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1949 YIELD TRIALS  
WITH  
CORN HYBRIDS IN MISSOURI





# 1949 YIELD TRIALS WITH CORN HYBRIDS IN MISSOURI<sup>1</sup>

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## INTRODUCTION

In 1949, yield trials were planted in ten locations, including three in the Northern Region and Southern Region, and four in the Central Region (Figure 1 and Table 1). The tests at Jasper and Malta Bend, Missouri, were abandoned due to excessive moisture.

The 1949 Yield Trial report is presented in two parts—namely, part one contains hybrids which are in commercial production plus several promising new experimental hybrids, and part two consisting of experimental hybrids along with several commercial hybrids for comparison purposes.

## EXPERIMENTAL METHODS

1. TYPE FIELD DESIGN All tests consisted of 28 varieties. Each variety was planted in a 2 x 10 hill plot and replicated 4 times. The field design was a modified Latin square, whereby the randomization of hybrids was restricted to the extent that each hybrid would appear an equal number of times in each section of the testing field.

2. YIELD DETERMINATIONS Acre yields were computed on the basis of shelled corn with 15.5 per cent moisture. Yields of hybrids exceeding this moisture percentage were adjusted downward, and yields of hybrids having lower moisture content than 15.5 per cent were adjusted upward. Yields were adjusted for missing hills, but not for other variations in stand, before being converted to acre yields.

3. MOISTURE AT HARVEST The percentage of moisture at harvest was determined by drawing 6 to 9 ears at random from one replication and removing several rows of kernels from each ear. Moisture determination was made on the bulk sample with a Tag-Heppenstall moisture meter.

4. STAND PERCENTAGE The percentage was determined by making actual counts of the plants present and computing the stand per cent based

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TABLE 1--LOCATION OF TESTING FIELDS, COOPERATORS, AND GENERAL INFORMATION REGARDING THE TESTING FIELDS IN 1949.

Cooperators	Location	Region	Soil	Fertilizer	Previous Crop	Date Planted	Date Harvested	Approximate No. Plants Per Acre	Environmental Conditions
1. R. T. Wright, Northwest Missouri State Teachers College	Maryville, Missouri	Northern	Upland	5 tons manure per acre plus 250 lbs. 0-20-0	Red Clover	May 7	Oct. 18	8200	Cut worm damage reduced stand 10-30%. Excessive amount moisture in June & July.
2. C. L. Van Buren, Northwest Missouri Agriculture Experiment Station	Lathrop, Missouri	Northern	Bottom-land	None	Corn	May 12	Oct. 25	11,700	Excellent conditions for corn production. Some corn borer damage
3. Roy Chinn	Shelbina, Missouri	Northern	Upland	200 lbs. of 8-24-8 per acre	Meadow	May 11	Oct. 27	12,000	Plant population too high for soil productivity.
4. McRoberts Farms	Malta Bend, Missouri	Central	Bottom-land	None	Soybeans	May 30	Abandoned	11,700	Excessive moisture after planting reduced stand & acre yield. Field abandoned at harvest
5. South Farm, Missouri Agr. Exp. Station	Columbia, Missouri	Central	Upland	864 lbs. 20% Super Phosphate. 300 lbs. $\text{NH}_4 \text{NO}_3$ 100 lbs. 6-18-16	Small Grain & Lespedeza	May 5	Oct. 24	10,600	Excellent conditions for corn production.

6. Mo. State Prison Farm, Col. Paul Renz, Supt.	Jefferson City, Missouri	Central	Bottom- land	None	Corn	May 3	Oct. 5	10,600	Excellent conditions for corn production.
7. Mo. Bottom- land Agr. Exp. Field	Elsberry, Missouri	Central	Bottom- land	None	Corn	May 31	Oct. 28	10,600	Excessive moisture during July & August reduced yields con- siderably.
8. Vocational Agr. School, Gale G. Joslyn, Instructor	Jasper, Missouri	Southern	Upland	250 lbs. 4-12-4	Corn	May 10	Abandoned	7,100	Heavy rainfall dur- ing early growing season prevented cultivation. Field abandoned due to weeds & poor stand.
9. Southeast Mo. Agr. Exp. Station	Sikeston, Missouri	Southern	Sikeston Ridge	250 lbs. 4-12-4 and 100 lbs. NH <sub>4</sub> NO <sub>3</sub> Side dress	Small Grain Vetch	Apr. 18	Oct. 13	7,800	Excellent conditions for corn production.
10. S. Crews Reynolds	Caruthers- ville, Missouri	Southern	Miss. Delta	100 lbs. 4-12-4	Corn	Apr. 19	Oct. 11	11,700	Excessive moisture prevented side- dressing of Nitrogen. Yields were reduced due to Nitrogen deficiency.



ple, in the Maryville commercial test, Table 6, the difference between any two varieties necessary for significance is 15.2 bushels. A difference less than 15.2 bushels between any two varieties would suggest, that under the conditions of this test, no differences in yield existed.

## SEASONAL CONDITIONS

The season of 1949 in many respects was similar to the 1948 season in that it was very favorable for corn production. The Agricultural Statistician of the United States Department of Agriculture, located at Columbia, Missouri, estimates the average corn yield for Missouri to be 41.0 bushels as compared with the 1948 average of 45.5 bushels.

Rainfall in all sections was adequate, and in some areas excessive rainfall in June and July prevented proper cultivation. Excessive rainfall prevented cultivation of the Jasper yield test, causing it to be abandoned. Water from heavy rains stood on the Malta Bend test, resulting in poor stands and it was also abandoned. Excessive rains at Elsberry lowered the yields considerably.

