

**1961  
MISSOURI  
HYBRID  
CORN  
YIELD  
TRIALS**

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And

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**AGRICULTURAL EXPERIMENT STATION**

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# 1961

## Missouri

# HYBRID CORN YIELD TRIALS

O. V. Singleton and M. S. Zuber

Average yield for the 1961 Missouri corn crop is estimated at 62 bushels per acre. Average yield of all hybrids tested at the 17 yield trial locations was 109 bushels per acre. The highest yielding hybrid, Mo4077W, produced 157 bushels per acre at Moscow Mills. The total rainfall from May 1 to September 15 ranged from 17 inches to more than 29 inches, while the number of days with temperatures above 90° varied from 12 to 61 at the different locations. Dry periods of 15 to 31 days were reported at several locations. Acre yields were reduced materially by these and other factors at some locations. This was very apparent at Adrain, Carthage, Ellington, Sikeston, Tarkio, and Cole Camp. Heavy rains in May delayed planting until June at some locations and resulted in later maturity with high grain moisture at harvest. In general, stalk lodging was higher than usual throughout the state particularly in districts 4, 5, and 6. Corn Borer and high winds contributed to high percent of stalk lodging at some locations.

## TESTING PROCEDURES

### Testing Areas:

The state was divided into nine districts with two tests located in each except District 5 in which there were three tests. Figure 1 shows the districts and locations of testing fields. The nine districts match those currently used for reporting the Missouri Farm Census.

### Seed Source:

In 1961 all producers and distributors of hybrid seed corn were eligible to enter these tests. No limit was placed on the number of hybrids any one company could enter and any hybrid could be entered in as many districts as desired. Fifteen pounds of seed for each district were sent in by firms for each entry. Seed for the open-pedigree hybrids was furnished by the state and federal agricultural experiment stations and by certified seed producers.

### Type of Field Design:

The number of hybrids tested in each district varied from 40 in Districts 2 and 8 to 64 in Districts 1 and 2. The hybrids were planted with each hybrid in four plots at each testing location. Plots consisted of two rows of five hills; they were located at random over the testing area to minimize cultural and soil differences.

### Stand:

All tests were planted at the rate of five seeds per hill. Plants were thinned to three or four per hill, the number depending upon expected environmental conditions. The stand percentage was 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 from the base more than 30 degrees from the vertical and "stalk-lodged" if it was broken below the ear. A plant that was both root and stalk lodged was counted in both categories. The percent was based on the total 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 four plots of a hybrid at a location. Measurement consisted of the approximated number of feet from the base of the plant to the point of attachment of the upper ear.

### Moisture:

The grain moisture of each entry was determined at harvest by removing two rows of kernels from each of 10 ears, randomly selected from the first and fourth replications. The grain from each replication was thoroughly mixed and the moisture content of the 100-gram sample was determined with a Steinlite moisture meter. The moisture percentage reported is the average of the two replications.

## Yield:

The corn from each plot was 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. Therefore, the yields at each location constitute an average yield of the four plots after all adjustments were made.

## 1961 RESULTS

1961 results are reported on a relative maturity group basis.

Group 1 - approximately 90 days; Group 2 - 115 days; Group 3 - 125 days; Group 4 - 135 days.

Results reported for each district are for tests conducted in 1961. Summaries are for 1959, 1960, and 1961.

It has been the policy of many to select hybrids on a single year's results or results from a single location. This is risky as environmental conditions fluctuate from year to year. The best hybrids are those which perform well over a period of years.

## THREE-YEAR PERFORMANCE RECORDS

Since the reorganization of the Missouri yield trials on a district basis in 1957, a number of hybrids have been tested for a 3 to 5-year period, either in a single district or in groups of districts. 1959, 1960, and 1961 results are reported in tables for the respective districts.

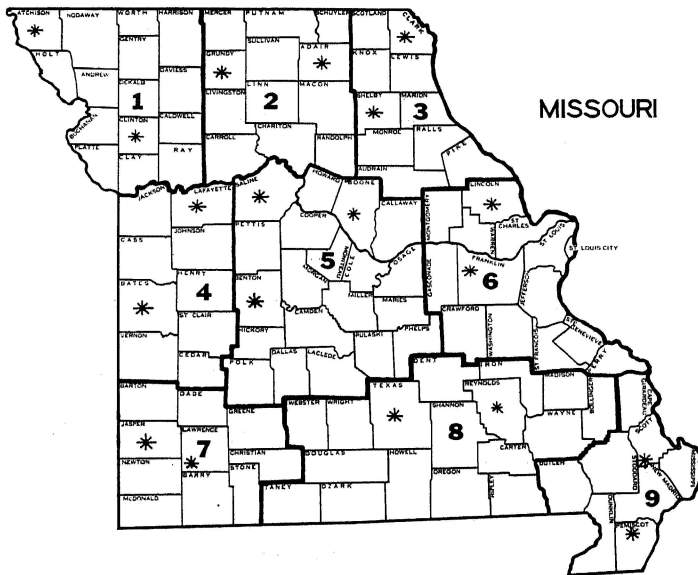
It should be emphasized that the results of tests for a period of more than 1 year are of greater value in selecting hybrids than any single year's results. However, if one must rely on results from any one year, it is best to use the average performance from as many testing locations as possible on the area where the hybrid is to be grown.

A 1959-1961 summary of test results for hybrids grown in each of the nine districts is in Tables 10 to 13.

Pedigrees of all open-pedigree hybrids tested in 1961 are listed in Table 14.

Numerous new closed-pedigree hybrids were tested from 1957 through 1961 for the first time. The Missouri Agricultural Experiment Station does not make specific recommendations for these hybrids, but we do suggest that farmers growing a new hybrid for the first time try a small acreage to determine whether they like the hybrid before they plant a large acreage of it. This recommendation should be practiced for all new hybrids, whether of closed or of open-pedigree origin.

Table 15 gives the districts in which different hybrids were entered by commercial companies in 1961. Table 16 gives the districts in which different open-pedigree hybrids were entered. Table 17 gives sources of seed of commercial hybrids.



**Fig. 1—Map showing the 9 districts and the testing locations.  
(\*) Location of tests.**

DISTRICT 1

Data for District 1 are reported in Tables 1A to 1H. Rainfall and temperatures were very favorable. Leafblight was exceptionally high in this district.

Table 1A Percent of Total Farmland Area Planted to Corn, Total Corn Acreage, Average Acre Yield and the Average Acre Yield for Hybrids Tested in the Missouri Corn Yield Trials for the 10-year Period (1951-1960), 1959, 1960 and 1961, in District 1.

		Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (Bu.)	Missouri Corn Yield Tests
10 year average	1951-1960	20.3	888,400	44.5	
	1959	25.4	1,012,000	57.8	95.2
	1960	21.4	940,000	53.5	115.7
	1961	14.0*	610,000*	64.4*	109.0

\*Estimated as of October 1, 1961.

Table 1B Location of Yield Trials, Date Planted and Harvested, and the Average Yield for Each Testing Location in District 1.

Testing Location	Cooperator	Date Planted	Date Harvested	Avg. Acre Yield (Bu.)	LSD Bu.
Tarkio	Ray Schmidt	May 24	Nov. 8	100.2	17.9
Lathrop	James Chenoweth	May 25	Nov. 10	117.7	18.0

Table 1C Total Rainfall, Number of Days with Rain, and Dry Periods from May 1 to September 15 at Each of the Testing Locations in District 1.

Testing Location	Nearest Weather Station	Total Rain- fall	No. of Days with Rain					Total	Dry Periods*
			May	June	July	Aug.	Sept. 1-15		
Tarkio	Tarkio	22.76	12	11	7	7	6	43	None
Lathrop	Lathrop	24.52	9	8	8	6	6	37	5/18-6/12

\* A dry period must have at Least 15 Consecutive days with less than 0.25 in. Precipitation.

Table 1D Average Temperature, Departure from Normal, and the Number of Days with Temperatures of 90° or more, and 100° or more from May 1 to September 15 at each of the Testing Locations in District 1.

Testing Location	Nearest Weather Station	Average Temp.	Departure from Normal	No. Days with Temperatures 90° or more		No. Days with Temperatures 100° or more
				1961	Avg.	1961
Tarkio	Tarkio	70.2	-1.6	28	45	0
Lathrop	Lathrop	70.1	-1.4	27	41	0

Table IE 1961 Performance Record for Hybrids Tested at Tarkio and Lathrop, Missouri, in District 1 (Experiments 1 & 2.)

Hybrid	Acre Yield Bu.	Moist- ure in Grain %	Stand %	Lodged Plants		Drop- ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
PIONEER 3359	116.7	19.8	97	7.9	3.4	2.0	4.7
GRIEVES C-K 418	110.1	19.7	96	0.0	4.8	0.4	3.9
MAYGOLD 98	104.2	18.2	96	2.9	4.1	0.0	3.7
MAYGOLD 68	101.6	18.8	97	2.0	1.2	0.0	3.7
IOWA 4376	100.7	19.5	92	7.9	6.5	0.4	3.9
MFA 2123	97.7	19.4	92	7.2	13.9	0.3	4.2
<u>Group II Maturity</u>							
MFA K6	132.6	20.1	97	0.0	3.6	1.8	4.7
DEKALB 831	129.3	18.9	97	7.7	17.3	0.4	4.6
DEKALB 805	125.0	18.7	98	0.0	1.5	1.7	4.2
UNITED HAGIE 158	124.6	25.0	93	5.6	18.1	0.8	4.1
PIONEER 321	123.3	18.5	98	3.6	6.3	0.7	4.7
DEKALB 633	122.1	19.9	94	2.9	10.8	3.1	4.7
MO 843	122.0	19.7	96	2.6	12.0	1.9	4.5
PIONEER 3304	121.8	20.6	97	1.3	7.8	2.7	4.2
DEKALB 3 X 1	117.7	18.8	89	9.8	13.2	1.7	4.2
MAYGOLD 29X	117.2	19.9	98	3.9	2.2	1.3	4.2
DEKALB 640	116.7	19.8	99	0.7	2.8	0.0	4.7
MO 447W*	116.2	24.5	98	6.8	7.9	1.0	4.9
MO 4080 W	115.4	21.3	95	11.6	6.6	0.5	4.5
DEKALB 662	114.2	18.3	97	10.5	12.5	1.0	4.1
CARGILL 310	112.5	18.3	96	1.8	4.5	1.3	4.1
UNITED HAGIE 3H 55	112.5	23.7	94	1.8	9.5	0.5	4.2
IOWA 5118	112.5	21.0	95	3.2	3.3	1.6	4.8
MAYGOLD 37	112.3	21.7	95	2.7	8.5	1.0	4.7
STECKLEY GG 30B	112.3	21.7	96	8.3	5.6	0.0	5.0
DEKALB 661	111.9	18.2	96	3.9	8.4	0.4	4.2
MO 880	111.5	21.3	99	6.3	7.6	1.0	4.3
DEKALB 854	111.4	18.0	96	3.3	9.3	0.7	4.6
MAYGOLD 48	110.4	17.9	92	1.8	4.8	0.4	4.2
AES 811W*	110.1	19.1	97	9.9	4.0	2.7	4.1
PIONEER 320	109.5	19.1	91	2.4	2.2	1.9	4.0
MO 1033	109.2	22.4	97	16.0	4.5	2.5	5.0
STECKLEY GG 15B	108.5	20.6	91	0.0	1.5	1.1	4.1
NEBR. NC PLUS 803	108.5	19.7	96	7.3	6.1	1.1	4.1
MO 1007	108.4	20.2	98	0.0	0.3	0.7	4.2
AG. ALUMNI 375	107.6	18.5	95	0.0	1.5	1.4	4.3
DEKALB 812	107.4	20.8	95	1.3	1.5	1.7	3.7
MFA 3210	107.4	17.6	92	0.0	3.4	0.8	4.2
IOWA 5018	106.9	19.5	98	3.0	3.7	0.3	4.6
US 13	106.4	19.1	96	1.4	20.3	3.2	4.7
MFA 2120	106.4	20.0	90	0.5	4.2	1.4	4.4
AG. ALUMNI 128	105.6	18.2	96	0.0	2.4	1.8	3.9
CARGILL 330	105.4	18.8	95	0.9	7.0	1.3	4.2
MO 1013	104.1	21.9	93	0.0	2.6	2.2	4.2
IOWA 4732	103.2	18.2	94	1.4	1.4	1.8	3.8
KAN 1639	102.7	18.7	94	3.3	9.9	1.4	4.5
UNITED HAGIE WW50	102.5	21.4	96	4.9	18.7	1.5	3.9
MO 1017	101.9	19.7	90	0.5	2.5	0.7	4.5
KAN 1859	101.6	22.5	96	9.1	18.4	2.1	4.1
CARGILL 315	101.4	19.6	92	1.0	3.4	1.8	3.8
NEBRASKA 501D	101.4	18.9	98	0.0	4.6	0.0	3.9
AES 801	101.1	23.3	98	1.3	2.2	0.8	4.5
DEKALB 3 X 2A	100.5	17.7	93	5.8	3.1	0.5	4.4
MO 1023	100.4	20.2	96	2.2	1.9	2.0	4.3
CARGILL 335	99.3	21.9	83	3.2	12.0	3.2	4.2
MO. MULTIPLE CROSS	93.0	21.2	96	0.7	5.4	0.7	4.2
MO 995	78.5	23.0	97	5.2	2.1	0.7	3.7
MO 1020	77.4	21.4	58	0.5	6.2	0.0	4.1
<u>Group III Maturity</u>							
US 523W*	120.4	20.9	98	5.1	10.9	1.6	5.0
KAN 2802*	115.1	24.3	95	9.1	12.3	0.3	5.0
PIONEER 312A	115.0	21.8	97	1.3	8.5	0.7	4.3
PIONEER 314	114.6	19.8	97	2.5	4.7	1.3	4.2
CARGILL 380	101.7	23.0	94	6.3	7.3	1.8	4.7
US 619W*	97.6	21.8	96	2.6	6.1	1.4	4.9
Mean	109.0	20.3	93	3.7	6.6	1.2	4.3

\*White Hybrid

Table F 1961 Performance Record for Hybrids Tested in District 1, Near Taxio, Missouri, in Atchison County. Planted May 24, 1961. Harvested November 8, 1961. (Exp. 1).

Hybrid	Acre Yield Bu.	Moisture in Grain %	Stand %	Lodged Plants		Drop-ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
GRIEVES C-K 418	109.4	20.2	96	0.0	7.8	0.7	3.9
PIONEER 3359	104.3	18.4	96	6.5	2.6	3.9	4.8
MAYGOLD 68	96.9	19.3	95	3.9	0.7	0.0	3.5
MAYGOLD 98	96.2	19.3	91	0.0	4.8	0.0	3.8
MFA 2123	96.1	17.6	96	0.0	7.8	0.6	4.4
IOWA 4376	88.5	20.4	89	0.0	4.2	0.7	3.9
<u>Group II Maturity</u>							
MFA K6	126.8	20.1	94	0.0	4.7	2.7	4.9
DEKALB 831	124.0	18.5	96	8.5	26.8	0.7	4.8
PIONEER 321	122.9	17.8	98	3.8	8.3	1.3	4.8
DEKALB 633	117.8	19.7	91	4.8	16.4	6.2	4.8
DEKALB 640	115.6	19.7	98	1.3	3.8	0.0	4.8
DEKALB 3 X 1	115.4	18.8	94	8.6	10.6	3.3	4.5
CARGILL 310	114.2	18.8	94	2.6	4.6	2.6	4.3
PIONEER 3304	113.1	20.2	97	2.6	10.3	4.5	4.5
DEKALB 662	112.9	18.2	95	9.9	13.8	2.0	4.3
MAYGOLD 29X	111.6	20.3	97	7.7	2.6	2.6	4.4
IOWA 5118	111.3	21.0	96	4.5	3.9	3.2	4.9
DEKALB 805	110.5	18.9	97	0.0	1.3	2.6	4.4
MO 843	109.4	19.7	98	2.5	13.4	3.8	4.6
MAYGOLD 48	107.5	18.0	88	3.5	7.8	0.7	4.3
MO 4080 W*	107.4	20.0	96	7.8	7.8	0.0	4.8
MO 880	106.4	20.5	99	5.7	7.6	1.9	4.6
NEBR. NC + 803	105.6	20.5	93	9.4	5.4	1.3	4.4
US 13	104.9	19.7	98	0.0	26.3	6.4	5.0
DEKALB 661	104.7	17.6	93	2.7	7.4	0.7	4.4
UNITED HAGIE 158	104.2	26.7	91	6.8	30.1	0.7	4.4
MFA 3210	104.1	18.1	91	0.0	4.1	0.7	4.3
MO 1033	103.5	21.4	98	19.7	6.4	3.2	5.0
UNITED HAGIE 3H 56	102.9	24.9	94	2.6	11.9	0.0	4.4
PIONEER 320	102.1	18.6	94	4.7	3.3	2.7	4.1
DEKALB 854	100.8	20.0	94	1.3	13.3	1.3	4.5
STECKLEY GG 30B	99.9	22.3	99	16.5	7.6	0.0	5.0
DEKALB 812	99.7	20.6	94	0.0	1.3	3.3	3.8
AG. ALUMNI 128	98.9	17.7	93	0.0	4.0	2.7	4.0
IOWA 5018	98.6	20.1	98	0.0	1.3	0.6	4.8
MAYGOLD 37	98.1	23.7	93	2.7	7.4	2.0	4.8
UNITED HAGIE WW50	98.1	21.5	95	4.6	15.8	1.3	4.0
STECKLEY GG 15B	97.9	20.2	89	0.0	2.1	2.1	4.1
AG. ALUMNI 375	97.8	17.5	94	0.0	2.0	2.7	4.5
MO 447W*	97.5	25.0	97	13.5	9.7	1.9	4.9
MO 1007	97.3	20.4	98	0.0	0.6	1.3	4.3
AES 811W*	96.7	17.3	94	7.9	4.6	4.6	4.1
DEKALB 3 X 2A	96.7	17.9	93	8.8	3.4	0.0	4.5
CARGILL 330	95.5	19.5	98	0.0	12.1	2.5	4.3
NEBRASKA 501D	95.3	18.5	99	0.0	5.7	0.0	3.9
IOWA 4732	94.6	18.6	94	0.0	0.0	2.7	4.0
CARGILL 335	92.4	22.1	83	5.3	18.9	5.3	4.4
CARGILL 315	92.0	19.7	96	0.0	3.9	2.6	3.9
MFA 2120	91.8	21.2	89	0.0	2.8	2.8	4.5
MO 1017	89.0	18.9	91	0.0	4.1	1.4	4.5
MO 1023	88.7	21.0	95	0.0	2.0	3.9	4.5
MO 1013	88.1	22.0	88	0.0	4.3	4.3	4.3
KAN 1639	86.8	19.2	98	3.8	11.5	1.9	4.6
KAN 1859	85.4	24.5	95	7.9	23.0	3.3	4.3
MO. MULTIPLE CROSS	83.8	21.5	98	1.3	9.0	1.3	4.3
AES 801	83.1	27.7	98	2.6	2.6	0.6	4.8
MO 1020	72.8	20.5	61	1.0	3.1	0.0	4.3
MO 995	67.2	22.7	97	7.7	3.2	1.3	3.9
<u>Group III Maturity</u>							
PIONEER 312A	110.0	21.2	94	2.6	11.9	1.3	4.6
PIONEER 314	109.0	19.7	96	0.7	8.5	2.6	4.4
KAN 2802*	106.8	22.7	98	15.4	15.4	0.6	5.0
US 523W*	101.0	21.2	98	5.8	12.2	3.2	4.9
CARGILL 380	85.3	23.0	93	8.1	10.1	2.7	4.8
US 619W*	68.6	21.3	99	5.1	9.5	1.9	5.0
Mean	100.2	20.4	94	3.9	8.0	2.0	4.4

Differences in yield between any two hybrids of less than 17.9 bushels are not considered significant.

\* White Hybrids

Table 1G 1961 Performance Record for Hybrids Tested in District 1, Near Lathrop, Missouri, in Clinton County. Planted May 25, 1961. Harvested November 10, 1961. (Exp. 2).

