	41	(5/8-5/29)(7/29-8/17)(8/19-9/14)

*A dry period is 15 or more consecutive days with less than 0.25 inch precipitation in any one day. All dates listed are inclusive. The beginning date is the day after rainfall of 0.25 inches or more. The ending date is the day before a 0.25 inch or more rainfall.

Table B. Cooperators, average temperature, departure from normal, the number of days with temperatures 90° or more, and 100° or more from May 1 to September 15 at each testing location.

District	Location	Cooperator	Average Temperature	Degrees F. From Normal	Number of Days Temperature Above 90°	Number of Days Temperature Above 100°
1	Tarkio	John Jones	68.8	-3.1	26	0
2	Spickard	Univ. of Mo. N. Mo. Center	68.0	-5.3	17	0
3	Wayland	D. S. Shrauner	67.2	-5.1	18	0
4	Higginsville	W. P. Moore	70.0	-4.9	24	0
5	Columbia	Univ. of Mo. Bradford Farm	70.8	-2.5	16	0
6	Washington	James Koelling	69.5	-4.1	18	0
7	Mt. Vernon	Univ. of Mo. S.W. Mo. Center	68.9	-4.8	9	0
8	Summersville	Howard Wuertley	69.8	-3.5	20	0
9	Portageville	Univ. of Mo. Delta Center	72.3	-4.5	28	0

DISTRICT 1

Data for District 1 are presented in Tables 1A through 1C.

The average yield from a harvest stand of 14,750 plants per acre was 124.1 bushels. The 84 hybrids tested in this district ranged in yield from 88.9 to 171.4 bushels per acre.

The growing season was marked by temperatures that averaged 3.1 degrees below normal. No temperatures of 100° or more were recorded. Precipitation was 17.90 inches from May 1 to September 15. Three dry periods occurred in 1967: May 6 to May 27, July 12 to July 26, and August 9 to August 31.

The control of insects, diseases, and weeds was very good in this test; thus, they did not have a detrimental influence on yield.

Table 1A. Corn production data for 1965, 1966, and 1967, and for the 10-year period 1957-1966 in District 1.

Period	Farmland Planted to Corn %	Total Corn Acreage	Avg. Acre Yield (bu)	Missouri Corn Yield Tests
1967	16.1	700,000*	66*	124.1
1966	14.7	636,000	70	100.6
1965	14.8	642,000	74	134.1
1957-1966 average	16.5	708,000	61	

*Preliminary estimate as of December 1, 1967.

TABLE 1B. 1967 PERFORMANCE RECORD FOR HYBRIDS TESTED IN DISTRICT 1, NEAR TARKIO, MISSOURI IN ATCHISON COUNTY. PLANTED MAY 16, 1967. HARVESTED NOVEMBER 27, 1967 (EXP.1).

HYBRID	ACRE YIELD BU.	MOISTURE IN GRAIN %	STAND %	LODGED PLANTS ROOT %	LODGED PLANTS STALK %	DROPPED EARS %	EAR HEIGHT GRADE
	GROUP I MATURITY						
ASGROW A90B	126.2	17.1	93	0.0	3.4	0.0	3.5
ASGROW ASC95	134.6	21.0	89	0.0	0.7	0.7	4.0
ASGROW ATC106	136.9	19.1	94	0.0	6.0	2.0	4.1
CORN KING 1023	105.8	18.7	88	0.7	1.4	0.0	3.5
MAYGOLD F35	128.5	17.6	98	0.0	0.0	0.0	3.3
MCCURDY 3X6	132.0	17.0	89	0.0	2.1	0.7	3.5
MFA B6	113.0	17.2	88	0.0	2.9	0.0	3.0
MFA B7	119.2	18.2	98	0.0	0.6	0.0	3.1
MFA 2151	111.5	18.1	89	0.0	2.8	0.0	3.5
NORTHRUP-KING KT623A	121.8	17.6	96	0.0	1.3	0.7	3.6
NORTHRUP-KING KT657	122.5	19.5	93	0.7	10.1	2.7	3.8
NORTHRUP-KING PX63	121.9	23.5	99	0.0	1.3	1.3	3.3
NORTHRUP-KING PX610	127.1	17.2	98	0.0	2.5	0.0	3.5
PIONEER 3420	129.4	16.7	95	0.7	1.3	0.0	3.8
PIONEER 3505	130.2	16.8	98	0.0	1.3	0.0	3.5
PIONEER X3329(3390)**	143.6	16.8	98	1.3	0.6	0.0	3.6
STULL 337Y	118.5	19.9	96	0.0	0.0	0.0	3.0
T E HARVESTMASTER	115.6	17.7	94	0.0	2.7	1.3	3.1
	GROUP II MATURITY						
ASGROW A150	130.8	18.1	73	0.0	6.0	0.0	4.0
BO-JAC X7	134.4	18.4	99	0.0	3.8	1.3	3.6
BO-JAC X8	141.1	21.6	97	0.0	0.0	0.6	3.6
CARGILL 695	108.5	17.0	96	0.0	0.0	0.0	3.1
DEKALB 848	118.7	20.4	97	0.0	0.6	0.6	3.4
EXCEL 769 EXP	129.4	17.6	94	0.0	2.6	0.0	3.8
EXCEL 1310 EXP	143.0	19.2	91	0.0	11.0	0.7	4.1
MAYGOLD 2036	136.8	19.5	99	0.0	0.6	0.0	3.5
MAYGOLD 29X	133.5	19.8	92	0.0	4.1	0.0	3.9
MAYGOLD 58X	122.2	18.8	98	0.0	3.8	0.6	3.5
MAYGOLD EXP9	136.9	19.1	95	0.0	5.3	0.0	3.8
MCCURDY H5-61	122.5	20.1	96	0.0	2.0	1.3	3.8
MCCURDY HP5	121.8	17.1	99	0.0	3.8	0.0	3.4
NORTHRUP KING KT 626	118.1	18.6	98	0.0	1.3	2.5	3.9
NORTHRUP-KING PX616	131.6	18.1	92	0.7	0.7	0.0	3.6
NORTHRUP-KING PX674	120.5	20.4	92	0.0	3.4	4.8	3.8
NORTHRUP-KING PX676	120.8	19.9	98	0.0	0.6	1.9	3.4
PIONEER 321	133.6	19.2	99	0.0	1.9	0.6	3.6
PIONEER 3300	132.0	21.1	97	0.0	5.2	0.0	3.8
PIONEER 3302	131.8	18.9	99	0.0	1.9	0.6	3.5
PIONEER 3306	139.6	17.8	97	0.0	1.9	0.0	4.0
PIONEER 3307	129.4	19.7	96	0.0	1.3	0.0	3.6
PIONEER X6370 (3199)**	171.4	18.1	99	0.0	3.2	0.0	4.4
STULL 500 WB*	113.6	22.2	95	0.0	13.8	3.3	3.8
STULL 800 WSX*	103.5	26.7	83	0.0	0.8	0.0	4.3
STULL 807YBSX	138.5	20.1	96	0.0	3.9	0.0	3.6
STULL 807 YBSX	133.6	20.9	94	0.0	4.0	0.7	3.8
STULL 807 YSX	131.4	21.6	94	0.0	2.0	0.0	3.6

TABLE 1B CONTINUED

HYBRID	ACRE YIELD BU.	MOISTURE IN GRAIN %	STAND %	LODGED PLANTS ROOT %	LODGED PLANTS STALK %	DROPPED EARS %	EAR HEIGHT GRADE
SUPR MAIZ 70	117.1	21.1	88	0.0	4.3	0.7	3.6
SUPR MAIZ 77	121.1	21.8	95	0.0	6.6	0.0	4.1
T E E20YA	122.6	19.8	96	0.0	5.9	0.0	3.6
T E BONUSMAKER S	113.3	17.4	92	0.0	0.0	0.0	3.0
T E CROPMASTER	128.3	20.2	94	0.7	6.6	2.0	4.1
UNITED-HAGIE IXL8	119.0	23.3	89	0.0	2.8	0.0	3.8
UNITED-HAGIE 5S570	135.0	27.9	98	0.0	3.2	0.0	3.8
UNITED-HAGIE 5S701	115.6	22.0	97	0.0	1.3	0.6	4.0
UNITED-HAGIE 6S540	140.3	21.3	94	0.0	6.0	0.7	3.5
UNITED-HAGIE 6S550	131.1	25.6	96	0.0	3.9	0.0	3.6
UNITED-HAGIE 6S560	124.6	21.2	95	0.7	0.0	0.0	3.5
KAN 1639	116.1	18.1	87	3.6	8.6	2.9	3.8
MO SX1	129.9	27.4	99	0.0	2.5	0.6	3.8
MO SX3	106.3	19.3	89	2.1	2.8	0.0	3.1
MO SX14W*	125.7	19.1	86	0.0	10.2	0.7	3.8
MO SX15W*	97.2	26.1	89	0.0	0.0	0.0	4.1
MO SX16W*	88.9	22.7	98	0.0	0.0	7.0	4.3
MO 63	127.4	18.6	96	0.0	2.6	0.0	3.8
MO 63A	123.1	19.6	98	0.0	0.6	1.9	3.6
MO 64	131.6	20.0	91	1.4	3.4	1.4	3.8
MO 65-2	129.3	20.2	98	0.0	1.3	0.6	4.0
MO 880	121.6	20.1	94	1.3	6.7	0.0	3.9
MO 881	116.8	20.2	88	0.0	7.1	0.7	4.1
MO 1023	118.8	21.5	94	0.0	1.3	1.3	3.5
U S 13	112.9	18.0	80	0.0	11.7	1.6	4.3
GROUP III MATURITY							
EXCEL 7907*EXP	90.6	29.6	95	0.0	5.3	1.3	4.3
PAG 399	128.7	17.4	89	0.0	0.7	0.0	3.5
PAG SX29	136.2	18.8	98	0.6	1.3	3.2	4.0
PAG SX99	141.1	22.9	94	0.0	4.0	0.0	4.3
PIONEER 3171	128.2	22.1	96	0.0	1.3	0.6	4.1
MO SX10	139.8	19.8	98	0.0	1.9	0.0	4.3
MO 476W*	124.1	23.2	96	0.0	17.0	2.0	4.1
MO 62-10	120.7	22.7	81	3.1	10.1	0.8	4.3
MO 64-30W*	115.5	20.2	92	0.0	6.1	1.4	4.1
MO 64-32W*	115.0	19.8	94	0.7	17.9	6.0	4.4
U S 523W*	99.7	24.0	93	0.0	7.4	5.4	3.9
U S 523WA*	99.3	25.3	93	0.0	13.4	7.4	4.4
U S 523WB*	101.3	25.9	96	0.0	7.1	5.8	4.5
MEAN	124.1	20.3	94	0.2	3.9	1.0	3.8

Differences in yield between any two hybrids of less than 13.8 bushels are not considered significant.
*White hybrid
**Permanent number designations

Table 1C. Summary of average performance of hybrids tested in District 1 for the three-year period 1965-1967.

Hybrid	Acre Yield (bu.)	% Lodging	
		Root	Stalk
Group I Maturity			
Northrup-King KT 623A	118.1	0.0	15.6
Northrup-King KT 657	125.5	0.2	14.0
Pioneer 3420	123.4	0.2	6.5
Group II Maturity			
Maygold 2036	131.5	0.0	8.7
Pioneer 321	132.5	0.0	13.0
Pioneer 3300	130.3	0.0	8.4
Pioneer 3306	136.9	0.0	10.8
Pioneer 3307	126.7	0.0	9.7
Kansas 1639	107.7	1.2	20.7
Mo SX1	125.9	0.0	2.8
Mo SX3	119.9	0.7	9.5
Mo SX10	127.8	0.0	9.7
Mo 63	117.5	0.0	10.7
Mo 880	114.0	0.4	10.6
Mo 1023	121.6	0.0	8.6
US 13	110.4	0.0	28.1
Group III Maturity			
Pioneer 3171	116.9	0.0	9.8
Mo 476W*	123.2	0.0	15.3
US 523W*	108.0	0.0	12.7
US 523WA*	112.5	2.0	18.7
US 523WB*	108.9	1.3	17.4
Mean	120.9	0.3	12.4

*White hybrid.

DISTRICT 2

The test at this location was abandoned due to poor stand, excessive weed infestation, and water damage.

Data on corn production in this district is given in Table 2A. Period of years information is presented in Table 2B.

Table 2A. Corn production data for 1965, 1966, and 1967, and for the 10-year period 1957-1966 in District 2.

Period	Farmland Planted to Corn %	Total Corn Acreage	Avg. Acre Yield (bu)	Missouri Corn Yield Tests
1967	9.2*	358,000*	57*	-----**
1966	10.2	398,000	66	132.5
1965	11.1	414,000	76	105.7
1957-1966 average	11.7	456,000	60	

*Preliminary estimates as of December 1, 1967.
**No test in 1967.