In some locations environmental conditions were very favorable for both root and stalk lodging. Heavy winds at Caruthersville in August caused excessively heavy root lodging. In general, stalk lodging was much greater than in 1948, due in part to corn borer damage in some locations.

Cut worms lowered the stand 10 to 30% at Maryville. The number of plants per acre at Shelbina, Elsberry, and Caruthersville were greater than the soil fertility at those locations could support.

## PART I

## INTEPRETATION OF RESULTS

PERIOD OF YEAR RESULTS ON COMMERCIAL HYBRIDS Evaluation of hybrids for yield and standing ability, which have been tested for a period of years, is far more valuable than taking the results for a single year. A hybrid may be outstanding one year, while in the next year it may be very undesirable. Results over a period of years tend to average these fluctuations. Tables 2, 3, and 4 give the results of commercial hybrids tested for the 3-year period of 1947, 1948, and 1949 in the Northern, Central, and Southern Regions respectively.

Although Kan. 2234, a white hybrid, led all others in yield for each region, it must be remembered that this hybrid is very low in shelling per cent, usually about 10% lower than most hybrids. When considering hybrids from the data in these tables, be sure to examine the standing ability in addition to yield. Kan. 1639 has given good results for the 3-year period in the Northern and Central Regions. This hybrid is of the same maturity as U. S. 13. It is more desirable than U. S. 13 in husk cover and ear height. Husk cover is important from the standpoint of protection from the grain weevil. Average ear height of Kan. 1639 is about a foot lower than U. S. 13.

1949 RESULTS OF COMMERCIAL HYBRIDS The results for 1949 are summarized for each of the three regions (tables 5, 9, and 13) and the performance data from each of the locations follow the regional tables. Again it must be emphasized that these results are for a single year and must be evaluated accordingly. An outstanding new white hybrid was U. S. 523W. This hybrid has been tested for a period of two years and has shown to be

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an excellent yielder with good standing ability. U. S. 523W is well adapted to the Central and Southern Regions of the state. However, it will mature most seasons in the Northern Region providing it is planted reasonably early. It is about the same maturity as Mo. 8. Other new experimental hybrids have been tested for a relatively short time, and will need further testing before any recommendations can be made. In the Southern Region an outstanding yielder was Dixie 17, however, it lacked standing ability. Dixie 17 is a prolific late white hybrid, somewhat high eared with a good husk cover.

TABLE 2--PERIOD OF YEARS DATA FOR THE NORTHERN REGION  
SUMMARY OF ACRE YIELD, MOISTURE CONTENT OF THE GRAIN, AND  
LODGING FOR HYBRIDS TESTED FOR THE THREE YEAR PERIOD 1947,  
1948, AND 1949. AVERAGES REPRESENT THE DATA FROM 8 TESTS  
FOR THE THREE YEAR PERIOD.

Rank	Hybrid	Acre Yield Bu.	Moisture	Lodged Plants	
			in Grain %	Root %	Stalk %
1	Kan. 2234 *	94.3	19.5	4.3	4.4
2	Kan. 2275 *	89.4	17.6	1.3	6.8
3	Mo. 148	86.1	16.5	.7	11.2
3	Kan. 1639	86.1	16.3	2.4	8.2
5	Kan. 1784	85.6	15.4	3.7	6.3
6	K. K. 77	85.5	14.8	.7	6.4
7	Funks G. 80	84.0	16.4	.6	11.5
7	DeKalb 816	84.0	16.2	2.9	9.9
9	U. S. 13	83.6	15.3	2.0	8.9
9	Ohio C. 92	83.6	14.7	.7	5.5
11	Pioneer 300	83.1	16.0	6.5	7.5
12	Iowealth 25	82.4	14.6	4.0	5.7
13	Ill. 200	81.9	15.9	.1	11.7
14	Pioneer 332	81.8	16.0	6.0	10.5
15	Pfister 170	81.3	14.8	3.8	6.1
16	Funks G. 94	80.7	15.2	1.0	8.5
17	Mo. 313	80.5	15.8	.8	10.2
18	Embros 36	80.1	15.4	3.3	11.0
19	DeKalb 827	79.6	14.5	1.0	9.4
19	DeKalb 800a	79.6	14.5	.6	7.7
21	U. S. 35	77.9	15.1	.8	8.4

\* White hybrids



TABLE 3--PERIOD OF YEARS DATA FOR THE CENTRAL REGION  
SUMMARY OF ACRE YIELD, MOISTURE CONTENT OF THE GRAIN, AND  
LODGING FOR HYBRIDS TESTED FOR THE THREE YEAR PERIOD 1947,  
1948, AND 1949. AVERAGES REPRESENT THE DATA FROM 8 TESTS  
FOR THE THREE YEAR PERIOD.

Rank	Hybrid	Acre Yield Bu.	Moisture	Lodged Plants	
			in Grain %	Root %	Stalk %
1	Kan. 2234 *	75.5	18.5	23.8	3.8
2	Kan. 2275 *	70.9	17.8	17.5	3.5
3	Kan. 1639	69.0	16.3	17.3	2.2
4	DeKalb 816	67.5	16.5	10.6	5.2
5.	Ohio C. 92	65.9	15.6	12.5	2.0
6	Funks G. 94	65.8	16.1	13.7	4.0
7	Pioneer 300	65.5	16.0	20.8	4.0
8	U. S. 13	64.2	16.2	9.1	5.0
8	Funks G. 80	64.2	16.4	9.2	4.9
8	Mo. 148	64.2	17.6	17.9	4.1
8	Mo. 313	64.2	17.1	15.8	4.1
12	Ill. 200	64.1	16.2	18.5	4.8
13	Kan. 1784	62.3	15.6	14.0	3.5
14	Mo. 8	62.2	18.8	16.8	9.6
15	DeKalb 825	60.1	16.5	11.1	2.9

\* White hybrids

TABLE 4--PERIOD OF YEARS DATA FOR THE SOUTHERN REGION  
SUMMARY OF ACRE YIELD, MOISTURE CONTENT OF THE GRAIN, AND  
LODGING FOR HYBRIDS TESTED FOR THE THREE YEAR PERIOD 1947,  
1948, AND 1949. AVERAGES REPRESENT THE DATA FROM 6 TESTS  
FOR THE THREE YEAR PERIOD.

