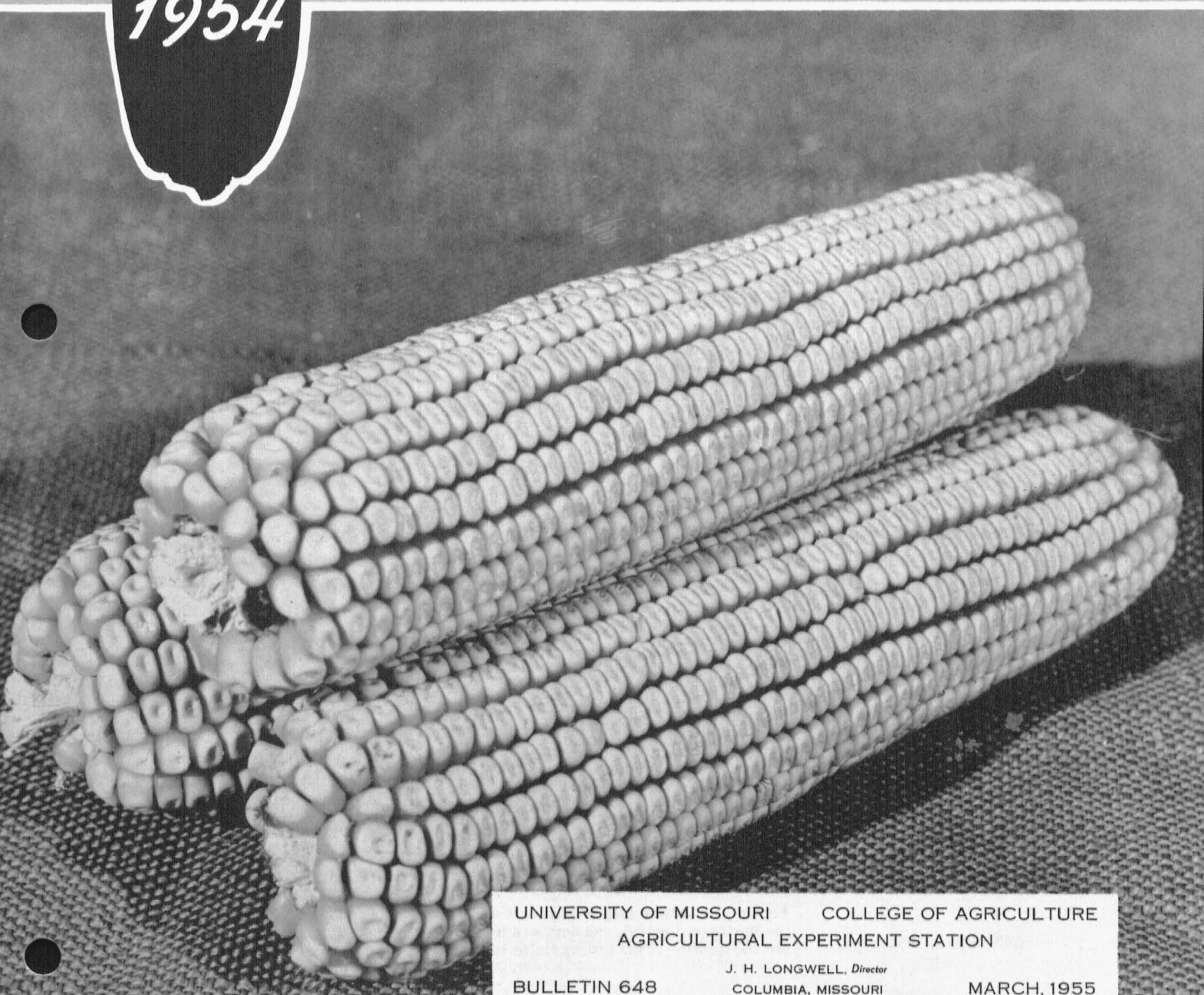
Missouri

HYBRID CORN

Yield Trials

1954



UNIVERSITY OF MISSOURI COLLEGE OF AGRICULTURE
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TABLE OF CONTENTS

Figure 1 -- Outline map of Missouri showing the Northern, Central, and Southern Regions; and the location of the testing fields in 1954.

Missouri Hybrid Corn Yield Trials 1954[1]

M. S. ZUBER AND C. O. GROGAN[2]

The 1954 yield trials were planted at 15 locations —four in the northern region, six in the central region, and five in the southern region. However, the severe drought necessitated the abandonment of one test in the northern, five in the central, and two in the southern region.

All of the information pertaining to the seven harvested tests as well as to the period-of-years data is given in this bulletin under the respective regions.

EXPERIMENTAL METHODS

Seed Sources. The seed of open-pedigree hybrids was obtained from the Missouri Seed Improvement Association, while the seed of experimental hybrids was produced by the Missouri corn breeding program. Seed of closed-pedigree hybrids was obtained either from local seed dealers or directly from the commercial companies concerned.

Type of Field Design. The tests at each location consisted of 56 hybrids. Each hybrid was planted in a plot two hills wide and five hills long. Four plots of each hybrid were planted in different parts of the testing field to minimize soil differences and position effects.

Yield. The yields of each hybrid were determined on the basis of shelled corn with a moisture content of 15.5 percent. Those hybrids which varied in moisture from 15.5 were adjusted in yield accordingly. The yields were also adjusted for missing hills. Therefore, the yields reported in the tables which follow are an average of the four plots after all of the adjustments had been made.

Moisture. The moisture in the grain at harvest of each hybrid was determined by removing two rows of kernels from each of ten ears selected at random from one replication. The kernels were thoroughly mixed, a sample drawn, and the moisture determined with a Steinlite moisture meter.

Stand. The percent stand was computed on the basis of the total plants present divided by a perfect stand for a particular test. A perfect stand varied from 120 to 160 plants, depending on the fertility of the soil and the likelihood of moisture at the testing location.

Lodging. A plant was classified as "root lodged" if it leaned at the base more than 30 degrees from the vertical, and "stalk lodged" if it was broken below the ear. If a plant was root lodged and stalk lodged, it was counted in both categories. The percent was based on the number of plants present.

Dropped Ears. The total number of ears dropped by each hybrid was recorded just previous to harvesting. This number was divided by the total number of plants present to give the percent of dropped ears. It was assumed that each plant produced one ear.

Ear Height Grade. The ear height grade for each hybrid is an average of four replications of the approximate number of feet from the ground to the point of attachment of the upper ear.

INTERPRETATION OF RESULTS

The performance of a hybrid extending over a period of years is a more reliable estimate of ability than the results of a single year. Environmental fluctuations may stimulate a hybrid to be outstanding one year but only average the following year. A record covering a number of years will tend to eliminate these variations and will thus give a clearer picture of the expected performance of a hybrid.

NORTHERN REGION

Information, other than yield, concerning the yield trials in the northern region is given in Tables 1, 2, and 3. The performance records of the hybrids tested in this region are given in Tables 4 and 5.

Temperatures well above average and precipitation below average were general throughout the

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TABLE 1 -- LOCATION OF YIELD TRIALS, DATES PLANTED AND HARVESTED, AND THE AVERAGE YIELD FOR EACH TESTING LOCATION IN THE NORTHERN REGION.

