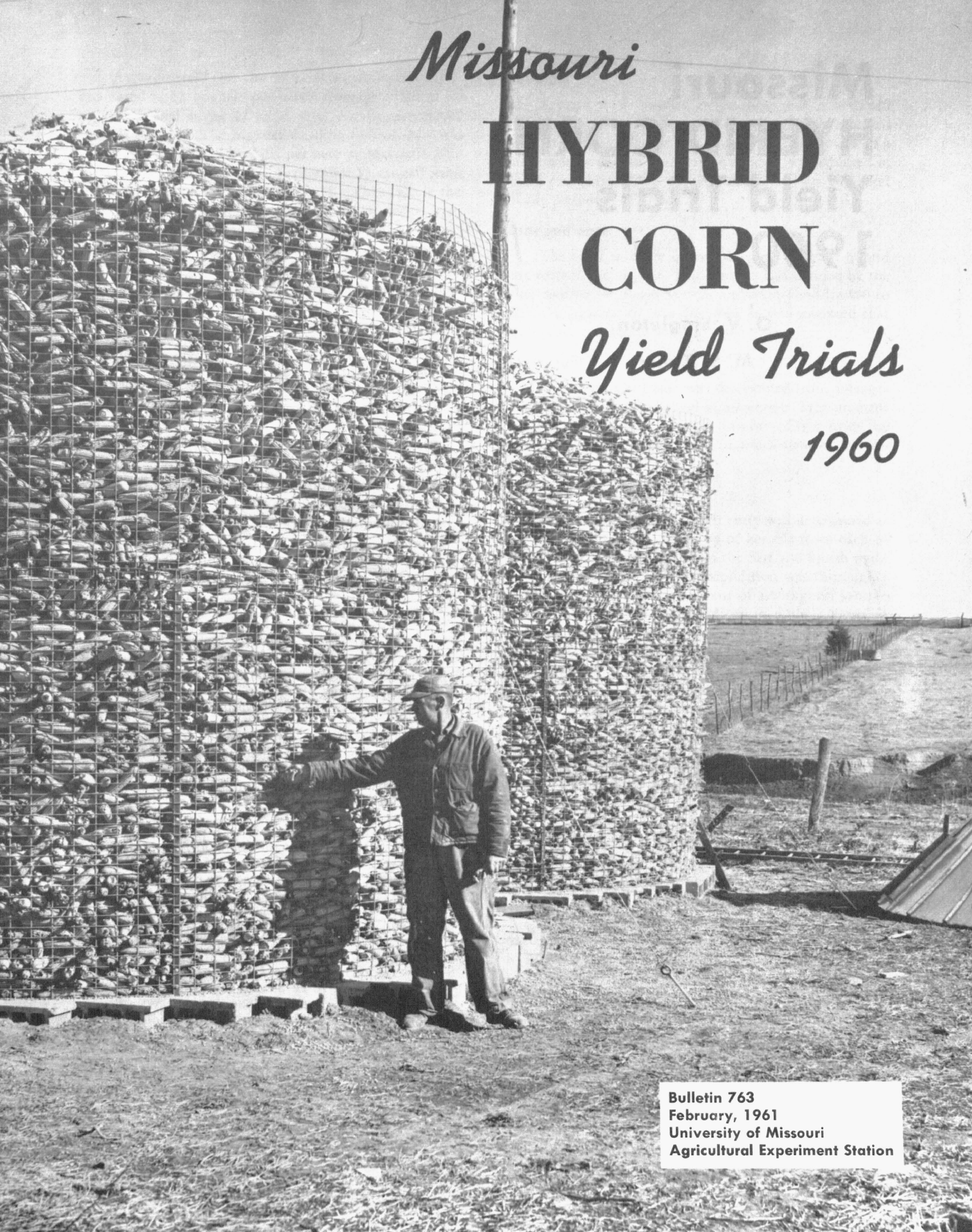


Missouri

HYBRID CORN

Yield Trials

1960



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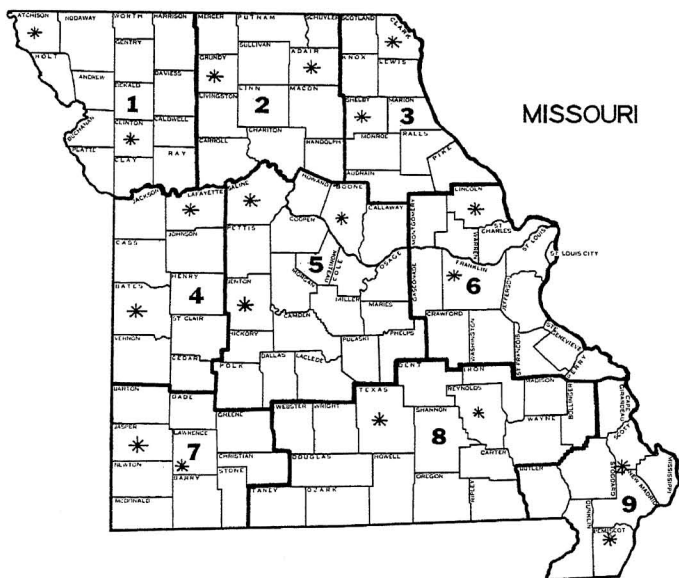


Fig. 1—Map showing the 9 districts and the testing locations.
(*) Location of tests.

ACKNOWLEDGMENT

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Average yield for the 1960 Missouri corn crop is estimated at 53 bushels per acre. Average yield of all hybrids tested at the 17 yield trial locations was 102 bushels per acre. The highest yielding hybrid, Mo W6 (cert.), produced 154 bushels per acre at Marshall. The total rainfall from May 1 to September 15 ranged from less than 10 inches to more than 35 inches, while the number of days with temperatures above 90° varied from 23 to 67 at the different locations. Dry periods of 15 to 45 days in July and August were reported at several locations. Acre yields were reduced materially by these and other factors at several locations. This was very apparent at Clarence, Kirksville, Wayland, Ellington 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 lower than usual throughout the state. Only 5 locations had more than 9 percent.

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 1960 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 48 in District 8 to 72 in District 9. 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. If a plant was both root and stalk lodged, it 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. This number was divided by the total number of plants present and multiplied by 100 to give 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 approximate 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 a 100-gram sample was determined for each replication 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.

1960 RESULTS

Results reported for each district are for tests conducted in 1960. Summaries are for 1958, 1959, and 1960. It is hoped that more closed-pedigree hybrids will be re-entered in the same districts for at least 3 years so results can be computed for longer periods.

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.

DISTRICT 1

Data for District 1 are reported in Tables 1A to 1F.
The second highest rainfall for any of the locations was reported at Tarkio. Temperatures in this location were above normal.

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 (1950-1959), 1958, 1959 and 1960 in District 1.

	Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (Bu.)	Missouri Corn Yield Tests
10 year average 1950-1959	20.1	880,200	44.4	
1958	14.1	618,000	58.5	88.7
1959	25.4	1,012,000	57.8	95.2
1960	20.7*	906,000*	55.0*	115.7

*Estimated as of October 1, 1960.

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 12	Oct. 31	115.7	11.6
Lathrop	N.W. Mo. Agri. Res. Center	May 24*			

* Not harvested

Table 1C Total Rainfall, Number of Days with Rain, and Dry Periods From May 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. 15		
Tarkio	Tarkio	24.15	7	12	4	9	1	33	7/1-7/17 7/19-8/5 8/30-9/15
Lathrop	Lathrop	18.89	8	12	8	6	1	27	7/11-7/28 8/19-9/8

* 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
				1960	Avg.	
Tarkio	Tarkio	71.4	+1.4	35	45	0
Lathrop	Lathrop	71.1	-0.4	33	41	0

Table 1E 1960 Performance Record for Hybrids Tested Near Tarkio, Missouri, in Atchison County. Planted May 12, 1960, and Harvested October 31, 1960. (Exp. 1). District 1.

Hybrid	Acre Yield Bu.	Moist- ure in Grain %	Stand %	Lodged Plants		Drop- ped Ears %	Ear Height Grade
				Root %	Stalk %		
Pfister PAG SX19	135.4	21.1	96	0.0	1.9	0.0	4.3
DeKalb 662	130.3	20.1	98	0.0	1.3	0.0	3.9
Pioneer 321	130.2	19.5	96	0.0	1.3	0.0	4.1
DeKalb 805	129.5	20.6	93	0.0	0.0	0.0	3.9
Funk G144	127.5	21.0	98	0.0	0.6	0.0	3.8
DeKalb 854	127.4	21.5	98	0.0	1.9	0.6	4.1
Pioneer 312A	126.8	23.3	99	0.0	0.6	0.0	4.0
MFA K6	126.1	21.8	95	0.0	0.0	0.0	4.0
DeKalb 661	125.2	19.3	95	0.0	1.3	0.0	3.9
Steckley Exp. 851	123.9	21.4	94	0.0	1.3	0.0	3.6
Funk G95A	122.8	18.5	87	0.0	2.2	0.0	3.6
DeKalb 640	121.6	19.4	94	0.0	0.0	0.7	4.4
Pfister PAG SX14	121.1	21.7	92	0.0	0.0	0.0	4.1
Pioneer 6488A	120.3	21.1	97	0.0	0.0	0.0	3.8
Cargill 335	120.0	20.7	98	0.0	2.5	0.0	3.8
Pfister PAG 418	119.1	21.0	93	0.0	0.7	0.0	3.1
Kan 1859	119.0	21.0	94	0.0	1.3	0.0	3.6
DeKalb 3x1	118.9	18.8	92	4.8	0.7	0.0	3.9
Maygold 48	118.8	19.7	94	0.0	2.7	0.0	3.8
DeKalb 812	118.7	21.7	95	0.0	0.7	0.0	3.4
DeKalb 633	118.6	20.8	98	0.0	0.0	0.0	4.1
Mo 880	118.5	21.6	98	0.0	0.6	0.0	3.8
Pioneer 320	118.4	20.0	99	0.0	0.0	0.0	3.9
MFA 3210	118.2	18.6	93	0.0	0.7	0.0	4.0
Mo 447W*	118.0	23.1	99	7.6	1.9	0.0	4.5
Maygold 37	118.0	21.8	93	0.0	0.7	0.0	4.3
Kan 2822	117.6	19.2	88	0.0	0.7	0.0	4.6
Maygold 29X	116.9	22.3	97	1.3	1.3	0.0	3.8
MFA 2120	116.8	19.7	88	0.0	1.4	0.0	3.9
U.H. WW60	116.0	21.6	94	0.0	3.3	0.0	3.6
US 523W* (cert.)	115.9	26.6	95	0.0	0.7	1.3	4.9
Pioneer 6758	115.6	23.1	90	0.0	1.4	0.0	3.9
US 619W* (cert.)	115.5	24.8	93	4.7	1.4	0.0	4.6
DeKalb 3x2	114.6	21.0	94	0.0	4.0	0.0	3.6
Ohio C92	114.5	19.0	89	0.0	0.0	0.0	4.0
US 13	114.4	19.2	91	0.0	2.7	0.0	4.0
Cargill 310	114.1	19.2	90	0.0	0.0	0.0	3.8
MFA 2123	113.6	19.9	92	0.0	5.4	0.0	4.0
Pfister PAG 415	113.6	20.1	93	0.0	0.7	0.0	3.1
Mo 880 (cert.)	113.5	21.8	94	0.0	0.0	0.0	3.5
Funk G96	113.4	23.1	95	0.0	0.0	0.0	3.3
Mo 843 (cert.)	112.9	21.3	88	2.1	0.7	0.0	4.5
Kan 1639	112.6	19.0	94	1.3	2.7	0.0	3.8
Steckley GG12	112.5	18.4	92	0.0	0.0	0.0	3.8
DeKalb 869	112.1	20.1	91	0.0	0.7	0.0	4.1
Mo 995	112.0	22.3	96	0.0	0.0	0.0	3.8
AES 801	111.7	21.9	91	0.0	0.0	0.0	3.9
Mo 843	111.5	22.5	96	0.0	1.3	0.0	4.1
US 619W*	110.2	24.5	83	3.8	0.8	0.0	4.9
Mo 447W* (cert.)	109.2	22.5	95	0.0	0.0	0.0	3.9
Rist R 71	109.1	18.6	94	0.0	0.7	0.0	3.8
Pfister PAG 434	108.8	23.9	90	0.7	0.0	0.0	4.1
Steckley GG15	108.5	21.0	88	0.0	1.4	0.0	4.0
Steckley Exp. 1610	107.9	19.6	93	0.0	0.0	0.0	3.0
AES 811W*	107.5	19.4	93	11.4	2.0	0.7	4.0
Mo 1023	107.1	22.3	96	1.3	0.0	0.6	3.8
Iowa 4376	105.8	19.9	96	0.0	0.0	0.0	3.4
Cargill 340	105.3	22.1	91	0.0	2.1	0.0	4.1
Cargill 349	105.0	19.8	88	0.0	2.8	0.0	3.9
Kan 1639 (cert.)	104.7	20.0	83	0.0	0.8	0.0	3.6
U.H. 52B	104.4	21.4	88	0.0	0.7	0.0	3.9
MFA 118	103.2	19.5	82	0.0	0.0	1.5	3.9
US 523W*	103.1	27.0	96	1.3	0.6	0.0	4.9
Mo 1002	101.1	19.1	84	0.0	0.0	0.0	4.0
Mean	115.7	21.0	93	0.6	1.0	0.1	3.9