Rank	Hybrid	Acre Yield Bu.	Moisture	Lodged Plants	
			in Grain %	Root %	Stalk %
1	Kan. 2234 *	77.2	16.2	33.4	10.9
2	Kan. 2275 *	76.2	15.2	20.0	12.5
3	Funks G. 711	74.6	17.1	18.2	32.4
4	U. S. 13	68.1	15.1	17.2	17.1
4	Funks G. 80	68.1	15.2	11.1	19.2
4	Mo. 8	68.1	16.4	24.3	21.7
7	Mo. 148	67.2	15.2	15.5	20.6
8	Kan. 1784	66.2	15.3	18.9	9.4
9	Kan. 1639	65.4	15.3	15.6	11.5
10	Mo. 313	64.7	14.8	13.2	14.4
10	Pioneer 300	64.7	14.9	19.1	18.8
12	Ill. 200	64.3	14.8	12.4	17.1
13	DeKalb 875	64.0	14.9	12.0	14.5
14	Ohio C. 92	63.7	15.0	13.3	10.7
15	DeKalb 847	63.2	14.7	16.9	9.2

\* White hybrids

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TABLE 5--NORTHERN REGION. AVERAGE PERFORMANCE OF HYBRIDS TESTED IN NODAWAY, CLINTON, AND SHELBY COUNTIES IN 1949.

Rank	Hybrid	Moisture		Lodged Plants			Ear Height Grade
		Acre Yield Bu.	in Grain %	Stand %	Root %	Stalk %	
1	Kan. 2234 *	94.2	19.5	91	3.9	6.5	4.6
2	U. S. 523W *	93.0	18.0	83	1.5	7.0	4.6
3	Mo. Exp. 826	89.1	14.8	82	2.8	11.1	4.8
4	Kan. 2275 *	87.3	17.2	82	.2	9.9	4.6
5	Mo. Exp. 840	87.0	16.6	79	.3	17.5	3.9
6	Kan. 1784	85.1	15.1	84	.5	11.4	3.9
7	Keystone 38	85.0	15.3	85	.2	10.2	4.1
8	Mo. 148	84.5	15.9	81	.6	16.5	4.4
8	Ohio C. 92	84.5	14.5	83	.5	7.2	3.6
10	Pfister 392	84.1	13.7	83	1.3	9.5	3.8
11	U. S. 13	83.5	15.3	80	0	13.9	3.7
12	Mo. Exp. 836	83.4	16.2	80	0	20.2	4.5
13	K. K. 77	83.1	14.3	84	0	10.3	4.1
14	DeKalb 816	82.7	16.1	86	.9	17.5	3.9
15	Funks G 94	81.4	15.2	81	0	13.6	4.0
16	Mo. 313	81.2	16.4	73	0	18.0	4.0
17	Pfister 170	81.0	14.7	81	0	9.1	3.7
18	Pioneer 300	80.9	15.6	82	.4	15.1	3.9
19	Kan. 1639	80.3	16.2	87	1.2	12.9	3.5
20	Pioneer 332	79.8	15.8	83	1.1	21.1	4.2
21	Ill. 200	79.7	16.1	85	.1	16.8	4.1
22	U. S. 35	79.4	15.1	78	.3	9.5	3.4
23	Embros 36	79.2	16.1	85	.5	20.7	4.0
24	Ioweath 25	78.9	14.9	77	1.1	8.8	3.8
25	Funks G 80	77.5	15.9	79	1.4	12.6	4.1
26	DeKalb 800a	77.1	14.7	77	0	12.3	3.6
27	Iowa 4320	75.2	16.3	76	.5	11.6	3.9
28	DeKalb 827	74.6	14.4	76	.2	10.8	3.3

\* White hybrids

TABLE 6--PERFORMANCE DATA ON HYBRIDS TESTED NEAR MARYVILLE, MISSOURI, IN NODAWAY COUNTY.

Rank	Hybrid	Moisture		Lodged Plants			Ear Height Grade	
		Acre Yield Bu.	in Grain %	Stand %	Root %	Stalk %		Dropped Ears %
1	U. S. 523W *	114.6	19.7	73	0	8.6	0	4.5
2	Kan. 2234 *	108.9	22.2	88	.5	9.0	0	4.5
3	Mo. Exp. 826	100.1	14.6	71	0	6.4	0	4.5
4	Mo. Exp. 840	99.5	15.1	65	0	10.3	0	3.5
5	Kan. 1784	97.7	15.3	72	0	8.1	1.7	4.0
6	Keystone 38	96.7	15.6	77	0	10.9	1.6	4.0
7	K. K. 77	96.6	12.6	63	0	10.5	3.3	3.8
8	Mo. 148	96.0	16.5	64	0	11.0	.6	4.0
8	Ohio C 92	96.0	13.7	76	0	6.6	1.1	3.3
10	Pioneer 300	93.2	15.3	75	0	15.6	0	3.5
11	Pfister 170	92.7	15.3	67	0	6.8	3.1	3.5
12	Kan. 1639	92.6	16.5	80	1.0	11.5	0	3.0
13	Pfister 392	92.3	13.1	73	1.1	6.3	1.7	3.0
14	Kan. 2275 *	92.1	18.1	63	0	8.6	0	4.3
15	Pioneer 332	90.8	14.8	69	0	23.5	0	4.0
16	Ill. 200	90.7	17.9	69	0	13.9	4.8	4.0
17	Mo. Exp. 836	89.7	15.3	66	0	16.5	1.3	4.0
18	Funks G 80	89.4	15.7	56	1.5	4.5	4.5	4.3
19	Embro. 36	87.7	16.9	72	0	17.2	.6	3.8
20	U. S. 13	87.6	14.9	65	0	9.0	1.9	3.5
21	Funks G 94	86.9	13.4	69	0	17.0	3.0	3.8
22	DeKalb 816	86.2	15.8	80	0	17.3	1.6	3.3
23	Iowealth 25	85.9	15.8	62	0	8.7	0	3.5
24	DeKalb 800 A	83.9	13.9	58	0	10.0	0	3.3
25	U. S. 35	82.3	14.2	57	0	5.9	2.2	3.3
26	Mo. 313	80.4	15.1	45	0	8.3	1.8	3.8
27	DeKalb 827	78.1	14.1	54	0	12.4	0	3.3
28	Iowa 4320	74.0	16.9	57	0	11.7	2.2	3.5