Hybrid	Acre Yield Bu.	Moist- ure in Grain %	Stand %	Lodged Plants		Drop- ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
PIONEER 3359	129.1	21.2	98	9.3	4.2	0.0	4.5
IOWA 4376	112.8	18.6	95	15.8	8.8	0.0	3.8
MAYGOLD* 98	112.2	17.1	100	5.8	3.3	0.0	3.5
GRIEVES C-K 418	110.8	19.2	95	0.0	1.8	0.0	3.9
MAYGOLD 68	106.3	18.3	98	0.0	1.7	0.0	3.8
MFA 2123	99.2	21.2	88	14.3	20.0	0.0	4.0
<u>Group II Maturity</u>							
UNITED HAGIE 158	145.0	23.2	95	4.4	6.1	0.9	3.8
DEKALB 805	139.4	18.4	99	0.0	1.7	0.8	4.0
MFA K6	138.4	20.0	100	0.0	2.5	0.8	4.4
MO 447W*	134.8	23.9	98	0.0	6.0	0.0	4.8
MO 843	134.6	19.6	94	2.7	10.6	0.0	4.4
DEKALB 831	134.6	19.3	98	6.8	7.7	0.0	4.3
PIONEER 3304	130.5	21.0	97	0.0	5.2	0.9	3.9
DEKALB 633	126.4	20.1	96	0.9	5.2	0.0	4.6
MAYGOLD 37	126.4	19.6	97	2.6	9.5	0.0	4.5
STECKLEY GG 30B	124.6	21.1	93	0.0	3.6	0.0	4.9
PIONEER 321	123.6	19.1	98	3.4	4.2	0.0	4.6
AES 811W*	123.5	20.8	99	11.8	3.4	0.8	4.1
MO 4080 W*	123.3	22.5	93	15.3	5.4	0.9	4.1
MAYGOLD 29X	122.7	19.4	98	0.0	1.7	0.0	4.0
UNITED HAGIE 3H 56	122.0	22.4	93	0.9	7.1	0.9	3.9
DEKALB 854	121.9	15.9	97	5.2	5.2	0.0	4.6
MFA 2120	120.9	18.8	90	0.9	5.6	0.0	4.3
MO 1013	120.0	21.7	98	0.0	0.9	0.0	4.1
DEKALB 3 X 1	119.9	18.7	84	10.9	15.8	0.0	3.9
MO 1007	119.4	20.0	97	0.0	0.0	0.0	4.0
AES 801	119.0	18.9	97	0.0	1.7	0.9	4.1
DEKALB 661	119.0	18.7	98	5.1	9.4	0.0	4.0
STECKLEY GG 15B	119.0	21.0	93	0.0	0.9	0.0	4.0
KAN 1639	118.5	18.1	90	2.8	8.3	0.9	4.3
DEKALB 640	117.8	19.8	99	0.0	1.7	0.0	4.5
KAN 1859	117.7	20.5	97	10.3	13.8	0.9	3.8
AG. ALUMNI 375	117.3	19.5	95	0.0	0.9	0.0	4.1
PIONEER 320	116.9	19.5	87	0.0	1.0	1.0	3.8
MO 880	116.6	22.1	98	6.8	7.6	0.0	4.0
DEKALB 662	115.5	18.4	98	11.1	11.1	0.0	3.9
CARGILL 330	115.2	18.1	91	1.8	1.8	0.0	4.0
IOWA 5018	115.2	18.9	98	6.0	6.0	0.0	4.4
DEKALB 812	115.1	21.0	96	2.6	1.7	0.0	3.5
MO 1033	114.8	23.3	96	12.2	2.6	1.7	5.0
MO 1017	114.7	20.5	88	0.9	0.9	0.0	4.4
IOWA 5118	113.6	20.9	93	1.8	2.7	0.0	4.6
MAYGOLD 48	113.3	17.8	95	0.0	1.8	0.0	4.0
AG. ALUMNI 128	112.3	18.7	98	0.0	0.8	0.8	3.6
MO 1023	112.1	19.4	96	4.3	1.7	0.0	4.1
IOWA 4732	111.8	17.8	93	2.7	2.7	0.9	3.6
NEBR. NC+ 803	111.4	18.9	98	5.1	6.8	0.9	3.6
CARGILL 310	110.8	17.8	97	0.9	4.3	0.0	3.6
CARGILL 315	110.8	19.5	88	1.9	2.8	0.9	3.6
MFA 3210	110.6	17.1	93	0.0	2.7	0.9	4.1
US 13	107.8	18.5	93	2.7	14.3	0.0	4.4
NEBRASKA 501D	107.4	19.2	96	0.0	3.5	0.0	3.6
UNITED HAGIE WW50	106.9	21.3	97	5.2	21.6	1.7	3.6
CARGILL 335	106.1	21.7	82	1.0	5.1	1.0	3.6
DEKALB 3 X 2A	104.2	17.5	93	2.7	2.7	0.9	4.4
MO. MULTIPLE CROSS	102.1	20.9	93	0.0	1.8	0.0	4.4
MO 995	89.7	23.2	97	2.6	0.9	0.0	3.6
MO 1020	82.0	22.2	54	0.0	9.2	0.0	3.6
<u>Group III Maturity</u>							
US 523W*	139.8	20.5	97	4.3	9.5	0.0	5.0
US 619W*	126.6	22.3	92	0.0	2.7	0.9	4.4
KAN 2802*	123.4	25.9	92	2.7	9.1	0.0	5.0
PIONEER 314	120.1	19.8	97	4.3	0.9	0.0	4.4
PIONEER 312A	119.9	22.3	99	0.0	5.0	0.0	3.6
CARGILL 380	118.0	22.9	95	4.4	4.4	0.9	4.4
Mean	117.7	20.1	94	3.4	5.2	0.3	4.4

Differences in yield between any two hybrids of less than 18.0 bushels are not considered significant

\* White Hybrids



Table 1H Summary of Acre Yield and Lodging for Hybrids Tested in District 1 for the Three-Year Period of 1959, 1960, and 1961.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
<u>Group I Maturity</u>				<u>Group II Maturity (Contd.)</u>			
MFA 2123	101.7	2.9	9.2	MFA 2120	106.0	0.3	2.4
Iowa 4376	99.1	2.6	3.3	Mo 843	106.0	1.4	6.9
<u>Group II Maturity</u>				US 13	105.2	1.9	4.1
DeKalb 805	120.7	0.2	0.6	Cargill 335	104.5	1.2	7.0
MFA K6	119.6	0.0	1.5	Steckley GG15	104.4	0.0	3.3
DeKalb 3 x 1	114.1	5.6	5.9	Mo 447W*	103.6	4.7	3.3
DeKalb 661	113.3	1.4	5.5	Kan 1859	103.5	4.2	7.5
DeKalb 854	112.2	1.4	5.2	AES 801	102.9	0.4	1.0
DeKalb 640	112.1	0.8	1.2	Kan 1639	101.7	1.5	5.1
Maygold 29X	110.0	2.0	2.2	AES 811W*	99.6	5.5	1.7
Maygold 37	109.5	0.9	4.6	Mo 995	98.2	1.9	1.3
Maygold 48	109.1	0.6	3.4	<u>Group III Maturity</u>			
MFA 3210	108.1	0.2	3.3	Pioneer 312A	112.0	0.3	3.7
Mo 880	106.4	3.0	3.1	US 523W*	107.0	2.6	4.4

\* White Hybrids

DISTRICT 2

Tables 2A to 2F give the 1961 results and 3-year summary for District 2. Climatic conditions were favorable at Spickard, resulting in above average yields. Spickard received the second highest rainfall and had the lowest temperatures reported for any location. Excessive rain fall in June, July and early August at Kirksville caused the abandonment of the test.

Table 2A Percent of Total Farmland Area Planted to Corn, Total Corn Acreage, Average Acre Yield and the Average Acre Yield for Hybrids Tested in the Missouri Corn Yield Trials for the 10-year Period (1951-1960), 1959, 1960, and 1961 in District 2.

		Farmland Planted to Corn(%)	Total Corn Acreage	Avg. Acre Yield(Bu.)	Missouri Corn Yield Tests
10 year average	1951-1960	13.4	525,000	44.8	
	1959	15.6	662,000	58.0	111.7
	1960	14.4	565,000	48.0	92.8
	1961	10.0*	382,000*	62.5*	109.7

\*Estimated as of October 1, 1961

Table 2B Location of Yield Trials, Date Planted and Harvested, and the Average Yield for Each Testing Location in District 2.

Testing Location	Cooperator	Date Planted	Date Harvested	Avg. Acre Yield(Bu.)	LSD Bu.
Spickard	N. W. Mo. Agri. Res. Center	May 13	Nov. 20	109.7	13.0
Kirksville	Ead Shockey	May 12	Not Harvested		

Table 2C Total Rainfall, Number of Days with Rain, and Dry Periods from May 1 to September 15 at Each of the Testing Locations in District 2.

Testing Location	Nearest Weather Station	Total Rain fall	No. of Days with Rain					Total	Dry Periods*
			May	June	July	Aug.	Sept. 1-15		
Spickard	Spickard	28.82	6	8	10	7	4	35	5/18-6/7
Kirksville	Kirksville	17.09	4	8	16	8	5	41	5/18-6/12 8/12-9/3

\*A dry period must have at least 15 consecutive days with less than 0.25 in. precipitation.

Table 2D Average Temperature, Departure from Normal, and the Number of Days with Temperatures of 90° or more, and 100° or more from May 1 to September 15 at each of the Testing Locations in District 2.

Testing Location	Nearest Weather Station	Average Temp.	Departure from Normal	No. Days with Temperatures 90° or more		No. Days with Temperatures 100° or more
				1961	Avg.	
Spickard	Spickard	68.6	-3.8	13	44	0
Kirksville	Kirksville	70.1	-1.9	17	44	0

Table 2E 1961 Performance Record for Hybrids Tested in District 2, Near Spickard, Missouri, in Grundy County. Planted May 13, 1961. Harvested November 20, 1961. (Exp. 3).

Hybrid	Acre Yield Bu.	Moist-ure in Grain %	Stand %	Lodged Plants		Drop-ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
PIONEER 3359	118.7	20.4	82	0.0	1.0	1.0	3.9
IOWA 4376	109.1	19.0	84	0.0	12.9	0.0	3.4
MFA 2123	103.0	21.1	88	0.0	17.0	0.0	3.6
MAYGOLD 98	102.4	19.2	87	0.0	6.7	0.0	3.1
MAYGOLD 68	97.5	19.8	85	0.0	7.8	1.0	3.1
<u>Group II Maturity</u>							
UNITED HAGIE 158	137.7	26.1	86	0.0	7.8	1.0	3.6
DEKALB 831	127.4	20.2	87	1.9	17.3	0.0	4.1
MO 843	126.3	20.4	88	2.8	17.9	0.0	4.0
PIONEER 321	125.2	21.0	92	0.0	22.7	0.0	3.5
MAYGOLD 29X	122.0	22.4	97	0.0	12.1	0.0	3.6
MFA K6	122.0	20.9	88	0.0	5.7	0.9	4.0
MAYGOLD 37	119.6	21.9	93	1.8	15.3	0.0	3.6
DEKALB 805	119.3	20.7	89	0.9	7.5	1.9	3.6
PIONEER 3304	117.8	21.6	85	0.0	15.7	1.0	3.8
CARGILL 340	116.3	21.4	83	0.0	25.0	5.0	3.8
UNITED HAGIE 3H 56	116.3	22.7	88	1.9	16.0	0.9	3.6
MO 1007	115.8	21.7	92	0.0	5.5	0.0	3.9
KAN. 1639	114.6	20.2	81	1.0	21.6	2.1	3.8
MCALLISTER 23A	114.5	21.7	93	0.0	3.6	0.9	3.8
IOWA 5118	114.4	20.5	96	0.0	11.3	0.9	4.5
DEKALB 3 X 1	114.1	20.4	92	1.8	32.7	0.9	3.5
MO 1023	113.4	22.8	93	0.0	9.9	0.0	3.5
CARGILL 330	112.5	19.6	80	0.0	3.1	0.0	3.6
DEKALB 3 X 4	112.1	20.8	87	0.0	21.2	1.0	4.3
MAYGOLD 48	111.9	20.2	82	0.0	14.3	1.0	3.4
MCALLISTER 13A	111.9	20.7	86	0.0	16.5	0.0	3.8
MCALLISTER X 1001	111.5	21.2	86	0.0	5.8	2.9	3.4
MO 447W*	110.4	23.3	82	0.0	13.3	0.0	3.9
CARGILL 5741	109.6	21.3	88	0.0	10.4	0.9	3.8
UNITED HAGIE WW 50	109.3	21.6	84	1.0	43.6	1.0	3.8
AES 811W*	109.1	20.8	90	0.0	3.7	0.9	3.5
DEKALB 661	108.8	21.0	86	0.0	22.3	0.0	3.8
AG. ALUMNI 375	108.8	20.5	89	0.0	14.0	0.9	3.6
MO 4080W*	108.7	22.6	83	0.0	5.0	0.0	4.1
MO 880	108.3	24.3	92	1.8	4.5	0.0	3.5
DEKALB 633	108.3	21.1	90	0.0	15.7	0.9	3.8
MFA 2120	108.3	19.6	85	0.0	9.8	0.0	3.8
STECKLEY GG 30B	107.8	24.1	86	1.0	12.6	0.0	3.9
AES 801	107.1	21.4	87	0.0	20.2	0.0	3.6
MO 1033	106.8	23.9	92	5.5	15.5	2.7	4.5
AG. ALUMNI 128	106.5	19.0	90	0.0	6.5	0.0	3.4
PIONEER 320	106.2	22.4	96	0.0	7.0	0.0	3.5
DEKALB 3 X 2A	106.0	19.1	88	2.8	11.3	0.0	3.6
KAN 1859	105.9	22.5	77	3.3	14.1	0.0	3.3
MO 1013	105.0	22.5	80	0.0	6.3	0.0	3.9
CARGILL 335	104.9	21.6	83	0.0	15.0	3.0	3.6
STECKLEY GG 15B	104.7	20.8	86	0.0	7.8	0.0	3.6
MO 1017	103.2	21.0	63	0.0	20.0	0.0	3.4
IOWA 5018	103.1	22.0	88	0.0	11.3	0.0	3.8
NEBRASKA 501D	102.8	21.1	94	0.0	22.1	0.9	3.5
DEKALB 812	99.6	21.3	84	0.0	8.9	0.0	3.1
US 13	96.5	21.0	76	0.0	38.5	2.2	4.3
MFA 3210	95.5	20.6	81	1.0	29.9	0.0	3.6
DEKALB 640	89.7	25.9	83	0.0	3.0	0.0	3.6
MO MULTIPLE CROSS	89.7	22.1	78	1.1	10.6	1.1	3.4
MO 995	85.0	26.0	88	0.9	3.8	0.9	3.4
MO 1020	83.8	21.2	53	3.1	6.3	0.0	3.4
<u>Group III Maturity</u>							
US 523W*	126.4	24.1	91	0.0	19.3	0.0	4.3
KAN 2802*	120.3	26.5	84	4.0	17.8	1.0	4.6
US 619W*	115.2	24.9	89	2.8	26.2	0.9	4.3
PIONEER 314	113.5	21.2	92	0.0	8.2	0.0	3.4
PIONEER 312A	107.4	24.6	81	0.0	10.3	0.0	3.8
DEKALB 869	107.3	21.6	92	0.0	13.6	0.0	3.8
CARGILL 380	103.5	24.1	91	0.0	10.1	0.0	3.8
Mean	109.7	21.7	86	0.6	13.6	0.6	3.7

Differences in yield between any two hybrids of less than 13.0 bushels are not considered significant.

\* White Hybrids

Table 2F Summary of Acre Yield and Lodging for Hybrids Tested in District 2 for the Three-Year Period of 1959, 1960, and 1961

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
<u>Group I Maturity</u>				<u>Group II Maturity (Contd.)</u>			
Iowa 4375	98.2	3.9	11.4	Steckley GG15	104.2	5.4	15.6
MFA 2123	97.2	8.2	13.2	Kan 1859	102.6	15.3	12.0
<u>Group II Maturity</u>				Cargill 335	102.2	6.7	16.1
DeKalb 805	118.5	10.1	8.5	DeKalb 812	101.7	6.5	6.8
Maygold 37	116.7	8.4	17.4	Mo 880	101.5	10.9	4.5
Cargill 5741	114.7	2.1	9.2	MFA 3210	100.1	4.5	15.8
Maygold 48	108.8	11.7	11.2	Mo 447W*	99.8	8.8	9.1
Maygold 29X	108.4	10.2	5.8	AES 801	99.7	7.2	13.3
Mo 843	108.2	7.9	19.9	DeKalb 640	98.3	3.2	3.1
DeKalb 3 x 4	107.7	7.1	17.3	AES 811W*	98.2	14.7	5.0
DeKalb 3 x 1	107.6	10.9	20.0	Mo 995	97.1	11.2	4.0
UH WW50	106.5	7.5	29.9	US 13	94.7	7.9	25.2
Kan 1639	106.1	11.2	13.5	<u>Group III Maturity</u>			
DeKalb 633	105.7	6.3	11.5	US 523W*	109.8	9.3	16.6
MFA 2120	105.4	5.2	7.6	DeKalb 869	104.1	9.0	10.4
				Pioneer 312A	103.3	5.8	6.9

\* White Hybrids

DISTRICT 3

Results for District 3 are given in Tables 3A to 3H. Rainfall and other weather conditions were very favorable in this district. Clarence had two dry periods in late May and late August. Heavy rains in May delayed planting until late May in both locations. District yields were the second highest of all district yields.

Table 3A Percent of Total Farmland Area Planted to Corn, Total Corn Acreage, Average Acre Yield and the Average Acre Yield for Hybrids Tested in the Missouri Corn Yield Trials for the 10-year Period (1951-1960), 1959, 1960, and 1961 in District 3.

		Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (Bu.)	Missouri Corn Yield Tests
10 year average	1951-1960	13.1	419,700	45.3	
	1959	19.4	621,000	56.6	108.4
	1960	17.3	554,000	52.0	79.9
	1961	12.7*	408,000*	65.5*	118.4

\*Estimated as of October 1, 1961

Table 3B Location of Yield Trials, Date Planted and Harvested, and the Average Yield for Each Testing Location in District 3.

Testing Location	Cooperator	Date Planted	Date Harvested	Avg. Acre Yield (Bu.)	LSD Bu.
Clarence	Anderson Meadows	May 26	Nov. 8	116.9	11.9
Wayland	D. L. Shrauner	May 23	Nov. 13	119.9	15.0

Table 3C Total Rainfall, Number of Days with Rain, and Dry Periods from May 1 to September 15 at Each of the Testing Locations in District 3.

Testing Location	Nearest Weather Station	Total Rain fall	No. of Days with Rain						Dry Periods*
			May	June	July	Aug.	Sept. 1-15	Total	
Clarence	Macon	27.51	7	10	15	9	5	46	5/19-6/6 8/13-9/3
Wayland	Kahoka	22.53	5	5	15	6	6	37	5/19-6/8

\* A dry period must have at least 15 consecutive days with less than 0.25 in. precipitation.

Table 3D Average Temperature, Departure from Normal, and the Number of Days with Temperatures of 90° or more, and 100° or more from May 1 to September 15 at each of the Testing Locations in District 3.

Testing Location	Nearest Weather Station	Average Temp.	Departure from Normal	No. Days with Temperatures 90° or more		No. Days with Temperatures 100° or more
				1961	Avg	
Clarence	Macon	70.2	-0.6	20	41	0
Wayland	Canton	69.2	-0.4	27	42	0

**Table 3E** 1961 Summary of Performance Records for Hybrids Tested Near Clarence and Wayland, Missouri, in District 3. (Exp. 5 and 6).

Hybrid	Acre Yield Bu.	Moisture in Grain %	Stand %	Lodged Plants		Dropped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
IOWA 4376	122.9	20.0	95	30.5	11.4	0.8	3.9
MORTONS 505	112.9	19.4	95	7.9	5.9	0.4	4.1
MFA 2123	104.1	22.0	93	21.4	14.8	3.4	4.3
<u>Group II Maturity</u>							
DEKALB 805	138.3	20.3	96	19.3	3.0	0.4	4.3
MFA K6	134.4	21.3	95	20.8	8.4	1.2	4.4
MO 447W*	133.7	25.3	97	33.4	4.7	0.0	4.7
BEAR UNICORN X 605	132.2	22.0	95	28.0	8.4	0.4	4.6
MO 1034	130.9	20.3	95	42.3	9.9	0.0	4.4
MO 1035	127.0	23.0	94	45.0	8.2	0.0	4.4
BEAR OK 96	126.4	24.0	96	31.1	11.6	0.5	4.8
PIONEER 321	125.3	20.9	91	17.3	11.1	0.0	4.5
MO 880	125.2	23.7	96	20.2	4.9	0.5	4.1
MCALLISTER X 1001	124.2	19.4	93	22.8	3.4	1.3	4.2
KAN 1639	124.0	21.5	95	18.8	19.3	0.3	4.5
IOWA 5043	123.8	19.9	92	12.7	17.1	0.0	4.7
AES 811W*	123.5	21.9	95	35.9	10.6	0.0	4.3
PIONEER 3304	122.0	22.0	95	23.3	6.7	0.0	4.2
MO 1023	120.8	23.0	97	27.0	8.1	0.3	4.3
MO 4078W	120.5	21.9	93	30.6	8.3	0.7	4.5
DEKALB 633	120.4	20.9	98	9.9	16.2	0.5	4.3
BEAR OK 878	120.4	20.6	94	18.1	8.2	0.3	4.7
AG. ALUMNI 375	120.1	19.8	97	11.9	7.0	0.3	4.5
MORTONS 6X	120.0	19.7	94	10.1	9.3	1.6	4.4
MO 4080W	120.0	23.0	95	26.2	9.0	0.4	4.6
STECKLEY GG 30B	119.8	25.5	95	37.5	12.5	0.0	4.7
CARGILL 340	118.5	20.5	95	8.5	12.2	0.8	4.3
NEBRASKA 501D	117.7	19.3	96	13.2	13.3	0.5	4.0
KAN 1859	117.4	24.0	96	36.3	18.8	0.4	4.2
MORTONS 12A	117.3	21.4	99	3.4	1.5	0.0	4.0
MFA 3210	117.0	19.1	94	11.8	13.7	0.0	4.6
DEKALB 812	116.4	21.3	98	4.8	9.4	0.7	3.9
IOWA 5118	116.4	20.8	95	14.8	10.1	0.0	4.6
CARGILL 315	116.2	19.1	96	9.1	14.2	1.9	3.9
IOWA 5018	116.2	21.6	96	12.8	30.6	0.0	4.3
DEKALB 831	115.8	22.5	95	35.8	26.3	1.6	4.3
MCALLISTER 13A	115.6	20.0	93	12.8	10.9	0.0	4.3
MO 1033	114.6	24.5	95	53.5	14.6	0.5	5.1
MO 843	114.5	21.8	95	27.2	24.9	0.5	4.5
IOWA 4732	113.4	19.0	95	12.1	10.8	0.5	3.8
AES 801	113.2	20.4	92	10.9	9.4	0.4	4.2
MO 1007	112.8	22.7	97	11.1	4.8	1.2	4.3
MCALLISTER 23A	112.8	22.7	95	4.3	5.9	0.0	4.2
MO 1013	112.7	22.8	95	10.8	7.6	2.4	4.1
MO 1017	112.1	21.3	88	23.4	4.9	0.0	4.6
MFA 118	111.3	19.9	93	18.3	14.9	0.9	4.4
AG. ALUMNI 128	110.1	19.7	96	6.5	5.9	0.0	3.9
US 13	109.0	21.8	96	23.6	24.0	1.1	4.9
MFA 2120	106.5	21.2	89	13.6	9.4	1.0	4.2
CARGILL 310	105.9	22.6	97	9.7	14.0	1.4	4.3
STECKLEY GG 15B	104.0	20.8	89	8.2	11.2	2.0	4.0
MO MULTIPLE CROSS	103.5	23.1	96	10.1	12.9	0.7	4.2
MO 1020	103.1	22.5	74	15.9	5.6	0.0	4.2
MO 995	97.5	25.1	98	25.7	3.0	0.0	3.9
<u>Group III Maturity</u>							
US 523W*	135.3	23.7	96	26.7	12.1	0.0	4.6
US 619W*	129.3	27.2	94	26.1	13.9	0.0	5.0
KAN 2802*	125.4	28.9	95	36.8	9.1	0.4	5.1
DEKALB 898B	125.3	23.4	97	23.3	10.6	2.4	5.2
KAN 4003	121.8	25.6	95	33.1	14.5	0.0	5.1
DEKALB 869	121.6	23.3	95	12.0	10.3	0.9	4.4
PIONEER 314	112.3	20.1	93	9.9	7.4	0.0	4.0
<b>Mean</b>	<b>118.4</b>	<b>21.9</b>	<b>94</b>	<b>20.3</b>	<b>11.0</b>	<b>0.6</b>	<b>4.4</b>
* White Hybrid							

Table 3F 1961 Performance Record for Hybrids Tested in District 3, Near Clarence, Missouri, in Shelby County. Planted May 26, 1961. Harvested November 8, 1961. (Exp. 5).