Table 2B. Summary of average performance of hybrids tested in District 2 for the three-year period 1964-1966.

Hybrid	Acre Yield (bu.)	% Lodging Root	% Lodging Stalk
Group I Maturity			
Pioneer 3284	113.0	0.3	13.1
Pioneer 3420	109.1	0.0	14.8
Dekalb XL362	108.9	0.0	18.5
Pioneer 3268	101.5	0.0	11.7
AES 704	98.8	0.0	7.3
Iowa 4376	97.4	0.0	20.9
Group II Maturity			
Mo SX4	126.0	0.0	7.4
Mo 64	121.0	0.7	14.5
Maygold 2036	117.4	0.0	8.8
Maygold L41	116.6	0.0	13.0
Mo SX1	116.4	1.1	13.4
Mo SX3	115.1	3.0	16.0
Northrup-King KT626	114.9	0.0	8.3
Pioneer 321	114.9	2.8	20.8
Mo 1034	114.0	0.0	9.8
Mo 63	112.8	1.3	10.0
MFA 3232	112.8	0.0	11.6
Mo 447W*	112.3	0.0	23.9
MFA K6	112.2	0.0	13.4
Mo SX2	112.1	0.0	24.7
Mo 63-29	110.9	2.2	11.8
Mo 1023	110.6	0.0	11.0
Mo 1007	109.5	0.0	9.1
Mo 478W*	107.6	0.3	22.6
Mo 880	106.0	0.0	13.2
Mo 843	105.7	0.0	27.7
Kansas 1639	102.7	0.0	17.9
US 13	96.8	0.0	36.4
Group III Maturity			
US 523W*	105.0	2.0	25.4
US 523WA*	101.2	1.6	29.1
Mean	110.1	0.5	16.2

*White Hybrid

DISTRICT 3

Data for District 3 are presented in Tables 3A through 3D.

Two population rates were tested. Table 3B is data from the regular test which had a planned stand of 17,376. Actual count was 16,680 producing an average of 131.1 bushels per acre. Table 3D is data from the high population test. An average yield of 124.0 bushels per acre was harvested from a stand of 21,684 plants per acre. A perfect stand would have been 22,588 plants.

This district experienced four dry periods, but they evidently were not at a critical time for corn production. Total precipitation from May 1 through September 15 was 15.52 inches. There were no days where temperatures reached 100° or more, and the average temperature was 5.1° below normal.

Stalk lodging was moderate, while root lodging was high. The regular test had 28.4% root lodging and the high-population test lodging was 75.3%. However, this did not seriously affect yields. There were no additional environmental hazards which were not controlled. Weeds were not a problem.

Table 3A. Corn production data for 1965, 1966, and 1967, and for the 10-year period 1957-1966 in District 3.

Period	Farmland Planted to Corn %	Total Corn Acreage	Avg. Acre Yield (bu)	Missouri Corn Yield Tests
1967	14.3*	444,000*	75*	131.1
1966	13.6	423,000	65	114.7
1965	14.8	459,000	77	142.0
1957-1966 average	15.0	467,000	59	

*Preliminary estimates as of December 1, 1967.

TABLE 3B. 1967 PERFORMANCE RECORD FOR HYBRIDS TESTED IN DISTRICT 3, NEAR WAYLAND, MISSOURI IN CLARK COUNTY. PLANTED MAY 23, 1967. HARVESTED NOVEMBER 20, 1967. (EXP. 3).

HYBRID	ACRE YIELD BU.	MOISTURE IN GRAIN %	STAND %	LODGED PLANTS ROOT %	LODGED PLANTS STALK %	DROPPED EARS %	EAR HEIGHT GRADE
GROUP I MATURITY							
ASGROW A90B	144.4	17.7	99	12.7	0.6	0.0	4.1
ASGROW ASC95	139.5	22.0	95	21.7	6.6	0.0	4.0
ASGROW ATC106	140.0	22.6	98	20.5	0.6	1.9	4.4
MCCURDY 3X6	141.6	20.2	98	25.0	3.2	0.0	3.6
MFA B6	122.1	20.2	94	17.2	2.6	0.0	3.6
MFA B7	131.9	21.4	95	19.1	0.7	0.0	3.8
MFA 2151	124.7	21.3	93	16.2	0.0	0.0	3.8
NORTHRUP-KING PX610	136.0	20.2	98	10.9	0.6	0.0	3.5
PIONEER 3420	139.3	17.4	97	29.0	0.0	0.6	4.1
PIONEER 3505	151.9	18.3	98	2.6	0.6	0.0	3.9
PIONEER X3329 (3390)**	146.7	19.0	97	24.5	0.6	0.0	3.9
S C 5900 (Ed. J. Funk)	126.8	22.0	93	10.8	3.4	0.0	3.6
S C 8535 (Ed. J. Funk)	133.9	19.3	98	21.8	0.6	0.6	4.0
STULL 337Y	133.9	23.0	98	12.1	0.0	0.0	3.4
STULL 807YBSX	153.6	22.8	96	18.3	0.7	0.0	4.0
STULL 807YBSX	159.6	23.0	96	20.8	0.6	0.0	3.6
SUPR MAIZ M539	105.4	22.2	97	60.6	2.6	0.6	3.8
T E HARVESTMASTER	104.1	19.0	98	54.5	1.3	0.0	3.5
GROUP II MATURITY							
ASGROW A150	131.1	20.5	94	18.7	2.0	0.0	4.4
BO-JAC X7	147.0	19.7	99	10.1	1.9	0.0	3.8
BO-JAC X8	138.2	23.6	99	10.8	0.6	0.6	3.9
CARGILL 695	119.8	17.7	95	12.5	1.3	2.0	3.5
EXCEL 769 EXP	135.3	20.8	98	32.5	1.3	0.6	4.0
EXCEL 1310 EXP	145.0	22.8	98	9.0	0.6	1.3	4.3
IA-MO SX-17	154.0	22.9	98	14.0	0.6	0.0	4.0
MAYGOLD 2036	150.0	20.9	99	22.6	0.6	0.0	3.8
MCALLISTER SX-6509	143.9	20.4	88	9.3	0.7	0.0	3.9
MCALLISTER SX-6584	158.1	22.6	98	10.3	1.3	1.3	4.0
MCALLISTER 13A	142.0	20.9	99	40.9	1.3	0.0	3.6
MCCURDY H5-61	142.9	20.5	99	24.1	0.6	0.6	3.8
MCCURDY HP5	133.8	20.2	98	4.5	1.9	0.0	3.9
MORTON MXL 57	147.9	23.0	100	0.0	0.6	1.9	3.8
MORTON MXL 79	141.0	19.4	98	19.1	0.0	0.6	4.1
NORTHRUP-KING KT625	119.7	20.9	99	43.7	0.0	0.0	4.1
NORTHRUP-KING PX616	130.8	20.9	95	18.4	1.3	0.7	3.9
NORTHRUP-KING PX674	130.3	22.9	98	22.9	1.9	1.9	3.6
NORTHRUP-KING PX676	131.1	20.8	99	55.1	0.0	0.0	4.1
PIONEER 321	140.5	21.1	96	13.1	5.2	0.7	3.6
PIONEER 3300	152.2	22.1	97	23.2	0.0	0.0	4.0
PIONEER 3302	125.4	22.4	97	21.3	0.0	0.0	3.9
PIONEER 3306	123.3	22.2	97	19.4	0.0	0.0	4.3
PIONEER 3307	145.6	21.8	97	18.7	1.9	0.0	4.1
STULL 807YSX	148.2	24.0	96	22.2	1.3	0.0	4.0

TABLE 3B CONTINUED

HYBRID	ACRE YIELD BU.	MOISTURE IN GRAIN %	STAND %	LODGED PLANTS ROOT %	LODGED PLANTS STALK %	DROPPED EARS %	EAR HEIGHT GRADE
SUPR MAIZ 6	147.9	21.8	96	5.2	3.3	0.7	3.8
SUPR MAIZ 70	123.2	23.1	99	23.9	1.9	0.6	3.9
T E E20YA	141.7	20.9	96	7.1	3.9	0.6	3.9
T E BONUSMAKER S	143.5	19.3	96	9.7	0.6	1.3	3.3
T E CROPMASTER	138.1	21.6	96	19.5	2.6	1.3	4.6
KAN 1639	132.4	20.0	94	7.9	6.6	0.7	4.1
MO SX1	84.0	32.0	99	79.9	0.0	2.5	3.9
MO SX3	117.2	19.8	96	2.6	3.2	0.0	3.9
MO SX14W*	119.3	22.8	96	73.9	0.0	0.0	4.1
MO SX15W*	112.0	26.2	83	53.8	1.5	0.0	4.3
MO SX16W*	119.3	29.4	96	41.8	0.0	1.3	4.4
MO 63	112.6	21.2	93	37.2	4.7	0.0	3.9
MO 63A	121.4	20.7	90	23.6	4.2	0.0	4.1
MO 64	123.9	23.0	96	66.7	1.3	0.0	3.9
MO 65-2	121.3	25.3	95	19.1	0.7	0.0	3.6
MO 880	119.9	19.9	98	62.4	1.9	0.0	4.0
MO 881	80.6	24.9	87	76.3	2.9	0.0	4.0
MO 1023	121.9	22.0	98	53.5	0.0	2.5	4.1
U S 13	139.1	19.4	97	19.4	11.0	1.3	4.5
GROUP III MATURITY							
PAG SX29	160.6	19.4	96	8.5	0.7	0.0	4.3
PIONEER 3171	124.5	23.2	99	45.6	3.8	0.6	4.1
MO SX10	131.6	23.3	95	52.6	2.0	0.0	4.0
MO 476W*	136.1	21.6	95	59.2	3.9	0.0	4.4
MO 62-10	92.3	27.1	98	63.5	2.6	0.0	4.1
MO 64-30W*	133.1	20.6	96	31.4	5.2	1.3	4.0
MO 64-32W*	105.5	21.0	99	52.2	0.6	1.3	4.4
U S 523 W*	103.5	22.9	97	69.0	0.6	0.6	4.3
U S 523 WA*	113.3	25.9	94	41.1	2.0	2.0	4.4
U S 523 WB*	106.0	27.2	96	41.6	3.2	0.6	4.9
MEAN	131.1	21.8	96	28.4	1.8	0.5	4.0

Differences in yield between any two hybrids of less than 17.4 bushels are not considered significant.
*White hybrid
**Permanent number designations

Table 3C. Summary of average performance of hybrids tested in District 3 for the three-year period 1965-1967.

Hybrid	Acre Yield (bu.)	% Lodging	
		Root	Stalk
Group I Maturity			
Pioneer 3420	129.6	9.7	3.9
Group II Maturity			
Pioneer 321	140.2	5.2	7.7
Pioneer 3306	144.2	7.4	1.8
Pioneer 3307	137.8	7.8	9.3
Kansas 1639	123.9	3.1	16.4
Mo SX1	105.7	29.9	3.1
Mo SX3	128.6	1.6	7.4
Mo 63	124.6	12.4	8.9
Mo 1023	127.1	18.5	3.4
US 13	129.3	6.5	18.7
Group III Maturity			
Mo 476W*	128.5	22.1	14.4
US 523W*	125.9	25.2	10.1
US 523WA*	125.3	14.9	13.9
US 523WB*	119.7	14.6	17.2
Mean	127.9	12.8	9.7

*White hybrid.

TABLE 3D. 1967 PERFORMANCE RECORD FOR HYBRIDS TESTED AT A HIGH PLANTING RATE NEAR WAYLAND, MISSOURI IN CLARK COUNTY. PLANTED MAY 23, 1967. HARVESTED NOVEMBER 20, 1967. AVERAGE PLANT POPULATION WAS 21,684 AT HARVEST (EXP.10).