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

Table 1F Summary of Acre Yield and Lodging for Hybrids Tested in District 1 for the Three-Year Period of 1958, 1959 and 1960.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
DeKalb 805	112.5	0.8	1.9	Cargill 335	100.3	0.8	12.5
DeKalb 3x1	109.3	2.5	7.7	Kansas 1859	100.1	3.7	6.7
Funk G144	108.3	0.5	4.1	US 523W*	99.8	1.1	7.3
DeKalb 661	105.8	0.1	12.4	US 13	99.7	1.6	13.0
Funk G95A	105.0	0.8	4.8	Mo 447W*	98.1	3.1	7.1
Pioneer 312A	104.4	0.6	7.7	Steckley GG15	98.0	0.4	10.2
U.H. WW60	104.2	1.3	8.5	U.H. 52B	97.1	0.6	6.5
DeKalb 640	103.2	0.6	4.2	MFA 118	96.5	0.5	6.1
MFA 2120	103.1	1.2	5.3	Mo 880	96.3	1.4	3.6
Maygold 37	102.9	0.0	7.5	Ohio C92	95.9	1.0	9.2
Maygold 29X	102.2	1.3	4.1	Ia 4376	93.1	0.2	4.4
Kansas 2822	101.4	1.0	7.8	AES 811W*	93.0	7.4	3.1
Maygold 48	101.1	0.8	8.0	Mo 843	90.5	0.9	6.6
AES 801	101.1	0.0	3.5				
Kansas 1639	100.9	0.9	7.6	Mean	100.9	1.2	6.8

* white hybrids

DISTRICT 2

Tables 2A to 2F give the 1960 results and 3-year summary for District 2. Climatic conditions were fairly favorable at Spickard, resulting in above average yields.

Spickard received the highest rainfall reported for any location. Three dry periods during the growing season at Kirksville caused a material reduction in yield.

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 (1950-1959), 1958, 1959 and 1960 in District 2.

	Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (Bu.)	Missouri Corn Yield Tests
10 year average 1950-1959	13.2	519,000	43.5	
1958	10.4	408,000	56.4	109.4
1959	15.6	662,000	58.0	111.7
1960	14.8*	579,000*	49.0*	92.8

*Estimated as of October 1, 1960

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	June 3	Nov. 2	106.8	11.4
Kirksville	Earl Shockey	June 2	Nov. 7	78.7	14.1

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 Rainfall	No. of Days with Rain					Total	Dry Periods*
			May	June	July	Aug.	Sept. 15		
Spickard	Spickard	34.81	10	8	5	7	2	32	7/11-7/29
Kirksville	Kirksville	18.03	11	14	5	11	1	42	7/10-8/4 8/8-8/28 8/30-9/15

* 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 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	
				1960	Avg.	1960	1960
Spickard	Spickard	70.6	-1.8	26	44		0
Kirksville	Kirksville	70.0	-2.0	25	44		0

Table 2E 1960 Summary of Performance Records for Hybrids tested at Spickard and Kirksville, Missouri, in District 2 (Exp. 3 and 4).

Hybrid	Acre Yield Bu.	Moisture in Grain %	Stand %	Lodged Plants		Drop- ped Ears %	Ear Height Grade
				Root %	Stalk %		
Cargill 5741	104.6	25.1	96	6.3	7.8	1.7	3.3
Pioneer 6758	103.8	29.0	98	9.2	14.8	1.0	3.3
Cargill 340	103.4	27.2	97	8.9	6.9	0.0	3.4
Pfister PAG SX14	103.4	27.3	95	6.8	3.2	0.4	3.6
Kan 1859	102.4	26.0	96	17.6	11.0	0.3	3.1
DeKalb 805	102.4	25.8	96	26.2	7.7	0.3	3.2
Pioneer 321	98.6	25.9	97	4.3	8.9	0.0	3.4
Steckley Exp. 851	98.6	26.8	100	15.5	11.9	0.3	3.0
Maygold 37	98.1	25.2	93	8.7	19.6	0.4	3.3
Pfister PAG SX19	97.9	28.2	95	16.8	2.7	0.0	3.4
US 523W*	97.7	27.7	96	18.2	23.3	0.3	3.6
Cargill 330	97.7	23.4	96	10.9	2.1	1.2	3.2
Mo 880	97.6	28.2	100	19.3	8.5	0.0	3.3
MFA K6	97.0	28.0	94	20.9	10.4	0.0	3.3
US 619W*	96.9	31.8	96	12.1	27.6	0.3	3.7
Mo 880(cert.)	96.6	27.2	98	18.4	6.3	0.9	3.3
Kan 2822	96.5	23.9	97	10.2	16.3	0.0	3.7
Pioneer 312A	96.5	32.9	96	10.0	7.1	0.4	3.5
Funk G91	95.6	25.4	98	12.9	14.0	0.0	3.3
Mo 447W*	95.5	30.1	98	16.8	10.5	0.0	3.4
Mo 843	95.1	28.4	96	10.2	19.7	0.0	3.4
Maygold 48	95.0	23.5	97	23.0	8.1	0.0	3.2
DeKalb 869	94.8	28.2	97	13.2	9.6	1.1	3.5
DeKalb 812	94.7	27.0	95	12.2	6.2	0.4	3.1
DeKalb 633	94.2	27.5	97	10.4	9.9	0.3	3.2
UH WW50	94.1	28.1	99	15.1	26.3	0.3	3.1
DeKalb 640	93.6	28.6	97	8.4	4.5	0.0	3.5
DeKalb 3x4	93.2	25.9	98	17.4	22.7	0.3	3.5
Pioneer 320	93.1	26.4	99	5.6	8.7	0.3	3.1
Funk G93	92.9	25.2	96	6.6	8.2	0.0	3.0
Cargill 335	92.7	28.8	96	13.9	20.2	0.0	3.2
Steckley GG15	92.6	27.1	95	10.2	20.5	0.3	3.6
Kan 1639 (cert.)	92.0	26.0	93	16.1	12.1	0.0	3.2
MFA 2120	92.0	27.5	98	12.8	7.5	0.0	3.6
Pioneer 6488A	91.5	26.3	97	9.2	4.3	0.6	3.0
DeKalb 3x1	90.4	23.0	97	20.6	15.5	0.6	3.1
Kan 1639	90.3	26.2	95	19.6	13.3	0.0	3.1
MFA 3210	90.2	25.3	96	8.7	9.7	0.6	3.2
DeKalb 803A	89.9	29.0	94	16.2	15.0	0.0	3.4
UH 66	89.7	26.7	94	22.4	11.7	0.3	2.9
MFA 2123	89.6	26.4	95	14.7	11.2	0.8	3.4
US 523W* (cert.)	89.5	32.0	97	20.3	24.4	0.7	3.5
Mo 447W* (cert.)	89.4	28.4	97	31.2	7.5	0.0	3.2
Maygold 29X	89.4	28.3	96	16.4	3.2	0.3	3.0
Mo 995	89.3	27.9	96	14.0	4.1	0.0	3.0
Pfister PAG 418	89.3	27.6	95	8.9	5.5	0.7	2.9
Ohio C92	88.4	24.0	99	11.5	13.2	0.0	3.5
Mo 843 (cert.)	88.1	28.5	90	9.1	17.2	0.9	3.4
Mo 1002	87.8	24.5	92	11.3	3.4	0.0	3.2
AES 811W*	87.1	26.4	95	31.5	7.1	0.4	3.1
Pfister PAG 434	87.1	29.7	95	17.2	9.2	0.0	3.3
Pfister PAG 415	86.9	27.7	94	11.6	1.9	0.4	2.8
Cargill 5035	86.4	29.6	97	13.5	15.6	1.2	3.2
Steckley GG12	86.2	24.6	94	11.2	11.6	0.7	3.1
DeKalb 3x2	85.3	24.5	95	16.3	9.3	0.3	3.1
AES 801	84.8	28.3	97	10.0	5.7	0.0	3.2
MFA 118	84.0	29.6	94	8.4	8.1	0.7	3.4
Iowa 4376	82.5	23.7	98	6.6	14.9	0.0	2.8
Steckley Exp. 1610	81.6	28.9	98	9.1	5.6	0.7	2.7
US 13	79.5	25.7	97	12.5	19.5	0.7	3.3
Mean	92.8	27.1	96	13.8	11.2	0.4	3.3

* white hybrids

Table 2F Summary of Acre Yield and Lodging for Hybrids Tested in District 2 for the Three-Year Period of 1958, 1959 and 1960.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
DeKalb 805	118.5	20.5	8.5	Pioneer 312A	105.5	10.2	9.5
DeKalb 3x4	110.4	10.3	19.5	Kansas 1639	105.4	18.2	11.8
Kansas 2822	109.1	8.7	18.1	MFA 2120	105.1	8.6	5.2
Maygold 37	108.9	11.8	18.1	DeKalb 3x2	104.4	16.5	12.6
Maygold 48	108.6	18.0	11.1	U.H. 66	104.0	21.3	13.2
Maygold 29X	108.5	16.5	3.7	Mo 447W*	101.7	14.5	10.2
US 523W*	108.2	16.9	16.1	Mo 880	101.3	15.4	4.5
Funk G91	108.0	11.6	15.4	AES 801	99.0	11.2	8.2
DeKalb 3x1	107.9	17.2	15.2	US 13	99.0	11.1	20.0
DeKalb 633	107.6	11.2	10.8	Mo 843	98.2	11.0	17.1
DeKalb 640	106.3	6.3	4.1	AES 811W*	97.6	25.6	7.3
U.H. WW50	106.3	11.5	22.2	Ia 4376	97.4	9.4	10.7
Cargill 335	106.2	12.8	17.6	Ohio C92	97.4	10.0	11.0
Steckley GG15	106.2	9.8	17.9				
Kansas 1859	105.7	26.0	11.2	Mean	105.1	14.0	12.5

* white hybrids

DISTRICT 3

Results for District 3 are given in Table 3A to 3F. Rainfall and other weather conditions were not very favorable in this district. Wayland's total rainfall was above average for the state but precipitation periods were

smallest in number, particularly late in the growing season, resulting in reduced yields. Clarence had three dry periods, which reduced yields. Heavy rains in May delayed planting until June in both locations.