Hybrid	Acre Yield Bu.	Moisture in Grain %	Stand %	Lodged Plants		Drop-ped Earb %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
IOWA 4376	121.3	21.8	93	58.9	7.1	0.9	3.6
MORTONS 505	111.2	20.6	100	15.8	8.3	0.0	3.6
MFA 2123	108.4	22.8	92	42.7	13.6	0.0	3.9
<u>Group II Maturity</u>							
DEKALB 805	141.2	21.2	98	38.5	2.6	0.0	4.0
MFA K6	133.0	22.7	94	41.6	7.1	1.8	4.1
BEAR UNICORN X 606	132.2	22.6	97	56.0	6.0	0.0	4.4
MO 1034	129.6	21.4	96	76.5	10.4	0.0	3.9
MO 880	127.7	24.4	98	37.6	4.3	0.9	3.6
PIONEER 321	126.4	22.8	94	34.5	4.4	0.0	4.0
AG. ALUMNI 375	126.3	20.6	97	22.4	0.9	0.0	4.1
MO 1035	124.5	25.8	95	77.2	7.0	0.0	3.9
PIONEER 3304	124.3	24.0	97	46.6	5.2	0.0	3.9
MCALLISTER X 1001	124.1	19.9	92	45.5	2.7	1.8	3.9
BEAR OK 96	123.8	25.6	96	58.3	4.3	0.9	4.6
AES 811W*	123.1	23.2	93	63.4	8.9	0.0	3.9
IOWA 5043	122.8	20.5	94	23.9	7.1	0.0	4.5
MO 447W*	122.5	28.2	98	66.7	3.4	0.0	4.5
DEKALB 633	121.9	22.5	97	19.8	6.0	0.9	3.8
CARGILL 340	120.9	22.3	98	16.9	8.5	0.8	3.9
MO 4080W*	120.5	23.5	98	47.0	8.5	0.0	4.3
MORTONS 6X	120.3	21.5	91	20.2	3.7	0.0	4.1
MO 1023	119.8	26.6	97	52.6	7.8	0.0	3.9
MCALLISTER 13A	118.4	21.3	98	25.6	11.1	0.0	4.0
KAN 1859	117.3	25.2	98	63.2	15.4	0.0	4.0
IOWA 5118	117.2	21.9	96	26.1	6.1	0.0	4.5
MFA 3210	117.0	19.7	92	23.6	9.1	0.0	4.3
MORTONS 12A	116.6	22.7	98	6.8	1.7	0.0	3.6
CARGILL 315	116.5	20.0	98	16.1	10.2	1.7	3.4
KAN 1639	116.4	24.4	93	36.9	10.8	0.0	4.3
IOWA 5018	115.9	21.9	98	24.8	6.8	0.0	3.9
BEAR OK 878	115.8	21.7	92	35.5	2.7	0.0	4.5
MO 1013	114.1	24.3	96	20.9	2.6	3.5	3.8
NEBRASKA 501D	113.9	20.7	95	26.3	12.3	0.9	3.5
MO 4078W	113.9	23.2	93	57.7	7.2	0.0	4.1
MO 1007	113.0	24.3	98	22.2	4.3	1.7	3.6
MO 843	112.7	22.8	93	51.8	25.0	0.9	4.1
STECKLEY GG 30B	112.6	26.9	96	69.6	8.7	0.0	4.3
IOWA 4732	112.0	20.1	93	24.1	12.5	0.9	3.5
MCALLISTER 23A	111.3	25.6	98	8.5	0.9	0.0	3.9
MFA 118	111.2	20.8	96	36.5	16.5	1.7	3.8
AES 801	111.1	23.2	92	21.8	10.0	0.0	3.6
DEKALB 812	110.8	22.5	97	9.5	6.0	0.0	3.4
AG. ALUMNI 128	109.8	20.6	96	13.0	2.6	0.0	3.3
DEKALB 831	107.6	24.4	97	68.1	24.1	1.7	4.0
CARGILL 310	107.5	20.2	95	19.3	8.8	0.9	4.0
MO 1020	107.2	23.8	76	30.8	3.3	0.0	4.0
MO 1017	107.0	23.2	88	46.7	4.8	0.0	4.3
US 13	105.7	22.6	96	45.2	24.3	0.9	4.8
MO 1033	105.5	27.3	94	89.4	9.7	0.9	5.0
MFA 2120	101.8	23.4	89	27.1	10.3	1.9	3.8
MO MULTIPLE CROSS	101.8	24.8	95	20.2	8.8	0.0	3.6
STECKLEY GG 15B	99.9	21.1	87	16.3	7.7	1.9	3.5
MO 995	95.3	28.6	99	51.3	3.4	0.0	3.3
<u>Group III Maturity</u>							
US 523W*	132.3	26.6	97	52.6	7.8	0.0	4.1
DEKALB 869	123.2	23.7	95	21.9	8.8	1.8	4.1
US 619W*	122.3	29.9	94	52.2	9.7	0.0	4.9
DEKALB 898B	120.5	25.9	98	46.6	7.6	0.8	5.0
KAN 2802*	119.2	32.1	98	66.1	5.9	0.8	4.9
PIONEER 314	118.9	21.7	97	19.8	2.6	0.0	3.6
KAN 4003	<u>113.3</u>	<u>27.9</u>	<u>97</u>	<u>64.7</u>	<u>14.7</u>	<u>0.0</u>	<u>5.0</u>
Mean	116.9	23.4	95	38.7	8.0	0.5	4.0

Differences in yield between any two hybrids of less than 11.9 bushels are not considered significant.

\* White Hybrids

Table 3G 1961 Performance Record for Hybrids Tested in District 3, Near Wayland, Missouri in Clark County. Planted May 23, 1961. Harvested November 13, 1961. (Exp. 6).

Hybrid	Acre Yield Bu.	Moisture in Grain %	Stand %	Lodged Plants		Dropped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
IOWA 4376	124.4	18.1	96	2.0	15.7	0.7	4.1
MORTONS 505	114.6	18.1	90	0.0	3.5	0.7	4.5
MFA 2123	99.7	21.2	94	0.0	16.0	6.7	4.6
<u>Group II Maturity</u>							
MO 447W*	144.8	22.3	95	0.0	5.9	0.0	4.8
MFA K6	135.8	19.8	96	0.0	9.7	0.6	4.6
DEKALB 805	135.3	19.3	93	0.0	3.4	0.7	4.5
BEAR UNICORN X 606	132.2	21.4	93	0.0	10.7	0.7	4.8
MO 1034	132.2	19.2	93	8.1	9.4	0.0	4.8
KAN 1639	131.5	18.5	97	0.6	27.7	0.6	4.6
MO 1035	129.4	20.1	93	12.8	9.4	0.0	4.9
BEAR OK 96	129.0	22.4	96	3.9	18.8	0.0	4.9
MO 4078W	127.0	20.5	93	3.4	9.4	1.3	4.9
STECKLEY GG 30B	126.9	24.0	93	5.4	16.2	0.0	5.0
BEAR OK 878	125.0	19.4	96	0.6	13.6	0.6	4.9
IOWA 5043	124.7	19.3	90	1.4	27.1	0.0	4.9
MCALLISTER X 1001	124.3	18.8	94	0.0	4.0	0.7	4.4
PIONEER 321	124.2	19.0	88	0.0	17.7	0.0	4.9
AES 811W*	123.9	20.5	97	8.4	12.3	0.0	4.6
DEKALB 831	123.9	20.5	93	3.4	28.4	1.4	4.5
MO 1033	123.6	21.6	96	17.5	19.5	0.0	5.1
MO 880	122.6	23.0	93	2.7	5.4	0.0	4.5
DEKALB 812	122.0	20.1	99	0.0	12.7	1.3	4.3
MO 1023	121.8	19.4	97	1.3	8.4	0.6	4.6
NEBRASKA 501D	121.4	17.9	97	0.0	14.2	0.0	4.4
MORTONS 6X	119.6	17.9	96	0.0	14.9	3.2	4.6
PIONEER 3304	119.6	20.0	92	0.0	8.2	0.0	4.5
MO 4080W*	119.4	22.5	92	5.4	9.5	0.7	4.8
DEKALB 633	118.9	19.3	98	0.0	26.3	0.0	4.8
MORTONS 12A	117.9	20.0	99	0.0	1.3	0.0	4.4
KAN 1859	117.5	22.8	93	9.4	22.1	0.7	4.3
MO 1017	117.2	19.4	88	0.0	5.0	0.0	4.8
MFA 3210	116.9	18.4	96	0.0	18.2	0.0	4.8
IOWA 5018	116.4	21.3	94	0.7	54.3	0.0	4.6
MO 843	116.2	20.8	96	2.6	24.7	0.0	4.8
CARGILL 340	116.0	18.6	91	0.0	15.8	0.7	4.6
CARGILL 315	115.8	18.2	93	2.0	18.1	2.0	4.3
IOWA 5118	115.6	19.6	93	3.4	14.1	0.0	4.6
AES 801	115.2	17.5	92	0.0	8.8	0.7	4.8
IOWA 4792	114.8	17.8	97	0.0	9.0	0.0	4.1
MCALLISTER 23A	114.3	19.7	92	0.0	10.9	0.0	4.4
AG. ALUMNI 375	113.9	19.0	96	1.3	13.0	0.6	4.8
MCALLISTER 13A	112.8	18.6	88	0.0	10.7	0.0	4.5
MO 1007	112.6	21.0	96	0.0	5.2	0.6	4.9
US 13	112.2	21.0	95	2.0	23.7	1.3	4.9
MFA 118	111.3	18.9	89	0.0	13.3	0.0	5.0
MO 1013	111.2	21.2	94	0.7	12.6	1.3	4.3
MFA 2120	111.1	18.9	89	0.0	8.5	0.0	4.6
AG. ALUMNI 128	110.3	18.7	96	0.0	9.1	0.0	4.4
STECKLEY GG 15B	108.1	20.4	90	0.0	14.6	2.1	4.5
MO MULTIPLE CROSS	105.1	21.4	96	0.0	17.0	1.3	4.8
CARGILL 310	104.2	25.0	98	0.0	19.2	1.9	4.6
MO 995	99.6	21.5	96	0.0	2.6	0.0	4.4
MO 1020	98.9	21.1	71	0.9	7.9	0.0	4.3
<u>Group III Maturity</u>							
US 523W*	138.3	20.8	95	0.7	16.4	0.0	5.1
US 619W*	136.3	24.4	94	0.0	18.0	0.0	5.1
KAN 2802*	131.5	25.7	91	7.5	12.3	0.0	5.3
KAN 4003	130.2	23.2	93	1.4	14.2	0.0	5.1
DEKALB 898B	130.1	20.9	96	0.0	13.6	3.9	5.3
DEKALB 869	119.9	22.9	95	2.0	11.8	0.0	4.6
PIONEER 314	<u>105.7</u>	<u>18.4</u>	<u>88</u>	<u>0.0</u>	<u>12.1</u>	<u>0.0</u>	<u>4.4</u>
Mean	119.9	20.4	94	1.9	13.9	0.6	4.7

Differences in yield between any two hybrids of less than 15.0 bushels are not considered significant.

\* White Hybrids

Table 3H Summary of Acre Yield and Lodging for Hybrids Tested in District 3 for the Three-Year Period of 1959, 1960, and 1961.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
<u>Group I Maturity</u>				<u>Group II Maturity (Contd.)</u>			
Iowa 4376	97.9	14.6	16.4	DeKalb 812	101.2	3.2	13.4
MFA 2123	91.2	11.7	21.2	Kan 1859	100.8	23.6	20.5
<u>Group II Maturity</u>				MFA 118	100.2	8.3	17.0
DeKalb 805	118.7	11.6	10.6	Mo 447W*	99.6	18.1	10.5
Bear Unicorn X606	115.4	12.1	12.4	AES 801	97.8	9.3	12.2
Bear OK 96	113.0	13.3	11.4	AES 811W*	97.5	28.7	13.1
Mortons 6X	112.9	4.7	11.7	MFA 2120	96.9	9.1	9.8
MFA K6	111.3	10.2	9.6	Mo 843	95.4	15.2	17.9
Bear OK 878	110.7	9.4	11.8	US 13	95.3	12.6	23.9
DeKalb 633	106.5	3.7	14.5	Mo 995	94.7	13.2	12.1
McAllister 23A	105.2	1.5	8.8	Steckley GG15	94.4	6.7	19.2
McAllister 13A	104.6	8.9	13.3	<u>Group III Maturity</u>			
Kan 1639	104.2	9.6	22.1	US 523W*	108.9	14.6	18.6
Mo 880	102.4	13.2	8.3	DeKalb 869	107.4	6.3	11.1
Cargill 310	101.3	4.5	13.6				

\* White Hybrids

DISTRICT 4

The results for District 4 are given in Tables 4A through 4H. Abnormal climatic conditions reduced yields at Adrian. That, with 46 days of temperatures above 90° and three dry periods in late May, late June and late August resulted in reduced yields.

Table 4A Percent of Total Farmland Area Planted to Corn, Total Corn Acreage, Average Acre Yield and the Average Acre Yield for Hybrids Tested in the Missouri Corn Yield Trials for the 10-year period (1951-1960), 1959, 1960, and 1961 in District 4.

		Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (Bu.)	Missouri Corn Yield Tests
10 year average	1951-1960	13.1	471,900	35.8	
	1959	14.3	518,000	52.6	79.3
	1960	13.5	489,000	53.0	103.6
	1961	7.5*	270,000*	60.4*	95.1

\* Estimated as of October 1, 1961.

Table 4B Location of Yield Trials, Date Planted and Harvested, and the Average Yield for Each Testing Location in District 4.

Testing Location	Cooperator	Date Planted	Date Harvested	Avg. Acre Yield (Bu.)	LSD Bu.
Adrian	Tom Amos	May 18	Oct. 24	80.7	7.7
Higginsville	Wilbert Fahrmeier	May 11	Oct. 18	109.4	15.5

Table 4C Total Rainfall, Number of Days with Rain, and Dry Periods from May 1 to September 15 at each of the Testing Locations in District 4.

Testing Location	Nearest Weather Station	Total Rain fall	No. of Days with Rain					Total	Dry Periods*
			May	June	July	Aug.	Sept. 1-15		
Adrian	Butler	26.32	15	9	10	5	5	44	5/19-6/2 6/15-7/5 7/23-8/6
Higginsville	Sweet Springs	28.34	9	9	13	4	6	41	None

\* A dry period must have at least 15 consecutive days with less than 0.25 in. precipitation.

Table 4D Average Temperature, Departure from Normal, and the Number of Days with Temperatures of 90° or more, and 100° or more from May 1 to September 15 at each of the Testing Locations in District 4.

Testing Location	Nearest Weather Station	Average Temp.	Departure from Normal	No Days with Temperatures 90° or more		No. Days with Temperatures 100° or more	
				1961	Avg.	1961	1961
Adrian	Butler	72.2	-0.9	46	42		0
Higginsville	Sweet Springs	70.7	-2.4	29	47		0

**Table 4E** 1961 Performance Record for Hybrid Tested at Adrian and Higginsville, Missouri, in District 4. (Exp. 7 and 8).

Hybrid	Acre Yield Bu.	Moisture in Grain %	Stand %	Lodged Plants		Drop-ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
PIONEER 3359	101.7	21.4	97	44.3	10.7	0.0	3.5
IOWA 4376	89.6	17.8	95	23.7	18.7	0.0	3.2
MAYGOLD 98	78.5	18.5	94	14.2	6.1	1.0	2.9
MAYGOLD 68	78.2	18.2	92	7.8	12.7	0.0	3.0
<u>Group II Maturity</u>							
MO 447W*	110.6	23.2	99	58.5	11.0	0.0	4.2
MFA K6	107.2	21.8	97	38.1	20.1	1.3	3.7
PIONEER 3304	106.0	20.7	97	27.2	2.2	0.0	3.4
DEKALB 805	104.2	19.1	97	32.2	10.1	2.2	3.3
MO 1023	103.2	21.2	96	58.4	11.2	0.4	3.3
PIONEER 321	102.1	19.0	93	26.0	15.8	0.5	3.6
MO 843	100.1	20.8	96	27.3	25.0	0.0	3.8
MAYGOLD 37	99.9	22.0	95	23.0	20.9	0.0	3.7
CARGILL 340	99.7	19.0	98	19.7	11.6	1.3	3.3
MO 1007	98.7	18.1	96	22.4	6.7	0.0	3.3
MO 880	98.5	21.7	97	46.3	4.0	0.5	3.5
MO 947	98.5	21.6	96	41.9	18.7	1.4	4.2
DEKALB 831	98.5	19.6	94	45.1	15.7	2.3	3.3
MFA 3232	98.0	21.5	95	28.0	10.7	0.0	3.3
DEKALB 633	97.6	20.8	96	40.4	11.8	0.0	3.8
DEKALB 3 X 4	97.3	19.7	88	36.6	23.6	0.5	3.7
PIONEER 320	96.6	20.3	95	8.7	17.2	1.8	3.2
KAN 1859	95.8	21.3	93	65.8	12.8	0.5	3.3
KAN 1639	95.3	19.6	95	48.3	9.3	0.9	3.5
MAYGOLD 29X	95.2	23.0	94	43.5	4.1	0.0	3.6
MFA 118	94.7	18.3	93	36.1	10.1	1.8	3.6
DEKALB 661	93.7	19.9	96	23.7	21.1	0.0	3.4
MO 1013	93.1	23.4	92	24.0	3.9	0.5	3.7
STECKLEY GG 15B	92.8	20.3	92	26.5	16.0	0.5	3.2
MAYGOLD 48	91.9	17.3	94	31.8	20.8	0.5	3.2
MO 955	91.7	24.3	95	43.2	8.5	0.5	3.7
MO 1017	91.6	20.4	87	32.5	7.6	0.5	3.6
MO 947A	90.5	21.0	90	27.5	17.0	1.0	3.9
CARGILL 315	90.0	18.4	97	14.7	18.1	1.8	3.4
US 13	89.6	20.2	92	45.2	23.6	1.9	4.1
MO 4080W	88.1	21.7	89	61.7	11.3	0.5	3.6
DEKALB 803A	85.6	23.7	90	44.1	20.6	0.0	3.5
MFA 3210	85.4	18.2	93	29.8	12.6	0.5	3.5
MFA 2120	84.4	22.5	88	31.1	10.9	0.0	3.3
STECKLEY GG EXP. 1266	80.2	19.9	95	31.1	11.1	0.9	2.8
MO 1020	65.2	21.9	48	31.2	11.1	0.0	3.2
<u>Group III Maturity</u>							
US 523W*	107.7	22.8	96	46.6	25.0	0.9	4.4
AES 904AW*	105.4	25.3	92	39.7	12.6	1.9	4.3
MO 4077W*	103.9	23.0	89	67.1	14.6	0.5	4.7
AES 904W*	103.4	28.4	96	37.6	4.7	0.0	4.4
US 619W*	102.3	24.4	98	60.1	18.1	0.9	4.3
MO W6*	102.0	26.3	96	44.1	7.3	0.5	4.7
KAN 2458W*	101.6	26.3	97	67.3	14.9	0.9	4.4
DEKALB 925A*	100.0	26.1	98	71.8	10.4	0.4	4.5
PIONEER 314	98.3	20.3	92	17.7	14.2	0.0	3.6
PIONEER 312A	98.1	24.0	95	29.0	20.6	0.0	3.8
MO W6A*	95.8	30.1	95	45.6	6.6	0.5	4.9
KAN 4003	92.7	25.5	94	34.9	16.3	0.5	4.2
DEKALB 886	91.9	24.1	90	25.1	4.4	1.0	3.5
DEKALB 898A	89.3	22.7	92	34.4	18.9	0.5	4.2
MO 916	<u>86.8</u>	<u>25.3</u>	<u>91</u>	<u>37.3</u>	<u>8.2</u>	<u>0.5</u>	<u>4.0</u>
Mean	95.2	21.7	93	37.1	13.3	0.6	3.7

\*White Hybrid



Table 4F 1961 Performance Records for Hybrids Tested in District 4, Near Adrian, Missouri in Bates County. Planted May 18, 1961 and Harvested October 24, 1961. (Exp. 7).