\* White hybrids

Average yield 91.7 bushels.

Differences in yield between any two entries of less than 15.2 bushels are not considered significant.

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TABLE 7--1949 PERFORMANCE DATA ON HYBRIDS TESTED NEAR  
LATHROP, MISSOURI, IN CLINTON COUNTY.

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants			Dropped Husk Ears Cover Grade	Ear Height Grade
			in Grain %	Stand %	Root %	Stalk %	%		
1	Kan. 2234 *	108.7	18.7	92	11.3	8.1	.9	2.0	4.8
2	U. S. 13	107.0	15.3	95	0	24.0	1.3	3.5	4.8
3	U. S. 523W *	106.2	16.9	93	3.6	6.7	1.3	2.0	4.8
4	Kan. 2275 *	105.8	16.3	92	.5	14.0	1.4	2.0	4.8
5	Mo. Exp.840	104.8	16.0	90	.9	33.3	.5	3.3	4.3
6	Mo. Exp.826	103.9	15.6	94	8.4	15.5	.4	4.0	5.0
7	Kan 1784	100.0	15.4	90	1.4	21.3	1.9	2.8	4.0
8	Mo. 148	98.9	16.4	91	1.8	31.2	2.3	3.5	4.8
8	Oh. C 92	98.9	14.9	92	1.4	11.3	0	3.0	4.0
10	DeKalb 816	98.8	16.5	92	2.7	24.0	0	3.8	4.0
11	Iowa 4320	98.1	16.5	90	1.4	19.0	1.9	3.3	4.3
12	Mo. Exp. 836	97.9	16.5	91	0	35.6	1.4	3.8	5.0
13	Keystone 38	97.8	14.9	92	.5	13.6	2.3	3.8	4.3
13	Funks G 94	97.8	16.0	93	0	18.8	.9	3.5	4.0
15	Mo. 313	97.7	18.5	89	0	37.4	.9	4.0	4.5
16	Kan 1639	97.3	15.1	93	2.7	23.3	.9	2.8	3.8
17	Pfister 392	96.8	14.6	94	2.7	17.8	.9	4.0	4.0
18	DeKalb 800A	96.2	14.9	89	0	24.4	1.9	3.8	4.3
19	Funks G 80	95.3	16.3	93	2.7	29.9	.4	3.3	4.0
20	Pioneer 300	95.1	16.3	93	1.3	25.4	0	4.0	4.3
21	Pfister 170	94.6	14.8	90	0	16.1	.9	4.0	4.0
22	K. K. 77	94.0	15.6	95	0	16.7	1.8	3.5	4.5
23	Pioneer 332	93.7	17.0	92	3.2	36.8	0	4.0	4.8
24	DeKalb 827	93.5	14.9	92	.5	14.9	1.8	3.0	3.0
25	U. S. 35	92.2	16.4	87	0	12.4	1.0	3.5	3.3
26	Ill. 200	90.4	16.3	96	.4	29.1	3.5	3.5	4.0
27	Embros 36	89.9	15.3	91	0	36.7	.9	3.5	4.3
28	Iowealth 25	86.7	15.0	88	3.3	14.7	1.4	3.3	4.0

\* White hybrids.

Average yield 98.7 bushels.

Differences in yield between any two entries of less than 10.0 bushels are not considered significant.

TABLE 8--1949 PERFORMANCE DATA ON HYBRIDS TESTED NEAR SHELBYNA, MISSOURI, IN SHELBY COUNTY.