HYBRID	ACRE YIELD BU.	MOISTURE IN GRAIN %	STAND %	LODGED PLANTS ROOT %	LODGED PLANTS STALK %	DROPPED EARS %	EAR HEIGHT GRADE
GROUP I MATURITY							
ASGROW A90B	129.9	17.2	95	60.9	3.0	0.5	3.9
ASGROW ASC95	129.1	22.1	97	83.7	1.0	0.0	4.1
ASGROW ATC106	163.0	21.7	97	49.5	1.0	0.5	4.0
MCCURDY 3X6	131.9	18.9	94	80.1	3.1	2.0	3.6
MFA B6	114.2	19.8	91	82.5	1.6	0.0	3.6
MFA B7	134.8	21.2	93	69.4	1.0	0.0	3.9
MFA 2151	125.0	19.6	93	60.3	11.9	1.5	3.6
NORTHRUP-KING PX610	132.5	19.2	97	65.7	1.5	1.5	3.9
PIONEER 3420	148.7	17.2	98	41.2	1.0	0.0	3.6
PIONEER 3505	134.3	18.8	97	46.3	1.5	0.0	3.8
PIONEER X3329(3390)**	147.3	17.7	99	69.9	1.0	0.0	3.9
STULL 337Y	126.6	22.0	96	80.4	1.5	0.0	3.1
STULL 807 YBSX	131.9	23.7	97	77.6	0.5	0.5	3.6
T E HARVESTMASTER	111.1	17.6	97	79.7	1.0	0.5	3.6
GROUP II MATURITY							
ASGROW A150	118.1	20.3	88	79.9	1.1	0.0	4.3
BO JAC X7	134.0	20.1	96	68.8	4.5	1.0	3.6
BO-JAC X8	144.2	20.5	97	50.0	2.0	0.5	3.8
CARGILL 695	119.9	19.2	99	77.1	0.0	0.5	3.5
EXCEL 769 EXP	116.8	20.7	100	90.0	1.4	0.9	3.9
EXCEL 1310 EXP	125.0	22.5	99	56.6	3.4	1.5	4.1
MAYGOLD 2036	111.7	22.7	97	96.5	0.5	0.0	3.6
MCCURDY H5-61	130.7	21.9	95	55.8	4.1	1.0	3.9
MCCURDY HP5	134.6	18.7	97	58.2	2.5	2.0	3.5
NORTHRUP-KING KT626	107.8	20.1	91	85.3	0.5	3.2	4.0
NORTHRUP-KING PX616	138.8	20.4	99	71.8	1.5	1.9	3.8
NORTHRUP-KING PX674	113.0	24.7	98	78.4	2.0	1.0	4.0
NORTHRUP-KING PX676	135.4	19.9	100	90.3	0.0	0.0	4.1
PIONEER 321	140.4	21.0	97	75.2	1.5	0.5	3.6
PIONEER 3300	138.3	22.8	95	80.2	1.0	0.5	3.6
PIONEER 3302	143.6	20.7	96	86.5	2.5	0.0	3.8
PIONEER 3306	153.4	18.1	92	68.1	2.1	0.0	3.9
PIONEER 3307	126.1	23.2	92	88.0	2.1	0.5	4.0
SUPR MAIZ 70	114.6	23.2	97	84.7	1.0	1.5	3.8
T E E20YA	121.1	23.1	95	79.2	2.0	2.5	4.0
T E BONUSMAKER S	123.6	19.7	94	85.1	1.0	0.0	3.4
T E CROPMASTER	114.9	22.4	100	87.4	0.0	0.0	4.4
MO SX1	69.2	30.4	99	95.1	0.0	0.5	3.9
MO SX14W*	87.6	25.0	93	96.4	0.0	0.5	4.0
MO SX15W*	100.8	27.1	87	88.3	2.8	0.6	4.5
MO SX16W*	88.1	28.0	95	84.8	0.0	0.0	4.1
MO 65-2	99.6	23.4	99	83.9	5.4	0.0	3.9
U S 13	114.9	19.6	99	75.2	1.5	0.5	4.8

TABLE 3D CONTINUED.

HYBRID	ACRE YIELD BU.	MOISTURE IN GRAIN %	STAND %	LODGED PLANTS ROOT %	LODGED PLANTS STALK %	DROPPED EARS %	EAR HEIGHT GRADE
	GROUP III MATURITY						
PAG 399	126.9	19.3	98	78.4	0.5	1.0	4.1
PAG SX29	150.4	20.5	98	52.7	1.0	0.0	4.1
PIONEER 3171	119.8	24.4	95	62.1	4.0	1.0	4.1
MO 476W*	108.2	23.1	92	96.4	0.0	0.5	4.3
MO 64-30W*	104.4	20.2	97	86.6	0.5	1.0	4.0
MO 64-32W*	113.5	21.9	94	76.0	3.1	3.1	4.6
MEAN	124.0	21.4	96	75.3	1.8	0.7	3.9

Differences in yield between any two hybrids of less than 20.0 bushels are not considered significant.
*White hybrid
**Permanent number designations

Table 3E. Summary of acre yield for hybrids tested in District 3 under high populations for the period 1965-1967.

Hybrid	Yield, Bushels Per Acre 2-Year Avg.	3-Year Avg.
Group I Maturity		
Asgrow ASC95	115.6	--
Dekalb XL361	122.2	--
Dekalb XL362	122.4	--
Pioneer 3420	131.6	--
Pioneer 3505	126.8	--
Stull 337Y	117.2	--
T.E. Harvestmaster**	105.4	--
Group II Maturity		
Bo-Jac X7	129.2	--
Maygold 2036	108.0	--
MFA 2222	122.7	--
MFA 3232	119.4	--
NK-PX674**	109.8	--
NK-PX676**	118.9	--
NK-KT626**	--	120.9
Pioneer 321	--	132.3
Pioneer 3302	131.6	--
Pioneer 3306	--	152.6
Pioneer 3307	--	125.4
TE E20YA**	123.2	--
TE Cropmaster**	104.6	--
Mo SX1	--	99.4
Mo 63	116.1	--
Mo 476W*	112.8	--
Mo 880	107.4	--
Mo 1023	105.1	--
US 13	--	118.8
Group III Maturity		
Pioneer 3171	119.8	--
US 523W*	119.4	--
US 523WA*	120.6	--
Mean	117.8	124.9

*White Hybrid
**NK=Northrup-King; TE = Taylor-Evans

DISTRICT 4

Results for District 4 are reported in Tables 4A to 4C.

An average yield of 118.2 bushels per acre was harvested from a stand of 14,269 plants. Desired stand was 15,680 and yield ranged from 146.9 to 100.4 bushels per acre.

Total rainfall for the period May 1 through September 15 was 20.50 inches. There were three dry periods of 21, 26, and 35 days. Temperatures averaged 4.9° below normal. There were no days when temperatures reached or exceeded 100°. Lodging was not serious at this location except for some of the weaker stalked hybrids. Weed infestation was low, chemical means being used as the control measure in lieu of cultivation.

Table 4A. Corn production data for 1965, 1966, and 1967, and for the 10-year period 1957-1966 in District 4.

Period	Farmland Planted to Corn %	Total Corn Acreage	Avg. Acre Yield (bu)	Missouri Corn Yield Tests
1967	10.8*	374,000*	64	118.2
1966	10.6	370,000	58	80.5
1965	9.7	339,000	66	126.0
1957-1966 average	11.0	383,000	54	

*Preliminary estimate as of December 1, 1967.

TABLE 4B. 1967 PERFORMANCE RECORD FOR HYBRIDS TESTED IN DISTRICT 4, NEAR HIGGINSVILLE, MISSOURI IN LAFAYETTE COUNTY. PLANTED MAY 15, 1967. HARVESTED NOVEMBER 17, 1967 (EXP. 4).

HYBRID	ACRE YIELD BU.	MOISTURE IN GRAIN %	STAND %	LODGED PLANTS ROOT %	LODGED PLANTS STALK %	DROPPED EARS %	EAR HEIGHT GRADE
GROUP I MATURITY							
ASGROW ASC112	125.6	19.6	81	0.0	6.2	0.8	4.0
DEKALB XL361	108.9	18.8	86	0.0	3.6	0.0	3.5
MFA 87	114.7	17.2	91	0.0	4.1	0.7	3.5
NORTHRUP-KING PX63	124.1	16.6	91	0.0	13.1	0.7	4.0
NORTHRUP-KING PX610	127.9	16.6	93	0.0	4.7	0.0	3.9
PIONEER 3420	113.0	16.3	91	0.0	5.5	0.7	3.9
PIONEER X3329 (3390)**	128.9	16.2	94	0.0	1.3	0.0	4.3
PRINCETON SX-690	108.2	18.1	95	0.0	5.9	0.0	3.4
STULL 707	121.8	18.0	96	0.0	4.5	0.0	3.4
T E HARVESTMASTER	103.9	16.8	94	0.0	9.9	0.0	3.8
GROUP II MATURITY							
ASGROW A150	121.0	17.0	97	0.0	10.3	1.3	4.1
ASGROW A204	126.9	19.0	96	0.0	10.5	0.0	4.5
CARGILL 695	101.6	15.9	86	0.0	7.2	1.4	3.3
DEKALB 848	126.2	17.9	92	0.0	3.4	2.0	4.1
MAYGOLD 2036	120.4	18.2	89	0.0	1.4	0.7	3.8
MAYGOLD 29X	130.9	19.7	98	0.0	3.8	0.6	4.0
MCCURDY 900	119.4	18.4	98	0.0	10.8	0.0	4.0
MCCURDY 7X11E	119.5	18.0	92	0.0	13.6	0.7	3.9
MCCURDY HP8	118.4	17.6	81	0.0	10.8	0.0	4.1
MFA K6	118.3	18.5	90	0.0	7.6	0.7	4.3
MFA 2222	119.1	16.7	93	0.0	5.4	1.3	4.0
NORTHRUP-KING PX616	115.4	17.1	89	0.0	7.7	1.4	4.1
NORTHRUP-KING PX674	129.1	18.9	94	0.0	6.7	2.0	4.3
NORTHRUP-KING PX676	127.5	17.3	98	0.0	3.8	0.6	3.9
PIONEER 321	114.0	18.5	92	0.0	13.6	0.7	4.0
PIONEER 3300	131.9	17.5	95	0.0	9.2	2.0	3.9
PIONEER 3302	114.2	18.3	98	0.0	6.4	0.6	3.9
PIONEER 3306	139.9	16.9	91	0.0	0.7	0.0	4.3
PIONEER 3307	119.4	17.8	86	0.0	9.4	1.4	4.1
PRINCETON SX-803	107.6	17.8	76	0.0	6.6	0.0	3.9
PRINCETON SX-804	124.7	17.6	90	0.0	20.1	1.4	4.5
SUMMERS H 60	118.6	16.4	98	0.0	6.4	0.6	4.1
T E EZOYA	106.5	18.8	94	0.0	9.3	0.7	3.8
T E BONUSMAKER S	123.4	16.6	92	0.0	12.9	0.0	3.3
T E CROPMASTER	119.2	18.0	96	0.0	9.7	2.6	4.1
KAN 1639	109.7	17.9	94	0.0	12.0	6.0	4.3
MO SX1	101.6	24.8	94	0.0	4.0	0.0	4.1
MO SX3	111.4	17.2	94	0.0	10.6	0.0	3.9
MO SX14W*	105.8	18.0	71	0.0	6.2	0.0	3.9
MO SX15W*	105.1	21.6	61	0.0	5.1	0.0	4.6
MO SX16*	100.4	21.1	95	0.0	5.3	3.9	4.5
MO 63	126.3	17.7	91	0.0	4.1	0.7	4.0

TABLE 4B CONTINUED

HYBRID	ACRE YIELD BU.	MOISTURE IN GRAIN %	STAND %	LODGED PLANTS ROOT %	LODGED PLANTS STALK %	DROPPED EARS %	EAR HEIGHT GRADE
MO 63A	123.8	18.1	89	0.0	7.0	0.7	4.1
MO 64	139.3	17.5	89	0.0	9.1	2.8	4.3
MO 65-2	108.4	19.3	98	0.0	5.1	1.3	4.1
MO 880	108.6	18.9	94	0.0	4.7	0.0	3.9
MO 881	112.3	18.5	94	0.0	6.6	0.7	4.3
MO 1023	112.9	19.6	91	0.0	4.1	1.4	4.1
U S 13	113.9	16.5	87	1.4	28.1	4.3	4.6
GROUP III MATURITY							
PAG 399	117.2	16.7	90	0.0	11.8	0.0	4.0
PAG SX29	119.5	17.3	82	0.0	9.2	0.0	4.4
PAG SX99	119.0	20.3	86	0.0	3.6	0.7	4.1
PIONEER 3171	146.9	18.6	93	0.0	8.1	0.7	4.6
MO SX10	117.7	20.3	92	0.0	4.8	0.0	4.5
MO 476W*	104.0	19.4	89	0.0	15.5	0.7	4.3
MO 916	118.0	20.0	89	0.0	8.5	1.4	4.6
MO 62-10	125.9	21.8	92	0.0	10.2	0.0	4.5
U S 523W*	109.3	18.6	94	0.0	12.6	0.7	4.6
U S 523WA*	133.9	17.9	88	0.0	17.1	5.7	4.9
U S 523WB*	111.3	21.1	97	0.0	15.5	6.5	5.0
MEAN	118.2	18.3	91	0.0	8.3	1.1	4.1

Differences in yield between any two hybrids of less than 16.4 bushels are not considered significant.
*White hybrid
**Permanent number designations

Table 4C. Average performance of hybrids tested in District 4 for the three-year period 1965-1967.