Hybrid	Acre Yield Bu.	Moist-ure in Grain %	Stand %	Lodged Plants		Drop-ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
PIONEER 3359	87.4	23.9	93	52.7	21.4	0.0	3.1
IOWA 4376	81.3	18.1	96	10.4	36.5	0.0	2.9
MAYGOLD 98	73.7	19.4	97	18.1	12.1	0.0	2.8
MAYGOLD 68	69.9	18.2	93	1.8	22.5	0.0	2.9
<u>Group II Maturity</u>							
KAN 1859	90.3	22.2	91	68.8	21.1	0.0	3.0
PIONEER 321	89.6	19.5	93	26.1	30.6	0.9	3.3
DEKALB 805	89.2	20.4	95	40.4	19.3	0.9	2.8
PIONEER 3304	89.1	21.4	96	33.0	3.5	0.0	2.9
KAN 1639	87.2	21.3	94	56.6	15.0	0.0	3.1
MO 947	85.7	22.8	96	49.6	34.8	0.9	3.9
DEKALB 831	85.3	20.3	89	43.9	27.1	1.9	3.0
MAYGOLD 29X	85.3	23.5	92	51.8	7.3	0.0	3.3
MO 447W*	84.3	25.6	98	67.8	19.5	0.0	3.8
CARGILL 340	84.2	19.0	98	29.9	20.5	1.7	3.0
DEKALB 633	83.7	21.7	96	50.4	18.3	0.0	3.5
MO 1007	83.2	16.4	94	34.5	13.3	0.0	3.0
MO 1023	83.1	23.3	93	60.4	20.7	0.0	3.1
DEKALB 3 X 4	82.5	20.6	88	50.0	44.3	0.0	3.6
MO 880	82.2	22.7	94	55.8	8.0	0.9	3.0
MAYGOLD 48	81.4	18.5	90	25.0	38.9	0.9	2.9
MO 955	81.2	26.3	92	54.5	13.6	0.9	3.5
MO 843	80.9	21.5	93	36.9	43.2	0.0	3.4
MAYGOLD 37	80.3	22.8	93	29.5	37.5	0.0	3.3
MFA K6	79.9	25.8	95	45.6	37.7	0.9	3.3
CARGILL 315	79.1	19.4	97	19.8	33.6	0.0	3.3
MFA 118	78.9	19.3	90	55.6	16.7	0.9	3.1
MO 4080W	78.3	22.2	94	69.9	18.6	0.0	3.3
STECKLEY GG 15B	78.2	20.4	91	32.1	27.5	0.0	2.9
MO 947A	78.1	22.3	92	23.6	29.1	0.9	3.4
DEKALB 661	78.1	20.6	98	32.2	31.4	0.0	3.3
US 13	77.2	21.5	94	46.0	38.9	0.9	3.6
MFA 3232	76.2	23.6	93	37.8	17.1	0.0	2.6
DEKALB 803A	76.0	22.4	81	50.5	35.1	0.0	3.3
MO 1013	75.8	23.8	85	26.5	6.9	0.0	3.3
PIONEER 320	75.7	22.9	91	6.4	28.4	1.8	3.0
MO 1017	74.4	22.5	81	44.3	12.4	0.0	3.3
STECKLEY GG EXP. 1266	72.3	22.3	93	28.6	19.6	0.0	2.5
MFA 3210	72.2	18.8	88	31.4	20.0	1.0	3.4
MFA 2120	70.5	24.6	88	39.6	18.9	0.0	3.1
MO 1020	62.8	24.0	49	42.4	18.6	0.0	3.1
<u>Group III Maturity</u>							
US 523W*	91.9	20.6	95	46.5	43.0	1.8	3.8
MO W6*	91.0	25.2	98	59.8	13.7	0.9	4.4
US 619W*	88.4	23.9	97	56.0	31.0	0.9	4.0
MO 4077W*	84.4	23.4	85	72.5	25.5	1.0	4.3
DEKALB 925A*	84.3	26.7	96	84.3	19.1	0.0	4.4
KAN 2458W*	83.8	26.5	95	63.2	27.2	0.0	4.3
AES 904W*	83.2	28.2	98	48.7	9.4	0.0	4.3
KAN 4003	83.1	24.0	92	40.9	26.4	0.9	3.9
MO 916	82.3	24.2	89	48.6	9.3	0.9	3.5
PIONEER 312A	82.3	23.9	95	44.7	36.8	0.0	3.8
MO W6A*	81.0	29.9	97	55.2	7.8	0.0	4.9
AES 904AW*	80.4	26.1	88	43.4	20.8	2.8	3.9
DEKALB 886	80.3	25.5	86	35.0	7.8	1.9	3.1
PIONEER 314	80.2	21.4	85	17.6	28.4	0.0	3.5
DEKALB 898A	76.5	24.7	93	67.6	30.6	0.0	4.0
Mean	81.1	22.5	92	43.0	23.2	0.5	3.4

Differences in yield between any two hybrids of less than 7.7 bushels are not considered significant.

\* White Hybrids

Table 4G 1961 Performance Record for Hybrids Tested in District 4, Near Higginsville, Missouri, in Lafayette County. Planted May 11, 1961. Harvested October 18, 1961. (Exp. 8).

Hybrid	Acre Yield Bu.	Moist-ure in Grain %	Stand %	Lodged Plants		Drop-ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
PIONEER 3359	116.0	18.8	100	35.8	0.0	0.0	3.8
IOWA 4376	97.9	17.5	93	36.9	0.9	0.0	3.5
MAYGOLD 68	86.4	18.1	91	13.8	2.8	0.0	3.1
MAYGOLD 98	83.3	17.5	90	10.2	0.0	1.9	3.0
<u>Group II Maturity</u>							
MO 447W*	136.9	20.7	100	49.2	2.5	0.0	4.5
MFA K6	134.5	17.8	98	30.5	2.5	1.7	4.0
MO 1023	123.2	19.1	99	56.3	1.7	0.8	3.5
PIONEER 3304	122.8	19.9	98	21.4	0.9	0.0	3.8
MFA 3232	119.8	19.3	97	18.1	4.3	0.0	3.9
MAYGOLD 37	119.5	21.1	96	16.5	4.3	0.0	4.0
MO 843	119.3	20.0	99	17.6	6.7	0.0	4.1
DEKALB 805	119.1	17.8	98	23.9	0.9	3.4	3.8
PIONEER 320	117.4	17.7	98	11.0	5.9	1.7	3.4
CARGILL 340	115.2	18.9	97	9.5	2.6	0.9	3.6
MO 880	114.8	20.7	100	36.7	0.0	0.0	3.9
PIONEER 321	114.5	18.4	93	25.9	0.9	0.0	3.9
MO 1007	114.1	19.8	98	10.3	0.0	0.0	3.5
DEKALB 3 X 4	112.1	18.8	87	23.1	2.9	1.0	3.8
DEKALB 831	111.6	18.8	98	46.2	4.3	2.6	3.6
DEKALB 633	111.4	19.9	96	30.4	5.2	0.0	4.0
MO 947	111.3	20.4	95	34.2	2.6	1.8	4.4
MO 1013	110.4	22.9	98	21.4	0.9	0.9	4.0
MFA 118	110.4	17.2	96	16.5	3.5	2.6	4.0
DEKALB 661	109.3	19.2	93	15.2	10.7	0.0	3.5
MO 1017	108.8	18.2	93	20.7	2.7	0.9	3.9
STECKLEY GG 15R	107.4	20.1	92	20.9	4.5	0.9	3.4
MAYGOLD 29X	105.0	22.5	95	35.1	0.9	0.0	3.8
KAN 1639	103.3	17.9	96	40.0	3.5	1.7	3.8
MO 947A	102.9	19.6	88	31.4	4.8	1.0	4.3
MAYGOLD 48	102.3	16.1	98	38.5	2.6	0.0	3.5
MO 955	102.1	22.2	97	31.9	3.4	0.0	3.9
US 13	102.0	18.8	90	44.4	8.3	2.8	4.6
KAN 1859	101.2	20.3	94	62.8	4.4	0.9	3.5
CARGILL 315	100.8	17.3	96	9.6	2.6	3.5	3.4
MFA 3210	98.6	17.6	98	28.2	5.1	0.0	3.6
MFA 2120	98.3	20.4	88	22.6	2.8	0.0	3.5
MO 4080W*	97.9	21.1	83	53.5	4.0	1.0	3.9
DEKALB 803A	95.2	24.9	98	37.6	6.0	0.0	3.6
STECKLEY GG EXP. 1266	88.1	17.4	97	33.6	2.6	1.7	3.1
MO 1020	67.6	19.8	46	20.0	3.6	0.0	3.3
<u>Group III Maturity</u>							
AES 904AW*	130.3	24.4	95	36.0	4.4	0.9	4.6
AES 904W*	123.6	28.6	94	26.5	0.0	0.0	4.4
US 523W*	123.4	25.0	97	46.6	6.9	0.0	4.9
MO 4077W*	123.4	22.5	93	61.6	3.6	0.0	5.0
KAN 2458W*	119.4	26.1	99	71.4	2.5	1.7	4.4
PIONEER 314	116.4	19.1	98	17.8	0.0	0.0	3.6
US 619W*	116.1	24.9	98	64.1	5.1	0.9	4.6
DEKALB 925A*	115.6	25.4	100	59.2	1.7	0.8	4.5
PIONEER 312A	113.9	24.1	95	13.2	4.4	0.0	3.8
MO W6*	113.0	27.3	94	28.3	0.9	0.0	5.0
MO W6A*	110.6	30.2	93	36.0	5.4	0.9	4.9
DEKALB 886	103.5	22.7	93	15.2	0.9	0.0	3.9
KAN 4003	102.3	26.9	95	28.9	6.1	0.0	4.4
DEKALB 898A	102.1	20.6	93	41.1	7.1	0.9	4.3
MO 916	<u>91.2</u>	<u>26.4</u>	<u>93</u>	<u>25.9</u>	<u>7.1</u>	<u>0.0</u>	<u>4.4</u>
Mean	109.4	20.9	94	31.1	3.4	0.7	3.9

Differences in yield between any two hybrids of less than 15.5 bushels are not considered significant.

\* White Hybrids

Table 4H Summary of Acre Yield and Lodging for Hybrids Tested in District 4 for the Three-Year Period of 1959, 1960, and 1961.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
<u>Group I Maturity</u>				<u>Group II Maturity (Contd)</u>			
Iowa 4376	89.1	7.9	8.5	Mo 880	92.4	16.7	1.9
				Maygold 48	91.9	12.4	8.0
				Steckley GG15	89.4	9.0	11.4
				MFA 118	88.5	12.2	5.4
<u>Group II Maturity</u>				US 13	87.4	15.8	12.5
DeKalb 805	99.1	13.1	5.7	Mo 947	86.9	14.7	9.1
MFA K6	99.1	15.6	7.9	MFA 2120	85.0	10.5	5.3
Kan 1639	98.8	16.3	6.6	MFA 3210	83.7	9.9	6.5
Maygold 37	97.8	8.1	11.4				
Mo 447W*	97.7	19.8	5.5				
DeKalb 3 x 4	96.8	12.8	13.2	<u>Group III Maturity</u>			
Maygold 29X	96.1	15.3	2.4	US 619W*	99.3	20.5	11.8
Mo 955	95.0	14.6	4.3	Pioneer 312A	96.4	10.4	9.8
Mo 843	94.2	11.1	12.5	US 523W*	96.3	16.4	13.1
				AES 904W*	95.2	12.5	6.8
				DeKalb 898A	92.1	19.2	10.1
				Kan 4003	89.2	12.4	7.6
				Mo 916	87.8	13.7	3.9

\* White Hybrids

DISTRICT 5

Results of District 5 trials are in Tables 5A to 5I. Rainfall and temperatures in this district were about state average. Corn borer and heavy winds caused excessive lodging at Cole Camp. Two dry periods at Cole Camp in June and August also contributed to lower yields.

Table 5A Percent of Total Farmland Area Planted to Corn, Total Corn Acreage, Average Acre Yield and the Average Acre Yield for Hybrids Tested in the Missouri Corn Yield Trials for the 10-year Period (1951-1960), 1959, 1960, and 1961 in District 5.

		Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (Bu.)	Missouri Corn Yield Tests
10 year average	1951-1960	9.0	575,000	40.5	
	1959	11.1	709,000	51.9	96.2
	1960	9.9	646,000	52.0	104.3
	1961	6.9*	440,000*	61.4*	104.2

\*Estimated as of October 1, 1961

Table 5B Location of Yield Trials, Date Planted and Harvested, and the Average Yield for Each Testing Location in District 5.

Testing Location	Cooperator	Date Planted	Date Harvested	Avg. Acre Yield (Bu.)	LSD Bu.
Marshall	M. F. A. Seed Division	May 25	Nov. 7	117.3	13.9
Columbia	Missouri Agric. Exp. Sta.	May 3	Oct. 26	105.5	11.2
Cole Camp	Hugo Schnakenberg	June 5	Nov. 6	89.9	17.6

Table 5C Total Rainfall, Number of Days with Rain, and Dry Periods from May 1 to September 15 at each of the Testing Locations in District 5.

Testing Location	Nearest Weather Station	Total Rain-fall	No. of Days with Rain						Dry Periods*
			May	June	July	Aug.	Sept. 1-15	Total	
Marshall	Marshall	27.63	7	6	14	5	3	35	5/18-6/1 6/16-7/1
Columbia	Columbia	24.43	8	9	14	9	4	44	None
Cole Camp	Stover	26.40	13	9	14	4	4	44	6/16-6/30 8/3-8/21

\*A dry period must have at least 15 consecutive days with less than 0.25 in. precipitation.

Table 5D Average Temperature, Departure from Normal, and the Number of Days with Temperatures of 90° or more, and 100° or more from May 1 to September 15 at each of the Testing Locations in District 5.

Testing Location	Nearest Weather Station	Average Temp.	Departure from Normal	No. Days with Temperatures 90° or more		No. Days with Temperatures 100° or more 1961
				1961	Avg.	
Marshall	Marshall	72.0	-0.7	32	39	0
Columbia	Columbia	70.7	-1.9	21	39	0
Cole Camp	Versailles	69.9	-2.6	12	40	0

Table 5E 1961 Summary of Performance Records for Hybrids Tested at Marshall, Columbia, and Cole Camp, Missouri, in District 5. (Exp. 9, 10, and 10A).

Hybrid	Acre Yield Bu.	Moist- ure in GRain %	Stand %	Lodged Plants		Drop- ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
PIONEER 3359	118.9	21.2	97	18.9	14.4	0.6	3.8
IOWA 4376	96.5	18.8	95	6.2	24.5	0.0	3.3
MAYGOLD 68	93.6	18.6	92	0.3	9.8	0.0	3.1
MAYGOLD 98	85.3	20.0	93	2.9	7.9	0.3	3.2
<u>Group II Maturity</u>							
MO 447W*	115.1	23.0	98	17.8	20.9	0.0	3.9
PIONEER 3304	114.7	18.8	96	4.1	14.5	0.3	3.5
MFA K6	114.0	20.1	97	8.6	14.7	0.6	3.6
DEKALB 805	112.4	19.5	96	10.8	13.5	0.6	3.5
MO 947	110.5	20.4	97	14.8	28.9	0.3	4.1
MAYGOLD 37	110.1	19.6	94	16.4	30.4	0.0	3.7
MO 1023	108.2	20.8	97	16.6	10.9	0.3	3.5
MO 955	107.5	22.9	98	19.7	19.2	0.6	3.8
KY 105	106.9	22.4	95	11.4	22.4	0.0	4.4
AG. ALUMNI 375	106.7	18.7	96	2.7	13.8	0.3	3.9
UNITED HAGIE 158	106.5	26.4	97	14.2	28.7	1.4	3.5
PIONEER 321	106.3	19.9	96	6.6	25.5	0.0	3.8
MO 947A	105.7	20.4	93	13.8	26.8	0.0	3.9
KAN 1639	105.4	18.8	95	10.2	31.3	0.0	3.5
KY 5707	104.9	20.9	94	13.6	18.7	1.5	3.7
UNITED HAGIE 3H56	103.5	22.9	96	5.0	16.6	0.3	3.5
MO 843	103.4	20.3	98	7.0	35.9	0.3	3.8
DEKALB 831	103.4	20.6	95	17.6	31.0	0.3	3.6
MAYGOLD 29X	103.4	21.0	93	9.2	16.2	0.0	3.4
MO 4080W	102.8	21.4	98	7.4	22.5	0.3	3.7
MAYGOLD 48	102.2	17.9	96	9.1	22.1	0.6	3.5
MO 1017	102.0	19.1	91	8.7	18.6	0.6	3.6
MFA 2120	101.9	19.4	95	6.9	17.1	0.0	3.8
MO 1007	101.5	20.4	95	3.6	11.3	1.2	3.5
MFA 3232	100.7	20.5	96	2.9	17.5	0.3	3.5
MFA 118	100.4	18.7	95	2.1	23.6	0.6	3.9
MO 880	99.1	21.8	93	12.0	10.7	0.3	3.5
US 13	98.9	18.9	95	7.8	44.3	0.0	3.7
PIONEER 320	97.8	19.7	90	4.4	17.2	0.0	3.3
MFA 3210	97.0	17.9	89	2.3	41.9	0.0	3.8
MO 1013	95.2	24.3	95	6.2	11.5	0.3	3.7
UNITED HAGIE WW 50	94.7	23.3	96	11.0	40.4	0.9	3.3
AG. ALUMNI 128	91.6	18.4	92	0.9	13.6	0.3	3.4
STECKLEY GG EXP. 1266	85.0	19.5	91	0.9	26.3	0.0	3.2
MO 1020	83.2	20.4	63	6.4	10.5	0.0	3.5
<u>Group III Maturity</u>							
MO 4077W*	124.3	22.3	94	19.1	23.4	0.0	4.7
MO W6*	116.2	25.7	98	10.4	27.6	0.0	4.8
MO W6A*	115.7	27.5	97	11.1	21.4	0.6	4.8
MO 916	114.9	21.7	95	9.6	15.9	0.0	4.0
US 523W*	114.1	22.4	96	9.8	27.8	0.3	3.8
DEKALB 925A*	112.8	24.9	96	25.2	29.1	0.0	4.3
DEKALB 898B	110.1	22.9	98	8.3	26.3	0.9	4.4
AES 904W*	109.6	28.0	97	9.9	21.2	0.0	4.3
US 619W*	106.8	22.5	96	6.8	37.7	0.9	4.0
KAN 4003	106.8	24.5	95	9.7	16.3	0.0	4.2
AES 904AW*	105.4	24.0	94	3.5	35.5	0.0	4.3
PIONEER 314	105.1	20.2	90	7.0	16.0	0.3	3.7
DEKALB 869	101.1	21.1	95	3.5	18.9	0.0	3.8
DEKALB 898A	100.1	20.7	95	11.4	32.5	0.3	4.0
DEKALB 886	95.8	23.1	96	5.8	17.1	0.0	3.9
PIONEER 312A	95.7	24.7	91	1.9	20.1	0.0	3.6
Mean	104.2	21.3	94	9.0	22.0	0.3	3.8
* White Hybrid							

Table 5F 1961 Performance Record for Hybrids Tested in District 5, Near Marshall, Missouri, in Saline County. Planted May 25, 1961. Harvested November 7, 1961. (Exp. 9).

Hybrid	Acre Yield Bu.	Moist- ure in Grain %	Stand %	Lodged Plants		Drop- ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
PIONEER 3359	124.4	21.4	96	10.4	9.6	0.9	3.9
IOWA 4376	112.4	19.5	97	10.3	19.8	0.0	3.9
MAYGOLD 68	101.5	18.4	92	0.0	7.3	0.0	3.5
MAYGOLD 98	101.3	19.2	96	7.8	6.1	0.9	3.6
<u>Group II Maturity</u>							
MO 947	132.8	20.1	98	29.7	16.1	0.0	4.3
AG. ALUMNI 375	131.0	19.2	99	0.0	3.4	0.0	4.5
DEKALB 805	130.8	19.4	96	17.4	11.3	0.0	3.8
PIONEER 3304	130.3	19.0	97	5.2	3.4	0.0	3.9
MFA K6	128.9	20.4	99	2.5	7.6	0.0	3.9
MO 447W*	128.3	22.0	100	20.0	10.8	0.0	4.3
DEKALB 831	126.5	19.1	100	25.0	18.3	0.0	4.0
MO 955	125.4	23.4	98	22.9	11.9	1.7	4.0
KAN 1639	122.4	20.6	99	10.1	21.8	0.0	3.9
KY 105	121.1	22.7	95	5.3	13.2	0.0	4.5
MO 843	120.9	20.7	99	15.1	35.3	0.0	4.0
MAYGOLD 37	120.8	19.3	91	22.0	28.4	0.0	3.9
MAYGOLD 29X	120.5	20.2	93	5.4	8.0	0.0	3.9
UNITED HAGIE 158	120.0	26.6	98	14.4	20.3	0.8	4.0
MO 1023	118.3	20.9	97	22.4	8.6	0.0	3.9
US 13	117.2	19.4	98	16.1	31.4	0.0	4.0
MO 4080W*	117.0	22.0	99	6.7	6.7	0.8	4.1
KY 5707	116.7	20.5	95	14.9	12.3	0.9	4.0
UNITED HAGIE 3H56	116.4	22.7	100	2.5	14.2	0.0	3.9
PIONEER 320	114.2	18.7	93	5.4	14.3	0.0	3.9
MO 1013	113.6	21.7	98	2.5	6.8	0.0	3.9
MAYGOLD 48	113.4	17.9	95	12.3	9.6	0.9	3.8
MO 947A	113.3	19.8	96	13.0	18.3	0.0	4.4
MFA 2120	112.4	20.4	94	8.8	8.0	0.0	4.1
MFA 118	112.2	19.7	97	0.0	12.9	0.0	4.3
MO 880	110.1	23.0	95	7.9	9.6	0.0	3.9
MO 1007	110.1	20.6	93	2.7	4.5	0.9	3.8
MO 1017	108.4	18.9	91	3.7	10.1	0.9	3.9
MFA 3232	107.7	20.7	93	2.7	18.8	0.0	3.9
PIONEER 321	104.0	20.3	95	12.3	29.8	0.0	4.0
MFA 3210	103.8	19.1	86	5.8	38.8	0.0	3.8
UNITED HAGIE WW 50	103.6	23.2	98	8.5	47.0	0.0	3.8
AG. ALUMNI 128	103.6	19.4	92	0.0	4.5	0.0	3.8
STECKLEY GG EXP. 1266	92.8	20.3	95	2.6	16.7	0.0	3.6
MO 1020	89.9	20.3	73	3.4	5.7	0.0	3.9
<u>Group III Maturity</u>							
US 523W*	137.0	20.4	98	7.7	32.5	0.0	4.5
DEKALB 925A*	135.9	23.4	97	16.4	23.3	0.0	4.5
MO W6A*	135.1	25.5	97	7.8	15.5	0.0	4.6
MO 4077W*	133.3	21.9	95	12.3	14.0	0.0	4.5
MO 916	133.0	22.7	98	6.8	6.8	0.0	4.3
MO W6*	131.5	25.4	98	2.6	21.4	0.0	4.6
US 619W*	128.6	21.9	95	0.0	36.8	0.0	4.1
AES 904W*	119.5	27.4	94	5.3	10.6	0.0	4.3
KAN 4003	116.8	22.0	89	3.7	15.0	0.0	4.3
AES 904AW*	116.7	25.4	94	0.0	37.2	0.0	4.4
PIONEER 312A	116.7	22.9	95	0.0	9.6	0.0	3.9
DEKALB 898A	112.5	20.5	94	15.9	19.5	0.9	4.3
PIONEER 314	112.1	19.9	93	9.9	18.9	0.0	3.8
DEKALB 898B	110.6	23.1	99	2.5	21.8	0.0	4.3
DEKALB 869	106.8	21.1	95	2.6	21.9	0.0	4.0
DEKALB 886	105.5	22.2	95	1.8	8.8	0.0	3.9
Mean	117.3	21.2	95	8.6	16.3	0.2	4.1

Differences in yield between any two hybrids of less than 13.9 bushels are not considered significant.