Testing Location	Cooperator	Date Planted	Date Harvested	Avg. Acre Yield Bu.
Maryville	Northwest Missouri State College	May 18	Nov. 4	58.3
Lathrop	Northwest Missouri Agri. Experiment Station	May 19	Nov. 3	54.2
Shelbina	Ed Rutter & Sons	May 17	Abandoned	----
Palmyra	M. L. Happal	May 17	Oct. 26	36.7

TABLE 2 -- AVERAGE TEMPERATURE, DEPARTURE FROM NORMAL, THE NUMBER OF DAYS WITH TEMPERATURES OF 90° OR MORE, AND 100° OR MORE AT THE TESTING LOCATIONS IN THE NORTHERN REGION.

Testing Location	Nearest Weather Station	Avg. Temp.	Departure from Normal	No. Days with Temperatures 90° or more		No. Days With Temperatures 100° or more
				1954	Avg.	1954
Maryville	Maryville	72.8	+2.8	51	45	11
Lathrop	Lathrop	74.4	+2.9	63	41	17
Shelbina	Shelbina	73.6	+1.3	64	44	17
Palmyra	Hannibal	73.0	+1.1	53	44	14

TABLE 3 -- TOTAL RAINFALL, NUMBER OF DAYS WITH RAIN, AND DRY PERIODS FROM MAY 1ST TO SEPTEMBER 15TH AT THE TESTING LOCATIONS IN THE NORTHERN REGION.

Testing Location	Nearest Weather Station	Total Rain-fall	No. of Days With Rain						Dry Periods*
			May	June	July	Aug.	Sept. 15th	Total	
Maryville	Maryville	21.64	11	10	7	16	2	46	5/3-3/15 6/22-7/1 7/3-7/20 7/22-7/31 8/28-9/8
Lathrop	Lathrop	18.35	9	8	6	11	1	35	5/3-5/28 6/16-7/9 7/11-7/27 8/28-9/8
Shelbina	Shelbina	14.53	10	6	4	9	0	29	5/3-5/22 6/17-7/1 7/3-7/20 8/29-9/15
Palmyra	Palmyra	14.09	9	8	8	12	0	33	5/3-5/16 6/17-7/20 8/29-9/15

*A dry period must have at least 10 consecutive days with less than 0.25 inch of precipitation.

TABLE 4 -- SUMMARY OF AVERAGE PERFORMANCE RECORDS FOR HYBRIDS TESTED IN THE NORTHERN REGION (1950-1954)

Hybrid	Acre Yield Bu.	Moisture in Grain %	Lodging Root %	Lodging Stalk %	Dropped Ears %	Ear Height Grade
5-Year Average (Results of 16 Tests)						
Mo 843	85.2	18.0	4.5	7.4	---	3.5
U S 523 W*	81.2	21.5	7.4	7.1	---	4.2
Kan 1639	80.0	17.3	4.6	6.5	---	3.5
Iowa 4476	79.7	18.4	1.5	8.4	---	3.8
Ohio C92	79.2	15.9	3.9	6.3	---	3.9
U S 13	78.0	17.1	4.1	10.7	---	4.1
Iowa 4531	76.0	17.1	2.2	7.2	---	3.6
Mo 148	73.5	17.7	8.5	11.4	---	4.3
4-Year Average (Results of 12 Tests)						
Mo 843	81.1	18.0	5.6	8.2	1.2	3.4
U S 523W*	79.5	22.1	9.1	7.6	1.3	4.2
Iowa 4476	77.7	18.4	1.9	9.3	1.3	3.7
Kan 1639	76.9	16.7	5.7	6.5	1.2	3.5
Ohio C92	76.2	15.6	4.9	6.7	1.6	3.8
A E S 801	75.9	17.4	1.4	4.9	0.8	3.2
U S 13	75.6	16.7	5.2	11.2	4.0	4.1
Iowa 4531	74.4	16.9	2.8	8.2	1.1	3.6
C B 8805	73.9	17.3	5.8	6.6	1.6	3.7
Mo 148	72.3	17.4	10.5	10.9	3.2	4.3
3-Year Average (Results of 10 Tests)						
Mo 4046W*	80.5	16.7	6.7	5.6	0.6	4.0
U S 523W*	75.1	18.3	7.7	5.1	1.5	4.0
Mo 843	72.7	16.2	5.5	3.7	0.9	3.3
Keystone 45	72.5	15.8	1.5	6.0	3.4	4.1
MFA 120A	72.2	15.6	3.4	5.8	3.1	3.8
Iowa 4476	72.2	16.7	1.5	3.1	1.6	3.6
U S 13	72.0	14.7	4.6	5.2	4.7	4.0
Mo 894	71.9	15.5	3.4	4.1	2.1	3.4
Mo 4041W*	71.6	17.8	4.8	3.9	0.7	4.0
Ohio C92	70.2	14.1	3.6	2.5	1.7	3.8
Mo 901	70.1	16.9	0.9	3.0	1.1	3.4
Kan 1639	69.9	14.8	4.2	3.8	1.0	3.4
A E S 801	69.6	16.2	0.4	2.1	0.8	3.1
P A G 383	68.4	14.6	4.4	2.4	2.2	3.2
Mo 148	67.8	15.9	9.8	7.2	3.1	4.2
Mo 897	67.3	16.5	0.4	2.8	0.8	3.7
C B 8805	66.8	15.5	3.6	3.1	1.5	3.6
Iowa 4531	66.8	15.3	1.6	2.4	1.0	3.5
Embro 36	59.4	14.9	0.6	3.7	1.4	3.8
2-Year Average (Results of 6 Tests)						
Mo 4047W*	66.7	16.5	11.5	6.5	0.3	4.0
Mo 4046W*	66.5	15.8	2.7	5.4	0.8	3.9

TABLE 4 -- CONTINUED

Hybrid	Acre Yield Bu.	Moisture in Grain %	Lodging Root %	Lodging Stalk %	Dropped Ears %	Ear Height Grade
A E S 903W*	65.2	17.0	4.5	3.8	0.5	3.8
Mo 880	63.3	15.1	2.1	1.3	1.7	3.5
Mo 4021WB*	61.3	15.5	1.6	4.0	0.7	3.5
M F A 120A	60.9	14.8	1.2	5.6	4.1	3.9
U S 523W*	60.8	16.5	5.4	6.1	1.7	3.9
Pioneer 302	60.4	15.9	0.6	3.8	1.4	4.0
U S 13	60.1	13.7	2.0	5.2	4.7	3.9
P A G 403	59.5	14.5	0.8	1.6	2.3	3.4
P A G 347	59.5	13.1	1.1	2.8	2.3	3.2
Funk G95A	58.5	13.8	0.0	3.9	3.1	3.6
Mo 894	58.1	14.8	2.5	3.8	3.0	3.5
Mo 4022WB*	57.7	17.1	4.3	4.9	1.3	3.5
Mo 860	57.7	15.8	1.5	2.7	2.1	4.1
Iowa 4476	57.5	16.1	0.1	3.5	2.1	3.8
Ohio C92	57.1	13.6	1.7	2.3	2.1	3.8
Mo 4041W*	57.0	16.8	1.4	3.7	0.8	4.0
Keystone 45	57.0	15.1	1.2	6.5	5.5	4.0
Nebr 1369B	56.7	14.5	2.5	6.7	1.6	3.3
P A G 383	56.4	14.1	1.3	2.8	2.9	3.3
Nebr 505W*	56.3	13.0	7.1	8.0	1.9	3.7
Mo 843	56.3	15.1	5.1	4.3	1.2	3.4
A E S 801	56.2	14.6	0.0	2.1	0.7	3.2
Ainsworth X-14-A	55.6	15.2	1.0	7.1	3.0	4.0
DeKalb 800A	55.6	13.6	1.7	3.8	3.0	3.8
M F A 115	55.6	13.7	0.2	3.5	3.5	3.9
Funk G91	55.5	15.1	0.0	2.7	4.2	3.8
Mo 148	55.0	13.9	7.3	6.3	3.0	4.0
Pioneer 301C	54.8	14.4	2.9	4.2	2.1	3.3
Kan 1639	54.5	14.0	2.7	3.5	1.2	3.5
Mo 901	54.3	16.1	0.3	3.7	1.5	3.4
Funk G99	54.0	14.7	5.3	2.9	2.1	3.9
Keystone 48	53.1	14.6	6.6	6.3	1.7	3.3
Iowa 4531	52.7	14.5	1.3	3.1	1.1	3.6
C B 8805	51.7	14.5	1.4	3.4	1.8	3.7
DeKalb 875	49.9	13.7	0.3	4.6	0.9	3.7
Mo 897	49.9	15.4	0.0	3.0	1.1	3.7
Pioneer 325	49.2	13.8	3.3	2.0	1.7	3.1
Mo 900	48.5	16.7	1.8	2.3	1.5	3.8
DeKalb 847	46.5	13.6	0.5	2.5	1.7	3.8
Embro 36	46.1	13.4	0.0	4.1	1.5	3.9
Embro 49	45.9	14.6	0.3	2.4	2.3	4.1