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 (1950-1959), 1958, 1959 and 1960 in District 3.

	Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (Bu.)	Missouri Corn Yield Tests
10 year average 1950-1959	12.7	407,000	45.5	
1958	13.2	424,000	60.2	104.4
1959	19.4	621,000	56.6	108.4
1960	17.2*	551,000*	52.0*	79.9

*Estimated as of October 1, 1960

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	June 4	Nov. 10	75.9	13.0
Kahoka	D. L. Shrauner	June 6	Oct. 27	83.8	19.7

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

Testing Location	Nearest Weather Station	Total Rain-fall	No. of Days with Rain					Total	Dry Periods*
			May	June	July	Aug.	Sept. 15		
Clarence	Macon	19.04	14	12	4	14	0	44	7/11-8/5 8/8-8/25 8/27-9/15
Wayland	Kahoka	21.68	8	9	3	4	1	25	8/8-9/15

* 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 1960
				1960	Avg.	
Clarence	Macon	70.9	+0.1	35	41	0
Kahoka	Canton	71.7	+0.6	23	42	0

Table 3E 1960 Summary of Performance Records for Hybrids Tested Near Clarence and Wayland, Missouri, in District 3. (Exp. 5 and 6).

Hybrid	Acre Yield Bu.	Moist- ure in Grain %	Stand %	Lodged Plants		Drop- ped Ears %	Ear Height Grade
				Root %	Stalk %		
DeKalb 805	99.2	17.5	97	6.0	15.8	0.3	4.3
Morton M-6X	95.1	17.0	93	0.7	14.9	0.4	4.1
Bear Unicorn X606	91.4	20.3	97	4.2	13.7	0.0	4.3
Pfister PAG SX19	91.2	16.4	95	2.3	3.4	0.0	4.3
Bear OK 878	89.4	16.5	94	1.8	20.4	0.0	4.4
McAllister 23A	87.4	17.6	96	0.0	10.3	0.0	3.8
Bear OK 96	86.4	18.9	95	6.0	13.8	0.4	4.8
Forster 44	86.4	18.0	94	3.4	23.7	0.0	4.5
Forster 25	86.0	16.6	95	0.4	12.0	0.4	3.5
Cargill 310	85.5	16.5	95	0.0	9.5	1.1	4.0
DeKalb 869	84.6	20.0	95	0.0	10.1	0.0	4.4
MFA K6	84.0	22.8	91	4.3	8.8	0.9	4.1
Mo 880	83.9	20.0	92	5.9	13.4	0.7	3.8
Funk G144	83.1	18.1	96	3.0	12.9	0.0	3.9
Forster 33	83.0	17.9	95	2.5	31.6	0.4	4.5
MFA 3210	82.9	16.4	95	0.9	17.3	0.0	4.1
Steckley Exp. 1610	82.9	17.2	99	0.5	23.1	0.0	3.3
Cargill 349	82.8	19.7	97	0.0	17.8	0.0	4.2
Morton M-505	82.6	15.5	95	5.0	9.0	0.0	3.9
Pioneer 312A	82.5	20.3	97	0.0	14.9	0.0	4.2
Mo 447W*	82.4	20.8	98	1.3	16.8	0.0	4.3
Pioneer 6758	82.0	22.4	98	1.3	26.6	0.3	4.3
DeKalb 812	81.8	18.4	97	1.3	15.6	0.5	3.5
Steckley Exp. 851	81.6	21.5	99	2.6	16.3	0.0	3.7
Kan 1639	81.1	17.9	91	0.5	24.1	0.0	4.2
DeKalb 633	80.9	17.5	97	0.0	10.4	0.0	3.9
Mo 1002	80.7	16.7	95	1.3	1.7	0.0	4.0
Forster 56	80.5	18.6	90	1.8	4.2	0.4	4.4
Pfister PAG 434	80.5	17.8	97	2.2	16.2	0.0	4.2
Kan 1859	80.1	19.7	93	4.6	18.6	0.0	3.9
Kan 1639 (cert.)	79.8	18.5	91	1.4	26.3	0.5	4.1
Pfister PAG SX14	79.3	17.4	93	0.0	0.5	0.0	4.1
Bear OK 69	78.9	20.6	95	5.3	20.5	0.0	4.3
Pioneer 321	78.9	19.3	98	0.3	7.4	0.0	4.0
McAllister 13A	78.8	16.5	96	0.0	11.1	0.3	3.9
Ohio C92	78.4	16.9	93	0.0	25.6	0.0	4.3
Mo 995	78.4	18.2	98	2.6	14.0	0.3	3.9
MFA 2120	78.2	19.1	93	0.5	8.6	0.0	4.0
Pioneer 6488A	78.2	17.6	99	2.1	21.9	0.3	3.9
Cargill 335	78.1	18.7	98	3.0	31.9	1.0	4.0
Cargill 285	77.9	17.1	95	0.4	7.5	0.0	4.0
DeKalb 640	77.6	17.8	93	4.0	6.6	0.0	4.1
DeKalb 661	77.5	20.1	98	0.7	22.7	0.4	3.9
Mo 843 (cert.)	77.4	19.6	95	2.6	19.3	0.4	4.5
Mo 880 (cert.)	76.8	19.5	97	3.0	8.5	0.4	4.0
MFA 118	76.3	18.0	94	0.0	12.1	1.6	4.0
Funk G93	76.2	16.3	95	0.7	15.6	0.0	3.8
Steckley GG15	76.2	19.0	93	0.7	21.8	0.4	4.2
Kan 2822	76.1	16.8	97	0.3	23.9	0.0	4.4
DeKalb 898A	76.0	19.0	96	8.5	13.0	0.7	4.6
AES 811W*	74.7	17.0	94	13.7	9.5	0.7	4.0
Iowa 4376	74.1	16.1	95	0.0	14.7	0.0	3.7
Steckley GG12	74.1	18.6	96	0.3	17.5	0.0	3.7
Mo 843	74.0	19.3	96	2.6	16.6	0.7	4.2
Pfister PAG 418	74.0	19.5	93	0.4	12.2	0.0	3.3
US 523W*	73.9	19.6	94	0.5	28.3	0.0	4.7
MFA 2123	73.9	17.2	89	1.7	19.5	0.0	4.1
US 13	73.7	17.9	95	0.0	21.9	0.4	4.3
US 619W*	73.6	20.1	98	1.3	28.3	0.0	4.6
DeKalb 3x1	72.9	16.9	97	2.6	24.4	0.0	4.2
AES 801	72.5	18.1	98	0.0	11.4	0.3	4.2
Embro 38	71.6	17.7	89	1.4	16.1	0.0	4.4
US 523W*(cert.)	66.6	22.6	95	3.9	25.3	0.0	4.4
Mo 447W* (cert.)	65.6	22.1	95	8.5	5.3	0.0	4.1
Mean	79.9	18.5	95	2.1	15.9	0.2	4.1

* white hybrids

Table 3F Summary of Acre Yield and Lodging for Hybrids Tested in District 3 for the Three-Year Period of 1958, 1959 and 1960.

Hybrid	Acre Yield	Lodged Plants		Hybrid	Acre Yield	Lodged Plants	
	Bu.	Root %	Stalk %		Bu.	Root %	Stalk %
DeKalb 805	114.5	6.0	10.7	MFA 118	96.3	2.7	14.3
Morton M-6X	108.5	2.8	10.2	Steckley GG15	96.3	6.7	18.4
DeKalb 633	103.3	0.6	10.3	AES 801	95.3	2.9	10.8
Funk G144	102.3	6.1	10.9	Mo 447W*	95.0	8.2	10.3
Pioneer 312A	102.3	0.3	14.2	US 13	94.0	6.5	18.9
US 523W*	100.7	6.9	17.3	Mo 880	93.7	8.2	6.8
Kansas 1639	99.8	5.6	18.8	AES 811W*	92.0	22.1	10.5
Kansas 1859	97.5	15.4	16.7	Mo 843	89.6	9.0	11.6
Cargill 335	97.5	7.3	26.8	Ia 4376	89.0	7.3	14.9
MFA 2120	97.4	5.9	9.1	Ohio C92	88.5	6.8	18.2
Kansas 2822	96.5	5.9	18.2	Mean	97.6	6.8	14.2

* white hybrids

DISTRICT 4

The results for District 4 are given in Table 4A through 4F. Abnormal climatic conditions reduced yields in this district. The Higginsville location received below average amount of rainfall during the growing season

with less than 15 inches. That, with 51 days of temperatures above 90° and a 45-day dry period in July and August, and one of 20 days duration in August and September, 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 (1950-1959) 1958, 1959 and 1960 in District 4.

10 year Average	1950-1959	Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (Bu.)	Missouri Corn Yield Tests
	1958	13.2	477,000	35.2	
	1959	10.4	376,000	53.0	90.9
	1960	14.3	518,000	52.6	79.3
		13.5*	488,000*	55.0*	103.6

* Estimated as of October 1, 1960

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.
Butler	Claude Lemon	May 18*			
Higginsville	Wilbert Fahrmeier	May 9	Oct. 10	103.6	15.9

* Not Harvested

DISTRICT 4

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					Sept. 15	Total	Dry Periods*
			May	June	July	Aug.	Sept.			
Butler	Appleton City	12.15	8	12	4	6	0	30	8/30-9/15	
Higginsville	Sweet Springs	14.53	12	15	9	7	1	44	7/2-8/16 8/19-9/8	

* 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
				1960	Avg.	
Butler	Appleton City	73.7	+0.6	57	42	7
Higginsville	Sweet Springs	72.3	-0.8	51	47	1

Table 4E 1960 Performance Record for Hybrids Tested in District 4, Near Higginsville, Missouri, in Lafayette County. Planted May 9, 1960, and Harvested October 10, 1960. (Exp. 8).