\* White Hybrids

Table 5G 1961 Performance Record for Hybrids Tested in District 5, Near Columbia, Missouri, in Boone County. Planted May 3, 1961. Harvested October 26, 1961. (Exp. 10).

Hybrid	Acre Yield Bu.	Moist- ure in Grain %	Stand- % %	Lodged Plants		Drop- ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
PIONEER 3359	127.3	18.6	96	3.5	0.0	0.0	3.4
IOWA 4376	90.4	16.6	98	0.0	22.0	0.0	3.0
MAYGOLD 68	88.8	17.5	89	0.9	2.8	0.0	3.0
MAYGOLD 98	74.5	21.2	94	0.9	4.4	0.0	3.0
<u>Group II Maturity</u>							
MO 447W*	120.5	20.7	99	12.6	8.4	0.0	3.9
MO 955	116.7	19.6	99	8.4	8.4	0.0	3.5
UNITED HAGIE 158	115.2	23.1	98	15.3	4.2	3.4	3.1
PIONEER 321	114.8	18.6	96	0.0	7.0	0.0	3.6
KY 105	114.8	20.2	99	5.9	10.1	0.0	4.4
PIONEER 3304	114.3	17.3	97	0.0	2.6	0.9	3.1
MO 947	113.9	17.7	97	0.0	16.4	0.0	4.0
DEKALB 805	108.6	18.2	99	2.5	3.4	1.7	3.3
MAYGOLD 37	108.6	18.4	97	3.4	10.3	0.0	3.4
MO 4080W*	108.5	18.7	98	8.5	8.5	0.0	3.6
MO 1023	108.3	19.4	97	7.8	5.2	0.0	3.1
MFA K6	105.2	20.3	98	4.3	6.8	0.9	3.3
MO 947A	104.7	19.0	93	3.6	11.7	0.0	3.4
MO 843	103.7	18.8	98	0.0	12.0	0.0	3.5
MO 1007	103.5	17.5	100	0.0	1.7	0.8	3.1
UNITED HAGIE 3H56	103.3	21.3	98	6.8	8.5	0.9	3.0
MAYGOLD 48	102.3	16.6	98	0.0	8.5	0.0	3.4
MO 1017	101.9	17.6	89	3.7	9.3	0.0	3.4
MAYGOLD 29X	101.8	19.1	98	11.9	5.9	0.0	3.0
PIONEER 320	101.2	18.7	93	0.0	9.8	0.0	3.0
MFA 118	101.2	17.5	96	3.5	7.0	0.9	3.4
MFA 2120	101.0	17.1	93	0.0	4.5	0.0	3.4
KY 5707	100.8	18.4	95	5.3	11.4	1.8	3.6
MFA 3232	98.7	19.0	98	2.6	4.3	0.0	3.1
MFA 3210	98.6	16.2	96	0.0	18.3	0.0	3.6
AG. ALUMNI 375	97.7	16.7	93	2.7	10.7	0.9	3.3
DEKALB 831	97.6	19.7	93	11.7	18.9	0.0	3.4
US 13	96.1	17.0	98	1.7	25.6	0.0	3.5
KAN 1639	95.0	16.5	95	10.5	18.4	0.0	3.1
MO 880	94.2	18.9	97	6.0	5.2	0.0	3.1
UNITED HAGIE WW 50	93.9	22.0	97	12.1	17.2	1.7	3.0
AG. ALUMNI 128	93.5	16.3	92	0.0	15.5	0.0	3.0
MO 1013	85.1	28.3	95	7.0	3.5	0.9	3.5
MO 1020	82.2	19.2	48	0.0	5.2	0.0	3.4
STECKLEY GG EXP. 1266	78.6	17.5	94	0.0	9.7	0.0	3.0
<u>Group III Maturity</u>							
MO 4077W*	137.6	20.8	98	22.0	11.9	0.0	4.8
US 523W*	123.7	21.4	98	9.3	14.4	0.0	3.6
KAN 4003	122.7	21.9	98	5.1	1.7	0.0	4.3
MO W6*	120.7	23.6	98	6.0	6.8	0.0	4.9
MO W6A*	120.5	26.2	100	6.7	4.2	0.8	4.9
MO 916	120.4	18.3	98	4.2	5.1	0.0	3.6
DEKALB 898B	120.0	20.8	99	8.4	10.1	1.7	4.5
DEKALB 925A*	117.3	22.6	97	25.0	16.4	0.0	3.9
AES 904W*	116.2	28.9	98	8.5	7.7	0.0	4.4
AES 904AW*	112.6	20.9	96	2.6	7.8	0.0	4.0
PIONEER 314	108.6	18.5	89	0.0	2.8	0.9	3.4
US 619W*	108.5	22.4	99	15.1	16.0	1.7	3.6
DEKALB 869	104.0	18.5	94	2.7	2.7	0.0	3.6
DEKALB 886	103.8	21.2	98	3.4	5.9	0.0	3.6
DEKALB 898A	100.3	19.9	98	5.1	19.7	0.0	3.8
PIONEER 312A	97.6	22.4	88	2.9	11.4	0.0	3.5
Mean	105.5	19.7	95	5.3	9.2	0.4	3.5

Differences in yield between any two hybrids of less than 11.2 bushels are not considered significant.

\* White Hybrids

Table 5H 1961 Performance Record for Hybrids Tested in District 5, Near Cole Camp, Missouri in Benton County. Planted June 5, 1961. Harvested November 6, 1961. (Exp. 10A).

Hybrid	Acre Yield Bu.	Moist-ure in Grain %	Stand %	Lodged Plants		Drop-ped Ears %	Ear Height Grade
				Root %	StALK %		
<u>Group I Maturity</u>							
PIONEER 3359	104.9	23.5	99	42.9	33.6	0.8	4.1
MAYGOLD 68	90.4	19.8	95	0.0	19.3	0.0	2.9
IOWA 4376	86.7	20.3	89	8.4	31.8	0.0	3.0
MAYGOLD 98	80.1	19.5	89	0.0	13.1	0.0	3.1
<u>Group II Maturity</u>							
MFA K6	107.9	19.5	93	18.9	29.7	0.9	3.5
MAYGOLD 37	100.8	21.0	95	23.7	52.6	0.0	3.9
PIONEER 321	100.2	20.7	98	7.6	39.8	0.0	3.8
PIONEER 3304	99.5	20.2	93	7.1	37.5	0.0	3.5
MO 947A	99.2	22.3	91	24.8	50.5	0.0	3.8
KAN 1639	98.8	19.2	92	10.0	53.6	0.0	3.4
MO 1023	97.9	22.1	98	19.7	18.8	0.9	3.4
DEKALB 805	97.8	21.0	93	12.5	25.9	0.0	3.3
KY 5707	97.1	23.9	93	20.7	32.4	1.8	3.6
MO 447W*	96.4	26.2	96	20.9	43.5	0.0	3.6
MO 1017	95.8	20.8	94	18.6	36.3	0.9	3.6
MFA 3232	95.8	21.7	97	3.4	29.3	0.9	3.5
MO 880	93.0	23.4	87	22.1	17.3	1.0	3.5
MFA 2120	92.4	20.6	99	11.8	38.7	0.0	3.9
AG. ALUMNI 375	91.4	20.2	95	5.3	27.2	0.0	3.8
MAYGOLD 48	91.0	19.2	95	14.9	48.2	0.9	3.3
MO 1007	90.9	23.2	93	8.0	27.7	1.8	3.6
UNITED HAGIE 3H56	90.7	24.7	89	5.6	27.1	0.0	3.6
MFA 3210	88.5	18.5	85	1.0	68.6	0.0	3.9
MAYGOLD 29X	88.0	23.6	89	10.3	34.6	0.0	3.3
MFA 118	87.8	19.0	92	2.7	50.9	0.9	4.1
MO 1013	86.8	23.0	93	9.0	24.3	0.0	3.6
UNITED HAGIE WW 50	86.7	24.7	93	12.5	57.1	0.9	3.0
DEKALB 831	86.2	23.0	93	16.2	55.9	0.9	3.4
MO 843	85.5	21.3	97	6.0	60.3	0.9	3.8
MO 947	84.8	23.4	97	14.7	54.3	0.9	3.9
KY 105	84.7	24.3	91	22.9	44.0	0.0	4.4
UNITED HAGIE 158	84.3	29.4	96	13.0	61.7	0.0	3.4
STECKLEY GG EXP. 1266	83.5	20.7	83	0.0	52.5	0.0	3.0
US 13	83.4	20.4	90	5.6	75.9	0.0	3.6
MO 4080W*	83.0	23.4	96	7.0	52.2	0.0	3.4
MO 955	80.5	25.6	96	27.8	37.4	0.0	4.0
PIONEER 320	78.1	21.6	85	7.8	27.5	0.0	3.1
AG. ALUMNI 128	77.7	19.4	93	2.7	20.7	0.9	3.3
MO 1020	77.5	21.6	69	15.7	20.5	0.0	3.3
<u>Group III Maturity</u>							
MO 4077W*	102.0	24.2	90	23.1	44.4	0.0	4.8
DEKALB 898B	99.6	24.9	96	13.9	47.0	0.9	4.5
MO W6*	96.4	28.2	99	22.7	54.6	0.0	4.8
PIONEER 314	94.5	22.2	89	11.2	26.2	0.0	3.8
AES 904W*	93.2	27.6	99	16.0	45.4	0.0	4.3
DEKALB 869	92.4	23.8	96	5.2	32.2	0.0	3.9
MO W6A*	91.5	30.8	93	16.8	44.6	0.9	4.8
MO 916	91.2	24.2	88	17.9	35.8	0.0	4.0
DEKALB 898A	87.5	21.6	94	13.3	58.4	0.0	3.9
AES 904AW*	86.9	25.6	93	8.0	61.6	0.0	4.5
DEKALB 925A*	85.1	28.8	93	34.2	47.7	0.0	4.4
US 619W*	83.4	23.1	93	5.4	60.4	0.9	4.3
US 523W*	81.7	25.5	93	12.5	36.6	0.9	3.4
KAN 4003	81.0	29.7	98	20.3	32.2	0.0	4.0
DEKALB 886	78.2	25.9	96	12.2	36.5	0.0	4.1
PIONEER 312A	<u>72.7</u>	<u>28.7</u>	<u>89</u>	<u>2.8</u>	<u>39.3</u>	<u>0.0</u>	<u>3.3</u>
Mean	89.9	23.1	93	13.1	40.6	0.3	3.7

Differences in yield between any two hybrids of less than 17.6 bushels are not considered significant.

\* White Hybrids

Table 5I Summary of Acre Yield and Lodging for Hybrids Tested in District 5 for the Three-Year Period of 1959, 1960, and 1961.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
<u>Group I Maturity</u>				<u>Group II Maturity (Contd.)</u>			
Iowa 4376	92.0	2.1	11.0	MFA 2120	97.7	2.3	11.1
<u>Group II Maturity</u>				Mo 880	97.2	4.6	4.6
DeKalb 805	113.9	3.6	7.0	MFA 3210	94.4	0.9	16.8
Maygold 37	107.7	5.8	20.0	US 13	93.0	2.9	20.5
Mo 947	105.5	5.2	15.3	<u>Group III Maturity</u>			
Mo 447W*	105.5	7.3	8.8	US 523W*	111.0	3.6	17.3
Mo 843	104.2	3.0	18.8	AES 904W	105.7	3.8	11.7
Mo 955	104.1	7.8	10.8	Kan 4003	105.5	3.4	11.2
Maygold 29X	102.3	3.9	7.2	US 619W*	105.1	3.4	21.2
Maygold 48	100.4	3.1	12.6	DeKalb 898A	103.7	5.3	16.1
MFA 118	98.5	1.0	11.7	Mo 916	102.4	3.5	8.9
Kan 1639	98.5	3.6	11.1	DeKalb 869	101.8	1.2	10.2

\* White Hybrids

### DISTRICT 6

Tables 6A to 6H give results for District 6. This district had the highest yield in the state trials. Each location had near average rainfall, and precipitation was very well distributed throughout the growing season. Heavy root and stalk lodging occurred at both locations due to excessive winds and some corn borer infestation.

Table 6A Percent of Total Farmland Area Planted to Corn, Total Corn Acreage, Average Acre Yield and the Average Acre Yield for Hybrids Tested in the Missouri Corn Yield Trials for the 10-year Period (1951-1960), 1959, 1960, and 1961 in District 6.

		Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (Bu.)	Missouri Corn Yield Tests
10 year average	1951-1960	10.8	357,700	43.8	
	1959	13.9	460,000	53.9	110.9
	1960	12.1	397,000	54.5	121.1
	1961	8.3	274,000	62.3	128.8

\*Estimated as of October 1, 1961

Table 6B Location of Yield Trials, Date Planted and Harvested, and the Average Yield for Each Testing Location in District 6.

Testing Location	Cooperator	Date Planted	Date Harvested	Avg. Acre Yield (Bu.)	LSD Bu.
Washington	Ben F. Geisert & Sons	June 2	Nov. 15	130.6	13.2
Moscow Mills	A. H. Sievert	May 26	Nov. 10	126.9	18.1

Table 6C Total Rainfall, Number of Days with Rain, and Dry Periods from May 1 to September 15 at each of the Testing Locations in District 6.

Testing Location	Nearest Weather Station	Total Rain-fall	No. of Days with Rain					Total	Dry Periods*
			May	June	July	Aug.	Sept. 1-15		
Washington	Union	22.35	13	10	9	6	7	45	5/19-6/2
Moscow Mills	Warrenton	23.03	6	8	13	6	4	37	8/12-9/3

\*A dry period must have at least 15 consecutive days with less than 0.25 in. precipitation.

Table 6D Average Temperature, Departure from Normal, and the Number of Days with Temperatures of 90° or more, and 100° or more from May 1 to September 15 at each of the Testing Locations in District 6.

Testing Location	Nearest Weather Station	Average Temp.	Departure from Normal	No. Days with Temperatures 90° or more		No. Days with Temperatures 100° or more
				1961	Avg.	
Washington	Union	70.9	-2.7	36	37	0
Moscow Mills	Warrenton	71.5	-1.4	21	37	0



Table 6E 1961 Summary of Performance Records for Hybrids Tested at Washington and Moscow Mills, Missouri, in District 6. (Exp 11 and 12).

Hybrid	Acre Yield Bu.	Moist- ure in Grain %	Stand %	Lodged Plants		Drop- ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
IOWA 4376	113.4	17.7	97	31.6	51.3	0.3	4.1
<u>Group II Maturity</u>							
KY 105	146.9	21.1	97	26.7	48.0	0.7	5.0
MO 447W*	144.5	21.2	99	52.5	48.4	0.3	5.0
MO 1031	136.7	23.6	94	26.9	35.6	0.7	4.8
STULLS 101Y	135.8	19.6	95	20.2	53.3	0.0	4.8
PIONEER 321	135.6	19.1	99	16.3	39.6	0.0	4.5
STULLS 100YA	135.6	20.6	97	30.4	57.8	0.3	5.0
MO 4081W	134.5	20.7	96	48.9	38.2	0.0	4.8
MO 947	130.7	19.9	97	35.0	58.0	0.3	5.0
TENN 604	130.1	20.7	98	22.0	54.8	0.3	5.0
MO 880	128.3	18.5	96	13.3	26.0	0.0	4.3
MO 947A	128.0	20.9	95	39.3	51.5	0.7	5.0
MO 4079W	127.9	20.8	97	53.1	47.6	0.4	4.7
KAN 1639	126.7	18.5	98	13.8	40.6	0.3	4.3
US 13	126.4	20.1	100	22.8	59.3	1.3	5.0
MO 1023	125.6	19.1	97	22.3	42.0	0.0	4.1
MO 1007	125.6	18.6	98	12.5	37.5	0.3	4.1
MO 955	125.4	23.6	96	57.3	47.8	0.0	4.9
CARGILL 340	125.0	18.5	95	6.2	45.9	0.0	4.1
MFA 3232	123.3	19.0	98	6.7	37.1	0.4	4.1
MO 1013	121.7	19.9	99	6.9	25.4	1.0	4.4
MO 843	120.2	21.2	97	28.5	57.3	0.3	4.4
MO 1017	118.3	18.4	92	18.3	43.0	0.0	4.4
CARGILL 330	117.9	18.8	97	2.6	37.5	0.3	4.1
KY 5707	117.5	19.3	93	32.4	48.0	0.0	4.5
AG. ALUMNI 375	114.0	18.4	95	7.2	47.5	0.7	4.5
MO 4080W	113.7	20.9	96	36.4	47.8	0.0	4.5
MO 1020	101.6	19.6	73	15.9	21.2	0.0	4.0
<u>Group III Maturity</u>							
MO 4077W*	148.7	21.4	93	50.2	52.0	0.0	4.9
MO W6A*	147.2	25.3	97	27.6	49.5	0.0	5.0
US 619W*	144.5	20.1	98	41.8	56.8	0.7	4.9
DEKALB 925*	140.5	22.2	95	42.9	44.2	0.0	4.8
KAN 4003	137.4	22.6	98	15.6	44.9	0.3	5.0
US 523W*	137.3	21.6	95	27.7	53.6	0.0	4.8
DEKALB 886	136.6	22.3	93	32.6	41.3	0.0	4.5
AES 904W*	135.5	22.9	91	26.4	50.6	0.0	5.0
AES 904AW*	133.6	22.5	93	28.5	56.5	0.0	4.9
MO 916	131.6	23.3	98	39.0	40.5	0.0	4.9
KY 5805W*	131.0	19.3	98	29.5	62.1	0.3	4.9
DEKALB 925A*	129.8	23.9	94	69.9	52.3	0.0	5.0
MFA 124	128.4	21.3	98	18.9	73.8	0.0	5.0
DEKALB 1028	127.9	26.5	95	68.1	52.3	0.0	5.0
TENN 501*	127.8	22.7	95	27.8	54.2	0.0	4.9
DEKALB 869	126.6	20.0	92	11.0	37.0	0.0	4.4
DEKALB 898A	125.9	19.6	94	32.5	52.8	0.0	4.9
MO W6*	123.8	27.2	99	21.2	51.3	0.0	5.0
DEKALB 898B	122.1	24.2	99	12.4	54.7	1.3	5.0
PIONEER 314	120.6	18.8	98	11.0	43.5	0.3	4.2
MFA WHITE*	119.6	24.5	98	46.9	51.2	0.0	4.4
<u>Group IV Maturity</u>							
DIXIE 29*	133.0	26.3	96	20.9	55.2	0.4	5.0
DIXIE 33*	128.5	25.9	98	44.3	52.0	0.0	5.0
Mean	128.8	21.2	96	28.5	47.7	0.2	4.7
*White Hybrid							

Table 6F 1961 Performance Record for Hybrids Tested in District 6, Near Washington, Missouri in Franklin County. Planted June 2, 1961. Harvested November 15, 1961. (Exp. 11).