*White Hybrids

northern region. The test near Shelbina was abandoned as a result of the drouth. The average yield for the three tests that were harvested was 49.7 bushels per acre which is below that normally obtained in the northern one-third of Missouri.

Mo 843, Kan 1639, Iowa 4476, and Ohio C92 have performed quite well over a period of years. US 523W also has a good record for this region. However, it must be considered as a full season hybrid and the moisture content of the grain may be high at harvest time. There are a number of promising hybrids whose ability needs further testing before they can be recommended or discarded.

TABLE 5 -- NORTHERN REGION, 1954 AVERAGE PERFORMANCE RECORD FOR COMMERCIAL AND EXPERIMENTAL HYBRIDS TESTED IN NODAWAY, CLINTON, AND MARION COUNTIES.

Hybrid	Bushels Per Acre			Regional Average					
	Mary-ville	La-throp	Pal-myra	Bu. Per Acre	% Moist-ure	% Lodging Root	% Lodging Stalk	% Drop-ped Ears	Ear Height Grade
Mo. 4047W*	75.6	78.2	47.9	67.2	16.9	19.7	5.0	0.5	3.8
AES 903W* (Mo 4042W)	78.8	70.7	48.8	66.1	18.0	7.8	3.0	0.5	3.8
Mo 4046W*	78.9	69.0	45.2	64.4	17.6	4.1	2.4	1.3	3.9
Pioneer 302	73.4	64.0	42.8	60.1	18.1	1.1	2.7	2.2	3.9
Mo 4021WB*	66.8	68.1	42.8	59.2	16.0	3.0	1.0	1.1	3.4
U S 523W*	68.4	62.8	44.9	58.7	18.6	10.7	3.6	2.0	3.6
Kan 2442*	66.4	58.8	49.8	58.3	17.6	16.0	1.0	3.0	3.9
Keystone 45	68.9	59.0	45.2	57.7	15.6	2.4	3.9	6.7	3.8
P A G 347	62.0	60.1	51.0	57.7	14.6	2.1	2.9	4.3	3.1
Iowa 4476	53.4	70.5	47.2	57.2	17.3	0.2	2.8	3.3	3.7
U S 13 (Hand Poll.)	65.0	61.2	42.4	56.2	14.6	4.0	5.1	9.1	3.9
P A G 403	62.4	63.6	41.9	56.0	16.1	0.8	1.1	4.2	3.2
U S 13 (Cert.)	69.9	63.6	31.6	55.0	15.0	4.8	5.3	9.0	3.9
U H 55	64.2	60.7	40.2	55.0	16.5	3.6	4.2	3.9	3.1
Mo 843	58.4	52.2	54.1	54.9	16.2	10.1	4.9	2.1	3.4
Mo 880	64.8	57.3	42.3	54.8	16.2	3.3	0.8	3.0	3.3
M F A 120A	62.3	58.4	43.3	54.6	16.7	1.4	3.3	6.0	3.8
Mo 860	63.8	50.2	49.5	54.5	17.4	3.0	2.7	3.3	4.0
Ainsworth X-14-3	60.5	54.7	45.6	53.6	16.4	2.5	3.0	4.2	3.5
Ainsworth X-14-A	58.7	56.0	44.1	52.9	16.5	1.7	5.1	3.8	3.8
Nebr 1369B	60.9	51.3	46.3	52.9	15.8	4.9	4.7	2.5	3.0
Nebr 1363B	60.6	55.0	42.2	52.6	16.9	0.0	4.8	4.4	3.4
Mo 4022WB*	65.5	57.2	35.1	52.6	18.0	8.5	5.6	2.5	3.3
Ohio C92	65.0	60.6	30.5	52.0	15.3	3.4	0.8	3.6	3.7
Mo 4041W*	69.2	52.0	34.9	52.0	17.4	1.4	2.2	0.8	4.0
Funk G99	56.3	56.0	43.1	51.8	15.2	10.6	1.7	3.4	3.7
Iowa 4531	59.8	61.5	31.9	51.1	16.6	2.5	2.7	1.6	3.6
AES 801	57.8	65.2	30.0	51.0	16.9	0.0	2.7	1.1	3.0
Mo 894	70.3	51.1	29.3	50.3	16.1	5.0	3.9	5.8	3.2
P A G 383	58.8	55.7	34.7	49.8	15.4	2.5	3.9	4.4	3.0
Mo 148	52.4	49.6	44.7	48.9	15.2	13.5	5.3	4.5	3.7
Funk G95A	50.9	55.6	39.5	48.7	15.9	0.0	2.5	5.6	3.7
Nebr 505W*	58.5	47.8	39.6	48.6	15.1	12.9	8.4	1.3	3.5
Funk G91	55.5	45.2	45.1	48.6	16.3	0.0	2.2	7.0	3.8
DeKalb 800A	58.2	50.9	35.8	48.3	15.1	2.5	1.6	5.0	3.7
Pioneer 301C	51.0	47.7	45.3	48.0	15.8	5.6	4.8	3.6	3.2
U H 66	56.2	55.5	31.7	47.8	14.3	4.4	2.2	8.1	3.5
Mo 901	50.7	58.0	33.7	47.5	16.9	0.5	1.3	1.8	3.3
M F A 115	50.9	53.5	37.0	47.1	14.4	0.0	3.6	6.3	3.9
Mo 4057BW*	58.3	58.1	24.7	47.0	17.0	2.5	1.9	1.9	3.3
Tenn 4116	56.0	51.2	33.2	46.8	17.8	3.3	1.1	3.9	4.0
Mo 4055BW*	50.8	54.6	34.4	46.6	16.7	1.1	1.9	2.8	3.7
Kan 1859	59.3	42.3	31.7	44.4	16.9	9.7	1.6	3.0	3.3
DeKalb 847	46.6	47.8	37.3	43.9	14.4	0.8	1.3	2.5	3.7
C B 8805	54.5	48.8	25.2	42.8	14.5	2.5	4.1	3.0	3.5
DeKalb 875	52.3	41.8	34.1	42.8	14.5	0.5	1.9	1.1	3.7
Mo 4059W*	51.1	48.9	27.4	42.5	15.1	10.2	3.7	2.5	3.6
Kan 1639	51.2	51.2	22.8	41.7	15.6	5.3	2.2	2.2	3.6
Pioneer 325	51.7	41.7	25.3	39.6	15.9	6.6	2.5	3.1	3.0
Keystone 48	49.1	46.1	23.2	39.5	16.2	12.5	4.7	3.1	3.1
Mo 900	49.6	40.4	18.7	36.6	16.4	2.2	1.1	2.2	3.8
Mo 926A	38.0	39.9	31.1	36.3	15.3	4.2	1.9	4.4	3.7
Mo 897	44.5	41.8	21.8	36.1	15.8	0.0	1.1	1.9	3.7
Embro 49	39.2	39.3	23.3	33.9	15.7	0.6	1.4	3.4	4.0
Embro 36	42.5	43.5	10.9	32.3	14.9	0.0	2.7	2.7	3.8
Tenn 4120	38.5	28.2	15.9	27.5	17.6	1.6	3.3	2.5	3.9
Means	58.3	54.2	36.7	49.7	16.1	4.4	3.0	3.5	3.6
L.S.D.**	8.9	12.2	13.9						