Hybrid	Acre Yield Bu.	Moist- ure in Grain %	Stand %	Lodged Plants		Drop- ped Ears %	Ear Height Grade
				Root %	Stalk %		
Mo 447W*	121.0	18.5	94	0.9	3.5	0.0	3.5
Pioneer 321	120.7	14.8	94	0.0	0.9	0.0	3.4
DeKalb 803A	115.1	17.0	92	0.0	1.8	0.0	3.5
Kan 1639	114.4	14.6	95	0.0	7.9	0.0	4.0
DeKalb 3x4	114.0	14.9	94	0.0	8.0	0.0	3.5
DeKalb 805	113.6	17.0	97	0.0	3.4	0.0	3.3
MFA K6	113.4	17.7	86	1.9	1.0	0.0	3.4
Maygold 29X	112.4	15.4	98	0.0	1.7	0.0	3.4
Kan 1639 (cert.)	111.2	15.3	74	0.0	1.1	0.0	3.4
Funk G702	110.4	16.5	94	0.0	0.9	0.0	3.6
Mo 843 (cert.)	109.4	16.9	99	0.0	3.4	0.0	3.6
Mo 804	108.9	17.1	94	0.0	1.8	0.0	4.4
Maygold 37	108.8	16.8	94	0.0	6.2	0.0	3.5
Pioneer 312A	107.8	17.4	96	0.9	4.3	0.0	3.4
Mo 955	107.3	16.3	92	0.0	1.8	0.0	3.6
Mo 880	107.2	16.1	94	0.0	1.8	0.0	3.4
Mo 843	107.1	18.5	98	0.0	3.4	0.0	4.0
DeKalb 661	106.6	14.9	97	0.0	6.0	0.0	3.5
Ohio C92	106.3	13.7	96	0.0	5.2	0.0	3.8
U.H. 66	106.2	15.0	86	0.0	2.9	1.0	3.1
AES 811W*	106.1	14.5	98	0.0	1.7	0.0	3.4
DeKalb 898A	105.4	15.0	85	0.0	7.8	0.0	4.0
Maygold 48	105.2	13.2	89	0.0	0.0	0.0	3.5
Cargill 380	105.1	18.6	92	0.0	1.8	0.0	3.5
Mo 947A (cert.)	104.8	16.8	95	0.0	10.5	0.0	3.9
DeKalb 633	104.5	15.6	88	0.0	1.0	0.0	3.3
Mo 916	103.8	20.1	89	0.0	2.8	0.0	3.6
Mo 881	103.6	18.1	93	0.9	1.8	0.0	3.9
U.H. WW60	103.6	16.4	90	0.0	4.6	0.0	3.3
Steckley GG15	103.3	16.4	94	0.0	8.0	0.0	3.6
AES 904W*	102.7	21.1	91	0.0	11.9	0.9	3.9
DeKalb 869	102.7	16.9	93	0.0	6.3	0.0	3.8
US 523W* (cert.)	102.6	18.4	83	0.0	6.0	0.0	3.8
Steckley Exp. 851	102.6	15.4	95	0.0	1.8	0.0	3.4
Mo 880 (cert.)	102.4	16.1	95	0.0	2.6	0.0	3.5
US 619W* (cert.)	102.1	17.5	95	0.0	7.9	0.0	4.0
Funk G144	102.0	15.6	91	0.0	0.9	0.0	3.4
US 523W*	101.8	20.2	96	0.0	5.2	0.0	3.9
Pioneer 6488A	101.8	14.7	97	0.9	0.9	0.9	3.1
Mo 1002	101.2	13.6	95	0.0	3.5	0.0	3.5
Pioneer 320	101.1	15.6	89	0.0	0.9	0.0	3.1
US 619W*	100.7	19.4	84	0.0	7.9	0.0	3.5
Mo 916 (cert.)	100.6	17.8	88	1.0	1.9	0.0	3.9
Mo 447W* (cert.)	100.5	16.4	95	0.0	0.9	0.0	3.5
AES 904W* (cert.)	100.4	18.4	91	0.0	4.6	0.0	4.0
Pioneer 6758	100.2	18.1	98	0.0	0.9	0.0	3.5
DeKalb 3x1	99.6	15.3	89	0.0	1.9	0.0	3.3
Iowa 4376	99.4	13.9	91	0.0	1.8	0.0	3.0
Mo Pipe 4*	98.4	19.7	97	0.9	6.9	0.0	4.1
DeKalb 854	98.3	14.5	81	0.0	23.7	0.0	3.3
Steckley GG12	97.3	13.9	97	0.0	1.7	0.0	3.3
Mo 947	95.6	18.4	89	0.0	3.7	0.0	3.9
MFA 2120	94.6	15.9	94	0.0	2.7	0.0	3.4
Mo 804 (cert.)	93.8	18.1	95	0.0	10.5	0.0	3.9
Kan 4003	93.0	18.1	93	1.8	0.9	0.0	3.9
MFA 118	92.9	15.1	78	0.0	1.1	0.0	3.4
US 13	92.5	17.0	90	0.0	7.4	0.0	3.6
Steckley Exp. 1610	90.9	14.7	98	0.0	5.1	0.0	3.0
MFA 3210	90.5	13.5	78	0.0	2.2	0.0	3.4
Mo W6	89.3	18.4	76	0.0	6.6	0.0	4.0
Mean	103.6	16.5	92	0.2	4.1	0.0	3.6

Differences in yield between any two hybrids of less than 15.9 bushels are not considered significant.

* white hybrids

Table 4F Summary of Acre Yield and Lodging for Hybrids Tested in District 4 for the Three-Year Period of 1958, 1959 and 1960.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
Kansas 1639	100.3	0.6	6.0	Maygold 48	91.0	5.8	1.5
US 619W*	99.3	0.9	8.4	Mo Pipe 4*	90.4	4.4	5.3
Maygold 29X	98.6	5.0	1.0	Mo 843	89.4	3.7	5.4
DeKalb 805	97.3	5.1	2.8	US 13	88.0	1.2	9.2
DeKalb 3x1	94.9	3.7	2.9	AES 904W*	87.9	0.7	6.6
Mo 447W*	94.2	2.0	2.4	MFA 118	87.5	0.8	2.7
Funk G144	94.2	3.2	3.0	Ia 4376	87.5	2.3	4.5
Maygold 37	94.2	4.2	5.1	Ohio C92	87.1	4.7	5.3
US 523W*	93.9	1.9	5.9	MFA 2120	86.8	1.3	2.7
DeKalb 3x4	92.8	3.4	7.0	Mo 880	86.5	5.7	1.0
Pioneer 312A	92.4	1.5	3.7	Mo 947	85.3	4.3	3.2
AES 811W*	91.2	3.7	1.6	Mean	91.8	3.0	4.2

* white hybrids

DISTRICT 5

Results of District 5 trials are in Tables 5A to 5F. Though rainfall in this district was below the state average, yields were above average. The lowest rainfall oc-

curred at Columbia; Marshall and Cole Camp received less than the state average. Two dry periods at Cole Camp and Columbia tended to reduce 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 (1950-1959) 1958, 1959 and 1960 in District 5.

	Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (Bu.)	Missouri Corn Yield Tests
10 year Average 1950-1959	8.8	565,000	40.4	
1958	7.8	496,000	55.0	115.3
1959	11.1	709,000	51.9	96.2
1960	10.5*	668,000*	56.0*	104.3

* Estimated as of October 1, 1960

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 5	Oct. 11	132.1	18.7
Columbia	Missouri Agric. Exp. Sta.	May 11	Oct. 13	98.2	9.2
Cole Camp	Hugo Schnakenberg	May 25	Oct. 18	82.8	9.7

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 Rainfall	No. of Days with Rain					Total	Dry Periods*
			May	June	July	Aug.	Sept. 15		
Marshall	Marshall	14.70	9	12	5	4	1	31	8/19-9/15
Columbia	Columbia	9.53	11	15	7	4	1	38	6/12-6/29 7/26-9/15
Cole Camp	Stover	14.14	12	11	12	7	1	43	7/26-8/20 8/22-9/15

* 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
				1960	Avg.	
Marshall	Marshall	73.4	+0.9	50	39	0
Columbia	Columbia	72.7	+0.1	43	39	1
Cole Camp	Versailles	72.0	-0.5	28	40	0

Table 5E 1960 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 %		
DeKalb 805	119.9	17.5	96	0.0	0.0	0.0	3.8
MFA K6	116.5	20.0	92	0.0	0.6	0.0	3.8
Maygold 37	112.2	18.2	94	0.0	1.5	0.0	3.9
Bear OK 890	111.5	20.3	92	0.0	1.2	0.0	4.4
US 523W*	110.6	22.4	95	0.0	1.1	0.6	4.4
Mo Pipe 4*	110.3	22.3	91	0.0	0.0	0.4	4.4
Mo 947	110.0	21.2	90	0.0	0.6	0.0	4.4
Bear OK 96	109.7	18.8	89	0.0	0.6	0.0	4.2
Mo 843	109.4	19.2	94	0.0	1.1	0.0	4.1
US 619W* (cert.)	109.4	19.6	87	0.0	0.6	0.3	4.4
Mo 447W*	109.3	20.6	98	0.0	0.9	0.0	4.0
AES 904W* (cert.)	109.1	23.9	89	0.0	0.9	0.6	4.6
Mo 4077W*	109.0	21.3	95	0.0	1.2	0.0	4.6
DeKalb 869	108.9	19.1	91	0.0	0.3	0.3	4.0
DeKalb 898A	108.8	17.9	89	0.0	0.3	0.0	4.3
US 523W* (cert.)	108.1	22.0	89	0.0	1.3	0.3	4.3
Mo W6* (cert.)	107.8	25.2	96	0.0	0.6	0.0	4.7
Mo 1023	107.8	19.5	94	0.0	0.6	0.0	3.9
Mo 843 (cert.)	107.7	18.7	88	0.0	2.1	0.0	4.0
Mo 955	107.5	21.0	90	0.0	0.3	0.0	4.2
Mo 881	107.4	21.5	92	0.0	0.0	0.0	4.4
Bear OK 878	106.7	16.8	87	0.0	0.3	0.0	4.0
Funk G134	106.6	17.5	90	0.0	0.6	0.0	3.9
Kan 1639	106.0	18.0	90	0.0	0.3	0.0	3.8
Funk G144	105.6	17.6	83	0.0	0.6	0.0	3.7
Kan 1639 (cert.)	105.4	18.0	93	0.0	1.1	0.0	3.7
Mo 880	105.2	20.2	93	0.0	0.0	0.0	3.7
US 619W*	105.0	20.2	91	0.0	1.2	0.3	4.3
Maygold 29X	105.0	20.1	96	0.0	0.3	0.0	3.6
Mo 880 (cert.)	104.1	20.2	90	0.0	0.0	0.0	3.6
Bear OK 69	104.1	18.6	88	0.0	1.4	0.0	4.0
AES 904W*	103.8	25.4	88	0.0	0.3	0.0	4.7
Funk G96	103.7	17.4	89	0.0	0.6	0.0	3.6
Mo 804	102.7	19.9	94	0.0	2.0	0.0	4.5
Kan 4003	102.6	22.9	94	0.0	1.2	0.0	4.4
DeKalb 3x4	102.6	16.3	96	0.0	4.2	0.0	4.0
DeKalb 661	102.6	16.2	93	0.0	1.4	0.0	3.6
Pfister PAG 434	102.3	19.6	91	0.0	1.2	0.0	4.0
DeKalb 633	101.9	18.2	87	0.0	0.3	0.0	3.8
Maygold 48	101.8	16.6	93	0.0	0.9	0.0	3.7
Pfister PAG 485	101.7	22.2	88	0.0	3.5	0.0	4.6
Mo 947A (cert.)	101.5	19.5	92	0.0	0.6	0.3	4.1
Mo 916 (cert.)	101.2	22.6	94	0.0	0.6	0.3	4.1
Mo 916	100.3	23.0	93	0.0	0.3	0.0	4.2
DeKalb 854	100.1	17.4	94	0.0	1.1	0.0	3.9
MFA 118	100.0	16.8	82	0.0	0.3	0.0	3.8
MFA 3210	99.8	14.9	92	0.3	0.0	0.0	4.0
DeKalb 803A	99.5	20.5	92	0.0	1.2	0.0	3.8
DeKalb 3x1	98.4	16.7	93	0.0	1.5	0.0	3.8
AES 811W*	97.1	19.2	91	0.0	0.9	0.0	3.9
Mo 447W* (cert.)	96.4	21.8	98	0.3	0.8	0.0	3.9
MFA 2120	95.0	19.1	88	0.0	0.4	0.0	3.9
Iowa 4376	93.2	15.6	91	0.0	1.1	0.0	3.3
Mo 1002	93.2	16.2	89	0.0	0.0	0.0	3.7
Ohio C92	89.6	16.0	80	0.0	1.2	0.0	3.9
US 13	87.7	16.6	85	0.0	2.2	0.0	3.8
Mean	104.3	19.4	91	0.0	0.9	0.1	4.0

* white hybrids

Table 5F Summary of Acre Yield and Lodging for Hybrids Tested in District 5 for the Three-Year Period of 1958, 1959 and 1960.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
US 523W*	118.2	1.1	8.9	Funk G144	105.3	1.2	4.0
DeKalb 805	117.0	0.3	2.9	Mo 843	105.0	1.0	7.8
Mo Pipe 4*	114.3	5.0	4.4	DeKalb 661	102.7	1.3	5.5
US 619W*	112.3	1.6	9.7	MFA 2120	102.2	0.1	6.6
Mo 947	111.6	0.6	6.8	Kansas 1639	100.8	0.3	1.8
Pfister PAG 485	111.6	2.3	8.2	MFA 118	100.6	0.1	4.8
AES 904W*	109.8	2.1	5.1	Mo 880	100.0	1.1	1.4
Mo 447W*	109.1	1.8	2.4	Ohio C92	98.1	1.2	5.5
Mo 881	108.7	2.3	5.1	AES 811W*	98.0	2.4	3.3
Mo 955	108.4	3.2	4.9	US 13	96.7	0.7	8.6
DeKalb 3x4	107.3	1.2	10.9	Iowa 4376	91.7	0.5	3.9
Funk G134	107.2	0.2	7.3				
DeKalb 3x1	105.6	1.3	7.7	Mean	105.9	1.4	5.7

* white hybrids

DISTRICT 6

Tables 6A to 6F give results for District 6. This district had the highest yield in the state trials. Each location had below average rainfall, but precipitation was

very well distributed throughout the growing season. Heavy stalk lodging occurred late in the season at Moscow Mills but did not materially affect yields.