Hybrid	Acre Yield Bu.	Moisture in Grain %	Stand %	Lodged Plants		Dropped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
IOWA 4376	117.2	17.9	97	29.0	76.8	0.6	4.1
<u>Group II Maturity</u>							
MO 447W*	144.7	20.5	100	58.8	76.3	0.0	5.0
KY 105	144.0	22.0	98	24.2	73.9	1.3	4.9
MO 1031	140.6	22.9	98	16.0	55.8	1.3	4.8
PIONEER 321	138.7	19.8	98	21.2	61.5	0.0	4.5
STULLS 100YA	137.3	22.3	96	40.3	67.5	0.6	5.0
MO 1023	133.9	18.3	99	22.6	57.9	0.0	4.1
TENN 604	132.4	21.0	99	23.3	78.0	0.6	5.0
MO 1007	132.3	17.1	98	12.2	53.2	0.0	4.0
MO 4081W	132.3	20.1	96	41.2	64.7	0.0	4.6
KAN 1639	131.4	19.1	97	4.5	60.6	0.6	4.0
MO 947	130.1	20.7	96	30.5	79.9	0.6	5.0
MO 4079W	129.3	19.4	95	42.8	73.7	0.7	4.6
KY 5707	128.3	18.4	96	30.1	66.0	0.0	4.5
STULLS 101Y	128.2	20.8	94	26.7	73.3	0.0	4.6
US 13	127.9	20.5	100	8.8	77.5	0.6	4.9
MO 880	126.8	17.9	94	6.0	35.8	0.0	4.0
CARGILL 340	126.8	18.7	98	7.0	52.2	0.0	3.8
MO 955	126.0	23.0	99	53.5	76.7	0.0	4.9
MFA 3232	124.6	18.7	96	3.9	47.7	0.7	4.1
MO 843	124.0	21.8	96	28.6	71.4	0.6	4.4
MO 1013	122.4	18.6	98	1.9	40.1	1.9	4.3
MO 947A	121.3	22.9	92	34.0	76.2	0.7	4.9
MO 1017	120.2	19.5	91	15.1	66.4	0.0	4.5
MO 4080W*	120.2	20.6	96	29.2	77.3	0.0	4.5
CARGILL 330	116.1	19.0	100	3.8	56.3	0.6	4.1
AG. ALUMNI 375	113.4	19.3	92	4.1	58.5	0.0	4.4
MO 1020	108.5	20.1	77	17.9	28.5	0.0	4.0
<u>Group III Maturity</u>							
MO W6A*	151.0	25.0	100	35.0	78.1	0.0	5.0
US 619W*	146.3	19.4	97	37.4	83.9	1.3	5.0
US 523W*	144.3	20.4	96	19.5	69.5	0.0	5.0
DEKALB 925*	142.4	21.8	95	40.1	58.6	0.0	5.0
MO 4077W*	139.8	22.3	92	49.0	78.9	0.0	4.9
MO 916	138.6	23.3	99	55.3	64.8	0.0	5.0
KAN 4003	136.9	21.8	99	25.3	70.3	0.6	5.0
AES 904W*	136.3	21.5	94	29.8	76.8	0.0	5.0
KY 5805W*	136.3	18.8	98	27.4	85.4	0.0	4.9
AES 904AW*	134.3	22.0	91	34.5	91.0	0.0	5.0
DEKALB 869	131.8	20.1	94	6.0	43.3	0.0	4.3
DEKALB 1028	131.3	23.9	95	62.5	84.9	0.0	5.0
DEKALB 886	130.9	22.2	94	31.8	62.9	0.0	4.5
DEKALB 925A*	129.2	22.9	98	64.3	77.7	0.0	5.0
DEKALB 898A	128.0	18.0	93	23.0	66.9	0.0	4.8
TENN 501*	127.3	23.0	97	33.5	77.4	0.0	4.9
MO W6*	126.8	27.0	99	22.8	74.1	0.0	5.0
DEKALB 898B	126.6	25.0	98	12.8	82.7	1.3	5.0
MFA 124	123.7	21.3	97	18.7	93.5	0.0	4.9
PIONEER 314	120.1	18.8	97	19.4	70.3	0.6	4.0
MFA WHITE*	118.5	24.3	97	63.2	80.0	0.0	4.3
<u>Group IV Maturity</u>							
DIXIE 33*	141.7	21.2	96	46.4	72.5	0.0	5.0
DIXIE 29*	<u>140.3</u>	<u>24.6</u>	<u>96</u>	<u>30.7</u>	<u>67.3</u>	<u>0.0</u>	<u>5.0</u>
Mean	130.6	21.0	96	28.0	68.5	0.3	4.6

Differences in yield between any two hybrids of less than 13.2 bushels are not considered significant.

\* White Hybrids

Table 6G 1961 Performance Record for Hybrids Tested in District 6, Near Moscow Mills, Missouri, in Lincoln County. Planted May 26, 1961. Harvested November 11, 1961. (Exp. 12).

Hybrid	Acre Yield Bu.	Moist- ure in Grain %	Stand %	Lodged Plants		Drop- ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
IOWA 4376	109.6	17.4	97	34.2	25.8	0.0	4.0
<u>Group II Maturity</u>							
KY 105	149.7	20.2	96	29.2	22.1	0.0	5.0
MO 447W*	144.2	21.8	98	46.2	20.5	0.6	4.9
STULLS 101Y	143.4	18.4	96	13.7	33.3	0.0	4.9
MO 4081W	136.7	21.2	96	56.5	11.7	0.0	4.9
MO 947A	134.6	18.8	98	44.6	26.8	0.6	5.0
STULLS 100YA	133.9	18.9	98	20.5	48.1	0.0	5.0
MO 1031	132.8	24.2	89	37.8	15.4	0.0	4.8
PIONEER 321	132.5	18.3	99	11.4	17.7	0.0	4.5
MO 947	131.2	19.0	97	39.4	36.1	0.0	5.0
MO 880	129.7	19.1	97	20.6	16.1	0.0	4.6
TENN 604	127.7	20.3	97	20.6	31.6	0.0	5.0
MO 4079W	126.5	22.2	99	63.3	21.5	0.0	4.8
US 13	124.8	19.6	99	36.7	41.1	1.9	5.0
MO 955	124.7	24.2	93	61.1	18.8	0.0	4.8
CARGILL 340	123.1	18.3	92	5.4	39.5	0.0	4.3
KAN 1639	121.9	17.9	98	23.1	20.5	0.0	4.5
MFA 3232	121.9	19.3	99	9.4	26.4	0.0	4.0
MO 1013	120.9	21.2	99	11.9	10.7	0.0	4.4
CARGILL 330	119.7	18.6	94	1.3	18.7	0.0	4.1
MO 1007	118.8	20.1	98	12.8	21.8	0.6	4.1
MO 1023	117.2	19.9	94	22.0	26.0	0.0	4.1
MO 843	116.4	20.6	97	28.4	43.2	0.0	4.3
MO 1017	116.4	17.3	93	21.5	19.5	0.0	4.3
AG. ALUMNI 375	114.5	17.5	98	10.3	36.5	1.3	4.5
MO 4080W*	107.2	21.2	96	43.5	18.2	0.0	4.4
KY 5707	106.7	20.1	90	34.7	29.9	0.0	4.4
MO 1020	94.6	19.0	68	13.9	13.9	0.0	4.0
<u>Group III Maturity</u>							
MO 4077W*	157.5	20.4	93	51.4	25.0	0.0	4.9
MO W6A*	143.3	25.5	93	20.1	20.8	0.0	5.0
US 619W*	142.6	20.7	99	46.2	29.7	0.0	4.8
DEKALB 886	142.2	22.4	92	33.3	19.7	0.0	4.5
DEKALB 925*	138.5	22.6	94	45.7	29.8	0.0	4.6
KAN 4003	137.9	23.4	97	5.8	19.4	0.0	5.0
AES 904W*	134.7	24.2	88	22.9	24.3	0.0	5.0
MFA 124	133.1	21.2	98	19.1	54.1	0.0	5.0
AES 904AW*	132.9	22.9	94	22.5	21.9	0.0	4.8
DEKALB 925A*	130.3	24.9	89	75.4	26.8	0.0	4.9
US 523W*	130.2	22.7	94	35.8	37.7	0.0	4.5
TENN 501*	128.2	22.3	93	22.1	30.9	0.0	4.8
KY 5805W*	125.6	19.7	97	31.6	38.7	0.6	4.8
MO 916	124.5	23.3	97	22.6	16.1	0.0	4.8
DEKALB 1028	124.4	29.0	95	73.7	19.7	0.0	5.0
DEKALB 898A	123.7	21.2	94	42.0	38.7	0.0	4.9
DEKALB 869	121.4	19.8	90	16.0	30.6	0.0	4.5
PIONEER 314	121.0	18.8	98	2.5	16.6	0.0	4.4
MO W6*	120.7	27.3	99	19.6	28.5	0.0	5.0
MFA WHITE*	120.6	24.7	98	30.6	22.3	0.0	4.5
DEKALB 898B	117.5	23.4	99	12.0	26.6	1.3	4.9
<u>Group IV Maturity</u>							
DIXIE 29*	125.7	28.0	96	11.1	43.1	0.7	5.0
DIXIE 33*	<u>115.3</u>	<u>30.5</u>	<u>99</u>	<u>42.1</u>	<u>31.4</u>	<u>0.0</u>	<u>5.0</u>
Mean	126.9	21.4	95	27.6	26.7	0.1	4.7

Differences in yield between any two hybrids of less than 18.1 bushels are not considered significant.

\* White Hybrids

Table 6H Summary of Acre Yield and Lodging for Hybrids Tested in District 6 for the Three-Year Period of 1959, 1960, and 1961.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
<u>Group I Maturity</u>				<u>Group III Maturity (Contd.)</u>			
Iowa 4376	102.4	11.7	29.6	MFA 124	122.9	6.6	41.7
<u>Group II Maturity</u>				DeKalb 1028	121.8	30.6	32.0
Mo 447W*	118.6	21.7	30.4	Mo W6*	121.6	7.4	24.9
Mo 947	117.5	13.8	32.1	Tenn 501*	121.1	12.8	30.9
Mo 955	115.6	21.9	22.6	DeKalb 898A	119.0	13.1	30.3
Mo 843	114.3	10.0	39.0	DeKalb 869	118.7	4.1	23.1
US 13	109.3	9.4	35.8	Mo 916	118.0	13.2	18.4
Kan 1639	109.1	5.9	23.0	MFA-White*	116.1	17.3	26.6
<u>Group III Maturity</u>				<u>Group IV Maturity</u>			
US 523W*	134.3	11.3	28.9	Dixie 29*	129.8	7.6	28.0
AES 904W*	133.7	10.7	28.1	Dixie 33*	129.1	16.8	33.2
US 619W*	128.4	16.3	37.7				
DeKalb 925*	126.3	15.1	28.6				
Kan 4003	125.8	6.9	28.5				

\* White Hybrids

DISTRICT 7

Results for District 7 are in Tables 7A to 7F. The rainfall records show that Mount Vernon and Carthage had above the state average rainfall. However, the yield at Carthage was above state average, in spite of the two long dry periods during the growing season. Stalk lodging was excessive due to corn borer and high winds. The Mount Vernon test was abandoned due to serious rodent damage.

Table 7A Percent of Total Farmland Area Planted to Corn, Total Corn Acreage, Average Acre Yield and the Average Acre Yield for Hybrids Tested in the Missouri Corn Yield Trials for the 10-year Period (1951-1960), 1959, 1960, and 1961 in District 7.

		Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (Bu.)	Missouri Corn Yield Tests
10 year average	1951-1960	5.7	181,800	29.1	
	1959	5.9	189,000	47.0	108.3
	1960	6.1	194,000	44.5	106.3
	1961	3.5*	111,000*	46.4*	110.2

\* Estimated as of October 1, 1961

Table 7B Location of Yield Trials, Date Planted and Harvested, and the Average Yield for Each Testing Location in District 7.

Testing Location	Cooperator	Date Planted	Date Harvested	Avg. Acre Yield (Bu.)	LSD Bu.
Carthage	Joy Ortloff	May 30	Oct. 12	110.2	20.8
Mount Vernon	Southwest Missouri Res.Center	April 24	Not Reported		

Table 7C Total Rainfall, Number of Days with Rain, and Dry Periods from May 1 to September 15 at each of the Testing Locations in District 7.

Testing Location	Nearest Weather Station	Total Rain-fall	No. of Days with Rain						Dry Periods*
			May	June	July	Aug.	Sept. 1-15	Total	
Carthage	Carthage	28.01	14	9	11	5	6	45	5/27-6/27 7/24-8/11
Mount Vernon	Mount Vernon	29.67	15	9	11	6	6	47	7/24-8/11

\* A dry period must have at least 15 consecutive days with less than 0.25 in. precipitation.

Table 7D Average Temperature, Departure from Normal, and the Number of Days with Temperatures of 90° or more, and 100° or more from May 1 to September 15 at each of the Testing Locations in District 7.

Testing Location	Nearest Weather Station	Average Temp.	Departure from Normal	No. Days with Temperatures 90° or more		No. Days with Temperatures 100° or more
				1961	Avg.	
Carthage	Carthage	71.1	-2.3	25	25	0
Mount Vernon	Mount Vernon	71.7	-2.9	29	25	0

Table 7E 1961 Performance Record for Hybrids Tested in District 7, Near Carthage, Missouri in Jasper County. Planted May 30, 1961. Harvested October 12, 1961. (Exp. 13).

Hybrid	Acre Yield Bu.	Moist- ure in Grain %	Stand %	Lodged Plants		Drop- ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
IOWA 4376	101.7	22.2	81	11.5	56.2	0.8	4.3
<u>Group II Maturity</u>							
PIONEER 321	123.1	21.0	78	5.6	41.9	3.2	4.9
MO 1031	121.3	24.7	94	3.3	54.7	1.3	5.0
PIONEER 3304	120.4	20.2	93	10.7	18.1	0.7	4.5
MO 447W*	118.0	22.8	96	21.6	43.8	0.0	5.0
MFA 3232	116.5	20.4	94	0.7	49.3	0.7	4.8
MO 1035	115.0	24.4	95	36.8	23.7	0.7	4.5
TENN 604	114.5	22.3	95	2.6	45.4	2.0	5.0
MFA 2120	110.4	20.7	85	11.0	39.0	0.0	4.6
MO 947	110.1	23.3	95	7.9	55.3	2.0	5.0
US 13	107.7	22.8	91	0.0	76.7	2.1	5.0
KAN 1639	104.1	22.2	87	4.3	57.6	0.7	4.6
MFA 118	103.6	21.1	92	0.0	36.1	2.0	4.6
MO 947A	103.0	22.4	87	6.5	61.2	0.7	4.9
MO 880	100.9	26.2	96	10.5	22.2	0.0	4.9
MO 955	99.4	25.4	78	14.5	48.4	0.0	5.0
STECKLEY GG EXP. 1266	97.1	21.0	92	4.1	31.3	1.4	3.8
MO 843	95.9	25.0	96	14.4	52.9	0.7	4.6
<u>Group III Maturity</u>							
KAN 2458W*	122.1	27.0	89	21.8	48.6	0.0	4.9
MO 916	120.9	23.6	93	16.9	41.9	0.7	5.0
POIROT Y6	119.3	30.6	89	28.7	28.0	0.7	5.0
MO 4077W*	116.7	23.9	89	22.5	51.4	0.7	5.0
MO W6A*	115.3	27.2	88	6.4	59.3	0.0	5.0
DEKALB 925A*	114.3	25.7	96	24.0	48.1	2.6	5.0
AES 904W*	113.4	26.4	91	0.0	42.8	0.7	5.0
DEKALB 925*	113.3	21.9	90	5.6	50.7	0.7	5.0
US 619W*	112.5	23.9	94	12.7	42.0	0.0	5.0
PIONEER 314	112.5	22.1	96	16.2	30.5	0.0	4.5
AES 904AW*	107.9	25.6	81	0.0	45.4	2.3	5.0
MO W6*	107.5	30.3	94	0.0	46.4	2.0	5.0
DEKALB 886	106.6	27.1	93	14.2	35.8	0.7	4.6
US 523W*	105.8	21.3	87	5.0	59.0	1.4	4.8
DEKALB 898B	103.7	26.7	96	1.3	60.8	0.7	5.0
DEKALB 898A	101.2	23.5	92	4.1	61.9	0.0	5.0
DEKALB 1023	101.0	26.1	93	7.4	71.8	0.7	5.0
DEKALB 8906	99.9	26.0	84	4.5	61.9	1.5	5.0
TENN 501*	92.8	21.9	94	0.7	61.3	0.7	4.9
<u>Group IV Maturity</u>							
DIXIE 29*	135.9	29.3	89	7.7	45.1	2.8	5.0
DIXIE 33*	<u>111.2</u>	<u>28.3</u>	<u>98</u>	<u>12.2</u>	<u>62.2</u>	<u>0.0</u>	<u>5.0</u>
Mean	110.2	24.3	91	9.7	47.9	1.0	4.8

Differences in yield between any two hybrids of less than 20.8 bushels are not considered significant.

\* White Hybrids

Table 7F Summary of Acre Yield and Lodging for Hybrids Tested in District 7 for the Three-Year Period of 1959, 1960, and 1961.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
<b>Group I Maturity</b>				<b>Group III Maturity</b>			
Iowa 4376	90.7	5.0	31.2	AES 904W*	121.4	0.8	28.8
<b>Group II Maturity</b>				<b>Group IV Maturity</b>			
Mo 947	110.0	3.2	28.7	Dixie 29	121.4	3.4	32.3
Mo 447W*	108.8	7.6	24.6	Dixie 33	116.6	7.5	39.3
MFA 2120	106.8	4.1	23.3				
Mo 843	104.9	4.9	31.7				
Mo 880	102.3	3.9	12.7				
MFA 118	99.1	0.0	21.4				
US 13	96.1	0.6	41.5				
Kan 1639	93.0	2.0	29.6				

\* White Hybrids

DISTRICT 8

Tables 8A to 8H give results for District 8. Abnormal climatic and other conditions reduced yields in this district. These were: (1) Rainfall was below average for the state during the growing season. (2) There were two dry periods at Summersville and three at Ellington. (3) Summersville had a temperature of 90° or above for 41 days and Ellington had 61 days with high temperatures, compared with the normal of 32 days for both locations. (4) Heavy leaf blight infestation.

Table 8A Percent of Total Farmland Area Planted to Corn, Total Corn Acreage, Average Acre Yield and the Average Acre Yield for Hybrids Tested in the Missouri Corn Yield Trials for the 10-year Period (1951-1960), 1959, 1960, and 1961 in District 8.

		Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (Bu.)	Missouri Corn Yield Tests
10 year average	1951-1960	2.8	132,000	31.1	
	1959	3.2	146,000	42.6	69.4
	1960	3.0	137,000	44.0	90.9
	1961	1.7*	76,000*	44.2*	100.7

\*Estimated as of October 1, 1961

Table 8B Location of Yield Trials, Date Planted and Harvested, and the Average Yield for Each Testing Location in District 8.

Testing Location	Cooperator	Date Planted	Date Harvested	Avg. Acre Yield (Bu.)	LSD Bu.
Summersville	Howard Weurtley	May 25	Oct. 25	102.0	18.8
Ellington	Gene Baker	April 21	Oct. 5	99.4	16.2

Table 8C Total Rainfall, Number of Days with Rain, and Dry Periods from May 1 to September 15 at each of the Testing Locations in District 8.

Testing Location	Nearest Weather Station	Total Rain-fall	No. of Days with Rain						Dry Periods*
			May	June	July	Aug.	Sept. 1-15	Total	
Summersville	Summersville	19.32	11	5	14	9	4	43	6/16-7/2 7/27-8/11
Ellington	Ellington	20.63	12	3	9	6	3	33	5/24-6/6 6/16-6/30 8/7-8/22

\* A dry period must have at least 15 consecutive days with less than 0.25 in. precipitation.

Table 8D Average Temperature, Departure from Normal, and the Number of Days with Temperature of 90° or more, and 100° or more from May 1 to September 15 at each of the Testing Locations in District 8.

Testing Location	Nearest Weather Station	Average Temp.	Departure from Normal	No. Days with Temperatures 90° or more		No. Days with Temperatures 100° or more
				1961	Avg.	1961
Summersville	Willow Springs	69.9	-2.4	41	32	0
Ellington	Clear Water Dam	72.0	+0.5	61	32	0

Table 8E 1961 Summary of Performance Records for Hybrids Tested at Summersville and Ellington, Missouri, in District 8. (Exp. 15 and 16).

Hybrid	Acre Yield Bu.	Moist- ure in Grain %	Stand %	Lodged Plants		Drop- ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
IOWA 4376	90.3	21.0	95	1.3	0.5	0.0	3.2
<u>Group II Maturity</u>							
MO 447W*	121.1	25.0	98	2.5	0.0	0.0	4.1
KY 105	109.1	24.3	99	2.9	0.9	0.0	4.6
TENN 604	106.9	27.2	96	1.3	2.2	0.0	4.6
STULLS 101Y	105.0	25.8	93	2.8	0.9	0.0	3.9
MO 955	100.6	27.3	93	2.7	0.9	0.0	3.8
STULLS 108Y	100.3	24.6	96	4.4	2.2	0.0	4.4
MO 843	100.1	24.2	99	6.8	3.0	0.0	3.7
MO 1031	99.4	26.8	98	3.4	0.4	0.0	3.7
MO 880	98.4	24.3	97	3.5	1.7	0.0	3.5
STULLS 400WC*	98.2	23.9	96	7.0	5.1	0.0	4.5
STULLS 100YA	96.2	25.1	92	0.4	6.4	0.4	4.6
MO 1035	94.2	27.0	98	25.3	0.9	0.0	3.5
US 13	91.6	22.4	93	3.6	4.5	0.0	4.0
KY 5707	91.3	25.3	92	5.1	2.7	0.0	3.9
MO 947	90.6	26.4	96	2.2	3.9	0.0	3.9
MO 947A	89.2	25.5	97	2.2	0.9	0.0	4.1
KAN 1639	87.0	23.1	98	7.7	5.9	0.0	3.6
<u>Group III Maturity</u>							
US 619W*	129.7	22.6	98	5.2	5.1	0.0	4.0
MO W6A*	115.1	33.1	97	2.1	0.9	0.0	5.0
US 523W*	109.8	24.5	98	5.1	3.0	0.0	3.9
MO W6*	108.3	31.3	98	0.5	1.7	0.0	4.8
MO 4077W*	106.3	27.1	93	11.2	0.9	0.0	4.4
MO 916	106.0	28.7	99	3.8	1.3	0.0	3.9
KY 5805W*	105.9	23.8	96	4.4	3.9	0.0	4.2
AES 904W*	104.7	31.8	99	5.9	1.3	0.0	4.5
DEKALB 925A*	103.0	28.7	98	15.0	0.9	0.0	4.4
DEKALB 8906	101.8	29.3	98	10.7	4.8	0.0	4.4
AES 904AW*	98.4	31.9	92	3.2	1.4	0.0	4.4
DEKALB 925*	98.1	27.9	88	12.3	2.7	0.0	4.1
STULLS 500W*	97.7	25.9	97	13.9	4.3	0.0	4.1
DEKALB 898B	96.7	26.3	96	0.9	4.4	0.0	4.2
TENN 501*	95.1	29.2	93	9.1	4.1	0.0	4.0
DEKALB 898A	90.8	24.5	95	8.6	4.3	0.0	3.9
DEKALB 886	89.1	27.2	96	4.5	1.8	0.0	3.8
DEKALB 869	88.8	24.8	95	0.5	1.7	0.0	3.7
<u>Group IV Maturity</u>							
DIXIE 33*	114.3	31.2	99	8.8	8.0	0.0	5.0
DIXIE 29*	105.9	31.2	97	2.9	3.4	0.0	4.8
NC 270	92.3	37.8	98	8.0	1.3	0.0	5.0
Mean	100.7	26.9	96	5.7	2.7	0.0	4.2
*White Hybrid							

Table 8F 1961 Performance Record for Hybrids Tested in District 8, Near Summersville, Missouri, in Texas County. Planted May 25, 1961. Harvested October 29, 1961. (Exp. 15).