*White Hybrid.

**The difference in yield before any two hybrids are considered significantly different.

CENTRAL REGION

Only one of the six tests planted in the central region was harvested. The others were abandoned because of the severe drouth. Therefore, no regional information for 1954 is given in Table 10.

The physical and climatic information for this region is given in Tables 6, 7, and 8. The period-of-years results for the central region are given in Table 9 and information pertaining to the test harvested at Elsberry is given in Table 10.

U S 523W, Mo 804, Mo 862, C B 7610, and Kan 1639 have performed well over a period of three to five years. New experimental white hybrids for this region which show promise are Mo 810W, Mo 4047W, and Mo 4048W. Seed of these hybrids as well as Mo 862 and C B 7610 is not available for planting this coming season.

TABLE 6 -- LOCATION OF YIELD TRIALS, DATES PLANTED AND HARVESTED, AND THE AVERAGE YIELD FOR EACH TESTING LOCATION IN THE CENTRAL REGION.

Testing Location	Cooperator	Date Planted	Date Harvested	Avg. Acre Yield Bu.
Carrollton	Missouri Pfister Associated Growers	May 5*	Abandoned	----
Marshall	MFA Seed Division	May 13	Abandoned	----
Columbia	Missouri Agri. Exp. Sta.	April 29	Abandoned	----
Jefferson City	Lincoln University	May 11	Abandoned	----
Washington	Ben Geisert	May 6	Abandoned	----
Elsberry	Missouri Bottomland Agri. Experiment Station	May 18	Nov. 8	40.2

*Estimated

TABLE 7 -- AVERAGE TEMPERATURE, DEPARTURE FROM NORMAL, THE NUMBER OF DAYS WITH TEMPERATURE OF 90° OR MORE, AND 100° OR MORE AT THE TESTING LOCATIONS IN THE CENTRAL REGION.

Testing Location	Nearest Weather Station	Avg. Temp.	Departure from Normal	No. Days with Temperatures 90° or more		No. Days with Temperatures 100° or more
				1954	Avg.	1954
Carrollton	Carrollton	75.0	+2.8	69	40	27
Marshall	Marshall*	75.6	+2.9	73	39	28
Columbia	Columbia	75.4	+2.8	71	39	23
Jefferson City	Jefferson City	75.3	+2.0	75	38	26
Washington	Union	75.4	+1.8	83	37	36

*The temperature totals for the months of August and September were taken from the Carrollton report.

TABLE 8 -- TOTAL RAINFALL, NUMBER OF DAYS WITH RAIN, AND DRY PERIODS FROM MAY 1ST TO SEPTEMBER 15TH AT THE TESTING LOCATIONS IN THE CENTRAL REGION.

Testing Location	Nearest Weather Station	Total Rain-fall	No. Days with Rain						Dry Periods*
			May	June	July	Aug.	Sept. 15th	Total	
Carrollton	Carrollton	13.47	10	10	4	16	1	41	5/3-5/25 6/17-7/9 7/11-7/20 7/22-7/31 8/20-9/16
Marshall	Marshall**	16.15	11	7	3	14	2	37	5/3-5/21 6/17-7/31 9/1-9/15
Columbia	Columbia	14.53	11	8	4	15	1	39	5/3-5/21 6/10-7/31 8/13-8/22 8/30-9/15
Jefferson City	Jefferson City	11.63	13	10	7	14	1	45	5/4-5/16 5/26-5/31 6/17-6/29 7/10-7/24 8/13-9/15
Washington	Union	9.64	13	9	5	16	2	45	5/3-5/22 5/26-6/7 7/4-7/24 8/13-9/7

*A dry period must have at least 10 consecutive days with less than 0.25 inch of precipitation.
**Precipitation totals for the months of August and September were taken from the Waverly report.

TABLE 9 -- SUMMARY OF AVERAGE PERFORMANCE RECORDS OF HYBRIDS TESTED IN THE CENTRAL REGION (1950-1954)

Hybrid	Acre Yield Bu.	Moisture in Grain %	Lodging Root %	Lodging Stalk %	Dropped Ears %	Ear Height Grade
5-Year Average (Results of 17 Tests)						
U S 523W*	90.2	17.5	3.8	4.5	---	4.2
C B 7610	89.1	17.5	2.2	5.8	---	4.2
Mo 862	87.8	18.9	2.8	4.0	---	4.3
Mo 804	86.5	16.7	2.8	6.6	---	4.4
Kan 1639	80.8	15.4	2.0	4.3	---	3.3
U S 13	80.0	14.4	2.3	6.4	---	3.8
Iowa 4476	78.4	16.3	0.4	5.1	---	3.5
Ohio C92	76.7	14.6	1.1	3.8	---	3.7
Mo 148	76.6	15.3	3.4	9.6	---	4.2
Mo 8	74.2	17.8	7.8	7.7	---	4.2
4-Year Average (Results of 14 Tests)						
U S 523W*	84.9	17.0	1.4	3.5	---	4.2
C B 7610	81.7	17.1	1.0	5.0	---	4.2
Mo 804	80.5	16.3	0.9	4.8	---	4.4
C B 7632	80.0	18.1	0.2	2.5	---	4.3
C B 9909	79.4	17.7	0.8	2.7	---	4.2
Mo 862	79.4	18.7	0.9	2.8	---	4.3
Mo 843	77.6	16.3	0.2	2.3	---	3.4
Kan 1639	75.2	15.0	0.4	3.4	---	3.4
U S 13	75.0	13.9	1.1	5.3	---	3.9
Mo 860	74.5	15.8	0.4	4.9	---	4.2
Mo 876	74.2	16.2	0.4	3.1	---	4.2
C B 9953	73.6	15.2	1.2	3.3	---	4.3
Iowa 4476	72.8	15.9	0.1	4.7	---	3.6
Mo 148	72.8	15.1	1.5	8.3	---	4.2
Ohio C92	71.4	14.2	0.2	3.0	---	3.7
Mo 8	68.5	17.5	5.0	6.3	---	4.3
3-Year Average (Results of 10 Tests)						
U S 523W*	82.9	15.9	1.8	4.2	1.1	4.3
C B 7610	81.4	15.2	0.7	6.3	0.4	4.2
C B 7632	81.3	15.6	0.3	2.8	0.4	4.4
Mo 883	80.6	17.7	1.1	2.4	0.4	4.2
Mo 862	79.8	16.8	0.8	3.5	0.8	4.4
C B 9909	78.8	16.3	0.7	2.0	0.8	4.3
Mo 804	78.8	15.5	1.1	6.1	0.3	4.6
Mo 843	76.7	14.8	0.2	2.4	0.3	3.5
Mo 8	76.2	16.9	4.8	6.8	0.2	4.4
Mo 892	76.2	14.7	0.1	4.7	0.3	3.6
Kan 1639	75.8	13.0	0.5	3.7	1.2	3.5
U S 13	75.5	12.9	1.4	4.5	1.8	4.0
P A G 403	74.8	13.2	1.6	0.5	1.2	3.2
Mo 148	74.8	13.9	2.0	8.0	1.7	4.4
Mo 860	74.7	14.4	0.5	4.8	1.4	4.4
MFA 120A	74.2	14.0	1.2	5.2	0.9	3.8
Ohio C92	72.3	13.2	0.2	3.8	0.7	3.8