Hybrid	Acre Yield (bu)	% Lodging	
		Root	Stalk
Group I Maturity			
Pioneer 3420	110.0	0.0	9.7
Group II Maturity			
Maygold 2036	107.2	0.0	5.3
MFA K6	109.6	2.0	6.3
MFA 2222	121.6	0.0	8.5
Pioneer 321	111.6	0.0	14.0
Pioneer 3300	109.0	0.0	11.6
Pioneer 3306	132.3	0.0	5.5
Pioneer 3307	119.3	0.0	13.3
Kansas 1639	99.7	1.2	15.6
Mo SX1	100.7	1.8	5.0
Mo SX3	107.8	0.0	10.4
Mo 63	112.6	1.8	10.2
Mo 880	95.7	0.0	10.8
Mo 1023	112.3	0.0	10.1
US 13	100.4	0.5	26.5
Group III Maturity			
Pioneer 3171	124.7	0.0	9.6
Mo 476W*	102.7	0.0	22.2
US 523W*	96.1	7.3	17.3
US 523WA*	109.3	14.0	19.5
US 523WB*	96.2	12.0	16.3
Mean	108.9	2.0	12.4

*White Hybrid

DISTRICT 5

Data from District 5 are presented in Tables 5A through 5C.

The average yield for this test was 86.2 bushels per acre with a range from 72.6 to 108.9 bushels per acre. Harvest stand was 10,686 from a perfect stand planned for 13,032 plants per acre.

Rainfall was only 12.05 inches for the period May 1 through September 15. There were three dry periods of 16, 18, and 23 days. Average temperatures were 2.5° below normal for the same period. There were no days where the temperature reached or exceeded 100°.

Root lodging was not of major importance, but stalk lodging averaged 28.7% over all hybrids. The percent stalk lodging ranged from zero to 67.7%. There was some European corn borer infestation. Weeds were not a problem.

Table 5A. Corn production data for 1965, 1966, and 1967, and for the 10-year period 1957-1966 in District 5.

Period	Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (bu)	Missouri Corn Yield Tests
1967	6.8*	422,000	68*	86.2
1966	6.6	404,000	58	109.9
1965	7.0	429,000	75	122.4
1957-1966 average	8.1	502,000	55	

*Preliminary estimates as of December 1, 1967.

TABLE 5B. 1967 PERFORMANCE RECORD FOR HYBRIDS TESTED IN DISTRICT 5, NEAR COLUMBIA, MISSOURI IN BOONE COUNTY. PLANTED MAY 2, 1967. HARVESTED NOVEMBER 5, 1967.

HYBRID	ACRE YIELD BU.	MOISTURE IN GRAIN %	STAND %	LODGED PLANTS ROOT %	LODGED PLANTS STALK %	DROPPED EARS %	EAR HEIGHT GRADE
	GROUP I MATURITY						
ASGROW ASC112	95.5	21.3	94	0.0	38.9	0.9	3.8
DEKALB XL65A	85.3	16.0	88	0.0	21.0	0.0	3.5
DEKALB XL361	92.4	17.1	88	0.9	6.6	0.0	3.4
MFA B7	80.5	18.1	88	0.0	47.2	0.0	3.1
NORTHRUP-KING PX610	87.0	16.2	98	0.0	43.2	0.8	3.3
PIONEER 3420	84.1	16.5	93	0.0	26.1	1.8	3.4
PIONEER X3329 (3390)**	95.5	16.4	78	0.0	25.8	0.0	3.4
PRINCETON SX-690	80.7	16.8	97	0.9	18.1	0.0	2.9
S C 5907 (Ed. J. Funk)	85.6	16.2	91	0.0	26.6	0.0	3.1
S C 8535 (Ed. J. Funk)	86.1	16.7	88	0.0	39.6	0.9	3.6
STULL 707	91.6	16.6	97	0.0	23.3	0.0	2.8
STULL 807YBSX	83.9	22.2	95	0.0	52.6	0.9	3.6
T E HARVESTMASTER	81.4	15.6	73	0.0	18.2	0.0	3.1
	GROUP II MATURITY						
ASGROW A150	90.9	18.5	76	0.0	20.9	2.2	3.6
ASGROW A204	91.9	20.0	91	0.9	19.3	0.0	3.8
CARGILL 695	76.0	15.0	92	0.0	50.0	0.0	3.0
DEKALB 848	87.1	19.1	87	0.0	24.0	0.0	3.4
MAYGOLD 2036	93.5	20.1	72	0.0	8.1	0.0	3.5
MAYGOLD 29X	94.4	21.3	86	1.0	9.7	1.9	3.4
MCCURDY 900	86.4	19.4	63	1.3	17.3	0.0	3.4
MCCURDY 7X11E	92.9	18.2	87	0.0	47.1	0.0	3.3
MCCURDY HP8	98.2	17.4	94	0.0	23.0	0.0	3.5
MFA K6	90.5	18.4	63	0.0	17.1	0.0	3.5
MFA 2222	82.3	18.6	79	0.0	18.9	0.0	3.3
NORTHRUP-KING PX616	72.6	17.1	68	1.2	9.9	0.0	3.5
NORTHRUP-KING PX674	91.1	19.0	90	0.0	29.6	0.0	3.4
NORTHRUP-KING PX676	82.3	18.3	93	0.0	42.9	0.0	3.5
PIONEER 321	87.5	19.4	97	0.0	32.8	2.6	3.4
PIONEER 3300	88.6	19.5	66	0.0	46.8	0.0	3.3
PIONEER 3302	89.1	18.5	87	0.0	8.7	1.0	3.5
PIONEER 3306	103.6	18.1	70	0.0	17.9	0.0	3.6
PIONEER 3307	84.6	18.5	84	0.0	27.7	1.0	3.5
PIONEER X6370 (3199)**	101.4	19.2	78	0.0	14.9	0.0	3.8
PRINCETON SX-803	95.8	18.0	61	0.0	1.4	0.0	3.1
PRINCETON SX-804	85.4	18.8	83	0.0	67.7	2.0	3.8
STULL 108Y	93.0	20.8	78	0.0	48.9	0.0	3.5
STULL 807YBSX	97.5	19.7	76	0.0	28.6	0.0	3.6
STULL 807YSX	108.9	21.0	88	0.0	23.8	0.0	3.4
SUPR MAIZ 6	94.8	19.0	89	0.9	30.8	0.0	3.6
SUPR MAIZ 77	87.1	19.6	87	0.0	18.3	1.0	3.9

TABLE 5B CONTINUED.

HYBRID	ACRE YIELD BU.	MOISTURE IN GRAIN %	STAND %	LODGED PLANTS ROOT %	LODGED PLANTS STALK %	DROPPED EARS %	EAR HEIGHT GRADE
T E E20YA	90.9	17.8	88	0.0	34.9	0.9	3.5
T E BONUSMAKER S	85.5	16.0	87	0.0	45.2	0.0	3.0
T E CROPMASTER	89.4	20.6	90	0.0	54.6	0.0	3.9
KAN 1639	77.3	20.2	82	0.0	21.4	0.0	3.6
MO SX1	89.7	25.9	93	2.7	4.5	0.9	3.5
MO SX3	74.3	20.5	56	0.0	0.0	0.0	3.3
MO SX14W*	72.6	19.0	55	0.0	10.6	0.0	3.4
MO SX15W*	65.9	24.4	53	0.0	45.3	0.0	3.8
MO SX16W*	87.1	21.0	85	0.0	6.9	2.0	4.0
MO 63	89.8	15.8	76	0.0	28.6	0.0	3.5
MO 63A	76.5	19.4	69	2.4	33.7	0.0	3.6
MO 64	74.0	19.9	97	0.0	33.6	2.6	3.8
MO 65-2	95.2	19.0	95	0.0	14.0	0.0	3.9
MO 880	84.2	20.6	72	0.0	3.5	0.0	3.4
MO 881	65.6	22.6	93	0.0	10.7	0.9	3.9
MO 1023	88.4	20.2	93	0.0	27.0	0.0	3.8
U S 13	84.6	16.2	90	0.0	53.7	1.9	3.9
GROUP III MATURITY							
PAG 399	77.2	16.1	77	0.0	29.3	0.0	3.5
PAG SX29	75.5	15.9	88	0.0	56.6	0.9	3.6
PAG SX99	94.4	22.5	83	0.0	40.0	0.0	3.6
PIONEER 3171	86.3	19.2	50	1.7	26.7	1.7	3.8
MO SX10	81.0	21.2	79	3.2	55.8	0.0	4.0
MO 476W*	80.3	19.9	89	0.0	41.1	0.9	3.9
MO 916	92.5	23.6	70	0.0	11.9	0.0	3.9
MO 62-10	61.4	21.8	55	0.0	27.3	0.0	4.0
U S 523W*	85.2	20.6	77	0.0	56.5	0.0	4.3
U S 523WA*	82.3	18.1	80	0.0	47.9	0.0	4.0
U S 523WB*	79.1	22.8	72	0.0	37.2	1.2	4.1
MEAN	86.2	19.1	82	0.3	28.7	0.5	3.6

Differences in yield between any two hybrids of less than 21.2 bushels are not considered significant.
*White hybrid
**Permanent number designation

Table 5C. Average performance of hybrids tested in District 5 for the three-year period 1965-1967.

Hybrid	Acre Yield (bu)	% Lodging	
		Root	Stalk
Group I Maturity			
Pioneer 3420	101.5	0.0	16.9
Stull 807YBSX	115.8	5.7	23.2
Group II Maturity			
Maygold 2036	114.1	5.5	7.6
MFA K6	111.9	2.9	10.4
MFA 2222	100.4	5.2	14.7
Pioneer 321	109.2	2.0	18.8
Pioneer 3300	110.9	1.7	21.0
Pioneer 3306	119.4	0.0	13.7
Pioneer 3307	113.4	2.3	15.2
Stull 108Y	121.8	10.5	21.0
Stull 807YSX	123.6	5.9	13.5
Kansas 1639	93.5	2.5	21.6
Mo SX1	113.9	9.8	5.9
Mo SX3	104.2	6.5	4.0
Mo 63	111.7	1.8	13.3
Mo 880	95.3	1.4	11.0
Mo 1023	109.5	5.3	13.2
US 13	96.2	2.3	39.7
Group III Maturity			
Pioneer 3171	111.6	7.4	17.9
Mo 476W*	105.1	3.7	34.7
US 523W*	102.7	11.8	38.0
US 523WA*	104.1	17.2	33.5
US 523WB*	109.2	12.4	25.4
Mean	108.6	5.4	18.9

*White hybrid.

DISTRICT 6

Results for District 6 are found in Tables 6A through 6C.

Two populations were to be tested at this location. The regular test was planted at 14,224 plants per acre, and the high population test was 18,491. However, the regular test was ruined because of seep water from the Missouri river. Harvest population from the high population test was 17,615. Average yield was 133.2 bushels per acre. Yields ranged from a low of 102.5 to a high of 148.9 bushels.

Rainfall was 19.59 inches falling on 37 days during the period May 1-September 15. There were two dry periods of 21 and 15 days duration. Temperatures averaged 4.1° below normal, and at no time reached or exceeded 100°.

Plant lodging was moderate. Weeds were not a problem in the high population test.

Table 6A. Corn production data for 1965, 1966, and 1967, and for the 10-year period 1957-1966 in District 6.

Period	Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (bu)	Missouri Corn Yield Tests
1967	7.5*	239,000	79*	133.2**
1966	7.6	240,000	60	107.7
1965	7.9	249,000	70	89.5
1957-1966 average	9.5	301,000	56	

*Preliminary estimate as of December 1, 1967.
**High population test yield.

Table 6B. Average performance of hybrids tested in District 6 during the three-year period 1964-1966.

Hybrid	Acre Yield (bu)	% Lodging	
		Root	Stalk
Group I Maturity			
Pioneer 3268	105.0	0.0	5.2
Pioneer 3284	96.0	0.0	7.8
Pioneer 3420	94.5	0.0	10.8
AES 704	93.2	0.2	11.5
Iowa 4376	86.4	0.0	7.1
Group II Maturity			
Mo SX4	118.7	0.0	4.3
Mo SX2	116.4	0.0	4.9
MFA K6	114.9	0.0	9.9
Mo SX1	112.2	0.0	6.4
Mo 64 (61-28)	110.3	0.0	8.7
Mo SX3	110.0	0.2	3.4
Mo 955	109.1	1.0	10.7
Mo 447W*	107.6	0.2	12.2
Mo 63	103.3	0.4	9.2
Mo 1007	101.3	0.0	11.6
Mo 843	99.7	0.2	15.7
Mo 61-7	97.7	0.0	7.6
Kansas 1639	96.5	1.1	11.5
Mo 1034	95.7	0.0	11.9
Pioneer 321	95.6	0.0	9.7
Mo 1023	94.6	0.0	14.5
US 13	93.2	0.0	13.7
Mo 880	92.8	0.7	5.3
MFA 3232	91.9	0.0	10.5
Group III Maturity			
Mo SX8	113.2	4.6	12.9
Mo 476W*	105.2	6.0	12.6
US 523WA*	103.6	1.0	22.1
Mo Pipe 12*	95.5	0.4	11.3
Mo Pipe 4*	89.7	0.4	14.2
US 523W*	87.8	0.0	16.9
Mean	101.1	0.5	10.5

*White Hybrids

TABLE 6C. 1967 PERFORMANCE RECORD FOR HYBRIDS TESTED AT A HIGH PLANTING RATE NEAR WASHINGTON IN FRANKLIN COUNTY, MISSOURI. PLANTED MAY 12, 1967. HARVESTED NOVEMBER 13, 1967. AVERAGE PLANT POPULATION AT HARVEST WAS 17,615 (EXP.11).