Rank	Hybrid	Moisture		Lodged Plants			Husk Cover Grade	Ear Height Grade	
		Acre Yield Bu.	in Grain %	Stand %	Root %	Stalk %			Dropped Ears %
1	Mo. 313	65.5	15.5	84	0	8.4	0	3.5	4.3
2	Kan. 2234 *	65.0	17.5	92	0	2.3	0	2.0	4.5
3	Iowa 25	64.1	13.9	82	0	3.0	.5	3.3	4.0
4	Kan. 2275 *	63.9	17.2	92	0	7.2	0	2.0	4.8
5	U. S. 35	63.6	14.6	89	.9	10.3	.5	3.5	3.5
6	Mo. Exp. 826	63.4	14.2	80	0	11.4	0	4.0	4.8
7	Pfister 392	63.1	13.5	83	0	4.5	0	4.0	4.3
8	DeKalb 816	63.0	16.1	87	0	11.1	1.0	4.0	4.3
9	Mo. Exp. 836	62.7	16.9	82	0	8.6	.5	4.0	4.5
10	Keystone 38	60.6	15.5	87	0	6.2	0	3.8	4.0
11	Embro 36	59.9	16.2	91	1.4	8.2	.5	3.3	4.0
12	Funks G 94	59.6	16.1	81	0	5.1	.5	3.8	4.3
13	K. K. 77	58.6	14.8	93	0	3.6	.9	3.5	4.0
13	Oh. C 92	58.6	14.8	82	0	3.6	0	3.3	3.5
15	Mo. 148	58.5	14.9	87	0	7.2	.5	3.8	4.3
16	U. S. 523W *	58.1	17.4	82	1.0	5.6	0	2.0	4.5
17	Ill. 200	58.0	14.1	90	0	7.4	0	3.0	4.3
18	Kan. 1784	57.7	14.5	89	0	4.7	.5	3.3	3.8
19	Mo. Exp. 840	56.8	18.8	81	0	8.8	3.1	3.3	4.0
20	U. S. 13	56.0	15.8	81	0	8.7	.5	3.3	4.0
21	Pfister 170	55.8	14.0	85	0	4.4	.5	3.8	3.5
22	Pioneer 332	55.0	15.5	87	0	2.9	2.9	3.5	3.8
23	Pioneer 300	54.4	15.3	78	0	4.3	1.1	3.8	4.3
24	Iowa 4320	53.4	15.6	80	0	4.1	0	3.5	4.0
25	DeKalb 827	52.3	14.2	82	0	5.1	2.5	3.3	3.5
26	DeKalb 800A	51.3	14.6	84	0	2.5	0	3.8	3.3
27	Kan. 1639	50.9	17.0	87	0	3.8	0	3.0	3.8
28	Funks G 80	47.8	15.8	88	0	3.3	.9	3.0	4.0

\* White hybrids.

Average yield 58.7 bushels.

Differences in yield between any two entries of less than 11.1 bushels are not considered significant.

## 14 MISSOURI AGRICULTURAL EXPERIMENT STATION

TABLE 9--CENTRAL REGION. AVERAGE PERFORMANCE OF HYBRIDS TESTED IN BOONE, COLE, AND LINCOLN COUNTIES IN 1949.

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants		Husk Cover Grade	Ear Height Grade
			in Grain %	Stand %	Root %	Stalk %		
1	Kan. 2234 *	94.2	16.3	98	20.4	5.5	2.2	4.0
2	U. S. 525 W *	90.3	16.5	95	8.0	13.0	2.0	4.2
3	U. S. 529 W *	90.1	17.6	96	13.0	5.9	2.0	3.9
4	U. S. 523 W *	89.0	16.9	94	9.9	5.8	2.0	3.9
5	Keystone 45	83.8	16.5	96	2.2	8.4	3.8	3.9
6	Mo. Exp. 826	81.7	16.1	90	10.4	10.2	4.0	3.9
7	Mo. Exp. 804	79.3	17.2	94	9.7	9.6	3.6	4.0
8	Kan. 1639	79.2	16.2	97	5.3	6.0	3.1	3.4
9	K. K. 88	78.0	15.2	95	3.1	9.1	3.3	3.9
9	Kan. 2275 *	78.0	17.1	93	11.7	8.0	2.3	3.8
11	Mo. 148	77.3	18.6	95	7.2	10.8	3.8	3.8
12	Pfister 170	76.5	16.4	95	6.5	6.9	3.7	3.7
13	Mo. 313	75.3	16.8	93	6.3	9.5	3.8	4.0
13	Kan. 1784	75.3	14.6	93	7.4	7.2	2.4	3.9
15	Mo. Exp. 840	75.2	15.6	91	5.6	10.2	2.9	3.9
16	Mo. 8	74.3	18.0	93	10.0	15.8	3.7	4.0
16	Funks G 94	74.3	16.5	96	4.3	10.4	3.6	3.4
18	U. S. 13	74.2	16.1	94	3.7	11.7	3.4	3.7
19	Mo. Exp. 836	74.1	16.5	89	2.9	15.1	4.0	3.9
20	DeKalb 816	72.4	16.9	96	3.7	11.2	3.8	3.6
21	Pioneer 300	72.1	15.5	94	8.7	7.4	3.6	3.7
22	Funks G. 80	71.9	16.1	96	4.6	7.2	2.9	3.9
23	Ohio C. 92	71.2	14.9	92	4.6	5.2	3.6	3.4
24	Ill. 200	70.8	16.0	95	4.8	8.0	3.7	3.9
25	Midwest 23	70.6	15.8	96	3.3	8.9	3.6	3.6
26	Embro 49	70.5	16.7	95	3.9	12.9	3.7	3.9
27	Iowa 4320	66.6	16.3	88	4.5	10.7	3.6	3.5
28	DeKalb 825	65.5	17.3	92	5.3	6.8	3.9	3.0

\* White hybrids.

TABLE 10--1949 PERFORMANCE DATA ON HYBRIDS TESTED NEAR COLUMBIA, MISSOURI, IN BOONE COUNTY.