Hybrid	Acre Yield Bu.	Moist- ure in Grain %	Stand %	Lodged Plants		Drop- ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
IOWA 4376	93.9	20.7	98	2.6	0.9	0.0	3.4
<u>Group II Maturity</u>							
MO 447W*	116.2	25.0	100	5.0	0.0	0.0	4.4
KY 105	115.2	24.2	100	5.8	1.7	0.0	5.0
STULLS 101Y	110.2	25.7	98	0.8	0.8	0.0	4.1
MO 843	106.0	24.2	98	11.9	4.2	0.0	4.0
STULLS 100YA	105.5	25.1	99	0.8	5.9	0.8	4.9
TENN 604	104.7	27.5	98	2.5	1.7	0.0	4.8
STULLS 400WC*	103.4	23.3	99	7.6	9.2	0.0	4.9
MO 1031	102.2	27.3	98	0.0	0.8	0.0	4.1
STULLS 108Y	102.0	25.2	94	7.1	1.8	0.0	4.9
MO 1035	101.6	27.8	100	18.3	1.7	0.0	3.9
MO 880	101.3	24.5	98	2.6	3.4	0.0	3.6
US 13	98.7	22.8	93	5.4	6.3	0.0	4.0
KAN 1639	97.4	23.6	99	8.4	10.9	0.0	3.8
MO 947	95.7	27.2	98	2.6	6.0	0.0	4.3
MO 947A	93.9	25.6	98	4.3	1.7	0.0	4.3
KY 5707	93.1	26.6	94	2.7	3.5	0.0	4.0
MO 955	91.5	28.3	98	4.3	1.7	0.0	4.0
<u>Group III Maturity</u>							
US 523W*	115.2	25.4	100	5.8	4.2	0.0	4.1
US 619W*	111.9	23.9	99	3.4	9.2	0.0	4.1
MO W6A*	110.8	32.9	100	4.2	1.7	0.0	5.0
MO 4077W*	110.0	26.0	97	22.4	1.7	0.0	4.8
MO 916	109.3	27.6	99	7.6	2.5	0.0	4.1
DEKALB 925A*	105.9	27.4	98	23.1	1.7	0.0	4.8
AES 904W*	105.6	32.3	100	6.7	2.5	0.0	4.9
TENN 501*	103.2	28.3	93	10.8	8.1	0.0	4.5
AES 904AW*	102.3	31.0	95	2.6	0.9	0.0	4.9
KY 5805W*	101.7	24.0	98	3.4	6.8	0.0	4.8
DEKALB 898B	101.0	26.8	96	1.7	6.1	0.0	4.6
DEKALB 925*	98.8	28.5	100	16.7	4.2	0.0	4.3
STULLS 500W*	98.8	26.6	99	11.8	4.2	0.0	4.5
DEKALB 898A	97.9	23.8	98	12.7	8.5	0.0	4.1
MO W6*	96.9	30.9	96	0.9	2.6	0.0	4.9
DEKALB B906	96.4	29.5	97	12.9	8.6	0.0	4.3
DEKALB 886	89.6	29.4	98	2.6	2.6	0.0	4.0
DEKALB 869	89.3	26.4	98	0.0	3.4	0.0	3.9
<u>Group IV Maturity</u>							
DIXIE 33*	113.9	27.2	100	15.0	13.3	0.0	5.0
DIXIE 29*	98.7	30.9	100	5.8	5.0	0.0	4.9
NC 270	<u>88.5</u>	<u>38.5</u>	<u>99</u>	<u>16.0</u>	<u>0.8</u>	<u>0.0</u>	<u>5.0</u>
Mean	102.0	27.0	98	7.1	4.1	0.0	4.4

Differences in yield between any two hybrids of less than 18.8 bushels are not considered significant.

\* White Hybrids



Table 8G 1961 Performance Record for Hybrids Tested in District 8, Near Ellington, Missouri, in Reynolds County. Planted April 21, 1961. Harvested October 5, 1961. (Exp. 16).

Hybrid	Acre Yield Bu.	Moist- ure in Grain %	Stand %	Lodged Plants		Drop- ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
IOWA 4376	86.6	21.2	92	0.0	0.0	0.0	3.0
<u>Group II Maturity</u>							
MO 447W*	125.9	24.9	96	0.0	0.0	0.0	3.8
MO 955	109.6	26.2	87	1.0	0.0	0.0	3.6
TENN 604	109.1	26.8	93	0.0	2.7	0.0	4.3
KY 105	102.9	24.3	97	0.0	0.0	0.0	4.1
STULLS 101Y	99.7	25.9	88	4.7	0.9	0.0	3.6
STULLS 108Y	98.5	23.9	98	1.7	2.6	0.0	3.9
MO 1031	96.5	26.3	98	6.8	0.0	0.0	3.3
MO 880	95.5	24.1	96	4.3	0.0	0.0	3.3
MO 843	94.2	24.2	100	1.7	1.7	0.0	3.3
STULLS 400WC*	93.0	24.4	92	6.4	0.9	0.0	4.0
KY 5707	89.5	24.0	89	7.5	1.9	0.0	3.8
STULLS 100YA	86.8	25.1	84	0.0	6.9	0.0	4.3
MO 1035	86.7	26.2	96	32.2	0.0	0.0	3.1
MO 947	85.5	25.6	93	1.8	1.8	0.0	3.5
US 13	84.5	22.0	93	1.8	2.7	0.0	3.9
MO 947A	84.4	25.3	95	0.0	0.0	0.0	3.8
KAN 1639	76.5	22.5	97	6.9	0.9	0.0	3.3
<u>Group III Maturity</u>							
US 619W*	147.5	21.3	96	7.0	0.9	0.0	3.9
MO W6*	119.7	31.6	99	0.0	0.8	0.0	4.6
MO W6A*	119.3	33.2	94	0.0	0.0	0.0	4.9
KY 5805W*	110.0	23.6	94	5.3	0.9	0.0	3.6
DEKALB 8906	107.2	29.0	98	8.5	0.9	0.0	4.4
US 523W*	104.4	23.5	96	4.3	1.7	0.0	3.6
AES 904W*	103.8	31.3	98	5.1	0.0	0.0	4.1
MO 916	102.7	29.7	99	0.0	0.0	0.0	3.6
MO 4077W*	102.5	28.2	88	0.0	0.0	0.0	4.0
DEKALB 925A*	100.1	30.0	98	6.8	0.0	0.0	4.0
DEKALB 925*	97.4	27.2	75	7.8	1.1	0.0	3.9
STULLS 500W*	96.5	25.2	94	15.9	4.4	0.0	3.6
AES 904AW*	94.5	32.8	89	3.7	1.9	0.0	3.9
DEKALB 898B	92.4	25.7	96	0.0	2.6	0.0	3.8
DEKALB 886	88.5	24.9	93	6.3	0.9	0.0	3.5
DEKALB 869	88.3	23.1	91	0.9	0.0	0.0	3.4
TENN 501*	87.0	30.1	92	7.3	0.0	0.0	3.5
DEKALB 898A	83.7	25.2	92	4.5	0.0	0.0	3.6
<u>Group IV Maturity</u>							
DIXIE 33*	114.7	35.2	98	2.6	2.6	0.0	5.0
DIXIE 29*	113.0	31.5	94	0.0	1.8	0.0	4.6
NC 270	<u>96.1</u>	<u>37.0</u>	<u>96</u>	<u>0.0</u>	<u>1.7</u>	<u>0.0</u>	<u>4.9</u>
Mean	99.4	26.7	94	4.2	1.2	0.0	3.9

Differences in yield between any two hybrids of less than 16.2 bushels are not considered significant.

\* White Hybrids

Table 8H Summary of Acre Yield and Lodging for Hybrids Tested in District 8 for the Three-Year Period of 1959, 1960, and 1961.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
<u>Group I Maturity</u>				<u>Group III Maturity</u>			
Iowa 4376	77.6	1.3	11.0	AES 904W*	99.0	5.1	11.7
				US 619W*	98.9	3.9	23.6
				US 523W*	91.7	4.5	21.2
<u>Group II Maturity</u>				<u>Group IV Maturity</u>			
Mo 447W*	92.8	10.1	9.7	Mo 916	91.5	4.1	1.9
Stull's 108Y	91.8	3.0	16.9	Mo W6*	90.4	4.8	8.7
Mo 843	87.8	4.5	12.9	Tenn. 501*	87.3	6.3	18.1
Mo 947	83.0	1.9	17.9	DeKalb 869	84.9	3.2	9.3
US 13	80.6	2.2	19.0	DeKalb 925*	84.5	6.6	22.7
Kan 1639	76.7	5.3	20.6	DeKalb 898A	84.4	6.3	17.1
				Dixie 33*	94.3	6.6	14.0
				Dixie 29*	88.1	3.1	9.7

\* White Hybrids

DISTRICT 9

District 9 results are in Tables 9A to 9H. The rainfall in this district was below the average for the state. In spite of nearly average rainfall at Sikeston, there were four dry periods during the growing season which resulted in lower yields.

Table 9A Percent of Total Farmland Area Planted to Corn, Total Corn Acreage, Average Acre Yield and the Average Acre Yield for Hybrids Tested in the Missouri Corn Yield Trials for the 10-year Period (1951-1960), 1959, 1960, and 1961 in District 9.

		Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (Bu.)	Missouri Corn Yield Tests
10 year average	1951-1960	14.3	351,100	40.3	
	1959	14.7	362,000	59.0	93.0
	1960	14.2	350,000	58.0	111.7
	1961	10.5 *	258,000 *	64.4*	107.2

\*Estimated as of October 1, 1961

Table 9B Location of Yield Trials, Date Planted and Harvested, and the Average Yield for Each Testing Location in District 9.

Testing Location	Cooperator	Date Planted	Date Harvested	Avg. Acre Yield (Bu.)	LSD Bu.
Sikeston	S. E. Missouri Agri. Res. Center	May 20	Oct. 2	98.1	12.5
Portageville	" " " " "	April 2	Oct. 2	116.2	11.6

Table 9C Total Rainfall, Number of Days with Rain, and Dry Periods from May 1 to September 15 at each of the Testing Locations in District 9.

Testing Location	Nearest Weather Station	Total Rain-fall	No. of Days with Rain					Total	Dry Periods*
			May	June	July	Aug.	Sept. 1-15		
Sikeston	Sikeston	21.08	11	6	14	8	43	5/23-6/6 6/16-7/2 8/7-8/23 8/25-9/13	
Portageville	Portageville	18.26	10	7	15	5	44	6/22-7/12 8/7-8/22	

\*A dry period must have at least 15 consecutive days with less than 0.25 in. precipitation.

Table 9D Average Temperature, Departure from Normal, and the Number of Days with Temperatures of 90° or more, and 100° or more from May 1 to September 15 at each of the Testing Locations in District 9.

Testing Location	Nearest Weather Station	Average Temp.	Departure from Normal	No. Days with Temperatures 90° or more		No. Days with Temperatures 100° or more
				1961	Avg.	
Sikeston	Sikeston	73.0	-1.7	39	37	1
Portageville	Portageville	74.1	-1.9	45	51	0

Table 9E- 1961 Summary of Performance Records for Hybrids Tested at Sikeston and Portageville, Missouri, in District 9. (Exp. 17 and 18).

Hybrid	Acre Yield Bu.	Moist- ure in Grain %	Stand %	Lodged Plants		Drop- ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
IOWA 4376	90.7	16.6	93	8.8	1.5	0.0	3.5
<u>Group II Maturity</u>							
MO 447W*	116.9	19.1	96	1.9	2.8	0.0	4.0
TENN 604	115.2	17.4	96	0.5	3.6	0.9	4.2
MFA K6	114.9	18.0	94	0.0	1.0	1.0	3.8
STULLS 108Y	114.5	17.4	97	3.2	3.1	0.5	4.2
MEECHAM 5	112.1	17.8	99	3.8	4.3	0.0	4.0
STULLS 101Y	111.8	17.5	96	1.4	2.7	0.5	4.0
MEECHAM 33Y-B	111.8	18.1	99	0.4	5.9	1.3	4.2
MFA 3232	111.7	18.1	98	0.0	2.2	0.0	3.4
MO 1035	111.3	19.9	99	16.1	1.3	0.0	3.7
STULLS 100YA	110.1	17.4	98	1.8	4.4	0.0	4.4
MO 843	109.0	17.7	99	0.0	3.0	1.3	3.7
SCHENK S-86	108.1	16.8	98	0.0	3.0	0.0	4.2
MO 1031	107.3	19.5	98	5.6	3.0	0.0	3.8
STULLS 400WC*	106.8	16.9	100	4.6	3.4	0.0	4.2
PIONEER 321	106.8	17.6	98	0.0	1.3	0.4	3.6
MO 880	105.4	17.8	92	2.0	0.0	0.0	3.7
MO 955	104.7	18.3	96	5.7	1.8	0.0	3.6
PIONEER 319	104.6	15.6	99	1.3	2.1	0.4	3.7
MO 947	104.4	17.9	98	7.7	2.2	0.5	4.1
KY 105	104.3	18.7	97	7.0	6.5	0.5	4.1
MCMULLIN 1	103.8	17.2	99	2.6	1.3	0.0	3.6
SCHENK S-87	103.6	18.2	99	0.9	1.7	0.4	4.0
US 13	103.1	16.5	99	1.3	7.1	2.1	4.3
SCHENK S-90W*	102.6	18.4	97	5.3	1.4	0.0	3.9
SCHENK S-73	102.1	17.3	96	0.0	0.4	0.5	3.8
MCMULLIN 2	100.7	17.6	98	0.0	0.9	0.5	3.5
MO 947A	100.5	16.9	99	1.3	4.7	0.0	3.7
MFA 118	100.5	16.1	98	0.0	0.0	0.0	3.6
MFA 2120	96.1	16.9	89	2.5	2.4	2.0	3.6
KAN 1639	94.1	19.3	100	3.8	1.3	0.9	3.7
KY 5707	91.3	17.2	98	5.7	9.1	0.9	3.5
<u>Group III Maturity</u>							
MO 4077W*	121.1	18.2	100	2.5	2.1	0.0	4.3
AES 904W*	116.8	20.2	99	1.7	2.1	0.9	4.1
AES 904AW*	115.7	22.3	100	1.3	4.2	0.0	4.2
MO W6A*	113.9	19.9	100	0.0	7.1	0.4	4.8
MO W6*	113.3	22.0	100	5.9	2.9	0.0	4.7
US 523W*	112.5	17.0	99	9.4	3.9	0.9	4.0
US 619W*	111.0	18.6	91	14.3	3.6	0.5	4.0
SCHENK S-99W*	111.0	17.7	97	4.0	4.3	0.9	4.2
DEKALB 898B	109.9	17.7	99	0.0	7.3	2.1	4.4
ZIMMERMANS 800Y	109.8	16.5	96	4.8	1.4	0.0	4.4
DEKALB 869	109.0	18.8	88	1.7	0.4	0.6	3.8
DEKALB 8906	108.1	20.4	95	5.6	3.7	1.4	4.4
DEKALB 1028	107.9	20.0	89	4.3	9.4	1.6	4.8
KY 5805W*	107.1	17.5	98	6.4	8.5	0.4	4.0
DEKALB 898A	106.1	18.3	92	5.4	4.9	0.5	4.0
PIONEER 323	104.6	17.7	97	0.0	0.0	0.5	3.5
DEKALB 925A*	103.9	21.3	99	26.5	2.6	0.0	4.2
MO 916	103.8	20.7	99	8.9	0.9	0.0	4.1
ZIMMERMANS 900W*	103.7	18.6	94	13.5	4.2	0.0	4.1
TENN 501*	103.4	18.9	99	0.5	5.2	0.0	3.9
STULLS 500W*	103.0	21.7	96	15.0	4.5	0.0	4.0
DEKALB 1023	101.9	22.3	91	4.1	11.1	1.0	4.7
DEKALB 886	100.9	18.9	97	0.4	0.9	0.0	3.7
<u>Group IV Maturity</u>							
DIXIE 29*	122.1	20.5	99	0.0	7.6	0.9	4.6
DIXIE 33*	117.7	21.7	97	4.5	8.0	0.5	4.7
PIONEER 309B	111.3	22.8	98	0.0	2.5	0.4	4.1
NC 270	91.9	29.6	98	3.5	1.7	0.0	4.4
Mean	107.2	18.7	97	4.1	3.4	0.5	4.0

\*White Hybrid

Table 9F 1961 Performance Record for Hybrids Tested in District 9, Near Sikeston, Missouri, in New Madrid County. Planted May 20, 1961. Harvested October 2, 1961. (Exp. 17).

Hybrid	Acre Yield Bu.	Moist- ure in Grain %	Stand %	Lodged Plants		Drop- ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
IOWA 4376	89.7	16.9	86	17.5	2.9	0.0	3.5
<u>Group II Maturity</u>							
MFA 3232	111.6	18.5	96	0.0	2.6	0.0	3.4
SCHENK S-86	110.9	17.3	96	0.0	4.3	0.0	4.4
MFA K6	110.6	18.1	90	0.0	1.9	1.9	3.9
STULLS 108Y	109.9	16.9	93	6.3	5.4	0.9	4.4
STULLS 101Y	107.7	17.5	93	2.7	4.5	0.9	4.1
MEECHAM 5	107.2	18.0	98	7.6	8.5	0.0	4.0
PIONEER 319	106.9	14.6	98	2.5	4.2	0.8	3.9
MO 447W*	106.7	19.6	91	3.7	5.5	0.0	3.9
MEECHAM 33Y-B	106.3	16.8	99	0.8	10.1	0.8	4.0
SCHENK S-73	105.2	17.7	93	0.0	0.0	0.9	3.9
MO 1035	103.5	20.2	98	32.2	2.5	0.0	3.8
STULLS 100YA	102.9	17.7	95	3.5	7.9	0.0	4.4
SCHENK S-87	102.7	19.1	100	1.7	1.7	0.8	4.0
MFA 118	101.7	15.9	96	0.0	0.0	0.0	3.8
MCMULLIN 1	101.6	17.9	98	5.1	1.7	0.0	3.8
MO 1031	101.4	21.3	98	11.1	6.0	0.0	3.9
MO 843	101.3	18.4	97	0.0	2.6	2.6	3.8
MCMULLIN 2	100.5	17.3	95	0.0	1.8	0.9	3.5
PIONEER 321	100.1	17.6	96	0.0	2.6	0.0	3.6
US 13	99.8	16.2	100	2.5	11.7	4.2	4.6
TENN 604	99.8	18.5	93	0.9	5.4	1.8	4.3
MO 880	99.2	17.5	84	4.0	0.0	0.0	4.0
MFA 2120	98.8	16.8	85	4.9	2.9	3.9	3.8
STULLS 400WC*	97.8	16.6	100	9.2	4.2	0.0	4.3
SCHENK S-90W*	97.6	18.5	94	10.6	2.7	0.0	3.8
MO 955	96.6	18.6	95	11.4	1.8	0.0	3.5
MO 947A	95.7	16.2	98	2.5	6.8	0.0	3.8
MO 947	95.1	18.6	98	15.4	4.3	0.9	4.1
KY 105	93.6	18.7	95	14.0	10.5	0.9	4.1
KAN 1639	86.5	22.2	100	7.5	2.5	1.7	3.8
KY 5707	77.8	16.7	96	11.3	17.4	1.7	3.6
<u>Group III Maturity</u>							
MO 4077W*	113.3	18.7	100	5.0	3.3	0.0	4.3
ZIMMERMANS 800Y	110.1	16.8	95	9.6	1.8	0.0	4.4
DEKALB 869	104.7	18.6	75	3.3	0.0	1.1	4.0
SCHENK S-99W*	102.5	17.7	94	8.0	4.4	1.8	4.3
DEKALB 886	101.6	19.8	98	0.8	0.8	0.0	3.8
DEKALB 898A	101.0	19.7	93	10.7	9.8	0.9	4.0
PIONEER 323	99.8	17.8	94	0.0	0.0	0.9	3.5
DEKALB 898B	99.7	17.3	98	0.0	12.0	3.4	4.4
KY 5805W*	99.3	17.1	98	12.7	16.1	0.8	4.0
AES 904W*	99.1	20.9	97	3.4	3.4	1.7	4.1
ZIMMERMANS 900W*	95.0	18.8	90	26.9	8.3	0.0	4.1
US 523W*	94.6	16.6	98	18.8	7.7	1.7	3.9
MO 916	94.2	22.2	98	17.8	1.7	0.0	4.1
MO W6A*	94.1	18.9	100	0.0	14.2	0.8	5.0
AES 904AW*	93.5	24.7	99	2.5	6.7	0.0	4.1
DEKALB B906	92.7	21.6	90	11.1	5.6	2.8	4.9
MO W6*	89.9	24.9	99	11.8	5.0	0.0	4.9
DEKALB 1023	88.4	24.1	83	8.1	16.2	2.0	5.0
TENN 501*	88.0	19.2	97	0.9	9.5	0.0	3.9
US 619W*	87.2	19.5	82	28.6	7.1	1.0	3.9
DEKALB 1028	85.7	20.9	78	8.5	13.8	3.2	4.8
DEKALB 925A*	81.6	23.0	98	53.0	5.1	0.0	4.3
STULLS 500W*	77.9	24.4	92	30.0	7.3	0.0	4.0
<u>Group IV Maturity</u>							
PIONEER 309B	97.8	23.5	98	0.0	4.2	0.8	4.3
DIXIE 33*	97.6	21.8	93	9.0	11.7	0.9	4.6
DIXIE 29*	95.6	21.4	98	0.0	11.9	1.7	4.8
NC 270	74.3	29.2	97	6.9	3.4	0.0	4.5
Mean	98.1	19.2	95	8.1	5.7	0.9	4.1

Differences in yield between any two hybrids of less than 12.5 bushels are not considered significant.

\* White Hybrids

Table 9G 1961 Performance Record for Hybrids Tested in District 9, Near Portageville, Missouri, in New Madrid County. Planted April 20, 1961. Harvested October 2, 1961. (Exp. 18).