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 (1950-1959) 1958, 1959 and 1960 in District 6.

	Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (Bu.)	Missouri Corn Yield Tests
10 year Average 1950-1959	10.7	353,000	43.7	
1958	9.9	326,000	57.1	123.5
1959	13.9	460,000	53.9	110.9
1960	12.3*	405,000*	55.0*	121.1

* Estimated as of October 1, 1960

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	May 23	Oct. 21	119.6	17.5
Moscow Mills	A. H. Sievert	June 3	Nov. 14	122.6	12.0

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 Rainfall	No. of Days with Rain					Total	Dry Periods*
			May	June	July	Aug.	Sept 15		
Washington	Union	11.95	10	9	10	9	1	39	5/20-6/10 8/31-9/15
Moscow Mills	Warrenton	14.79	13	11	13	8	2	47	7/13-8/7 8/19-9/15

* 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 1960
				1960	Avg.	
Washington	Union	72.2	-1.4	47	37	1
Moscow Mills	Warrenton	71.7	-1.2	34	37	2

Table 6E 1960 Summary of Performance Records for Hybrids Tested at Washington and Moscow Mills, Missouri, in District 6. (Exp. 11 and 12).

Hybrid	Acre Yield Bu.	Moisture in Grain %	Stand %	Lodged Plants		Dropped Ears %	Ear Height Grade
				Root %	Stalk %		
Mo W6A*	139.7	26.0	98	0.3	9.9	0.0	5.3
Mo Pipe 4*	137.8	22.0	98	0.3	12.1	0.0	5.2
Mo 4077W*	136.5	23.9	98	4.2	16.0	0.0	5.1
US 523W*	136.2	22.7	96	0.9	15.0	0.3	5.0
AES 904W* (cert.)	134.7	27.1	99	0.6	13.5	0.3	5.2
Dixie 33*	133.9	24.1	98	0.9	26.4	0.3	5.5
Funk G509W*	131.0	27.7	98	0.3	9.4	0.0	4.8
US 523W* (cert.)	130.6	24.6	99	1.6	20.6	0.0	4.7
AES 904W*	130.4	27.0	97	1.0	23.7	0.3	5.2
Mo 804 (cert.)	130.0	22.0	98	0.6	20.4	0.0	5.0
Mo 804	129.8	21.7	97	0.0	23.0	0.6	5.3
Mo 916	128.1	22.1	98	0.0	9.5	0.0	4.7
Mo 916 (cert.)	128.1	22.5	98	0.6	12.4	0.3	4.6
Dixie 29*	127.9	25.0	96	0.0	17.2	0.3	5.3
Pfister PAG 485	127.9	23.4	97	1.9	22.5	0.0	5.0
Mo W6* (cert.)	127.6	25.5	97	0.3	12.6	0.0	5.3
DeKalb 898A	127.4	19.3	94	0.0	20.5	0.3	4.8
DeKalb 1028	127.0	25.2	98	5.1	29.1	0.3	5.2
DeKalb 925*	126.7	22.6	96	0.0	22.7	0.0	4.9
Mo 881	125.7	26.0	98	0.6	10.2	0.0	4.7
Mo 800A	125.4	22.8	95	1.0	19.4	0.0	5.2
Mo 447W*	124.8	24.7	99	2.5	10.7	0.0	4.4
MFA 124	124.2	23.7	96	0.0	29.2	0.6	4.9
Mo 880 (cert.)	124.1	21.5	100	0.0	7.9	0.0	4.2
Mo W6*	123.6	25.1	98	0.0	14.1	1.6	5.2
Kan 4003	123.3	25.3	99	0.3	18.3	0.0	5.1
Pfister PAG 633W*	122.9	25.5	97	1.6	10.6	0.6	5.0
Mo 880	122.4	20.6	98	0.0	6.7	0.0	4.3
DeKalb 869	121.6	22.0	97	0.3	12.2	0.3	4.7
Funk G711AA	120.6	27.6	96	0.0	19.1	0.0	5.3
US 619W*	120.5	23.1	94	0.3	22.3	0.3	4.7
Pfister PAG 434	120.1	21.0	97	0.3	9.9	0.3	4.4
Mo 947	119.8	22.7	98	3.5	17.4	0.0	4.9
Funk G144	118.9	21.5	98	0.0	8.2	0.0	4.1
Mo 447W* (cert.)	117.0	22.6	96	0.3	7.0	0.0	4.4
DeKalb 633	117.0	18.7	97	0.0	11.0	0.0	4.3
DeKalb 805	117.0	19.5	94	0.0	9.1	0.9	4.4
Tenn 501*	116.3	23.4	94	1.4	21.1	0.0	4.6
Kan 1639	115.7	19.5	97	0.3	20.3	0.0	4.4
MFA White*	115.7	22.4	98	1.3	12.7	0.0	4.4
US 619W* (cert.)	114.8	26.0	92	1.7	21.5	1.0	5.2
Mo 955	114.1	23.8	98	2.2	10.2	0.9	4.5
AES 811W*	114.0	21.9	97	3.2	10.7	0.3	4.3
DeKalb 803	113.8	20.9	99	0.0	14.6	0.0	4.3
Cargill 380	113.7	22.0	97	0.0	19.2	0.6	4.4
Mo 947A (cert.)	113.6	21.3	98	1.3	24.0	0.0	4.5
Funk G134	112.9	19.8	97	0.0	15.5	0.3	4.5
DeKalb 640	111.0	19.7	97	0.0	7.4	0.0	4.5
Ohio C92	109.8	17.7	94	0.0	23.2	0.3	4.5
Mo 843	109.5	23.1	94	0.0	21.2	0.0	4.4
Kan 1639 (cert.)	109.1	20.7	96	0.0	15.7	0.6	4.2
Mo 843 (cert.)	106.4	20.3	91	0.0	23.6	0.3	4.4
Mo 1002	106.2	18.9	93	0.3	5.4	0.3	4.2
DeKalb 803A	105.3	22.9	96	0.0	23.7	0.3	4.3
Iowa 4376	99.7	18.7	99	0.0	12.4	0.3	3.7
US 13	97.6	18.3	97	0.0	25.7	0.0	4.4
Mean	121.1	22.7	97	0.7	16.2	0.2	4.7

* white hybrids

Table 6F Summary of Acre Yield and Lodging for Hybrids Tested in District 6 for the Three-Year Period of 1958, 1959 and 1960.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
Dixie 29*	137.4	0.7	12.2	Funk G144	118.1	0.1	7.7
US 523W*	137.0	2.3	12.9	Funk G134	115.1	0.6	15.8
AES 904W*	135.8	2.0	11.9	Mo 447W*	114.4	5.7	5.0
Mo Pipe 4*	133.1	2.4	11.0	Mo 843	111.5	0.9	21.3
Dixie 33*	130.8	3.0	20.2	Ohio C92	110.7	1.8	12.0
Ffister PAG 485	127.9	2.2	13.8	Mo 800A	109.2	2.3	8.8
US 619W*	126.6	2.8	21.9	Kansas 1639	107.9	1.4	10.9
Mo 881	125.4	3.2	12.2	US 13	107.2	2.1	18.1
DeKalb 1028	123.0	9.0	19.7	AES 811W*	105.5	5.5	7.4
Mo 947	122.0	2.4	15.6	Iowa 4376	97.3	1.2	15.1
Tenn 501*	120.4	4.8	15.3				
DeKalb 805	119.0	0.6	15.4	Mean	119.8	2.6	13.8

* white hybrids

DISTRICT 7

Results for District 7 are in Tables 7A to 7F. The rainfall records show that Mount Vernon and Carthage had slightly less than the state average rainfall. However,

yields at these locations were fairly high, in spite of the two dry periods at each place and above average number of days with temperatures exceeding 90°.

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 (1950-1959) 1958, 1959 and 1960 in District 7.

	Farmland Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield (Bu.)	Missouri Corn Yield Tests
10 year average 1950-1959	5.8	184,000	29.1	
1958	5.4	170,000	50.3	114.4
1959	5.9	189,000	47.0	108.3
1960	5.6*	178,000*	47.0*	106.3

* Estimated as of October 1, 1960

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 4	Oct. 3	97.9	13.6
Mount Vernon	Southwest Missouri Res. Center	April 19	Oct. 4	114.7	11.5

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					Total	Dry Periods*
			May	June	July	Aug.	Sept. 15		
Carthage	Carthage	16.13	10	11	12	7	0	40	6/7-7/12 8/19-9/15
Mount Vernon	Mount Vernon	16.49	9	9	13	6	0	37	6/14-7/3 8/19-9/15

* 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
				1960	Avg.	1960
Carthage	Carthage	73.1	-0.3	43	25	0
Mount Vernon	Mount Vernon	72.7	-1.9	43	25	1

Table 7E 1960 Summary of Performance Records for Hybrids Tested at Mount Vernon and Carthage, Missouri, in District 7. (Exp. 13 and 14).