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants			Ear Cover Grade	Ear Height Grade
			Grain %	Stand %	Root %	Stalk %	Dropped Ears %		
1	Kan. 2234 *	122.5	16.7	99	60.0	4.2	0	2.3	4.0
2	U. S. 529W *	119.8	17.8	95	36.8	2.2	0	2.0	4.0
3	U. S. 525W *	114.1	15.5	92	22.7	15.5	0	2.0	4.5
4	U. S. 523W *	111.6	16.4	91	28.4	6.4	0	2.0	4.0
5	Kan. 2275 *	105.6	18.0	86	35.0	9.7	0	2.0	4.0
6	Keystone 45	103.6	16.3	97	5.6	15.9	0	3.5	3.8
7	Mo. Exp. 826	103.0	16.5	88	31.3	13.7	0	4.0	4.0
8	Mo. 8	102.6	17.7	90	24.9	20.3	0	3.8	4.0
9	Kan. 1639	99.8	15.7	95	14.5	7.9	0	2.8	3.0
10	Funks G. 80	98.6	16.0	96	12.6	11.3	.4	2.5	4.0
11	Mo. 313	98.4	15.1	90	18.9	12.9	0	4.0	4.0
11	Mo. Exp. 804	98.4	18.1	91	27.9	12.3	0	3.8	4.0
13	U. S. 13	98.2	16.1	93	11.2	15.2	.4	3.5	3.8
14	Mo. Exp. 840	97.7	16.2	86	15.5	14.5	1.0	3.0	4.0
15	Kan. 1784	96.2	15.4	92	20.8	9.5	0	2.3	3.8
16	K. K. 88	96.1	15.3	95	8.3	12.7	0	3.3	3.8
17	Pioneer 300	95.3	16.3	94	26.2	15.6	0	3.8	3.5
18	Pfister 170	95.2	15.4	91	19.6	7.8	0	3.3	3.8
19	Mo. 148	94.6	16.9	94	21.7	9.7	0	4.0	4.0
20	DeKalb 816	94.5	16.2	95	11.0	21.1	0	3.5	3.5
20	Funks G 94	94.5	16.3	97	12.9	17.6	0	3.8	3.5
22	Ohio C 92	92.8	15.3	88	13.7	6.2	0	3.3	3.5
23	Midwest 23	92.5	15.3	96	10.0	15.2	0	3.8	3.5
24	Mo. Exp. 836	92.0	17.3	85	8.8	18.5	0	4.0	3.8
25	Embro 49	91.9	16.4	93	11.6	20.5	.4	3.8	3.8
26	Ill. 200	87.0	15.2	93	14.3	9.0	0	3.3	4.0
27	DeKalb 825	85.6	16.5	87	15.8	12.9	0	4.0	3.0
28	Iowa 4320	83.8	16.0	80	13.5	17.2	0	3.8	3.8

\* White hybrids

Average yield 98.9 bushels.

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

# 16 MISSOURI AGRICULTURAL EXPERIMENT STATION

TABLE 11--1949 PERFORMANCE DATA ON HYBRIDS TESTED NEAR JEFFERSON CITY, MISSOURI, IN COLE COUNTY.

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants			Husk Cover Grade	Ear Height Grade
			in Grain %	Stand %	Root %	Stalk %	Dropped Ears %		
1	U. S. 523 W *	106.0	19.6	95	1.3	1.8	0	2.0	4.0
2	Kan. 2234 *	102.0	19.2	96	1.3	.9	0	2.0	4.0
3	U. S. 525 W *	101.5	17.6	95	1.3	4.4	0	2.0	4.0
4	U. S. 529 W *	97.1	20.5	97	2.1	3.0	0	2.0	3.8
5	Mo. 148	96.9	17.1	94	0	7.5	0	3.5	4.0
6	Keystone 45	96.0	18.0	95	0	1.8	.9	4.0	4.0
7	K. K. 88	93.6	15.3	94	.9	6.2	.9	3.3	4.0
8	Mo. Exp. 804	93.1	18.2	95	1.3	4.8	.9	3.3	4.0
9	Mo. Exp. 826	92.7	17.7	93	0	1.3	0	4.0	4.0
10	Kan. 1639	91.6	17.4	99	1.3	1.7	0	3.3	3.8
11	Pfister 170	90.6	14.9	97	0	1.7	0	4.0	3.8
12	Kan. 1784	89.4	15.5	94	1.3	5.8	0	2.5	4.0
13	Funks G 94	89.2	15.8	97	0	5.2	.4	3.3	3.5
14	Kan. 2275 *	88.5	18.1	97	0	.9	1.3	2.5	3.8
15	Midwest 23	85.8	16.3	94	0	2.2	.4	3.3	3.8
16	Pioneer 300	84.2	15.8	92	0	2.3	0	3.3	3.8
17	Mo. Exp. 836	84.0	18.5	91	0	5.0	0	4.0	4.0
18	Mo. 313	83.6	16.9	90	0	3.7	.5	3.5	4.0
19	DeKalb 816	82.8	17.2	95	0	1.8	0	4.0	3.8
20	Mo. 8	82.5	20.1	92	2.7	5.4	.5	3.5	4.0
21	Ill. 200	82.2	17.9	96	0	2.2	.9	4.0	4.0
22	Funks G 80	81.6	17.8	95	0	1.7	1.7	3.3	3.8
23	U. S. 13	81.2	17.2	92	0	6.8	.5	3.3	3.8
23	Embryo 49	81.2	15.3	95	0	6.1	1.8	3.5	3.8
25	Mo. Exp. 840	79.9	17.4	92	1.4	5.0	0	2.8	4.0
26	DeKalb 825	77.0	16.0	93	0	.4	.9	3.8	3.0
27	Ohio C. 92	76.4	15.2	96	0	2.6	0	3.8	3.3
28	Iowa 4320	75.8	17.0	93	0	5.8	0	3.3	3.3

\* White hybrids

Average yield 97.0 bushels.

Differences in yield between any two entries of less than 14.2 bushels are not considered significant.



TABLE 12--1949 PERFORMANCE DATA ON HYBRIDS TESTED NEAR  
ELSBERRY, MISSOURI, IN PIKE COUNTY.