TABLE 9 -- CONTINUED

Hybrid	Acre Yield Bu.	Moisture in Grain %	Lodging Root %	Lodging Stalk %	Dropped Ears %	Ear Height Grade
Mo 876	72.1	14.6	0.1	2.8	1.1	4.3
C B 9953	71.7	13.8	0.2	3.8	2.7	4.3
Iowa 4476	71.4	14.6	0.1	5.0	0.7	3.7
Keystone 111W*	66.0	17.5	2.7	1.5	0.1	4.0
2-Year Average (Results of 5 Tests)						
Mo 810W*	84.5	17.5	0.1	7.1	0.4	4.1
Mo 4047W*	75.2	16.9	6.1	7.4	0.6	3.5
C B 7610	71.1	15.3	1.1	4.9	0.6	4.0
Mo 884	70.9	15.8	2.3	2.6	0.1	4.2
Mo 4048W*	70.0	16.6	0.9	1.8	0.6	3.9
C B 7632	69.4	15.6	0.2	1.3	0.6	4.1
U S 523W*	69.1	15.7	1.0	2.8	1.6	4.1
Mo 904	68.7	16.4	2.0	7.4	0.7	4.1
Pioneer 302	68.0	16.1	1.3	2.9	1.7	3.7
Mo 883	66.5	17.6	1.6	1.6	0.5	4.0
C B 9909	66.4	16.4	0.9	2.1	1.1	4.1
Mo 804	65.8	15.6	1.3	5.8	0.3	4.6
Kan 1639	65.4	13.0	0.4	1.9	1.3	3.5
Pioneer 301C	65.2	13.1	0.3	1.8	0.9	3.2
Funk G91	65.1	13.5	0.1	1.3	1.9	3.6
U S 13	65.0	13.2	1.7	3.2	2.1	3.9
Mo 843	64.9	14.8	0.1	1.1	0.3	3.5
Mo 862	64.5	16.2	0.8	3.0	1.2	4.2
Mo 4022WB*	64.5	16.1	0.6	1.8	0.6	3.2
P A G 403	64.5	13.1	2.1	0.1	1.7	3.2
M F A 120 A	64.3	13.8	1.7	3.0	1.3	3.7
Pioneer 301	64.2	12.9	0.1	1.7	2.6	3.2
Mo 148	63.8	13.6	2.1	5.0	1.4	4.2
Mo 4041W*	62.7	14.8	1.7	1.6	0.3	4.1
Mo 892	62.7	14.6	0.1	3.7	0.3	3.7
Ohio C92	62.6	13.1	0.1	2.5	0.7	3.8
Mo 901	62.6	14.0	0.0	0.8	0.5	3.4
P A G 484	62.2	17.3	2.6	2.9	0.4	4.3
Mo 4021WB*	62.1	16.5	0.0	1.7	1.2	3.3
P A G 383	61.9	12.8	0.2	1.9	0.7	3.3
Keystone 45	61.5	13.9	0.3	1.2	1.0	3.8
Mo 860	61.1	13.9	0.5	3.9	1.8	4.2
Funk G95A	60.9	12.9	0.3	0.8	0.8	3.2
M F A 115	60.6	12.8	0.3	1.7	1.4	3.8
DeKalb 847	59.6	13.0	0.6	1.3	1.6	3.6
Iowa 4476	58.1	14.5	0.1	3.7	0.9	3.7
C B 9953	58.1	13.6	0.1	1.8	2.8	4.2
Mo 876	57.9	14.0	0.0	0.7	1.6	4.1
DeKalb 875	57.7	13.5	2.0	1.8	2.2	4.0
Mo 8	52.1	17.4	5.8	4.9	0.3	4.2
Embro 49	51.8	13.6	1.6	4.2	1.6	3.9
Keystone 111W*	51.1	17.7	2.5	1.7	0.1	3.7
DeKalb 825	51.1	13.0	0.4	0.9	2.4	3.4

*White Hybrids.

TABLE 10 -- 1954 PERFORMANCE RECORD FOR COMMERCIAL AND EXPERIMENTAL HYBRIDS TESTED ON THE MISSOURI BOTTOMLAND AGRICULTURAL EXPERIMENT FARM NEAR ELSBERRY IN LINCOLN COUNTY, MISSOURI.