Hybrid	Acre Yield Bu.	Moist-ure in Grain %	Stand %	Lodged Plants		Drop-ped Ears %	Ear Height Grade
				Root %	Stalk %		
<u>Group I Maturity</u>							
IOWA 4376	91.6	16.2	99	0.0	0.0	0.0	3.4
<u>Group II Maturity</u>							
TENN 604	130.5	16.3	99	0.0	1.7	0.0	4.1
MO 447W*	127.1	18.5	100	0.0	0.0	0.0	4.0
MFA K6	119.2	17.9	98	0.0	0.0	0.0	3.6
STULLS 108Y	119.1	17.8	100	0.0	0.8	0.0	4.0
MO 1035	119.1	19.5	100	0.0	0.0	0.0	3.5
MEECHAM 33Y-B	117.3	19.3	99	0.0	1.7	1.7	4.3
STULLS 100YA	117.2	17.1	100	0.0	0.8	0.0	4.3
MEECHAM 5	117.0	17.6	99	0.0	0.0	0.0	3.9
MO 843	116.7	16.9	100	0.0	3.3	0.0	3.6
STULLS 101Y	115.8	17.4	98	0.0	0.8	0.0	3.9
STULLS 400WC*	115.8	17.2	100	0.0	2.5	0.0	4.0
KY 105	114.9	18.6	98	0.0	2.5	0.0	4.1
MO 947	113.7	17.2	98	0.0	0.0	0.0	4.1
PIONEER 321	113.4	17.5	99	0.0	0.0	0.8	3.5
MO 1031	113.1	17.7	98	0.0	0.0	0.0	3.6
MO 955	112.7	18.0	97	0.0	1.7	0.0	3.6
MFA 3232	111.7	17.7	99	0.0	1.7	0.0	3.4
MO 880	111.6	18.0	100	0.0	0.0	0.0	3.4
SCHENK S-90W*	107.5	18.2	99	0.0	0.0	0.0	3.9
US 13	106.4	16.7	98	0.0	2.5	0.0	4.0
MCMULLIN 1	106.0	16.4	100	0.0	0.8	0.0	3.4
MO 947A	105.3	17.6	100	0.0	2.5	0.0	3.6
SCHENK S-86	105.2	16.3	100	0.0	1.7	0.0	4.0
KY 5707	104.7	17.7	99	0.0	0.8	0.0	3.4
SCHENK S-87	104.4	17.3	98	0.0	1.7	0.0	3.9
PIONEER 319	102.3	16.5	100	0.0	0.0	0.0	3.4
KAN 1639	101.7	16.3	99	0.0	0.0	0.0	3.6
MCMULLIN 2	100.9	17.8	100	0.0	0.0	0.0	3.5
MFA 118	99.2	16.3	99	0.0	0.0	0.0	3.4
SCHENK S-73	99.0	16.9	98	0.0	0.8	0.0	3.6
MFA 2120	93.3	16.9	93	0.0	1.8	0.0	3.3
<u>Group III Maturity</u>							
AES 904AW*	137.9	19.9	100	0.0	1.7	0.0	4.3
MO W6*	136.6	19.1	100	0.0	0.8	0.0	4.5
US 619W*	134.8	17.6	99	0.0	0.0	0.0	4.0
AES 904W*	134.4	19.5	100	0.0	0.8	0.0	4.0
MO W6A*	133.7	20.9	100	0.0	0.0	0.0	4.5
US 523W*	130.3	17.4	99	0.0	0.0	0.0	4.0
DEKALB 1028	130.1	19.0	100	0.0	5.0	0.0	4.8
MO 4077W*	128.8	17.7	100	0.0	0.8	0.0	4.3
STULLS 500W*	128.1	19.0	100	0.0	1.7	0.0	4.0
DEKALB 925A*	126.2	19.6	100	0.0	0.0	0.0	4.1
DEKALB B906	123.5	19.2	99	0.0	1.7	0.0	3.9
DEKALB 898B	120.0	18.1	99	0.0	2.5	0.8	4.4
SCHENK S-99W*	119.4	17.6	100	0.0	4.2	0.0	4.0
TENN 501*	118.8	18.6	100	0.0	0.8	0.0	3.8
DEKALB 1023	115.4	20.5	99	0.0	5.9	0.0	4.3
KY 5805W*	114.8	17.9	98	0.0	0.9	0.0	4.0
MO 916	113.4	19.1	99	0.0	0.0	0.0	4.0
DEKALB 869	113.3	18.9	100	0.0	0.8	0.0	3.6
ZIMMERMANS 900W*	112.3	18.3	98	0.0	0.0	0.0	4.1
DEKALB 898A	111.1	16.8	91	0.0	0.0	0.0	3.9
ZIMMERMANS 800Y	109.5	16.2	97	0.0	0.9	0.0	4.3
PIONEER 323	109.3	17.5	99	0.0	0.0	0.0	3.5
DEKALB 886	100.2	17.9	95	0.0	0.9	0.0	3.6
<u>Group IV Maturity</u>							
DIXIE 29*	148.6	19.6	100	0.0	3.3	0.0	4.4
DIXIE 33*	137.8	21.5	100	0.0	4.2	0.0	4.8
PIONEER 309B	124.7	22.0	98	0.0	0.8	0.0	3.9
NC 270	<u>109.5</u>	<u>29.9</u>	<u>99</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>4.3</u>
Mean	116.2	18.2	99	0.0	1.1	0.1	3.9

Differences in yield between any two hybrids of less than 11.6 bushels are not considered significant.

\* White Hybrids

Table 9H Summary of Acre Yield and Lodging for Hybrids Tested in District 9 for the Three-Year Period of 1959, 1960, and 1961.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
<u>Group I Maturity</u>				<u>Group III Maturity</u>			
Iowa 4376	89.7	3.5	5.9	US 619W*	113.7	5.0	7.5
<u>Group II Maturity</u>				US 523W*	112.3	3.7	6.4
MFA K6	116.4	0.2	4.6	AES 904W*	107.0	1.1	5.1
Mo 843	109.4	0.7	5.3	DeKalb 898A	106.6	2.7	5.5
McMullin 1	106.0	1.2	3.4	DeKalb 1023	103.9	2.0	13.4
Pioneer 319	105.6	0.6	3.6	Mo W6*	103.4	2.3	3.4
MFA 2120	104.1	0.8	3.3	Mo 916	103.2	3.4	3.0
Mo 947	103.4	3.1	3.4	DeKalb 869	103.1	2.6	5.3
Schenke-90W*	103.1	2.9	6.5	Tenn. 501*	102.7	0.2	6.0
Mo 447W*	102.4	1.6	2.8	DeKalb 1028	97.6	2.5	10.5
MFA 118	101.7	0.0	4.9	<u>Group IV Maturity</u>			
US 13	100.1	0.7	8.6	Dixie 33*	110.1	3.8	4.8
Kan 1639	92.0	1.8	6.0	Dixie 29*	107.9	0.0	6.2

\*White Hybrids

Table 10 1959, 1960, and 1961 Summary of Performance Records for Hybrids Tested in all Districts. Averages of 53 Tests.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
<u>Group I Maturity</u>				<u>Group II Maturity (Contd.)</u>			
Iowa 4376	93.0	5.8	14.3	Kan 1639	97.8	6.3	15.3
<u>Group II Maturity</u>				US 13	95.9	6.0	21.2
Mo 447W*	103.2	11.1	11.6	<u>Group III Maturity</u>			
Mo 843	102.5	6.5	18.3	US 523W*	109.4	7.6	17.7

\* White Hybrids

Table 11 1959, 1960, and 1961 Summary of Performance Records for Hybrids Tested in Districts 1, 2, and 3. Averages of 16 Tests.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
<u>Group I Maturity</u>				<u>Group II Maturity (Contd.)</u>			
Iowa 4376	98.4	7.0	10.4	Steckley GG 15	101.0	4.0	12.7
<u>Group II Maturity</u>				Mo 447W*	101.0	10.5	7.6
DeKalb 805	119.3	7.3	6.6	AES 801	100.1	5.6	8.8
Kansas 1639	104.0	7.4	13.6	US 13	98.4	7.5	17.7
Mo 880	103.4	9.0	5.3	AES 811W*	98.4	16.3	6.6
Mo 843	103.2	8.2	14.9	Mo 995	96.7	8.8	5.8
MFA 2120	102.8	4.9	6.6	<u>Group III Maturity</u>			
Kan 1859	102.3	14.4	13.3	US 523W*	108.6	8.8	13.2

\* White Hybrids

Table 12 1959, 1960, and 1961 Summary of Performance Records for Hybrids Tested in Districts 4, 5, and 6. Average of 20 Tests.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
<u>Group I Maturity</u>				<u>Group III Maturity</u>			
Iowa 4376	94.5	7.2	16.4	US 523W*	113.9	10.4	19.8
<u>Group II Maturity</u>				AES 904W*	111.5	9.0	15.5
Mo 447W*	107.3	16.3	14.9	US 619W*	110.9	13.4	23.6
Mo 955	104.9	14.8	12.6	Kan 4003	106.8	7.6	15.8
Mo 843	104.2	8.0	23.4	DeKalb 898A	104.9	12.5	18.8
Mo 947	103.3	11.2	18.8	Mo 916	102.7	10.1	10.4
Kan 1639	102.1	8.6	13.6				
US 13	96.6	9.4	22.9				

\* White Hybrids

Table 13 1959, 1960, and 1961 Summary of Performance Records for Hybrids Tested in Districts 7, 8, and 9. Average of 17 Tests.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
<u>Group I Maturity</u>				<u>Group III Maturity</u>			
Iowa 4376	86.0	3.3	16.0	AES 904W*	109.1	2.3	15.2
				US 619W*	108.7	4.8	21.1
				US 523W*	105.8	3.5	20.1
<u>Group II Maturity</u>							
Mo 447W*	101.3	6.4	12.4	Mo W6*	102.6	2.7	13.1
Mo 843	100.2	3.4	16.6	Mo 916	102.5	4.6	10.5
Mo 947	98.8	2.7	16.7	Tenn 501	96.9	2.9	19.7
US 13	92.3	1.2	23.0				
Kan 1639	87.2	3.0	18.7	<u>Group IV Maturity</u>			
				Dixie 33	107.1	6.6	19.7
				Dixie 29	105.8	2.2	16.1

\* White Hybrids

Table 14 Pedigrees of Open-Pedigree hybrids Tested in 1961.

Hybrid	Pedigree	Endosperm Color
<u>Early (90 Day)</u>		
Iowa 4376	(WF9 x B6)(187-2 x M14)	Yellow
<u>Medium (115-120 Day)</u>		
AES 801	(WF9 x B7)(B10 x B14)	Yellow
Kan 1639	(WF9 x 38-11)(K148 x K150)	"
Kan 1859	(WF9 x N6)(K148 x K150)	"
Mo 843	(WF9 x Oh7A)(B10 x C103)	"
Mo 880	(WF9 x 38-11)(K148 x Mo 5)	"
Mo 947	(WF9 x Oh7A)(Mo 3 x CI 21E)	"
Mo 955	(Mo 6 x CI 21E)(WF9 x Oh7A)	"
Mo 995	(R909 x R938)(K148 x Mo 5)	"
US 13	(WF9 x 38-11)(L317 x Hy)	"
Mo 1023	(WF9 x B41)(Mo 5 x C103)	"
Nebr. 501D	(WF9 x Hy)(N6 x N6D)	"
Mo 1007	(WF9 x B14)(C103 x Mo5)	"
Mo 1013	(B41 x B14)(C103 x Mo5)	"
Mo 1017	(WF9 x Oh7A)(C103 x B14)	"
Mo 1020	(WF9 x Oh7A)(Oh43 x C103)	"
Mo 947A	(38-11 x CI 21E)(WF9 x Oh7A)	"
Mo 1031	(Mo 0225 x K711)(Mol1 x CI 38B)	"
Mo 1033	(Mo5 x Oh7A)(K148 x B41)	"
Mo 1034	(B41 x Mol1)(Mo5 x C103)	"
Mo 1035	(B41 x Mol1)(Mo5 x K148)	"
Ky 105	(T8 x CI 21E)(38-11 x Oh7B)	"
Ky 5707	(WF9 x 38-11)(C103 x CI 21E)	"
Tenn. 604	(T416 x T474)(T432 x T498)	"
AA 128	(B14 x R61)(WF9 x Oh43)	"
AA 375	(WF9 x H50)(B14 x C103)	"
Iowa 4732	(WF9 x B7)(B14 x N6)	"
Iowa 5018	(WF9 x B7)(B14 x CI 31A)	"
Iowa 5118	(WF9 x Hy)(B14 x CI 31A)	"
Iowa 5043	(WF9 x 38-11)(B14 x CI 31A)	"
Mo 447W	(K55 x K6)(H28 x K41)	White
AES 811W	(N72 x Mo 1W)(K41 x H30)	"
Mo 4078W	(Mol1W x Ky211)(H30 x H41)	"
Mo 4079W	(Mol1W x Ky211)(K55 x K6)	"
Mo 4080W	(Mol1W x Ky211)(H26 x H27)	"
<u>Late (125 - 135 Day)</u>		
Kan 4003	(K201G x K11)(K12 x Oh7B)	Yellow
Mo 881	(CI 21E x Mo 7)(Oh7B x Oh29)	"
Mo 916	(Mo 6 x CI 21E)(Oh7B x Oh29)	"
Kan. 2802	(K41 x K745)(K63 x K64)	White
AES 904W	(K64 x Mo 22)(T111 x T115)	"
Ky 5805W	(CI 64 x 33-16)(K55 x Ky27)	"
Mo 4081W	(Mol1W x Ky211)(CI66 x K6)	"
Kan 2458W	(K55 x H28)(K698 x K699)	"
Mo 4077W	(Mo 2RF x H28)(CI66 x K6)	"
AES 904AW	(T111 x T115)(CI 64 x Mo22)	"
Mo W6	(K64 x Mo 22)(Dixie 29)	"
Mo W6A	(CI 64 x Mo 22)(Dixie 29)	"
US 523W	(K55 x K64)(Ky27 x Ky49)	"
US 619W	(K55 x CI 64)(Ky27 x Ky49)	"
Tenn. 501	(T111 x T115)(K41 x K44)	"
<u>Very Late (135 - 145 Day)</u>		
NC 270	(NC222 x NC83)(GT112 x CI 21)	Yellow
Dixie 29	(T101 x T105)(T111 x T115)	White
Dixie 33	(T101 x T105)(T13 x T61)	"





Table 16 Location by Districts of Open-Pedigree Hybrids in the 1961 Yield Tests.

Hybrid	Districts								
	1	2	3	4	5	6	7	8	9
US 13	X	X	X	X	X	X	X	X	X
Mo 843	X	X	X	X	X	X	X	X	X
Mo 880	X	X	X	X	X	X	X	X	X
Mo 447W	X	X	X	X	X	X	X	X	X
Kansas 1639	X	X	X	X	X	X	X	X	X
US 523W	X	X	X	X	X	X	X	X	X
US 619W	X	X	X	X	X	X	X	X	X
Iowa 4376	X	X	X	X	X	X	X	X	X
Mo 1007	X	X	X	X	X	X			
Mo 1023	X	X	X	X	X	X			
Mo 1013	X	X	X	X	X	X			
Mo 1017	X	X	X	X	X	X			
Mo 1020	X	X	X	X	X	X			
Mo 4080W	X	X	X	X	X	X			
Mo 1033	X	X	X						
AES 811W	X	X	X						
AES 801	X	X	X						
Kansas 2802	X	X	X						
Kansas 1859	X	X	X	X					
Mo 995	X	X	X						
Iowa 5018	X	X	X						
Iowa 5118	X	X	X						
Iowa 4732	X	X	X						
Nebraska501D	X	X	X						
AA 128	X	X	X		X				
AA 375	X	X	X		X	X			
Mo 955				X	X	X	X	X	X
Mo 916				X	X	X	X	X	X
Mo 947				X	X	X	X	X	X
Mo 947A				X	X	X	X	X	X
Kansas 4003			X	X	X	X			
AES 904W				X	X	X	X	X	X
AES 904AW				X	X	X	X	X	X
Mo W6				X	X	X	X	X	X
Mo W6A				X	X	X	X	X	X
Mo 4077W				X	X	X	X	X	X
Iowa 5043			X						
Kan 2458W				X					
Mo 4078W			X				X		
Mo 1034			X						
Mo 1035			X						
Tenn 501						X	X	X	X
Dixie 33						X	X	X	X
Dixie 29						X	X	X	X
Tenn 604						X	X	X	X
Ky 105					X	X	X	X	X
Ky 5707					X	X	X	X	X
Ky 5805 W					X	X	X	X	X
Mo 1031					X	X	X	X	X
Mo 4079W					X	X	X	X	X
NC 270								X	X
Mo 4081W						X			

Table 17 Sources of Seed for Commercial Hybrids.

Hybrids	Firm	Address
Bear OK	Bear Hybrid Corn Co., Inc.	Decatur, Illinois
Cargill	Cargill, Inc.	Minneapolis, Minnesota
Corn King	Malcolm H. Grieve	Pierson, Iowa
DeKalb	DeKalb Agri. Assoc., Inc.	DeKalb, Illinois
Maygold	Earl May Seed Co.	Shenandoah, Iowa
McAllister	McAllister Seed Co.	Mt. Pleasant, Iowa
McMullin	McMullin Hybrid Corn Sales	Sikeston, Missouri
Meecham	Meechams Hybrids	Morganfield, Kentucky
MFA	MFA Seed Division	Marshall, Missouri
Morton	Roy A. Morton & Sons	Bowen, Illinois
Nebraska C	Nebraska Hybrid Seed Growers Assn.	Lincoln, Nebraska
Pioneer	Pioneer Seed Corn Co., and Garst & Thomas Hybrid Corn Co.	Tipton, Indiana Coon Rapids, Iowa
Poirot	Severin Poirot III	Golden City, Missouri
Schenk	Chas. H. Schenk & Sons	Vincennes, Indiana
Steckley	Steckley Hybrid Corn Co.	Lincoln, Nebraska
Stull	Stull Bros.	Sebree, Kentucky
United Hagie	United-Hagie Hybrids, Inc.	Des Moines, Iowa
Zimmerman	Zimmermans Hybrids	Evansville, Indiana

## COMPARISON OF HYBRIDS OF DIFFERENT MATURITIES

Hybrids of three maturities were tested at all location in 1961. These were an early hybrid, Iowa 4376; a midseason hybrid, US 13; and a late hybrid US 523 W. The yield results for 1961 follow the same pattern as those for 1960, 1959, 1958, and 1957. See Figure 2 for summary of comparative yields for 5 years (1957-1961).

Where conditions were more favorable for high yields during the 5-year period, the spread in yield between maturities was greater, and the full season hybrids had about a 30-bushel yield advantage. With lower yields caused by less favorable growing conditions, there was less difference in yield between the three maturity groups. This is illustrated by the difference of about 7 bushels for districts 1 and 4.

Apparently it is logical to plant hybrids that take advantage of as much of the growing season as the climate will permit in your region. However, the choice would be regulated if the objective in planting early-maturing hybrids was something other than yield.

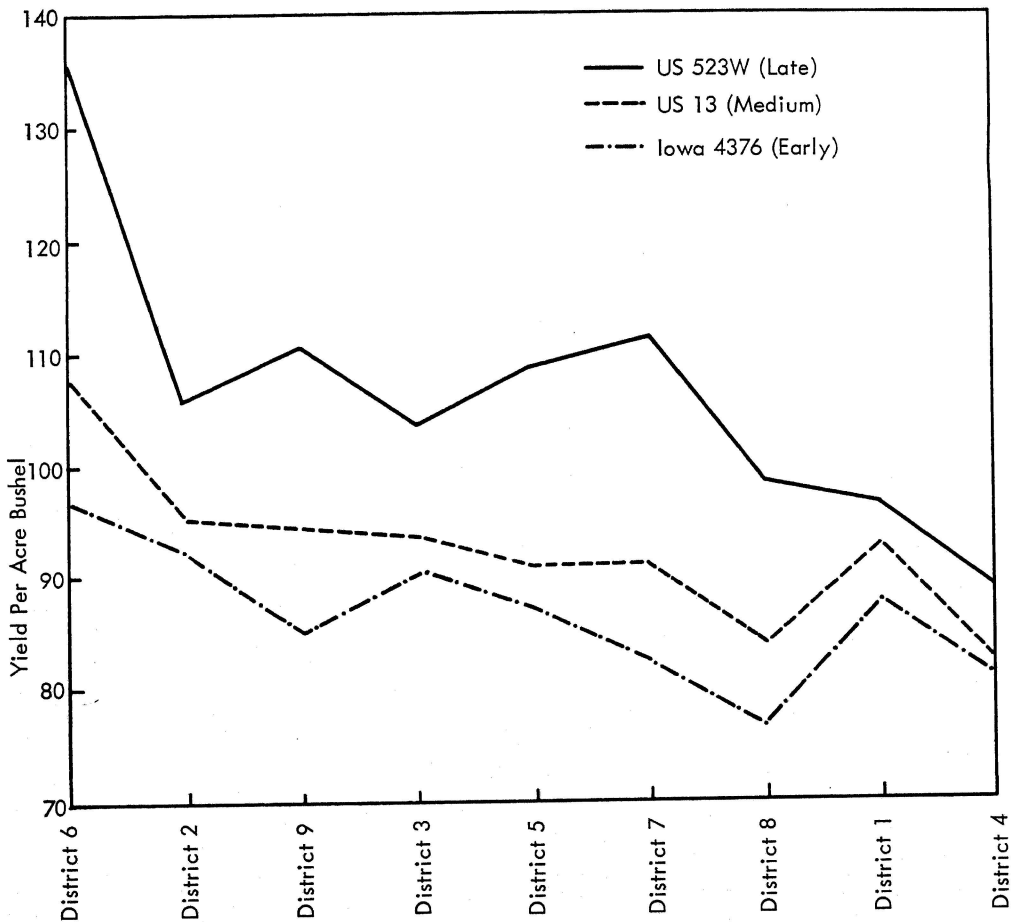


Fig. 2 - Comparative average yields of hybrids of three different maturity classifications grown in the nine districts in Missouri in 1957, 1958, 1959, 1960, and 1961.