HYBRID	ACRE YIELD BU.	MOISTURE IN GRAIN %	STAND %	LODGED PLANTS ROOT %	LODGED PLANTS STALK %	DROPPED EARS %	EAR HEIGHT GRADE
GROUP I MATURITY							
ASGROW ASC112	148.4	19.0	93	0.0	14.4	1.0	4.4
MFA B7	126.6	17.8	95	0.0	1.5	1.0	3.9
NORTHRUP-KING PX610	133.9	16.7	93	0.0	15.5	0.0	4.1
PIONEER 3420	128.3	16.8	93	0.0	6.7	1.0	4.1
PIONEER X3329 (3390)**	140.8	16.7	96	0.0	7.5	0.0	4.4
PRINCETON SX-690	130.1	19.0	92	0.0	3.7	0.5	3.5
STULL 707	141.5	17.7	96	0.0	4.0	0.5	3.5
T E HARVESTMASTER	118.0	16.7	94	0.0	21.4	0.0	4.1
GROUP II MATURITY							
ASGROW A150	131.0	16.8	88	0.0	10.9	0.5	4.6
ASGROW A204	143.9	18.6	86	0.0	11.8	1.7	4.8
CARGILL 695	102.5	17.6	92	0.5	13.0	1.0	3.4
MCCURDY 900	125.7	18.1	93	0.0	18.1	2.1	4.3
MCCURDY 7X11E	140.5	18.7	93	0.0	18.0	0.5	4.0
MCCURDY HP8	150.7	17.0	96	0.0	21.1	0.5	4.4
MFA 2222	108.3	17.3	93	0.5	17.0	0.0	3.9
NORTHRUP-KING PX616	150.0	17.4	97	0.0	10.9	0.5	4.0
NORTHRUP-KING PX674	146.1	18.4	96	0.0	7.0	0.5	3.9
NORTHRUP-KING PX676	142.0	17.7	96	0.0	14.0	0.5	4.1
PIONEER 321	139.2	18.0	96	0.0	14.1	1.0	4.4
PIONEER 3300	140.0	17.1	91	0.0	7.4	1.1	4.4
PIONEER 3302	117.1	17.2	84	0.0	9.7	0.0	4.0
PIONEER 3306	141.0	17.5	96	0.0	12.5	0.5	4.6
PIONEER 3307	132.6	17.3	93	0.0	8.3	1.0	4.1
PRINCETON SX-803	116.7	18.3	87	0.0	16.1	0.6	4.1
PRINCETON SX-804	148.9	18.4	96	0.0	12.1	1.5	4.5
SCHENK SS-X85	121.3	20.2	93	0.0	8.2	0.0	4.4
T E E20YA	131.8	19.5	91	0.0	18.0	2.1	4.4
T E BONUSMAKER S	123.5	17.1	92	0.0	5.2	0.0	3.8
T E CROPMASTER	137.0	19.1	97	0.0	16.4	4.5	4.9
MO SX1	127.2	23.5	100	0.0	9.7	0.5	4.0
MO SX14*	133.4	17.2	84	0.0	16.6	2.3	4.1
MO SX15*	145.5	20.3	78	0.0	4.3	0.0	5.0
MO SX16*	126.4	19.9	94	0.0	6.2	6.7	4.6
MO 65-2	126.3	19.7	96	0.0	13.1	1.5	4.5
U S 13	134.9	17.0	94	0.0	26.2	3.6	5.0
GROUP III MATURITY							
PAG 399	134.5	16.4	95	0.0	7.6	2.0	4.4
PAG SX29	132.6	17.8	97	0.0	6.9	1.5	4.4
PAG SX99	131.9	22.0	95	0.0	8.1	1.0	4.8
PIONEER 3171	141.1	19.7	97	0.0	33.2	1.0	4.9
MO 476W *	135.8	18.9	96	0.0	30.7	1.5	4.9
MEAN	133.2	18.3	93	0.0	12.7	1.1	4.3

Differences in yield between any two hybrids of less than 15.0 bushels are not considered significant.
*White hybrid
**Permanent number designation

Table 6D. Summary of acre yield for hybrids tested in District 6 under high populations for the period 1965-1967.

Hybrid	Yield, Bushels Per Acre 2-Year Avg.	3-Year Avg.
Group I Maturity		
Dekalb XL361	99.5	--
Dekalb XL362	91.4	--
Dekalb 664	106.6	--
Pioneer 3268	106.5	--
Pioneer 3420	--	104.9
Group II Maturity		
MFA 2222	--	92.0
MFA 3232	95.6	--
NK PX674**	140.0	--
NK PX676**	136.0	--
Pioneer 321	--	114.4
Pioneer 3300	--	122.7
Pioneer 3302	117.1	--
Pioneer 3306	--	122.3
Pioneer 3307	--	120.2
Princeton SX-804	141.8	--
TE Cropmaster**	128.0	--
TE E20YA	125.7	--
Mo SX1	--	117.3
Mo 63	105.8	--
Mo 447W*	107.2	--
Mo 843	98.8	--
Mo 880	86.9	--
Mo 995	101.4	--
Mo 1023	76.9	--
Mo 1034	82.4	--
US 13	--	111.7
Group III Maturity		
Dekalb XL390**	106.4	--
Pioneer 3171	134.2	--
Mo SX8	92.6	--
Mo 476W*	133.6	--
US 523W*	83.8	--
US 523WA*	103.2	--
US 523WB*	105.9	--
Mean	108.3	113.2

*White Hybrid
**NK= Northrup-King; TE = Taylor-Evans

DISTRICT 7

Data for District 7 are presented in Tables 7A through 7C.

An average yield of 88.0 bushels per acre was produced from a harvest stand of 11,054 plants. A perfect stand would have been 11,760 plants per acre. Yields ranged from 69.0 to 120.0 bushels per acre.

Rainfall was 18.16 inches which fell on 40 days from May 1 through September 15. There were dry periods of 21 and 23 days. Average temperature for the growing season was 4.8° below normal. There were no days on which the temperature reached or exceeded 100° in 1967. There were only nine days with temperatures 90° or higher.

Neither root or stalk lodging were important factors influencing yield. Weed control was good.

Table 7A. Corn production data for 1965, 1966, and 1967, and for the 10-year period 1957-1966 in District 7.

Period	Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (bu)	Missouri Corn Yield Tests
1967	2.6*	76,000*	63*	88.0
1966	3.2	94,000	34	57.4
1965	3.4	100,000	53	104.0
1967-1966 average	4.3	129,000	56	

*Preliminary estimates as of December 1, 1967.

TABLE 7B. 1967 PERFORMANCE RECORD FOR HYBRIDS TESTED IN DISTRICT 7, NEAR MT. VERNON, MISSOURI IN LAWRENCE COUNTY. PLANTED APRIL 6, 1967. HARVESTED OCTOBER 12, 1967 (EXP. 7).

HYBRID	ACRE YIELD BU.	MOISTURE IN GRAIN %	STAND %	LODGED PLANTS ROOT %	LODGED PLANTS STALK %	DROPPED EARS %	EAR HEIGHT GRADE
	GROUP I MATURITY						
MFA B7	76.2	16.1	95	0.0	7.0	0.0	2.9
NORTHRUPKING KT623A	83.1	16.1	97	0.0	7.8	0.0	3.3
NORTHRUPKING KT657	90.0	17.0	96	0.0	10.4	0.9	3.1
NORTHRUPKING PX63	79.1	15.3	96	0.0	3.5	0.0	3.1
PIONEER 3420	75.7	14.8	95	0.0	1.8	0.0	3.0
PIONEER X3329 (3390)**	91.8	15.5	98	0.0	3.4	0.0	3.0
T E HARVESTMASTER	76.4	15.8	95	0.0	3.5	0.0	3.1
	GROUP II MATURITY						
ASGROW A204	91.0	18.5	99	0.0	6.7	1.7	3.4
DEKALB XL83	89.0	17.8	89	0.0	5.6	0.0	3.0
DEKALB XL385	82.2	18.8	97	0.9	5.2	0.0	3.6
FUNK G144	86.3	16.6	97	0.0	5.2	0.0	3.1
MFA K6	90.0	16.9	94	0.0	1.8	0.0	3.1
MFA 2222	83.3	16.8	100	0.0	1.7	0.8	2.9
NORTHRUPKING PX616	85.3	16.6	93	0.0	1.8	0.0	3.0
NORTHRUPKING PX674	75.5	16.1	97	0.0	8.6	0.0	3.4
NORTHRUPKING PX676	84.3	15.7	96	0.0	5.2	0.0	3.0
PIONEER 321	82.8	16.1	97	0.0	4.3	0.9	3.3
PIONEER 3300	92.5	16.8	93	0.0	0.0	0.0	3.1
PIONEER 3302	83.1	16.8	99	0.0	3.4	0.8	2.9
PIONEER 3306	94.8	16.6	100	0.0	3.3	0.0	3.4
PIONEER 3307	90.6	17.0	98	0.0	3.4	1.7	3.1
PIONEER X6370 (3199)**	120.0	17.5	100	0.0	5.0	0.0	3.8
PRINCETON SX-803	74.6	16.4	72	0.0	2.3	0.0	3.1
PRINCETON SX-804	83.7	16.8	92	0.0	11.8	1.8	3.4
SCHENK SS-77A	86.8	16.9	98	0.0	6.8	0.9	2.9
SCHENK SS-X75	83.7	16.1	95	0.0	7.9	0.0	3.1
SCHENK SS-X85	69.0	17.0	88	0.0	6.7	1.0	3.3
T E E20YA	78.5	16.9	93	0.0	8.0	0.0	3.4
T E BONUSMAKER S	76.5	15.6	94	0.0	2.7	0.0	2.8
T E CROPMASTER	82.1	18.1	93	0.0	2.7	0.9	3.5
KAN 1639	81.9	16.3	96	0.0	6.1	0.9	3.4
MO SX1	95.9	22.9	91	0.0	0.9	0.0	3.0
MO SX3	86.1	21.2	98	0.0	5.1	0.0	3.9
MO SX 14W*	80.2	16.9	68	0.0	4.9	0.0	3.3
MO SX 15W*	81.3	21.1	66	0.0	2.5	0.0	3.3
MO SX 16*	102.2	19.3	99	0.0	0.8	0.8	3.1
MO 63	85.4	15.2	93	0.0	0.9	0.0	3.5
MO 63A	90.2	16.3	94	0.0	5.3	0.9	3.3
MO 64	91.9	17.0	98	0.0	6.0	0.9	3.4
MO 65-2	97.3	17.8	100	0.0	2.5	0.0	3.1
MO 880	87.9	16.6	98	0.0	2.6	0.0	3.3
MO 881	104.7	17.3	95	0.0	3.5	0.0	3.4
MO 1023	88.9	17.8	96	0.0	5.2	0.0	3.0
U S 13	84.5	16.4	94	0.0	15.0	0.9	3.8

TABLE 7B CONTINUED.

HYBRID	ACRE YIELD BU.	MOISTURE IN GRAIN %	STAND %	LODGED PLANTS ROOT %	LODGED PLANTS STALK %	DROPPED EARS %	EAR HEIGHT GRADE
	GROUP III MATURITY						
PAG 399	84.9	16.0	98	0.0	2.5	0.8	2.9
PAG SX29	89.9	16.3	95	0.0	3.5	0.0	3.0
PAG SX99	88.5	17.1	92	0.0	9.1	2.7	3.3
PIONEER 3171	114.0	19.2	98	0.0	0.8	0.0	3.5
MO SX10	93.4	18.2	96	0.0	6.1	0.0	3.5
MO 476W*	95.1	17.1	95	1.8	8.8	0.0	4.1
MO 916	107.2	17.0	97	0.0	0.9	0.0	3.8
MO 62-10	94.6	16.8	90	0.0	3.7	1.9	3.6
U S 523W*	97.0	16.8	95	1.8	7.0	0.0	3.5
U S 523WA*	86.6	17.7	88	0.0	10.5	1.0	3.5
U S 523WB*	91.5	18.4	98	0.0	9.4	1.7	3.6
	GROUP IV MATURITY						
FUNK 711AA	90.2	24.7	85	0.0	5.9	0.0	3.9
MEAN	88.0	17.3	94	0.1	4.9	0.4	3.3

Differences in yield between any two hybrids of less than 12.2 bushels are not considered significant.
*White hybrid

Table 7C. Average performance of hybrids tested in District 7 during the three-year period 1965-1967.