Hybrid	Acre Yield Bu.	Moisture in Grain %	Lodging Root %	Lodging Stalk %	Dropped Ears %	Ear Height Grade
Mo 810W* (Mo 8010W)	69.8	19.6	0.0	10.8	0.0	4.0
Mo 4047W*	55.7	18.2	5.4	11.8	0.9	3.5
Mo 884	53.4	17.2	2.5	4.1	0.0	4.0
C B 7610	51.6	16.6	0.0	6.9	0.0	4.0
Tenn 3471*	51.2	16.9	0.0	2.5	0.0	3.7
Kan 2442*	50.7	15.0	4.1	4.1	0.0	4.0
U S 13 (Cert.)	49.8	14.5	0.0	3.3	0.8	4.0
C B 9909	46.9	17.5	0.0	2.5	1.6	4.0
C B 7632	46.8	16.6	0.0	1.6	0.0	4.0
Mo 4048W*	46.6	17.7	0.8	1.7	0.8	3.7
P A G 403	46.5	14.3	3.3	0.0	1.6	3.0
Mo 904	46.3	16.8	0.0	10.8	0.8	3.7
Funk G91	45.0	14.8	0.0	0.0	0.8	3.5
Kan 1639	44.3	14.1	0.0	1.6	0.0	3.7
Mo 883	43.9	18.3	0.0	2.5	0.0	3.7
Pioneer 302	43.5	17.7	0.8	5.1	1.7	3.5
P A G 484	43.4	18.3	2.5	3.3	0.0	4.0
Mo 148	42.5	14.1	0.8	4.2	0.8	4.0
M F A 120A	42.4	14.8	2.5	2.5	0.0	3.5
U S 13 (Hand Poll.)	42.3	14.7	2.5	2.5	0.8	3.7
Ainsworth X-14-3	42.0	14.5	0.0	1.6	1.6	3.5
M F A 115	41.8	13.8	0.0	2.5	0.0	3.7
Mo 804	41.1	16.7	0.8	5.8	0.0	4.0
P A G 383	41.1	13.9	0.0	1.7	0.0	3.2
Ainsworth X-14-A	41.0	14.2	0.0	4.1	0.0	3.5
Pioneer 301	41.0	14.5	0.0	0.8	2.6	3.0
Ohio C92	40.9	14.2	0.0	1.7	0.0	4.0
Pioneer 301C	40.9	14.2	0.0	0.8	0.8	3.0
Mo 4022WB*	40.6	17.5	0.0	2.5	0.0	3.0
Mo 892	40.3	16.7	0.0	4.1	0.0	3.7
Funk G99	40.3	13.7	0.0	5.8	0.0	3.5
Funk G95A	39.7	13.4	0.0	0.0	0.0	3.0
U S 523W*	39.5	17.2	0.0	3.3	1.6	4.0
Mo 843	39.1	16.2	0.0	0.8	0.0	3.2
Mo 901	38.2	14.8	0.0	0.0	0.0	3.2
DeKalb 847	37.8	13.7	0.0	0.8	0.8	3.7
Mo 4021WB*	37.5	18.2	0.0	2.5	1.6	3.2
Embro 101	36.8	18.5	0.0	5.8	0.0	4.0
Mo 4041W*	36.0	14.9	0.8	1.6	0.0	4.0
Kan 1859	35.8	14.5	2.5	5.1	0.0	3.2
Keystone 45	35.4	15.1	0.0	0.0	0.0	3.7
Mo 862	34.7	16.4	0.0	3.3	0.8	4.0
Kan 1830	34.7	16.6	0.0	0.8	0.8	4.0
Mo Pipe Corn Hybrid*	34.6	17.1	0.8	0.0	0.0	3.7
Mo 860	34.2	14.5	0.0	5.0	0.8	4.0
Iowa 4476	34.1	16.8	0.0	3.3	0.8	3.7
Pipe Corn* (O.P. Bueschers)	33.8	16.2	5.0	19.4	0.0	4.2
U H 65A	33.0	16.8	0.0	4.2	3.4	5.7
DeKalb 875	32.9	14.8	2.5	0.0	1.6	4.0
Keystone 111W*	29.3	18.0	2.5	1.7	0.0	3.5
Mo 8	28.3	18.0	0.0	2.5	0.0	4.0
DeKalb 825	27.7	14.2	0.0	0.0	1.7	3.2
Mo 876	25.8	14.3	0.0	0.0	0.0	3.7
Embro 49	25.7	14.3	2.5	5.0	0.8	3.7
U. H. 59	25.6	14.1	0.0	0.0	0.0	3.5
C B 9953	24.8	14.3	0.0	1.6	1.6	4.0
Means	40.2	15.8	0.8	3.2	0.6	3.7

*White Hybrids.

Differences in yield between any two hybrids of less than 9.6 bushels are not considered significant.

SOUTHERN REGION

The long periods without adequate moisture in the southern one-third of the state made it necessary to abandon the two tests in the southwestern part of Missouri. However, all of the tests in southeastern Missouri were harvested.

Information, other than the performance records of the hybrids, is given in Tables 11, 12, and 13. The yield test results for the southern region are found in Tables 14 and 15.

The late hybrids generally performed better than early hybrids in Missouri this past season. The one exception was the test near Sikeston where the early hybrids appeared to do better than the late ones. U S 523W again gave good results in this region. Promising experimental hybrids for this region include Mo 810W, Mo 4047W, Mo 4048W, Mo 5365W, and Mo 862.

TABLE 11 -- LOCATION OF YIELD TRIALS, DATES PLANTED AND HARVESTED, AND THE AVERAGE YIELD FOR EACH TESTING LOCATION IN THE SOUTHERN REGION.

Testing Location	Cooperator	Date Planted	Date Harvested	Avg. Acre Yield Bu.
Stark City	Mrs. D. A. Turner & Sons	April 17*	Abandoned	----
Pierce City	Southwest Missouri Agri. Experiment Station	April 19*	Abandoned	----
Sikeston	Southeast Missouri Agri. Experiment Station	April 19	Sept. 27	52.8
Vinson	Dirl Bagby	April 19	Sept. 28	56.5
Steele	Cleo Garrett	April 20	Sept. 29	70.5

*Estimated

TABLE 12 -- AVERAGE TEMPERATURE, DEPARTURE FROM NORMAL, THE NUMBER OF DAYS WITH TEMPERATURE OF 90° OR MORE, AND 100° OR MORE AT THE TESTING LOCATIONS IN THE SOUTHERN REGION.

Testing Location	Nearest Weather Station	Avg. Temp.	Departure from Normal	No. Days with Temperatures 90° or more		No. Days with Temperatures 100° or more
				1954	Avg.	1954
Pierce City	Mt. Vernon	77.2	+3.8	89	25	38
Stark City	Neosho	76.4	+3.7	91	25	30
Sikeston	Sikeston	77.1	+2.4	80	33	21
Vinson	Malden	78.2	+2.2	85	32	27
Steele	Caruthersville	78.2	+1.0	85	32	19

TABLE 13 -- TOTAL RAINFALL, NUMBER OF DAYS WITH RAIN, AND DRY PERIODS FROM MAY 1ST TO SEPTEMBER 15TH AT THE TESTING LOCATIONS IN THE SOUTHERN REGION.

Testing Location	Nearest Weather Station	Total Rain-fall	No. of Days with Rain						Dry Periods*
			May	June	July	Aug.	Sept. 15th	Total	
Pierce City	Pierce City	13.93	12	7	6	6	2	33	5/8-5/25 6/9-7/5 7/7-7/23 8/3-8/28 8/30-9/7
Stark City	Granby	10.10	9	2	1	3	0	15	5/8-5/25 6/9-7/23 8/7-9/15
Sikeston	Sikeston	16.03	9	11	5	7	1	33	5/8-5/28 6/24-7/22 8/7-8/19 8/21-9/15
Vinson	Malden	11.66	9	8	3	8	1	29	5/8-5/27 6/16-7/21 8/2-8/18 8/30-9/15
Steele	Deering	14.82	10	7	6	5	1	29	5/4-5/27 6/22-7/2 7/4-7/21 8/3-8/19 8/21-9/7

*A dry period must have at least 10 consecutive days with less than 0.25 inch of precipitation.