Hybrid	Acre Yield Bu.	Moisture in Grain %	Stand %	Lodged Plants		Dropped Ears %	Ear Height Grade
				Root %	Stalk %		
AES 904W*	127.6	17.0	98	0.0	8.8	1.7	4.5
AES 904W* (cert.)	122.3	17.1	98	0.0	5.7	2.6	3.9
Mo W6* (cert.)	118.3	16.8	99	0.4	7.5	1.6	4.7
Pfister PAG 485	118.2	15.5	95	0.0	7.3	1.1	4.5
Dixie 33*	118.1	15.7	95	2.1	16.9	0.7	4.8
Funk G711AA	117.4	18.0	97	0.9	14.6	1.0	4.7
US 523W* (cert.)	115.9	15.0	98	0.0	6.3	1.6	4.1
Mo 881	115.8	15.2	96	1.4	7.3	0.3	4.0
Mo 447W*	115.1	16.2	97	1.3	6.8	0.3	3.8
DeKalb 925*	114.8	15.8	98	0.0	7.1	1.0	3.9
Mo W6A*	114.4	17.4	98	0.0	9.8	1.3	4.5
Bear OK 878	112.5	13.3	98	0.0	6.2	0.3	4.0
Ga 7005	112.1	16.8	94	0.0	5.6	0.7	4.5
Mo Pipe 4*	112.0	17.2	99	0.9	11.1	0.3	4.2
US 619W*	111.6	15.7	96	2.6	6.9	2.7	4.0
Mo 916 (cert.)	111.5	16.2	96	0.5	2.6	0.3	4.0
Mo 947	110.9	15.2	93	1.3	10.9	1.9	4.2
Mo 916	110.7	15.6	93	0.5	5.0	0.0	4.0
US 523W*	110.1	15.0	95	1.3	11.8	0.0	4.0
Mo 843	109.5	14.9	96	0.0	7.7	0.7	3.8
Mo 978	109.5	16.1	89	0.0	9.0	1.1	4.6
TRF 9	109.3	16.7	97	0.5	8.1	0.7	4.4
Mo W6*	108.7	15.5	98	1.3	9.3	1.6	4.3
DeKalb 898A	108.5	13.5	99	1.3	9.4	1.6	3.7
Dixie 29*	108.4	16.9	92	0.0	17.1	1.1	4.6
DeKalb 1023	107.4	17.2	94	0.0	29.8	1.6	4.5
US 619W* (cert.)	107.1	17.1	99	3.8	11.0	1.3	4.0
Mo 804	105.7	15.2	98	0.0	19.9	1.1	4.2
Mo 947A (cert.)	105.0	14.6	93	2.3	10.7	0.7	4.0
MFA 2120	104.7	14.4	99	0.0	4.0	0.7	3.7
Mo 880 (cert.)	103.3	15.8	91	0.5	3.1	0.0	3.6
Mo 800A	102.8	15.9	93	0.0	15.3	1.7	4.4
Funk G144	102.7	14.4	97	0.4	5.6	0.3	3.4
Mo 447W* (cert.)	102.2	15.8	96	1.3	2.6	0.0	4.0
Bear OK 890	102.0	15.3	93	0.5	7.0	0.7	4.1
Ga 102	101.8	17.4	85	1.0	10.7	1.5	4.6
DeKalb 1028	101.7	15.8	98	0.5	32.3	1.6	4.5
DeKalb 869	101.3	15.1	89	1.9	6.1	1.1	3.7
Mo 880	100.8	15.1	98	1.3	5.5	0.0	3.6
Tenn 501*	99.6	16.1	92	1.4	18.8	0.7	3.9
Funk G91	99.2	13.6	96	0.5	5.4	0.7	3.5
DeKalb 854	99.0	13.7	91	1.4	9.4	0.4	3.6
Mo 843 (cert.)	98.4	14.7	89	1.9	5.5	0.8	3.6
DeKalb 803A	97.6	15.3	92	3.2	8.7	0.4	3.7
MFA 118	97.3	13.6	92	0.0	4.2	0.0	3.6
Kan 1639 (cert.)	96.8	14.0	89	0.0	7.5	0.8	3.5
Mo 804 (cert.)	96.8	14.8	97	0.0	22.8	1.3	4.0
Embryo 38 BE	96.5	15.2	89	0.0	25.3	1.1	3.7
Ohio C92	94.2	13.5	86	0.5	6.7	0.4	3.8
Kan 1639	92.7	14.0	98	1.7	12.3	0.7	3.4
Iowa 4376	85.6	13.0	96	3.5	7.3	1.7	3.1
US 13	83.1	13.1	92	1.8	12.4	1.0	3.7
Mean	106.3	15.4	95	0.9	10.2	0.9	4.0

* white hybrids

Table 7F Summary of Acre Yield and Lodging for Hybrids Tested in District 7 for the Three-Year Period of 1958, 1959 and 1960.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
AES 904W*	125.6	0.8	15.7	DeKalb 1028	110.2	4.6	30.9
Mo W6*	124.2	1.1	13.9	Funk G144	107.8	1.6	11.6
Pfister PAG 485	121.6	0.9	17.0	Tenn 501*	107.7	2.8	17.7
Dixie 29*	119.5	1.1	19.8	Mo 843	105.5	0.3	15.6
Mo Pipe 4*	119.4	3.9	13.1	Mo 880	101.7	0.8	5.4
US 523W*	118.6	1.3	15.1	Funk G91	100.9	0.4	14.9
DeKalb 925*	118.0	0.5	16.6	Ohio C92	100.5	1.1	9.0
Dixie 33*	117.1	5.1	21.1	Mo 800A	97.8	1.1	14.9
DeKalb 1023	116.6	3.9	30.1	US 13	96.1	0.6	17.5
US 619W*	114.6	1.8	19.0	Kansas 1639	92.5	0.8	11.7
Mo 881	113.8	0.9	13.9	Iowa 4376	88.2	1.3	14.1
Mo 947	112.2	0.8	11.7				
Mo 447W*	111.8	0.7	11.1	Mean	110.1	1.6	15.9

* white hybrids

DISTRICT 8

Tables 8A to 8F 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 and fewer rains occurred during the growing season. (2) There were two dry periods at Summersville and three at Ellington. (3) Summersville had a tempera-

ture of 90° or above for 42 days and Ellington had 66 days with high temperatures, compared with the normal of 32 days for both locations. (4) Stalk lodging was fairly high at Summersville due to corn borer infestation and excessive winds.

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 (1950-1959) 1958, 1959 and 1960 in District 8.

10 year average	1950-1959	Farmland	Total Corn Acreage	Avg. Acre Yield (Bu.)	Missouri Corn Yield Tests
		Planted to Corn (%)			
	1950-1959	2.9	134,600	31.0	
	1958	2.3	105,000	43.4	112.7
	1959	3.2	146,000	42.6	69.4
	1960	3.1*	141,000*	45.0*	90.9

* Estimated as of October 1, 1960

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 17	Oct. 24	96.5	20.9
Ellington	Dan Massie	May 12	Oct. 25	85.3	21.2

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					Total	Dry Periods*
			May	June	July	Aug.	Sept. 15		
Summersville	Summersville	14.90	8	6	9	6	9	29	5/22-6/11 8/22-9/15
Ellington	Ellington	15.89	7	5	7	6	6	27	5/21-6/13 7/6-7/21 8/20-9/9

* 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 Temperatures 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 1960
				1960	Avg.	
Summersville	Willow Springs	71.3	-1.0	42	32	1
Ellington	Clear Water Dam	73.2	+1.7	66	32	5

Table 8E 1960 Summary of Performance Records for Hybrids Tested at Summersville and Ellington, Missouri, in District 8. (Exp. 15 and 16).

Hybrid	Acre Yield Bu.	Moisture in Grain %	Stand %	Lodged Plants		Dropped Ears %	Ear Height Grade
				Root %	Stalk %		
AES 904W*	106.1	21.1	97	2.1	14.7	0.0	4.4
DeKalb 869	99.9	18.4	90	0.0	4.1	0.0	3.9
Mo 881	99.5	19.1	98	0.0	4.2	0.0	4.2
Stull 108 Y	98.5	20.6	96	1.7	18.5	0.0	4.2
DeKalb 898A	98.1	18.1	96	1.3	9.0	0.0	3.9
Mo 916	97.7	19.0	98	0.0	2.3	0.0	3.8
Mo 447W*	97.3	19.1	97	0.5	6.6	0.0	3.8
AES 904W* (cert.)	97.1	21.2	96	0.0	4.3	0.0	4.5
Mo 916 (cert.)	96.7	18.1	99	0.0	2.8	0.0	3.8
Stull 100 YA	96.7	19.4	97	0.0	12.9	0.4	4.0
US 523W*	96.4	19.9	99	1.3	10.7	0.0	4.0
Ga 7005	96.2	20.9	92	0.0	11.7	0.0	4.7
Mo 804 (cert.)	94.3	18.6	96	0.0	15.2	0.0	4.1
US 619W*	93.3	19.2	97	2.6	13.9	0.0	4.1
Mo W6A*	93.3	21.6	98	0.0	2.3	0.0	4.4
US 523W* (cert.)	93.3	21.0	97	5.3	10.1	0.0	4.0
DeKalb 925*	93.0	20.4	99	0.0	10.0	0.0	3.8
US 619W* (cert.)	92.9	20.3	94	5.4	13.1	0.0	3.9
Stull 400WC*	92.4	17.9	93	1.3	16.1	0.4	4.2
Dixie 33*	92.2	22.4	95	0.0	12.0	0.0	4.7
Mo 947	91.8	18.6	96	0.0	13.6	0.0	4.1
Mo 804	91.7	19.0	97	0.0	13.8	0.0	4.3
Mo Pipe 4*	91.4	21.4	96	7.4	12.7	0.4	4.3
Mo 947A (cert.)	91.4	17.9	97	0.0	12.2	0.0	3.8
Mo 843 (cert.)	90.7	17.7	95	0.0	5.8	0.0	3.8
Stull 500W*	90.7	21.2	95	2.1	15.6	0.0	4.0
Pfister PAG 485	90.2	20.2	95	0.0	17.8	0.4	4.3
Stull 101 YA	90.1	17.6	89	0.9	20.0	0.0	4.0
Mo 880	90.0	18.3	100	1.3	2.3	0.4	3.5
Kan 1639	89.8	18.3	99	1.7	15.1	0.0	3.7
Kan 1639 (cert.)	89.1	16.5	94	3.9	11.4	0.0	3.8
Dixie 29*	88.9	23.3	93	0.0	1.9	0.0	4.4
Stull 400W*	88.8	18.8	97	2.2	8.0	0.0	3.9
Funks G711AA	88.6	24.6	96	0.4	12.9	0.0	4.6
Mo 843	87.7	18.8	93	1.0	13.0	0.0	3.9
Mo W6* (cert.)	87.5	22.1	95	0.9	4.5	0.0	4.3
Tenn 501*	86.4	20.1	94	3.1	12.0	0.0	4.0
DeKalb 1028	85.7	22.8	92	5.2	26.6	0.0	4.5
Mo 447W* (cert.)	85.5	21.1	97	3.0	2.0	0.0	3.7
Ohio C92	85.4	16.1	95	0.0	6.8	0.0	3.7
Mo 880 (cert.)	85.4	18.3	96	0.5	1.5	0.4	3.6
Mo W6*	85.2	21.5	96	0.5	3.0	0.0	4.3
DeKalb 1023	84.9	21.1	96	7.7	27.3	0.0	4.6
Iowa 4376	82.9	16.2	98	0.0	1.4	0.0	3.3
Mo 800A	81.6	22.6	90	0.0	15.0	0.0	4.2
Ga 102	80.1	20.4	90	0.4	7.2	0.0	4.3
Mo 978	80.0	21.4	90	2.9	12.7	0.0	4.1
US 13	78.9	16.3	90	0.0	11.7	0.4	3.8
Mean	90.9	19.8	95	1.4	10.5	0.1	4.1

* white hybrids

Table 8F Summary of Acre Yield and Lodging for Hybrids Tested in District 8 for the Three-Year Period of 1958, 1959 and 1960.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
AES 904W*	105.6	3.1	11.3	Mo 947	92.2	1.2	17.7
Dixie 33*	99.4	4.7	13.8	DeKalb 925*	91.3	2.5	22.4
US 523W*	99.0	2.8	20.7	Mo 447W*	91.3	10.1	10.7
Mo W6*	97.6	5.0	8.5	Ohio C92	86.5	1.3	13.2
US 619W*	96.0	2.2	22.9	Mo 843	86.3	2.2	13.7
Mo Pipe 4*	95.1	7.9	15.1	Mo 800A	85.5	3.1	14.7
Dixie 29*	94.9	2.1	9.0	US 13	82.2	1.9	19.3
Mo 881	94.4	2.9	6.8	Kansas 1639	81.5	3.2	19.6
Tenn 501*	93.6	3.5	18.0	Iowa 4376	76.5	1.2	12.2
DeKalb 1028	93.2	14.2	28.3				
DeKalb 1023	92.8	13.8	31.1	Mean	91.7	4.5	16.5

* white hybrids

DISTRICT 9

District 9 results are in Tables 9A to 9F. The rainfall in this district was below the average for the state.