Hybrid	Acre Yield (bu)	% Lodging	
		Root	Stalk
Group I Maturity			
Pioneer 3420	77.7	0.0	2.4
Group II Maturity			
Dekalb XL-83	86.2	0.0	4.0
MFA K6	81.7	0.0	1.5
MFA 2222	78.9	0.0	4.4
Pioneer 321	83.5	0.0	3.4
Pioneer 3300	86.8	0.3	3.4
Pioneer 3306	94.8	0.0	2.9
Pioneer 3307	84.6	0.0	1.7
Kansas 1639	76.9	0.0	6.8
Mo SX1	91.3	0.0	2.3
Mo 63	74.8	0.0	0.9
Mo 880	75.0	0.0	3.8
Mo 881	93.5	0.0	5.2
Mo 1023	77.0	0.0	4.1
US 13	75.8	0.3	11.8
Group III Maturity			
Mo SX10	85.9	0.0	4.0
Mo 476W*	85.5	0.6	6.7
Mo 916	99.9	0.0	1.8
US 523W*	91.1	0.6	8.9
US 523WA*	94.2	0.0	6.1
US 523WB*	91.1	0.0	8.7
Mean	85.1	0.1	4.5

*White Hybrid

DISTRICT 8

Data for District 8 are presented in Tables 8A through 8C.

An average yield of 89.8 bushels per acre was produced from a harvest stand of 11,290 plants. A perfect stand would have been 11,760 plants per acre. Yields ranged from a low of 71.9 to a high of 109.5 bushels per acre.

Rainfall was only 11.13 inches falling on 31 days during the period May 1 through September 15. There were two dry periods of 19 and 36 days. Average temperature during the growing season was 3.5° below normal. There were no days on which the temperature reached or exceeded 100°.

Root and stalk lodging were minimal. Weeds were not a problem.

Table 8A. Corn production data for 1965, 1966, and 1967, and for the 10-year period 1957-1966 in District 8.

Period	Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (bu)	Missouri Corn Yield Tests
1967	0.8	34,000	57	89.8
1966	1.0	43,000	43	94.7
1965	1.2	50,000	48	107.2
1957-1966 average	2.1	91,000	43	

*Preliminary estimates as of December 1, 1967.

TABLE 8B. 1967 PERFORMANCE RECORD FOR HYBRIDS TESTED IN DISTRICT 8, NEAR SUMMERSVILLE, MISSOURI IN TEXAS COUNTY. PLANTED MAY 19, 1967. HARVESTED NOVEMBER 9, 1967 (EXP. 8).

HYBRID	ACRE YIELD BU.	MOISTURE IN GRAIN %	STAND %	LODGED PLANTS ROOT %	LODGED PLANTS STALK %	DROPPED EARS %	EAR HEIGHT GRADE
	GROUP I MATURITY						
DEKALB XL65A	85.3	19.0	97	0.0	0.0	0.0	3.6
MFA B7	99.4	18.3	99	0.0	4.2	0.0	3.5
NORTHRUP-KING PX63	91.3	18.8	91	0.0	11.0	0.0	3.9
T E HARVESTMASTER	87.3	18.4	94	0.0	8.8	0.0	3.6
	GROUP II MATURITY						
ASGROW A204	99.6	22.2	97	0.0	12.1	0.0	4.4
MFA K6	89.2	22.1	86	0.0	4.9	1.0	4.3
MFA 2222	90.2	20.0	97	0.0	6.0	0.0	3.6
NORTHRUP-KING PX616	97.0	18.6	97	0.0	6.0	0.0	3.5
NORTHRUP-KING PX674	101.2	20.8	96	0.0	5.2	0.0	3.9
NORTHRUP-KING PX676	88.5	19.1	98	0.0	2.6	0.0	3.8
PIONEER 321	96.5	18.7	94	0.0	4.4	0.0	3.9
PIONEER 3196	103.4	21.4	95	0.0	0.9	0.0	4.0
PIONEER 3302	101.6	18.8	100	0.0	2.4	0.0	3.9
PIONEER 3306	106.5	19.5	98	0.0	2.6	0.0	4.0
PIONEER 3307	109.5	19.2	100	0.0	5.8	0.0	3.9
PRINCETON SX-803	98.8	19.5	91	0.0	2.8	0.0	3.9
PRINCETON SX-804	102.2	19.4	88	0.0	1.0	0.0	3.9
SCHENK SS-77A	94.8	18.0	95	0.0	7.9	0.0	3.8
SCHENK SS-75	86.5	22.6	98	0.0	6.0	0.0	3.8
SCHENK SS-X85	83.8	19.1	94	0.0	16.8	0.0	3.6
T E E20YA	82.9	21.0	93	0.0	34.8	0.9	3.8
T E BONUSMAKERS	90.5	18.5	100	0.0	1.6	0.0	3.1
T E CROPMASTER	85.0	20.6	96	0.0	12.2	0.0	4.1
KAN 1639	81.3	19.3	98	0.0	19.7	0.0	4.1
MO SX1	80.9	30.8	98	0.0	0.0	0.0	4.0
MO SX3	80.5	22.0	97	0.0	1.7	0.0	3.6
MO SX14W*	89.5	20.7	77	0.0	10.9	1.1	4.0
MO SX15W*	71.9	30.1	83	0.0	1.0	0.0	4.3
MO SX16W*	82.1	25.9	98	0.0	0.0	0.0	4.4
MO 63	86.1	20.1	97	0.0	7.8	0.0	4.1
MO 63A	93.6	17.6	95	0.0	10.5	0.9	4.0
MO 64	91.1	21.8	93	0.0	10.7	1.8	4.1
MO 65-2	81.9	22.8	98	0.0	3.4	0.0	4.0
MO 880	88.3	21.8	96	0.0	5.2	0.0	4.0
MO 881	90.3	21.9	98	0.0	6.0	0.0	4.3
MO 1023	91.0	22.3	98	0.0	5.1	0.0	3.6
U S 13	88.4	18.9	95	0.0	33.3	0.0	4.3
	GROUP III MATURITY						
PAG 399	87.4	18.6	97	0.0	2.6	0.0	3.6
PAG SX29	85.8	19.9	98	0.0	4.3	0.0	4.0
PAG SX99	83.3	24.7	96	0.0	6.1	0.9	4.1
PIONEER 3171	88.6	23.9	100	0.0	25.8	0.0	4.0
MO SX10	80.3	24.0	98	0.0	0.9	0.0	4.3
MO 476W*	92.9	20.6	94	0.0	15.9	0.0	4.5
MO 916	86.1	23.1	100	0.0	8.3	0.0	4.8
MO 62-10	81.2	23.5	96	0.0	7.8	0.0	4.4
U S 523W*	80.8	22.1	97	0.0	20.7	1.7	4.1
U S 523WA*	91.4	23.1	99	0.0	18.5	0.0	4.4
U S 523WB*	84.8	24.2	99	0.0	26.1	0.8	4.6
MEAN	89.8	21.2	96	0.0	8.6	0.2	4.0

Differences in yield between any two hybrids of less than 14.7 bushels are not considered significant.
*White hybrid

Table 8C. Average performance of hybrids tested in District 8 for the three-year period 1965-1967.

Hybrid	Acre Yield (bu)	% Lodging	
		Root	Stalk
Group II Maturity			
Kansas 1639	87.2	0.0	13.0
Mo SX1	96.5	0.0	1.7
Mo 63	92.4	0.0	4.9
Mo 880	88.2	0.0	7.6
Mo 881	100.2	0.0	7.0
Mo 1023	92.7	0.0	4.5
US 13	88.9	0.0	18.6
Group III Maturity			
Mo SX10	95.0	0.0	1.4
Mo 476W*	103.0	0.0	8.7
Mo 916	98.4	0.3	4.7
US 523W*	91.8	0.0	13.0
US 523WA*	108.9	0.0	10.9
US 523WB*	101.4	0.4	15.9
Mean	95.7	0.0	8.6

*White Hybrid

DISTRICT 9

Data for District 9 are presented in Tables 9A through 9D.

Regular and high population tests were conducted in this district.

Average yield for the regular test was 83.8 bushels per acre from a harvest stand of 12,380 plants. A perfect stand would have been 13,032 plants per acre. Yields ranged from 47.4 to 105.9 bushels per acre.

In the high population test, average yield was 92.3 bushels per acre from a harvest stand of 25,642. A perfect stand would have been 29,816 plants per acre. Yields ranged from 72.0 to 108.9 bushels per acre.

Rainfall in the Delta region was 23.55 inches for the period May 1 to September 15. There were three dry periods of 22, 20, and 27 days.

Root and stalk lodging was insignificant in both the regular and the high population tests. Weeds were somewhat a problem in the regular test, but were controlled in the high population test.

Table 9A. Corn production data for 1965, 1966, and 1967, and for the 10-year period 1957-1966 in District 9.

Period	Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (bu)	Missouri Corn Yield Tests
1967	9.1	225,000*	89*	83.8
1966	9.6	236,000	59	108.4
1965	10.5	259,000	73	107.8
1957-1966 average	11.9	292,000	41	

*Preliminary estimate as of December 1, 1967.

TABLE 9B. 1967 PERFORMANCE RECORD FOR HYBRIDS TESTED IN DISTRICT 9, NEAR PORTAGEVILLE, MISSOURI IN PEMISCOT COUNTY. PLANTED APRIL 3, 1967. HARVESTED SEPTEMBER 6, 1967 (EXP. 9).

HYBRID	ACRE YIELD BU.	MOISTURE IN GRAIN %	STAND %	LODGED PLANTS ROOT %	LODGED PLANTS STALK %	DROPPED EARS %	EAR HEIGHT GRADE
	GROUP I MATURITY						
DEARMONT-OLIVER BB-64A	86.9	18.6	95	0.0	1.8	0.0	2.8
MFA B7	75.2	18.6	90	0.0	3.7	0.0	2.4
T E HARVESTMASTER	72.3	16.8	98	0.0	2.6	0.0	2.6
	GROUP II MATURITY						
ASGROW A150	79.1	20.3	93	0.0	4.5	0.0	3.5
ASGROW A204	83.6	25.0	95	0.0	2.6	0.0	3.4
DEARMONT-OLIVER BB-65A	83.4	20.4	93	0.0	4.5	0.9	2.8
DEARMONT-OLIVER BB	86.0	22.9	98	0.0	0.0	0.0	3.1
DEKALB XL-385	91.5	22.4	98	0.0	0.8	0.0	3.0
MEACHAM M-7W*	85.3	27.5	98	0.0	1.7	0.0	3.1
MEACHAM M-33YB	83.3	25.8	99	0.0	2.5	0.0	3.3
MEACHAM MX-35W*	47.4	25.7	92	0.0	0.0	0.0	2.5
MEACHAM MX-50W*	79.7	24.8	94	0.0	1.8	0.0	2.8
MEACHAM MX-75W*	90.5	26.0	100	0.0	0.0	0.0	2.8
MFA K6	89.4	19.4	95	0.0	2.6	0.0	2.9
MFA 2222	67.7	19.5	91	0.0	1.8	0.0	2.5
NORTHRUP-KING KT626	86.8	19.7	89	0.0	2.8	0.0	2.9
NORTHRUP-KING PX616	84.2	18.4	98	0.0	2.5	0.0	2.9
NORTHRUP-KING PX674	87.5	19.8	96	0.0	0.9	0.0	2.9
NORTHRUP-KING PX676	82.5	18.9	98	0.0	1.7	0.0	2.5
PIONEER 3196	85.3	22.6	95	0.0	1.8	0.0	3.1
PIONEER 3306	83.5	22.8	94	0.0	3.5	0.0	3.1
PRINCETON SX-802	82.4	17.5	95	0.0	1.8	0.0	2.5
PRINCETON SX-803	70.7	20.4	96	0.0	0.9	0.0	2.5
PRINCETON SX-804	85.6	23.7	87	0.0	1.9	1.9	3.1
PRINCETON SX-809	99.2	19.8	97	0.0	2.6	0.0	3.0
SCHENK S-73A	81.8	20.6	93	0.0	0.9	0.0	3.0
SCHENK SS-77A	77.3	20.4	87	0.0	1.0	0.0	2.5
SCHENK S-96W*	84.3	24.0	96	0.0	0.0	0.0	3.3
SCHENK SS-X75	81.6	22.4	97	0.0	1.7	0.0	2.8
STULL 307	83.6	23.7	98	0.0	0.9	0.0	3.1
STULL 500 WB*	96.6	24.3	98	0.0	2.6	0.0	3.3
STULL 800 WSX*	81.3	28.4	95	0.0	1.8	0.0	3.4
T E E20YA	77.5	20.0	93	0.0	2.7	0.0	3.0
T E BONUSMAKER S	56.8	22.1	95	0.0	3.5	0.0	2.0
T E CROPMASTER	86.2	20.2	90	0.0	2.8	0.0	2.9
KAN 1639	74.2	20.4	95	0.0	3.5	0.0	3.0
MO SX1	105.9	29.9	98	0.0	0.0	0.0	3.0
MO SX3	87.8	26.8	97	0.0	2.6	0.0	3.5
MO SX 14W *	87.1	19.2	87	0.0	2.9	2.9	3.0
MO SX 15W *	85.1	29.8	73	0.0	1.1	0.0	3.4
MO SX 16W *	91.5	27.0	94	0.0	0.9	2.7	2.8
MO 63	87.5	16.7	97	0.0	0.9	0.0	2.8
MO 63A	83.9	17.2	98	0.0	3.4	1.7	2.8

TABLE 9B CONTINUED.