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants			Ear Height Grade
			Grain %	Stand %	Root %	Stalk %	Dropped Ears %	
1	Kan. 2234 *	58.1	13.1	98	0	11.4	.8	4.0
2	U. S. 525 W *	55.4	16.4	98	0	19.1	2.6	4.0
3	U. S. 529 W *	53.5	14.6	96	0	12.6	.4	4.0
4	Keystone 45	51.7	15.1	95	.9	7.4	.4	3.8
5	Mo. Exp. 826	49.4	14.2	90	0	15.7	1.8	3.8
5	U. S. 523 W *	49.4	14.6	95	0	9.2	0	3.8
7	Mo. Exp. 840	48.0	13.1	95	0	11.0	0	3.8
8	Mo. Exp. 804	46.4	15.3	97	0	11.6	.4	4.0
9	Mo. Exp. 836	46.3	13.8	90	0	21.9	0	3.8
10	Kan. 1639	46.2	15.6	96	0	8.3	.4	3.3
11	Ohio C. 92	44.4	14.3	93	0	6.7	.9	3.5
12	K. K. 88	44.3	14.9	95	0	8.4	1.3	3.8
13	Mo. 313	43.9	18.5	98	0	11.9	2.1	4.0
14	Pfister 170	43.6	19.0	98	0	11.1	0	3.5
15	U. S. 13	43.2	15.1	96	0	13.0	.4	3.5
16	Ill. 200	43.1	14.9	95	0	12.7	0	3.8
17	Mo. 148	40.5	15.7	98	0	15.3	3.8	3.5
18	Iowa 4320	40.3	16.0	91	0	9.2	.9	3.3
19	Kan. 1784	40.2	13.0	93	0	6.3	1.8	3.8
20	DeKalb 816	40.0	17.2	97	0	10.7	.4	3.5
21	Kan. 2275 *	39.8	15.2	97	0	13.3	1.3	3.5
22	Funks G 94	39.1	17.4	95	0	8.3	1.8	3.3
23	Embro 49	38.4	18.4	96	0	12.2	2.2	4.0
24	Mo. 8	37.7	16.1	98	2.5	21.6	2.1	4.0
25	Pioneer 300	36.9	14.5	95	0	4.4	.9	3.8
26	Funks G 80	35.6	14.4	98	1.3	8.5	.4	3.8
27	DeKalb 825	34.0	19.4	96	0	7.0	2.6	3.0
28	Midwest 23	33.6	15.9	98	0	9.4	1.7	3.5

\* White hybrids.

Average yield 43.5 bushels.

Differences in yield between any two entries of less than 12.0 bushels are not considered significant.

TABLE 13--SOUTHERN REGION. PERFORMANCE OF HYBRIDS TESTED IN NEW MADRID AND PEMISCOT COUNTIES IN 1949.

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants		Husk Cover Grade	Ear Height Grade
			in Grain %	Stand %	Root %	Stalk %		
1	Dixie 17 *	100.2	15.1	95	18.0	43.8	2.0	4.8
2	Mo. Exp. 5366W *	94.7	14.7	93	13.9	26.9	2.2	4.0
3	Funks G. 711	90.6	16.1	97	7.5	52.3	3.8	4.3
4	U. S. 529 W *	89.7	15.7	98	18.3	12.6	2.2	4.2
5	U. S. 523 W *	89.3	14.8	96	7.4	14.6	2.0	3.9
6	Keystone 222	88.8	17.1	87	13.0	46.2	3.9	4.4
7	U. S. 527 W *	87.6	14.9	98	6.6	29.4	2.0	4.7
8	Kan. 2275 *	84.7	15.1	99	9.0	13.4	2.5	4.1
9	Mo. Exp. 804	82.7	15.0	96	5.9	29.3	3.3	3.8
10	Mo. Exp. 840	81.0	15.5	96	4.6	24.0	3.2	3.4
11	Funks G. 80	80.7	14.9	97	4.8	25.6	3.6	3.7
12	Kan. 2234 *	80.2	15.8	95	24.3	12.9	2.2	4.2
13	Kan. 1639	78.8	14.6	97	4.6	13.4	3.7	2.8
14	U. S. 13	76.7	14.5	97	8.5	28.0	3.9	3.5
15	Mo. Exp. 826	76.5	15.7	89	13.2	27.6	3.9	4.0
16	Mo. 148	75.7	14.8	97	4.3	31.6	3.7	3.8
17	Pfister 662	74.6	14.7	89	15.3	18.3	3.7	4.2
18	Pioneer 300	74.4	14.4	96	11.6	28.1	3.7	3.3
19	Mo. 8	74.2	16.0	96	12.8	32.5	3.3	3.7
20	Mo. 313	72.6	14.7	94	1.7	21.4	4.0	3.4
21	Kan. 1784	72.4	14.4	94	10.0	15.5	3.2	3.3
22	Ohio C. 92	72.0	14.4	95	3.8	13.2	3.8	3.2
23	Pfister 392	71.6	14.4	95	2.9	13.9	4.0	3.2
24	DeKalb 875	70.7	15.1	97	1.9	16.5	4.1	2.9
25	DeKalb 847	68.8	14.9	86	5.7	14.2	3.7	3.0
26	Ill. 200	67.5	14.6	97	4.5	26.0	3.9	3.4
27	Iowa 4320	66.8	15.1	89	7.7	24.9	3.8	3.3
28	Embro 49	66.7	14.8	96	10.3	33.5	3.9	3.4

\* White hybrids.

TABLE 14-- 1949 PERFORMANCE DATA ON HYBRIDS TESTED NEAR SIKESTON, MISSOURI, IN NEW MADRID COUNTY.