Sixty-seven days with temperatures above 90° (16 above average) reduced yields at Portageville.

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 (1950-1959) 1958, 1959 and 1960 in District 9.

	Farm-land Planted to Corn (%)	Total Corn Acreage	Avg. Acre Yield(Bu.)	Missouri Corn Yield Tests
10 year average 1950-1959	14.5	356,600	40.1	
1958	12.4	304,000	56.1	91.4
1959	14.7	362,000	59.0	93.0
1960	12.6*	311,000*	59.0*	111.7

* Estimated as of October 1, 1960

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. Cen.	April 19	Sept. 28	120.3	11.6
Portageville	" " " " "	April 18	Sept. 29	103.0	27.7

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					Sept. 15	Total	Dry Periods*
			May	June	July	Aug.	Sept.			
Sikeston	Sikeston	14.33	8	10	3	9	4	33	6/29-7/24 8/20-9/3	
Portageville	Portage- ville	18.57	8	14	13	6	3	44	8/20-9/8	

* 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
				1960	Avg.	1960
Sikeston	Sikeston	74.3	-0.4	56	37	1
Portageville	Portageville	75.2	-0.8	67	51	1

Table 9E 1960 Summary of Performance Records for Hybrids Tested at Sikeston and Portageville, Missouri, in District 9. (Exp. 17 and 18).

Hybrid	Acre Yield Bu.	Moisture in Grain %	Stand %	Lodged Plants		Dropped Ears %	Ear Height Grade
				Root %	Stalk %		
Mo 881	126.1	15.6	99	1.3	1.7	0.0	3.2
MFA K6	124.2	15.8	98	0.5	2.6	0.0	3.1
US 619W*	123.4	16.5	100	0.8	2.9	0.0	3.4
US 619W* (cert.)	122.8	16.4	98	2.2	5.9	0.0	3.5
US 523W* (cert.)	122.6	15.9	100	2.1	3.8	0.0	3.3
DeKalb 1023	122.4	16.9	98	0.5	11.1	0.0	3.7
McMullin 1	121.6	15.8	99	0.9	0.9	0.8	3.3
Schenk S-99	121.6	15.6	98	1.8	7.8	0.0	3.5
Funk G509W*	121.4	19.0	100	1.7	1.7	0.0	3.5
Mo 916	121.0	16.7	100	0.9	2.5	0.0	3.2
Stull 500W*	120.6	17.4	99	0.0	3.0	0.0	3.4
Embros 222 LE	120.1	18.3	93	0.9	5.3	0.0	3.5
US 523W*	119.9	15.7	100	0.4	3.4	0.0	3.5
Stull 400W*	119.9	16.7	100	2.9	5.0	0.0	3.4
Mo 916 (cert.)	119.4	16.6	100	0.4	0.8	0.0	3.4
Pfister PAG 633W*	119.4	16.7	99	0.0	3.0	0.0	3.3
Stull 108 Y	118.6	15.1	100	0.0	2.5	0.0	3.4
AES 904W* (cert.)	118.5	17.3	100	0.8	4.2	0.4	3.5
DeKalb 869	117.7	16.1	99	0.0	2.6	0.4	3.2
Stull 400WC*	117.3	15.7	98	2.1	4.7	0.0	3.4
DeKalb 1028	117.2	17.1	94	0.0	5.3	0.0	3.6
Schenk S-87	116.7	15.9	96	0.0	2.7	0.0	3.3
Funk G770W*	116.6	19.9	99	0.5	3.4	0.0	3.6
Mo 843	115.7	15.3	99	0.9	2.9	0.4	3.2
Mo W6A*	115.5	17.0	100	0.4	2.5	0.4	3.5
Funk G144	115.4	16.0	100	0.4	3.4	0.0	3.0
MFA 2120	115.2	15.7	97	0.0	1.7	0.0	3.1
Mo 447W*	115.1	16.9	100	1.3	3.4	0.4	3.2
Pioneer 319	114.7	15.2	100	0.4	2.9	0.4	3.2
Pfister PAG 485	114.7	15.5	99	0.9	2.6	0.0	3.4
AES 904W*	114.5	16.7	99	1.7	6.0	0.5	3.3
Mo 947	114.1	15.9	100	0.0	2.1	0.4	3.3
Coker 616*	113.5	18.0	98	0.9	0.5	0.0	3.2
Pfister PAG 631W*	113.5	16.4	97	1.7	3.4	0.5	3.1
Dixie 29*	113.0	18.2	99	0.0	3.4	1.3	3.6
MFA 118	113.0	15.0	100	0.0	3.8	0.4	3.0
DeKalb 898A	112.6	14.6	99	0.0	3.0	0.0	3.2
Mo 978	112.5	16.6	100	2.9	3.4	0.0	3.5
Mo 947A (cert.)	112.5	15.3	100	0.0	3.3	0.0	3.1
Dixie 33*	111.6	17.0	97	2.2	3.9	0.5	4.0
Mo 804	111.0	15.0	98	0.4	3.0	0.0	3.5
Pioneer 312A	111.0	16.6	97	0.0	3.5	0.0	3.2
Pioneer 309A	110.2	16.8	100	0.0	3.8	0.0	3.5
McMullin 2	109.9	15.9	100	0.0	3.8	0.4	3.2
Pfister PAG 434	109.9	16.1	97	0.4	2.2	0.0	3.2
Stull 101 YA	108.7	14.8	99	0.5	3.4	0.0	3.4
Mo 800A	107.5	16.1	95	0.0	3.1	0.0	3.6
Schenk S-90*	107.0	16.4	98	2.1	5.5	0.4	3.1
Stull 100 YA	107.0	15.8	99	0.0	5.9	0.0	3.4

Ga 7005	106.9	17.4	99	0.4	2.1	0.0	3.7
Kan 1639 (cert.)	106.6	15.2	99	0.4	6.0	0.4	3.1
Schenk S-86	106.6	15.5	97	0.4	2.2	0.0	3.3
Mo 880 (cert.)	106.4	15.4	99	0.5	2.2	0.0	3.0
Kan 1639	106.2	14.7	99	1.7	3.4	0.0	2.8
Mo 447W* (cert.)	105.2	15.5	100	2.1	1.3	0.0	3.2
Tenn 501*	104.8	16.2	100	0.0	2.5	0.0	3.0
McMullin 1TP	104.7	15.3	99	0.0	2.9	0.4	3.0
Funk G711AA	104.3	18.8	98	0.5	2.1	0.4	3.7
MFA 3210	103.6	14.7	99	0.0	3.4	2.6	3.1
Funk G134	102.1	15.7	99	0.4	5.5	1.3	3.1
Pioneer 300H	102.0	15.9	92	0.0	3.5	0.0	3.1
DeKalb 925*	101.7	16.5	99	1.7	7.7	0.4	3.2
Mo 880	101.4	16.1	99	0.0	0.8	0.8	2.9
Ga 102	101.4	17.2	97	0.9	1.3	0.0	3.5
Mo Pipe 4*	101.3	17.5	97	1.3	2.6	0.0	3.4
Mo 843 (cert.)	101.0	15.7	96	0.4	6.0	0.0	3.2
McMullin 55	99.8	15.1	100	0.0	3.0	1.3	3.3
DeKalk 1225	99.7	19.7	98	1.3	0.5	0.0	4.1
Mo W6*	99.3	17.9	97	0.0	3.1	0.0	3.5
US 13	98.3	15.6	99	0.4	8.3	0.8	3.0
Ohio C92	94.5	15.1	94	0.0	3.2	0.0	3.0
Iowa 4376	92.8	15.0	96	0.0	6.2	0.0	2.8
Mean	111.7	16.3	98	0.7	3.5	0.2	3.3

* white hybrids

Table 9F Summary of Acre Yield and Lodging for Hybrids Tested in District 9 for the Three-Year Period of 1958, 1959 and 1960.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
US 523W*	110.8	0.6	6.6	DeKalb 1023	100.1	2.4	17.6
US 619W*	110.6	0.3	8.6	Mo 843	100.0	1.5	15.7
Mo 881	109.9	1.2	3.7	Mo W6*	99.0	0.3	4.3
DeKalb 1028	105.7	2.6	11.8	Tenn 501*	98.6	0.4	6.3
Dixie 33*	105.0	3.2	3.6	Mo 447W*	97.1	2.7	2.5
Pfister PAG 631W*104.0	104.0	1.0	11.3	Funk G134	95.8	0.1	7.8
Pfister PAG 633W*103.8	103.8	0.8	8.4	MFA 118	95.5	0.0	12.2
AES 904W*	102.1	0.6	5.6	US 13	94.1	0.7	10.0
Funk G144	101.7	0.6	6.5	Mo 804	91.6	0.1	11.4
Mo 947	101.5	1.3	6.1	Mo 800A	91.4	1.0	4.0
DeKalb 925*	101.3	1.4	8.0	Kansas 1639	88.8	1.6	10.6
MFA 2120	100.9	0.6	6.9	Ohio C92	88.2	2.0	7.8
Mo Pipe 4*	100.6	2.2	5.1	Iowa 4376	84.4	1.4	8.6
Dixie 29*	100.3	0.8	5.7				
Pioneer 319	100.1	0.1	5.5	Mean	99.4	1.1	7.9

* white hybrids

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 or 4-year period, either in a single district or in groups of districts. 1958, 1959, and 1960 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 in the area where the hybrid is to be grown.

A 1958-1959-1960 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 1960 are listed in Table 14.

Numerous new closed-pedigree hybrids were tested from 1957 through 1960 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 1960. Table 16 gives the districts in which different open-pedigree hybrids were entered.

Table 10 1958, 1959 and 1960 Summary of Performance Records for Hybrids Tested in All Districts. Averages of 55 Tests.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
US 523W*	109.6	3.9	12.3	US 13	94.9	2.9	15.0
Mo 447W*	101.5	5.4	6.9	Ohio C92	94.8	3.3	10.1
Kan 1639	97.5	3.6	11.0	Iowa 4376	89.5	2.8	9.8
Mo 843	97.3	3.5	13.1	Mean	97.9	3.6	11.2

* white hybrids

Table 11 1958, 1959 and 1960 Summary of Performance Records for Hybrids Tested in Districts 1, 2 and 3. Averages of 17 Tests.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
DeKalb 805	115.2	9.1	7.0	AES 801	98.5	4.7	7.5
Pioneer 312A	104.1	3.7	10.5	Mo 447W*	98.3	8.6	9.2
US 523W*	102.9	8.3	13.6	US 13	97.6	6.4	17.3
Kansas 2822	102.3	5.2	14.7	Mo 880	97.1	8.3	5.0
Kansas 1639	102.0	8.2	12.7	AES 811W*	94.2	18.4	7.0
MFA 2120	101.9	5.2	6.5	Ohio C92	93.9	5.9	12.8
Cargill 335	101.3	7.0	19.0	Iowa 4376	93.2	5.6	10.0
Kansas 1859	101.1	15.0	11.5	Mo 843	92.8	7.0	11.8
Steckley GG15	100.2	5.6	15.5	Mean	99.8	7.8	11.3

* white hybrids

Table 12 1958, 1959 and 1960 Summary of Performance Records for Hybrids Tested in Districts 4, 5 and 6. Averages of 20 Tests.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
US 523W*	116.4	1.8	9.2	Kansas 1639	103.0	0.8	6.2
US 619W*	112.7	1.8	13.3	Mo 843	102.0	1.9	11.5
Mo Pipe 4*	112.6	3.9	6.9	Ohio C92	98.6	2.6	7.6
AES 904W*	111.2	1.6	7.9	AES 811W*	98.2	3.9	4.1
DeKalb 805	111.1	2.0	7.0	US 13	97.3	1.3	12.0
Mo 947	106.3	2.4	8.5	Ia 4376	92.2	1.3	7.8
Funk G144	105.9	1.5	4.9	Mean	105.2	2.1	7.9
Mo 447W*	105.9	3.2	3.3				

* white hybrids

Table 13 1958, 1959 and 1960 Summary of Performance Records for Hybrids Tested in Districts 7, 8 and 9. Averages of 18 Tests.