TABLE 14 -- SUMMARY OF AVERAGE PERFORMANCE RECORDS OF HYBRIDS TESTED IN THE SOUTHERN REGION (1950-1954)

Hybrid	Acre Yield Bu.	Moisture in Grain %	Lodging Root %	Lodging Stalk %	Dropped Ears %	Ear Height Grade
5-Year Average (Results of 13 Tests)						
Mo 5365W*	80.9	15.2	7.0	12.6	---	4.5
U S 523W*	78.7	13.5	9.6	9.0	---	3.8
Dixie 33*	78.0	16.2	9.1	6.9	---	4.9
Mo 862	73.5	16.2	7.2	7.8	---	4.0
Dixie 22	73.0	16.1	5.5	14.7	---	4.7
C B 7610	72.5	14.1	5.0	7.5	---	4.0
Mo 804	71.2	13.6	4.3	8.8	---	3.9
U S 13	69.5	12.7	2.9	5.5	---	3.3
Ohio C92	68.0	12.4	4.4	5.3	---	3.3
Kan 1639	67.8	12.9	3.7	4.6	---	2.9
Mo 148	67.7	12.8	5.5	9.8	---	3.7
Iowa 4476	66.7	13.2	0.8	6.5	---	3.1
Mo 8	65.3	14.4	10.0	10.4	---	3.8
4-Year Average (Results of 9 Tests)						
U S 523W*	76.0	12.1	4.5	10.4	---	3.7
Mo 5365W*	74.5	13.6	1.7	14.8	---	4.6
Dixie 33*	72.6	14.7	3.7	7.8	---	4.8
Mo 862	69.9	14.7	1.9	9.0	---	3.9
C B 7610	69.0	12.6	1.4	7.5	---	3.9
U S 13	68.8	11.4	0.6	6.3	---	3.4
Mo 843	68.3	12.1	2.4	6.5	---	3.2
C B 7632	67.9	13.5	0.9	9.7	---	4.2
Mo 804	67.3	12.4	1.1	10.1	---	3.9
Dixie 22	66.8	14.5	1.4	11.6	---	4.6
Mo 860	66.7	12.1	0.8	8.7	---	3.7
Ohio C92	66.1	11.3	1.2	6.0	---	3.3
Kan 1639	65.9	11.3	0.5	4.9	---	2.9
Mo 148	65.6	11.6	1.1	11.1	---	3.8
Iowa 4476	64.5	11.8	0.2	7.8	---	3.1
Mo 8	64.2	13.1	4.1	11.7	---	3.7
C B 8805	62.7	12.1	1.9	5.8	---	3.0
3-Year Average (Results of 6 Tests)						
U S 523W*	64.9	11.3	6.0	10.2	0.4	3.7
T R F 3*	61.7	12.7	13.1	9.6	0.2	3.9
U S 13	61.3	10.4	0.8	4.6	1.8	3.4
Mo 862	60.6	13.8	2.2	7.7	0.8	3.9
M F A 120A	59.7	10.2	1.9	7.8	1.5	3.1
Mo 843	59.7	11.0	3.2	5.2	0.3	3.2
Mo 860	59.2	11.2	1.1	6.3	0.9	3.7
Mo 5365W*	59.1	12.8	1.8	14.7	0.0	4.6
Dixie 33*	59.0	13.9	4.2	7.6	0.6	4.8
Mo 148	58.7	10.5	1.5	9.8	0.4	3.7
Mo 883	58.6	13.9	3.1	3.3	0.2	3.8
Ohio C92	58.6	10.4	1.4	4.6	0.7	3.3
C B 7610	58.0	11.7	1.8	4.6	0.7	3.8
Kan 1639	57.7	10.2	0.7	3.4	0.8	2.9
P A G 484	57.6	13.5	4.4	10.6	0.9	3.9
Mo 804	56.7	11.6	1.5	9.1	0.4	3.8
C B 7632	56.6	12.4	1.1	8.1	1.0	4.0
Keystone 222A	56.2	13.8	2.7	14.3	0.6	4.4

TABLE 14 -- CONTINUED

Hybrid	Acre Yield Bu.	Moisture in Grain %	Lodging Root %	Lodging Stalk %	Dropped Ears %	Ear Height Grade
Mo 8	56.1	12.3	5.3	10.5	1.0	3.7
C B 8805	54.7	10.5	2.2	4.0	0.7	3.0
Iowa 4476	54.3	10.6	0.3	5.1	0.6	3.1
Tenn 90	53.9	14.0	3.4	11.2	1.9	4.6
Dixie 22	53.2	13.6	1.7	14.7	0.4	4.4
2-Year Average (Results of 5 Tests)						
U S 523W*	66.6	11.6	7.7	4.8	0.7	3.8
Pioneer 302	65.3	11.1	3.3	6.9	1.5	3.6
P A G 631W*	64.3	12.0	7.7	4.1	0.3	3.6
Mo 810W*	62.1	11.8	1.0	6.4	0.4	4.0
Mo 4047W*	62.1	12.0	1.2	4.5	0.2	3.5
Mo 4048W*	61.6	10.6	5.6	3.4	0.7	3.5
Mo 843	61.1	11.1	2.7	5.4	0.5	3.3
Mo 862	60.7	12.3	1.2	2.9	0.5	3.9
A E S 903W*	60.6	11.5	4.3	4.1	0.9	3.3
U S 13	60.4	10.6	1.3	3.8	1.6	3.6
T R F 3*	59.9	12.4	10.2	6.8	0.3	3.8
M F A 120A	59.0	10.4	2.8	7.0	1.5	3.2
Mo 4041W*	58.9	12.1	6.2	4.5	0.5	3.5
Ohio C92	58.7	10.4	2.2	5.1	1.1	3.6
Mo 148	58.5	10.0	2.2	9.1	0.3	3.7
Pioneer 301	58.5	10.2	1.8	2.5	0.9	2.9
Mo 5365W*	58.0	12.1	2.7	10.1	0.0	4.5
Mo 860	57.9	11.2	1.7	5.7	1.4	3.8
Mo 884	57.3	11.3	1.9	2.9	0.0	3.9
Kan 1639	57.2	10.2	1.1	2.7	0.9	3.0
Mo 4022WB*	56.6	12.5	5.8	2.5	0.5	2.8
Dixie 33*	56.5	12.6	5.6	6.6	1.0	4.7
Mo 883	56.4	12.8	3.2	2.9	0.0	4.1
DeKalb 847	56.2	9.9	1.3	2.2	0.3	3.1
C B 7632	56.1	11.1	1.7	6.4	1.2	4.1
Ainsworth X-14-A	56.0	10.7	1.7	6.2	1.2	3.4
C B 7610	55.9	11.9	2.8	3.3	0.8	4.0
P A G 403	55.8	11.0	0.4	1.0	0.5	2.9
Mo 8	54.7	11.7	5.8	7.7	0.8	3.6
Mo 804	54.7	11.8	2.3	5.8	0.3	3.8
Mo 4021WB*	54.5	12.1	1.8	2.5	0.3	3.2
P A G 484	54.0	12.6	6.6	6.2	0.6	3.9
Keystone 222A	53.9	13.1	3.4	9.3	0.9	4.3
C B 8805	53.7	10.6	3.4	3.2	1.0	3.1
Embro 155W*	53.6	10.8	3.4	6.5	0.7	3.9
Iowa 4476	53.4	10.5	0.4	1.1	0.6	3.3
DeKalb 817A	53.3	9.5	1.0	5.2	0.7	3.1
Mo 8009W*	52.9	14.0	2.1	2.3	0.3	4.6
Funk G134	52.6	11.0	7.4	2.2	0.5	3.4
Tenn 90	52.1	13.2	5.1	7.8	1.4	4.5
Embro 49	52.0	10.4	1.1	3.7	1.3	3.4
Funk G704	51.9	10.9	4.0	2.8	0.0	3.8
DeKalb 876	51.6	10.5	2.1	5.8	1.1	3.4
Funk G711	50.7	13.7	2.2	13.1	0.6	4.1
Mo 876	49.3	11.5	2.3	4.5	0.5	4.0
Keystone 111W*	48.5	11.7	6.7	3.6	1.2	3.8
Dixie 22	48.3	13.2	1.5	5.6	0.7	4.3

*White Hybrids

DISCUSSION

It has not been feasible to test all of the hybrids currently sold in Missouri. An effort has been made to test those hybrids which are widely grown, or whose performance is sufficiently promising to warrant consideration. Therefore, if a particular hybrid should not be included in the yield tests, it does not necessarily mean that the hybrid is inferior. A number of hybrids that have special purposes in certain areas are not given a general testing. All factors must be carefully considered before hybrids are entered in the state yield tests.