HYBRID	ACRE YIELD BU.	MOISTURE IN GRAIN %	STAND %	LODGED PLANTS ROOT %	LODGED PLANTS STALK %	DROPPED EARS %	EAR HEIGHT GRADE
MO 64	81.7	22.5	97	0.0	1.7	0.0	3.3
MO 65-2	83.6	22.2	91	0.0	4.6	0.0	3.0
MO 880	82.2	20.3	94	0.0	0.0	0.0	2.8
MO 881	85.4	24.1	92	0.0	0.0	0.0	3.4
MO 1023	84.1	22.3	94	0.0	2.7	0.0	2.9
U S 13	71.7	17.3	97	0.0	3.4	0.0	3.1
	GROUP III MATURITY						
PAG SX99	80.4	25.3	97	0.0	0.9	0.0	3.0
PRINCETON SX-927	92.7	25.2	97	0.0	0.9	0.0	3.1
PRINCETON 920-A*	88.3	25.1	98	0.0	1.7	0.8	3.0
PRINCETON 990-A*	86.0	25.7	95	0.0	2.6	0.9	3.3
MO SX10	91.8	25.3	93	0.0	0.0	0.9	3.1
MO 476W*	87.3	22.6	93	0.0	0.9	0.0	3.0
MO 916	102.5	24.7	98	0.0	1.7	0.0	3.5
MO 62-10	88.4	24.5	96	0.0	0.0	0.0	3.4
U S 523W*	86.2	22.8	95	0.0	5.3	0.9	3.3
U S 523WA*	88.9	24.6	94	0.0	5.3	1.8	3.0
U S 523WB*	87.0	24.0	98	0.0	1.7	0.0	3.8
MEAN	83.8	22.5	95	0.0	2.0	0.3	3.0

Differences in yield between any two hybrids of less than 10.9 bushels are not considered significant.
*White hybrid

Table 9C. Average performance of hybrids tested in District 9 for the three-year period 1965-1967.

Hybrid	Acre Yield (bu)	% Lodging	
		Root	Stalk
Group II Maturity			
Meacham MX-50W*	76.1	2.0	12.3
MFA K6	97.7	0.0	5.9
MFA 2222	84.7	0.0	2.3
Princeton SX-804	97.2	0.0	3.9
Schenk S-73A	92.5	0.0	3.3
Schenk S-96W*	91.7	0.9	4.3
Kansas 1639	87.9	0.0	7.5
Mo SX1	105.9	0.0	1.5
Mo 63	94.6	0.0	5.3
Mo 880	83.1	0.0	6.9
Mo 881	101.5	0.9	1.2
Mo 1023	89.6	0.0	4.7
US 13	82.4	0.3	7.9
Group III Maturity			
Princeton 920-A*	96.9	0.9	8.5
Princeton 990-A*	101.9	0.0	4.4
Mo SX10	93.0	0.0	1.5
Mo 476W*	100.8	8.3	6.2
Mo 916	105.1	0.0	3.6
US 523W*	94.5	3.6	9.3
US 523WA*	95.9	2.4	10.6
US 523WB*	101.2	1.9	13.2
Mean	94.0	1.0	5.9

*White Hybrid

TABLE 9D. 1967 PERFORMANCE RECORD FOR HYBRIDS TESTED AT A HIGH PLANTING RATE NEAR PORTAGEVILLE IN PEMISCOT COUNTY, MISSOURI. PLANTED APRIL 3, 1967. HARVESTED SEPTEMBER 1967. AVERAGE PLANT POPULATION AT HARVEST WAS 25,642 (EXP. 12).

HYBRID	ACRE YIELD BU.	MOISTURE IN GRAIN %	STAND %	LODGED PLANTS ROOT %	LODGED PLANTS STALK %	DROPPED EARS %	EAR HEIGHT GRADE
	GROUP I MATURITY						
MFA B7	92.2	18.1	95	0.0	1.0	0.0	2.8
T E HARVESTMASTER	80.0	19.5	82	0.0	2.3	0.0	2.9
	GROUP II MATURITY						
ASGROW A204	87.8	24.7	91	0.0	4.2	0.4	3.6
DEKALB XL-385	102.5	22.3	92	0.0	1.0	1.4	3.3
MFA 2222	75.5	23.5	91	0.0	1.4	0.4	3.0
NORTHRUP-KING PX616	92.7	18.4	90	0.0	2.1	0.4	3.1
NORTHRUP-KING PX674	96.5	20.8	92	0.0	2.1	0.3	3.0
NORTHRUP-KING PX676	90.5	18.7	96	0.3	2.0	1.3	2.9
PIONEER 3306	99.6	19.8	89	0.0	2.5	0.0	3.4
PRINCETON SX-803	72.0	20.5	69	0.0	0.5	0.0	2.5
PRINCETON SX-804	94.4	25.0	88	0.0	1.4	1.4	3.4
SCHENK SS-77A	97.3	22.2	96	0.0	2.3	0.0	2.9
SCHENK SS-X75	108.6	20.4	93	0.0	2.4	0.3	3.1
T E E20YA	92.2	21.8	86	0.0	4.5	0.0	3.0
T E BONUSMAKER S	72.6	18.1	89	0.4	4.7	0.0	2.4
T E CROPMASTER	92.1	23.6	87	0.0	3.7	0.7	3.4
MO SX1	108.9	28.2	93	0.0	2.1	0.0	3.0
MO SX14W*	102.5	18.5	59	2.7	2.7	1.1	2.9
MO SX15*	91.4	31.1	55	7.0	0.6	0.0	3.5
MO SX16W*	98.7	24.4	79	0.0	2.8	1.2	3.1
MO 65-2	86.8	23.1	91	0.0	2.5	0.0	3.1
U S 13	83.0	18.6	89	0.0	7.9	3.2	3.1
	GROUP III MATURITY						
PAG SX99	105.5	26.5	89	0.0	1.8	0.7	3.3
MO 476W*	91.8	24.3	86	1.5	5.2	0.0	3.5
MEAN	92.3	22.2	86	0.5	2.7	0.5	3.1

Differences in yield between any two hybrids of less than 17.0 bushels are not considered significant.
*White hybrid

Table 9E. Summary of acre yield for hybrids tested in District 9 under high populations for the period 1965-1967.

Hybrid	Yield, Bushels Per Acre 2-Year Avg.	3-Year Avg.
Group I Maturity		
Dekalb XL361	98.1	--
Dekalb XL362	96.8	--
Group II Maturity		
Dekalb XL385	104.0	--
Pioneer 3306	103.0	--
Princeton SX-803	79.2	--
Princeton SX-804	91.6	--
TE E20YA**	88.7	--
TE E20YB**	95.7	--
TE Cropmaster**	87.6	--
TE SX20Y**	106.4	--
Mo SX1	--	99.0
Mo 63	106.6	--
Mo 447W*	105.0	--
Mo 843	97.6	--
Mo 880	90.8	--
Mo 955	98.8	--
Mo 1023	90.6	--
Mo 1034	81.6	
US 13	--	89.7
Group III Maturity		
Dekalb XL390*	106.0	--
Dekalb 999*	103.2	--
Mo 476W*	99.1	--
Mo 881	113.6	--
Mo 916	102.8	--
US 523W*	98.5	--
US 523WA*	91.3	--
US 523WB*	95.4	--
Group IV Maturity		
Dixie 29	109.1	--
Mean	97.7	94.3

*White Hybrid
**TE = Taylor-Evans

Table 10. Summary of performance records for hybrids tested in Districts 1, 2, and 3 for the period 1965-1967 (8 tests).

Hybrid	Acre Yield (bu)	% Lodging	
		Root	Stalk
Group I Maturity			
Pioneer 3420	120.1	2.5	13.7
Group II Maturity			
Pioneer 321	131.9	3.4	20.3
Pioneer 3306	138.4	1.8	8.6
Pioneer 3307	126.9	2.2	13.5
Kansas 1639	115.6	1.1	22.5
Mo SX1	123.5	8.3	11.1
Mo SX3	123.1	2.8	15.3
Mo 63	122.4	4.2	11.9
Mo 1023	122.7	4.6	11.2
US 13	113.0	1.6	36.6
Group III Maturity			
Mo 476W*	125.5	6.3	23.2
US 523W*	118.4	7.8	24.0
US 523WA*	116.4	5.4	29.6
US 523WB*	112.1	7.1	25.5
Mean	122.1	4.2	19.1

*White Hybrid

Table 11. Summary of performance records for hybrids tested in Districts 4, 5, and 6 for the period 1965-1967 (8 tests).

Hybrid	Acre Yield (bu)	% Lodging	
		Root	Stalk
Group I Maturity			
Pioneer 3420	98.2	0.0	14.0
Group II Maturity			
MFA K6	111.2	1.2	11.3
MFA 2222	97.0	1.5	11.4
Pioneer 321	99.2	0.5	15.0
Pioneer 3300	108.6	1.3	10.5
Pioneer 3306	114.0	0.0	9.9
Pioneer 3307	109.6	0.6	12.3
Kansas 1639	93.4	1.8	17.1
Mo SX1	105.7	2.9	7.2
Mo SX3	105.0	1.8	6.2
Mo 63	105.1	0.9	11.8
Mo 880	91.5	0.4	8.9
Mo 1023	97.6	1.3	15.6
US 13	94.0	0.7	25.7
Group III Maturity			
Mo 476W*	104.8	5.4	23.0
US 523W*	89.5	4.8	25.5
US 523WA*	104.0	8.8	26.8
US 523WB*	100.0	7.8	21.4
Mean	101.6	2.3	15.2

*White Hybrid

Table 12. Summary of performance records for hybrids tested in Districts 7, 8, and 9 for the period 1965-1967 (9 tests).

Hybrids	Acre Yield (bu)	% Lodging	
		Root	Stalk
Group II Maturity			
Kansas 1639	84.0	0.0	9.1
Mo SX1	97.9	0.0	1.8
Mo 63	87.3	0.0	3.7
Mo 880	82.1	0.0	6.1
Mo 881	98.4	0.3	4.5
Mo 1023	86.4	0.0	4.4
US 13	82.4	0.2	12.8
Group III Maturity			
Mo SX10	91.3	0.0	2.3
Mo 476W*	96.4	3.0	7.2
Mo 916	101.1	0.1	3.4
US 523W*	92.5	1.4	10.4
US 523WA*	99.7	0.8	9.2
US 523WB*	97.9	0.8	12.6
Mean	92.1	0.5	6.7

*White Hybrid

Table 13 . Pedigrees of open-pedigree hybrids tested in 1967.

Hybrids	Pedigree	Endosperm Color
Medium Maturity (115-120 Days)		
Kansas 1639	(WF9 x 38-11)(K148 x K150)	yellow
Mo SX-1	(Mo5 x CI21E)	yellow
Mo SX-3	(Mo17 x Mo5)	yellow
Mo SX-14W	(33-16 x Ky201)	white
Mo SX-15W	(Ky216 x CI66)	white
Mo SX-16W	(33-16 x Mo14W)	white
Mo 63	(WF9 x B41)(Mo17 x C103)	yellow
Mo 63A	(WF9 x H49)(Mo17 x C103)	yellow
Mo 64	(WF9 x B41)(C103 x Mo17)	yellow
Mo 65-2	(H60 x CI21E)(B37 x Mo5)	yellow
Mo 880	(WF9 x 38-11)(K148 x Mo5)	yellow
Mo 881	(CI21E x Mo7)(Oh7B x Oh29)	yellow
Mo 1023	(WF9 x B41)(Mo5 x C103)	yellow
Late Maturity (125-135 Days)		
Mo SX-10	(B37 x CI21E)	yellow
Mo 62-10	(WF9 x B41)(Mo6 x CI21E)	yellow
Mo 64-30W	(Mo1W x H29)(H28 x H31)	white
Mo 64-32W	(H21 x H28)(H31 x 33-16)	white
Mo 476W	(33-16 x H28)(K55 x K6)	white
Mo 916	(Mo6 x CI21E)(Oh7B x Oh29)	yellow
US 523W	(K55 x K64)(Ky27 x Ky49)	white
US 523WA	(CI66 x CI64)(Ky27 x Ky49)	white
US 523WB	(CI66 x CI64)(CI127 x Ky49)	white

Table 14. Location by districts of commercial hybrids entered in the 1967 yield trials.