Hybrid	Acre Yield Bu.	Lodged Plants		Hybrid	Acre Yield Bu.	Lodged Plants	
		Root %	Stalk %			Root %	Stalk %
AES 904W*	111.1	1.5	10.9	Mo 947	102.0	1.1	11.8
US 523W*	109.5	1.6	14.1	Mo 447W*	100.1	4.5	8.1
Dixie 33*	107.2	4.3	12.8	Tenn 501*	100.0	2.2	14.0
US 619W*	107.1	1.4	16.8	Mo 843	97.3	1.3	15.0
Mo W6*	106.9	2.1	8.9	Ohio C92	91.7	1.5	10.0
Mo 881	106.0	1.7	8.1	Mo 800A	91.6	1.7	11.2
Mo Pipe 4*	105.0	4.7	11.1	US 13	90.8	1.1	15.6
Dixie 29*	104.9	1.3	11.5	Kansas 1639	87.6	1.9	14.0
DeKalb 925*	103.5	1.5	15.6	Iowa 4376	83.0	1.3	11.6
DeKalb 1023	103.2	6.7	26.3				
DeKalb 1028	103.0	7.1	23.7	Mean	100.6	2.5	13.6

* white hybrids

Table 14 Pedigrees of Open-Pedigree hybrids Tested in 1960.

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)	"
Kan 2822	(WF9 x Hy)(38-11 x H10)	"
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)	"
Ohio C92	(WF9 x 38-11)(Hy x Oh07)	"
US 13	(WF9 x 38-11)(L317 x Hy)	"
Mo 1002	(Mo 11 x B14)(R61 x Mo 4529)	"
Mo 1023	(WF9 x B41)(Mo 5 x C103)	"
Mo 447W	(K55 x K6)(H28 x K41)	White
AES 811W	(N72 x Mo 1W)(K41 x H30)	"
Tenn 501	(T111 x T115)(K41 x K44)	"
TRF 9	(13-2 x 17-1)(K55 x K6)	"
<u>Late (125-135 Day)</u>		
Kan 4003	(K201G x K711)(K712 x Oh7B)	Yellow
Mo 800A	(K201r x T202)(Mo 3 x CI 21E)	"
Mo 804	(CI 7 x K4)(38-11 x CI 21E)	"
Mo 881	(CI 21E x Mo 7)(Oh7B x Oh29)	"
Mo 916	(Mo 6 x CI 21E)(Oh7B x Oh29)	"
AES 904W	(K64 x Mo 22)(T111 x T115)	White
Mo Pipe 4	(1518-2 x 1560-2)(K10 x Ky49)	"
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)	"
<u>Very Late (135-145 Day)</u>		
Ga 102	(GE54 x T204)(NC88 x GE62)	Yellow
Ga 7005	(GE54 x C103)(T204 x GE62)	"
Dixie 29	(T101 x T105)(T111 x T115)	White
Dixie 33	(T101 x T105)(T13 x T61)	"

Table 15 Location by Districts of Hybrids Entered by Commercial Companies in the 1960 Yield Tests.

Hybrid	Districts								
	1	2	3	4	5	6	7	8	9
Bear OK 69			X		X				
Bear OK 890					X		X		
Bear OK 96			X		X				
Bear Unicorn X606			X						
Bear OK 878			X		X		X		
Cargill 285			X						
Cargill 310	X		X						
Cargill 330		X							
Cargill 335	X	X	X						
Cargill 340	X	X	X						
Cargill 349	X								
Cargill 380				X		X			
Cargill 5035		X							
Cargill 5741		X							
Coker 616									X
DeKalb 3x1	X	X	X	X	X				
DeKalb 3x2	X	X							
DeKalb 3x4		X		X	X				
DeKalb 633	X	X	X	X	X	X			
DeKalb 640	X	X	X			X			
DeKalb 661	X		X	X	X				
DeKalb 662	X								
DeKalb 803						X			
DeKalb 803A		X		X	X	X	X		
DeKalb 805	X	X	X	X	X	X			
DeKalb 812	X	X	X						
DeKalb 854	X			X	X		X		
DeKalb 869	X	X	X	X	X	X	X	X	X
DeKalb 898A			X	X	X	X	X	X	X
DeKalb 925						X	X	X	X
DeKalb 1023							X	X	X
DeKalb 1028						X	X	X	X
DeKalb 1225									X
Embros 38			X						
Embros 38 BE							X		
Embros 222 LE									X
Forster 25			X						
Forster 33			X						
Forster 44			X						
Forster 56			X						
Funk G91		X					X		
Funk G93		X	X						
Funk G95A	X								
Funk G96	X				X				
Funk G134					X	X			X
Funk G144	X		X	X	X	X	X		X
Funk G509W						X			X
Funk G702				X					
Funk G711AA						X	X	X	X
Funk G770W									X
Maygold 29X	X	X		X	X				
Maygold 37	X	X		X	X				
Maygold 48	X	X		X	X				

Table 15 Continued.

Hybrid	Districts								
	1	2	3	4	5	6	7	8	9
McAllister 13A			X						
McAllister 23A			X						
McMullin 1									X
McMullin 1TP									X
McMullin 2									X
McMullin 55									X
MFA K6	X	X	X	X	X				X
MFA 118	X	X	X	X	X		X		X
MFA 124						X			
MFA 2120	X	X	X	X	X		X		X
MFA 2123	X	X	X						
MFA 3210	X	X	X	X	X				X
MFA White						X			
Morton M-6X			X						
Morton M505			X						
Pfister PAG 415	X	X							
Pfister PAG 418	X	X	X						
Pfister PAG 434	X	X	X		X	X			X
Pfister PAG 485					X	X	X	X	X
Pfister PAG 631W									X
Pfister PAG 633W						X			X
Pfister PAG SX14	X	X	X						
Pfister PAG SX19	X	X	X						
Pioneer 300H									X
Pioneer 309A									X
Pioneer 312A	X	X	X	X					X
Pioneer 319									X
Pioneer 320	X	X		X					
Pioneer 321	X	X	X	X					
Pioneer 6488A	X	X	X	X					
Pioneer 6758	X	X	X	X					
Rist R 71	X								
Schenk S-86									X
Schenk S-87									X
Schenk S-90W									X
Schenk S-99W									X
Steckley GG12	X	X	X	X					
Steckley GG15	X	X	X	X					
Steckley Exp. 851	X	X	X	X					
Steckley Exp. 1610	X	X	X	X					
Stull 100 YA								X	X
Stull 101 YA								X	X
Stull 108 Y								X	X
Stull 400W								X	X
Stull 400WC								X	X
Stull 500W								X	X
U.H. WW50		X							
U.H. 52B	X								
U.H. WW60	X			X					
U.H. 66		X		X					
Total	42	40	44	30	25	19	16	13	39

Table 16 Location by Districts of Open-Pedigree Hybrids in the 1960 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 843 (cert.)	X	X	X	X	X	X	X	X	X
Mo 880	X	X	X	X	X	X	X	X	X
Mo 880 (cert.)	X	X	X	X	X	X	X	X	X
Mo 447W	X	X	X	X	X	X	X	X	X
Mo 447W (cert.)	X	X	X	X	X	X	X	X	X
Kansas 1639	X	X	X	X	X	X	X	X	X
Kansas 1639 (cert.)	X	X	X	X	X	X	X	X	X
US 523W	X	X	X	X	X	X	X	X	X
US 523W (cert.)	X	X	X	X	X	X	X	X	X
Ohio C92	X	X	X	X	X	X	X	X	X
US 619 W	X	X	X	X	X	X	X	X	X
US 619 W (cert.)	X	X	X	X	X	X	X	X	X
Iowa 4376	X	X	X	X	X	X	X	X	X
Mo 1002	X	X	X	X	X	X			
AES 811W	X	X	X	X	X	X			
AES 801	X	X	X						
Kansas 2822	X	X	X						
Kansas 1859	X	X	X						
Mo 995	X	X	X						
Mo 1023	X								
Mo 955				X	X	X			
Mo 916				X	X	X	X	X	X
Mo 916 (cert.)				X	X	X	X	X	X
Mo 947				X	X	X	X	X	X
Mo 947A (cert.)				X	X	X	X	X	X
Kansas 4003				X	X	X			
Mo Pipe 4				X	X	X	X	X	X
AES 904W				X	X	X	X	X	X
AES 904W (cert.)				X	X	X	X	X	X
Mo 804				X	X	X	X	X	X
Mo 804 (cert.)				X	X	X	X	X	X
Mo 881				X	X	X	X	X	X
Mo W6				X	X	X	X	X	X
Mo W6 (cert.)					X	X	X	X	X
Mo 4077W					X	X			
Tenn 501						X	X	X	X
Dixie 33						X	X	X	X
Dixie 29						X	X	X	X
Mo 800A						X	X	X	X
Mo W6A						X	X	X	X
Mo 978							X	X	X
Ga 102							X	X	X
Ga 7005							X	X	X
TRF 9							X		
Total	22	20	20	30	31	37	36	35	33

Sources of Seed for Commercial Hybrids.

Hybrids	Firm	Address
Bear OK	Bear Hybrid Corn Co., Inc.	Decatur, Ill.
Cargill	Cargill, Inc.	Minneapolis, Minn.
Coker	Cokers Pedigreed Seed Co.	Hartsville, S. C.
DeKalb	DeKalb Agri. Assoc., Inc.	DeKalb, Ill.
Embros	Ed F. Mangelsdorf & Bro., Inc.	St. Louis, Mo.
Forster	Parks Forster Farm Seeds	Donnellson, Ia.
Funk	Funk Bros.	Bloomington, Ill.
Maygold	Earl May Seed Co.	Shenandoah, Ia.
McAllister	McAllister Seed Farms	Mt. Pleasant, Ia.
McMullin	McMullin Corn Sales	Sikeston, Mo.
MFA	MFA Seed Division	Marshall, Mo.
Morton	Roy A. Morton & Sons	Bowen, Ill.
Pfister PAG	Pfister Associated Growers	Aurora, Ill.
Pioneer	Pioneer Seed Corn Co., and Garst & Thomas Hybrid Corn Co.	Tipton, Ind. Coon Rapids, Ia.
Rist	Plainview Hay, Feed & Seed Farm	Humbolt, Nebr.
Schenk	Chas. H. Schenk & Sons	Vincennes, Ind.
Steckley	Steckley Hybrid Corn Co.	Lincoln, Nebr.
Stull	Stull Bros.	Seabee, Ky.
United Hagie	United-Hagie Hybrids, Inc.	Des Moines, Ia.

COMPARISON OF HYBRIDS OF DIFFERENT MATURITIES

Hybrids of three maturities were tested at all locations in 1960. These were an early hybrid, Iowa 4376; a midseason hybrid, US 13; and a late hybrid US 523 W. The yield results for 1960 follow the same pattern as those for 1959, 1958, and 1957. See Figure 2 for summary of comparative yields for 4 years (1957-1960).

Where conditions were more favorable for high yields during the 4-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 less than 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.