Information pertaining to the sources of seed of

TABLE 15 -- SOUTHERN REGION, 1954 AVERAGE PERFORMANCE RECORDS FOR COMMERCIAL AND EXPERIMENTAL HYBRIDS TESTED IN NEW MADRID, STODDARD, AND PEMISCOT COUNTIES.

Hybrid	Bushels Per Acre			Regional Average					
	Sikes-ton	Vinson	Steele	Bu. Per Acre	% Moist-ure	% Lodging Root	% Lodging Stalk	% Dropped Ears	Ear Height Grade
P A G 631W*	62.9	71.4	91.3	75.2	13.9	14.0	7.4	0.5	4.3
U S 523W*	51.1	74.8	95.6	73.8	14.8	14.0	6.5	0.5	4.5
Pioneer 302	60.4	68.7	90.2	73.1	13.3	5.7	10.6	1.6	4.2
Tenn 3744*	58.2	67.4	92.8	72.8	13.6	3.6	4.2	0.5	4.2
U S 13 (Cert.)	63.0	58.6	83.4	68.3	12.2	2.7	5.8	1.9	4.1
Mo 881	54.2	64.4	83.3	67.3	13.0	3.6	3.8	0.5	4.5
Ohio C92	58.3	65.5	74.8	66.2	12.8	4.3	7.4	0.8	4.1
Mo 148	62.4	57.5	77.9	65.9	12.2	2.2	12.6	0.2	4.3
Mo 4047W*	55.4	62.8	78.7	65.6	14.6	0.8	6.8	0.0	4.2
Mo 862	57.9	65.4	70.5	64.6	13.4	1.9	2.4	0.5	4.7
Mo 4041W*	53.7	63.1	73.8	63.5	14.1	12.0	5.5	1.0	4.1
Keystone 222A	53.1	59.6	77.4	63.4	14.9	5.4	10.0	1.7	5.4
U H 6	62.0	50.4	76.0	62.8	13.7	23.4	4.7	0.0	4.5
Pioneer 301	59.6	62.8	64.8	62.4	13.0	3.5	4.2	1.1	3.3
AES 903W* (Mo 4042W)	61.7	56.3	69.1	62.4	14.6	8.6	4.7	0.5	3.0
Ainsworth X-14-A	50.4	62.9	72.2	61.8	12.8	2.0	10.0	1.0	4.1
M F A 120A	56.7	61.7	67.0	61.8	13.1	5.2	13.2	1.6	3.5
Mo 810W* (Mo 8010W)	52.6	62.7	69.8	61.7	13.8	1.6	3.9	0.8	4.9
Mo 843	57.6	59.1	67.4	61.3	13.1	4.1	9.9	0.5	3.8
Embro 49	66.0	46.9	70.8	61.3	12.7	2.2	5.6	2.2	4.0
U S (Hand Poll.)	56.5	60.6	66.4	61.2	13.2	2.5	3.9	1.3	4.1
Mo 4048W*	49.3	60.1	73.9	61.1	13.5	10.7	4.1	1.4	4.2
P A G 403	60.8	61.6	60.5	60.9	13.7	0.0	2.0	0.5	3.5
Mo 8	53.0	59.8	69.3	60.7	13.3	10.3	9.4	0.8	4.0
Kan 1639	63.2	60.7	57.7	60.5	12.8	1.7	3.4	0.8	3.7
T R F 3*	60.1	57.8	63.1	60.4	14.4	16.1	7.8	0.2	4.5
Kan 1830	51.2	52.6	76.5	60.1	13.0	8.4	7.6	2.8	4.5
Mo 5365W*	49.4	56.9	73.6	60.0	13.4	4.1	4.1	0.0	5.4
C B 7632	50.4	62.6	66.7	59.9	13.4	2.2	6.7	1.9	4.8
Mo 4022WB*	57.1	50.9	71.5	59.8	14.3	9.8	4.2	0.5	3.4
Mo 804	45.4	66.1	65.1	58.9	13.3	4.1	6.8	0.2	4.6
Mo 884	45.2	65.0	65.2	58.5	12.9	2.5	5.3	0.0	4.7
Embro 155W*	56.4	55.2	63.3	58.3	12.9	6.4	10.4	0.8	4.5
U H 65A	47.5	58.7	68.0	58.1	12.8	2.5	3.8	0.5	3.8
Mo 860	47.9	57.0	68.5	57.8	13.7	3.3	7.4	1.9	4.4
C B 8805	48.4	58.9	65.7	57.7	13.2	6.7	3.8	0.8	3.6
DeKalb 876	46.1	57.2	69.6	57.6	13.0	4.1	7.5	1.0	4.2
C B 7610	45.3	47.4	80.0	57.6	14.4	4.7	5.3	1.1	4.9
Mo 883	53.7	51.0	67.5	57.4	14.6	6.4	5.2	0.0	4.6
Dixie 33*	44.3	50.1	77.1	57.2	13.4	6.8	8.9	1.1	5.6
DeKalb 847	52.2	52.3	66.7	57.1	12.4	2.5	4.4	0.5	3.5
Iowa 4476	55.1	57.6	56.9	56.6	12.4	0.8	0.8	0.2	4.0
DeKalb 817A	58.9	58.9	50.4	56.1	11.9	1.6	8.2	0.5	3.8
Mo 4021WB*	51.3	51.8	64.4	55.8	14.1	3.1	2.8	0.0	3.7
Tenn 90 (T0009)*	44.6	56.6	64.9	55.4	14.5	9.0	7.2	1.1	5.5
Tenn 29(T0114)*	41.6	50.7	70.9	54.4	13.5	0.5	5.5	1.1	4.9
Funk G704	49.5	32.2	81.4	54.3	13.6	7.5	4.7	0.0	4.8
P A G 484	52.6	47.0	63.1	54.2	14.1	12.3	7.0	0.8	4.6
DeKalb 1002	45.2	46.8	70.2	54.0	13.7	4.4	9.5	0.2	4.8
Keystone 111W*	51.4	35.2	74.0	53.5	13.5	12.9	5.0	1.1	4.4
Funk G134	55.7	51.9	52.1	53.3	13.7	14.4	3.2	0.5	4.1
Funk G711	40.6	45.7	72.9	53.1	15.9	3.4	14.2	0.8	4.8
Mo 916	52.4	44.5	61.4	52.7	13.6	1.6	2.8	0.0	4.1
Mo 876	40.6	57.8	57.1	51.8	13.1	3.3	5.0	1.0	4.8
Mo 8009W*	39.3	36.9	69.1	48.4	14.4	3.3	2.4	0.5	5.4
Dixie 22	37.4	47.1	56.7	47.1	15.2	2.5	5.5	0.5	5.2
Means	52.8	56.5	70.5	59.9	13.6	6.3	6.2	0.8	4.4
L.S.D.**	4.4	18.9	24.9						

*White Hybrid.

**The difference in yield before any two hybrids are considered significantly different.

open-pedigree hybrids may be obtained from the Missouri Seed Improvement Association of Columbia, Missouri, or from the particular hybrid seed corn company concerned for closed-pedigree hybrids.

It is the genuine desire of those connected with the testing program that the information contained in this bulletin will be a practical aid to those concerned with the production of corn in Missouri.