Hybrid	Districts									Thick planting experiments		
	1	2	3	4	5	6	7	8	9	10	11	12
Maturity Group I												
Asgrow A90B	X	X	X							X		
Asgrow ASC95	X	X	X							X		
Asgrow ATC106	X	X	X							X		
Asgrow ASC112				X	X	X					X	
Corn King 1023	X											
Dearmont-Oliver BB64A									X			
Dekalb XL65A		X			X	X		X				
Dekalb XL361	X	X		X	X	X						
Maygold F35	X											
McCurdy 3x6	X	X	X									
MFA B6	X	X	X							X		
MFA B7	X	X	X	X	X	X	X	X	X	X	X	X
MFA 2151	X	X	X							X		
Northrup-King KT623A	X						X					
Northrup-King KT657	X						X					
Northrup-King PX63	X	X		X			X	X				
Northrup-King PX610	X	X	X	X	X	X				X	X	
Pioneer 3420	X	X	X	X	X	X	X			X	X	
Pioneer 3505	X	X	X							X		
Pioneer X3329	X	X	X	X	X	X	X			X	X	
Princeton SX-606						X						
Princeton SX-690				X	X	X					X	
Super Crost 5900 (Ed. J. Funk)			X									
Super Crost 5907 (Ed. J. Funk)					X							
Super Crost 8535 (Ed. J. Funk)			X		X							
Stull 707				X	X	X						
Stull 337Y	X	X	X							X		
Stull 807YBSX	X	X	X		X	X				X		
Sup'r Maiz M539			X									
T. E. Harvestmaster	X	X	X	X	X	X	X	X	X	X	X	X
Maturity Group II												
Asgrow A150	X	X	X	X	X	X			X	X	X	
Asgrow A204				X	X	X	X	X	X		X	X
Bo-Jac X7	X	X	X							X		
Bo-Jac X8	X	X	X							X		
Cargill 695	X	X	X	X	X	X				X	X	
Dearmont-Oliver BB-65A									X			
Dearmont-Oliver BB-636									X			
Dekalb XL83							X					
Dekalb XL385							X		X			
Dekalb 848		X		X	X	X						
Excel 769 (Exp.)	X	X	X							X		
Excel 1310 (Exp.)	X	X	X							X		
Funk G 144							X					
Funk 711 AA							X					
Funk G 4641						X						
Funk G 4656						X						
Funk G 4697						X						
Funk G 5757						X						
Ia.-Mo. SX-17			X									
Maygold 2036	X	X	X	X	X					X		
Maygold 29X	X	X		X	X							
Maygold 58X	X	X										
Maygold Exp. 9	X											
McAllister SX-6509			X									
McAllister SX-6584			X									
McAllister 13A			X									
McCurdy 900				X	X	X					X	
McCurdy 7X11E				X	X	X					X	
McCurdy H5-61	X	X	X							X		
McCurdy HP5	X	X	X							X		
McCurdy HP8				X	X	X					X	

Table 14. Continued.

Hybrid	Districts									Thick Planting experiments		
	1	2	3	4	5	6	7	8	9	10	11	12
Meacham M-7W									X			
Meacham M-33YB									X			
Meacham MX-35W									X			
Meacham MX-50W									X			
Meacham MX-75W									X			
MFA K6				X	X	X	X	X	X			
MFA 2222				X	X	X	X	X	X		X	X
Morton MXL 57			X									
Morton MXL 79			X									
Northrup-King KT626	X	X	X						X	X		
Northrup-King PX616	X	X	X	X	X	X	X	X	X	X	X	X
Northrup-King PX674	X	X	X	X	X	X	X	X	X	X	X	X
Northrup-King PX676	X	X	X	X	X	X	X	X	X	X	X	X
Pioneer 321	X	X	X	X	X	X	X	X		X	X	
Pioneer 3196								X	X			
Pioneer 3300	X	X	X	X	X	X	X	X		X	X	
Pioneer 3302	X	X	X	X	X	X	X	X		X	X	
Pioneer 3306	X	X	X	X	X	X	X	X	X	X	X	X
Pioneer 3307	X	X	X	X	X	X	X	X		X	X	
Pioneer X6370	X	X			X	X	X					
Princeton SX-802						X			X			
Princeton SX-803				X	X	X	X	X	X		X	X
Princeton SX-804				X	X	X	X	X	X		X	X
Princeton SX-809						X			X			
Schenk S-73A									X			
Schenk SS-77A							X	X	X			X
Schenk S-96W									X			
Schenk SS-X75							X	X	X			X
Schenk SS-X85							X	X			X	
Stull 307									X			
Stull 108Y					X	X						
Stull 500WB	X								X			
Stull 800 WSX	X								X			
Stull 807 YBSX	X	X	X		X	X						
Stull 807 YSX	X	X	X		X	X						
Summers H60				X								
Sup'r Maiz 6			X		X							
Sup'r Maiz 70	X	X	X							X		
Sup'r Maiz 77	X	X			X							
T. E. E20YA	X	X	X	X	X	X	X	X	X	X	X	X
T. E. Bonusmaker S	X	X	X	X	X	X	X	X	X	X	X	X
T. E. Cropmaster	X	X	X	X	X	X	X	X	X	X	X	X
United-Hagie IXL8	X											
United-Hagie 5S570	X											
United-Hagie 5S701	X											
United-Hagie 6S540	X											
United-Hagie 6S550	X											
United-Hagie 6S560	X											
Maturity Group III												
Excel 7907 (Exp.)	X											
PAG 399	X	X		X	X	X	X	X		X	X	
PAG SX29	X	X	X	X	X	X	X	X		X	X	
PAG SX99	X	X		X	X	X	X	X	X		X	X
Pioneer 3171	X	X	X	X	X	X	X	X		X		
Princeton SX-927						X			X			
Princeton 920-A						X			X			
Princeton 990-A						X			X			
Maturity Group IV												
Funk 711AA							X					

Table 15. Location by districts of open-pedigree hybrids in 1967 yield trials.

Hybrids	1	2	3	4	5	6	7	8	9	10	11	12
				Maturity Group II								
Kansas 1639	X	X	X	X	X	X	X	X	X			
Missouri SX1	X	X	X	X	X	X	X	X	X	X	X	X
Missouri SX3	X	X	X	X	X	X	X	X	X			
Missouri SX14W	X	X	X	X	X	X	X	X	X	X	X	X
Missouri SX15W	X	X	X	X	X	X	X	X	X	X	X	X
Missouri SX16W	X	X	X	X	X	X	X	X	X	X	X	X
Missouri 63	X	X	X	X	X	X	X	X	X			
Missouri 63A	X	X	X	X	X	X	X	X	X			
Missouri 64	X	X	X	X	X	X	X	X	X			
Missouri 65	X	X	X	X	X	X	X	X	X	X	X	X
Missouri 65-2	X	X	X	X	X	X	X	X	X	X	X	X
Missouri 880	X	X	X	X	X	X	X	X	X			
Missouri 881	X	X	X	X	X	X	X	X	X			
Missouri 1023	X	X	X	X	X	X	X	X	X			
US 13	X	X	X	X	X	X	X	X	X	X	X	X
				Maturity Group III								
Missouri SX10	X	X	X	X	X	X	X	X	X			
Missouri 476W	X	X	X	X	X	X	X	X	X	X	X	X
Missouri 916				X	X	X	X	X	X			
Missouri 62-10	X	X	X	X	X	X	X	X	X			
Missouri 64-30W	X	X	X							X		
Missouri 64-32W	X	X	X							X		
US 523W	X	X	X	X	X	X	X	X	X			
US 523WA	X	X	X	X	X	X	X	X	X			
US 523WB	X	X	X	X	X	X	X	X	X			

Table 16. Sources of seed for commercial hybrids.

Hybrid	Firm	Address
Asgrow	Asgrow Seed Company	P. O. Drawer A. San Antonio, Texas 78211
Bo-Jac	Bo-Jac Hybrid Corn Co.	R.R.#2, Mt. Pulaski, Illinois 62548
Corn King	Malcolm H. Grieve	Pierson, Iowa 51048
Excel	Excel Sorghum Company	P.O. Box 1629, Plainview, Texas 79072
Ia-Mo	Iowa-Missouri Hybrid Corn Co.	Keosauqua, Iowa 52565
Maygold	Earl May Seed & Nursery Co.	Shenandoah, Iowa 51601
McAllister	McAllister Seed Farms	P.O. Box 206, Mt. Pleasant, Iowa 52641
McCurdy	W. O. McCurdy & Sons	Fremont, Iowa 52561
Meacham	Meacham's Hybrids	R.R. #3, Morganfield, Kentucky 42437
MFA	MFA Seed Division	Marshall, Missouri 65340
Morton	R. A. Morton & Sons, Inc.	Bowen, Illinois 62316
Northrup-King	Northrup-King & Co.	1500 Jackson, N.E., Minneapolis, Minn.55413
Oliver	Dearmont Oliver & Sons	Charleston, Missouri 63834
Pioneer	Garst & Thomas Hybrid Corn Co.	Coon Rapids, Iowa
Pioneer	Pioneer Corn Co., Inc.	221 N. Main St., Tipton, Indiana 46072
Princeton	Princeton Farms	P. O. Box 319, Princeton, Indiana 47570
Schenk	C. H. Schenk & Sons, Inc.	R.R. #4, Vincennes, Indiana 47591
Stull	Stull Brothers, Inc.	P.O. Box 7, Sebree, Kentucky 42455
Summers	Llroy B. Summers	R.R. #2, Malta Bend, Missouri 65339
Super Crost	Edw. J. Funk & Sons, Inc.	Kentland, Indiana 47951
Sup'r Maiz	Moews Seed Companies	Granville, Illinois 61326
Taylor-Evans	Taylor-Evans Seed Co.	Box 480, Tulia, Texas 79088
United-Hagie	United-Hagie Hybrids, Inc.	4244 Clinton Ave., P.O. Box 2007 Des Moines, Iowa 50310

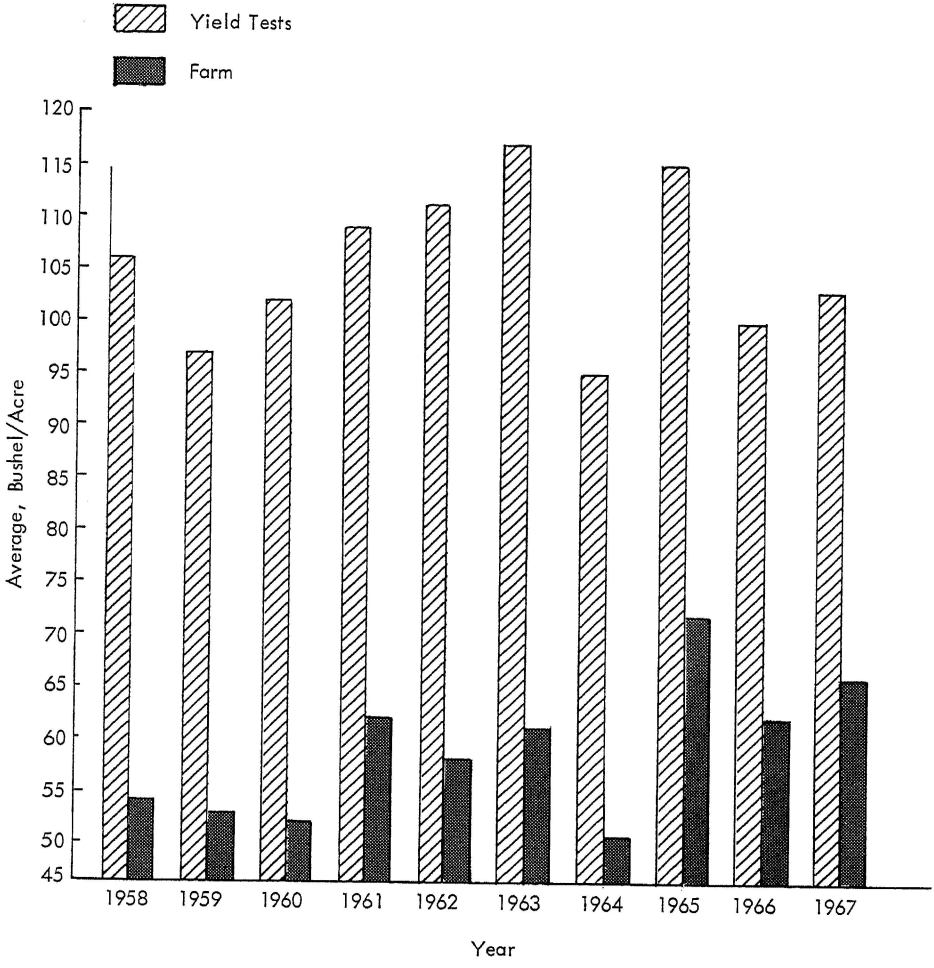


FIGURE 2: COMPARISON OF AVERAGE YIELD OF ALL HYBRIDS IN STATE YIELD TESTS WITH AVERAGE YIELD OF ALL CORN PRODUCED IN MISSOURI BY YEARS (1958-1967)