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants		Dropped Ears %	Husk Cover Grade	Ear Height Grade
			in Grain %	Stand %	Root %	Stalk %			
1	Dixie 17 *	121.6	15.0	99	13.2	39.0	0	2.0	5.0
2	Funks G 711	108.5	16.5	98	3.2	59.0	0	3.8	4.3
3	Mo. 5366W *	108.2	14.6	93	7.4	26.2	0	2.0	4.0
4	U. S. 523W *	96.3	14.9	96	5.1	7.8	0	2.0	3.8
5	U. S. 527W *	96.0	14.6	96	2.6	11.0	0	2.0	4.5
6	U. S. 529W *	94.2	15.4	98	8.3	3.8	0	2.0	4.3
7	Kan. 2275 *	93.5	15.2	99	5.1	5.1	0	2.5	4.3
8	Keystone 222	92.9	17.9	81	3.1	51.2	0	3.8	4.3
9	Kan. 2234 *	87.2	15.4	94	16.7	5.3	0	2.3	4.3
10	U. S. 13	85.1	14.1	99	1.3	11.9	0	4.0	3.5
11	Mo. 804	85.0	15.1	98	3.8	17.2	.6	3.3	3.8
12	Mo. 840	84.6	14.5	94	4.0	13.9	0	2.8	3.5
13	Funks G 80	83.9	14.6	96	3.2	24.0	0	3.3	3.8
14	Mo. 826	83.5	16.1	93	5.4	26.8	0	4.0	4.0
15	Mo. 148	82.4	14.2	98	3.8	24.8	0	3.8	3.8
16	Pfister 661	82.1	14.1	90	4.9	8.3	0	3.8	4.3
17	Oh. C 92	81.1	13.7	97	0	8.4	0	3.8	3.0
18	Pioneer 300	80.1	14.0	94	4.6	21.2	0	3.8	3.3
19	Pfister 392	79.3	13.7	94	1.3	8.6	0	4.0	3.0
20	Kan. 1639	79.1	14.3	98	0	7.1	0	3.3	2.5
21	Embro 49	78.7	14.3	99	0	28.5	0	4.0	3.5
22	Mo. 8	78.6	16.4	98	5.1	16.7	0	3.0	4.0
23	DeKalb 875	78.3	14.6	99	2.5	13.2	0	4.3	2.8
24	Mo. 313	78.0	14.0	92	3.4	11.6	0	4.0	3.5
25	Kan. 1784	77.9	14.1	96	3.9	15.0	0	3.0	3.5
26	DeKalb 847	73.7	13.7	88	2.8	5.7	0	4.3	3.0
27	Ill. 200	72.6	13.8	98	2.5	24.2	.6	3.8	3.0
28	Iowa 4320	68.1	14.0	83	3.0	17.3	.8	3.8	3.3

\* White hybrids.

Average yield 86.4 bushels.

Differences in yield between any two entries of less than 8.0 bushels are not considered significant.

## 20 MISSOURI AGRICULTURAL EXPERIMENT STATION

TABLE 15--1949 PERFORMANCE DATA ON HYBRIDS TESTED NEAR  
CARUTHERSVILLE, MISSOURI, IN PEMISCOT COUNTY.

Rank	Hybrid	Moisture		Lodged Plants			Dropped Ears %	Husk Cover Grade	Ear Height Grade
		Acre Yield Bu.	in Grain %	Stand %	Root %	Stalk %			
1	U. S. 529W *	85.2	15.9	98	30.2	21.3	0	2.3	4.0
2	Keystone 222	84.7	16.2	93	22.8	41.1	0	4.0	4.5
3	U. S. 523W *	82.3	14.7	96	9.6	21.3	0	2.0	4.0
4	Mo. Exp. 5366W *	81.1	14.8	92	20.3	27.5	0	2.3	4.0
5	Mo. Exp. 804	80.4	14.9	94	8.0	41.3	0	3.3	3.8
6	U. S. 527W *	79.1	15.1	99	10.5	47.7	0	2.0	4.8
7	Dixie 17 *	78.8	15.1	90	22.7	48.6	0	2.0	4.5
8	Kan. 1639	78.5	14.9	96	9.1	19.6	0	4.0	3.0
9	Funks G 80	77.5	15.2	98	6.4	27.1	0	3.8	3.5
10	Mo. Exp. 840	77.4	16.4	97	5.2	34.1	0	3.5	3.3
11	Kan. 2275 *	75.8	14.9	98	12.8	21.7	0	2.5	3.8
12	Kan. 2234 *	73.1	16.1	95	31.9	20.5	0	2.0	4.0
13	Funks G 711	72.6	15.6	96	11.7	45.5	0	3.8	4.3
14	Mo. 8	69.7	15.5	94	20.4	48.2	0	3.5	3.3
15	Mo. Exp. 826	69.4	15.3	84	20.9	28.4	0	3.8	4.0
16	Mo. 148	68.9	15.3	96	4.8	38.3	0	3.5	3.8
17	Pioneer 300	68.6	14.8	97	18.5	34.9	0	3.5	3.3
18	U. S. 13	68.2	14.8	95	15.7	44.1	0	3.8	3.5
19	Mo. 313	67.1	15.3	96	0	31.2	0	4.0	3.3
21	Pfister 661	67.1	15.3	97	25.6	28.2	0	3.5	4.0
21	Kan. 1784	66.9	14.6	91	16.0	16.0	0	3.3	3.0
22	Iowa 4320	65.4	16.1	95	12.3	32.5	.4	3.8	3.3
23	Pfister 392	63.9	15.1	95	4.4	19.2	0	4.0	3.3
24	DeKalb 847	63.8	16.0	83	8.5	22.6	0	4.0	3.0
25	DeKalb 875	63.1	15.5	95	1.3	19.7	0	3.8	3.0
26	Oh. C 92	62.8	15.1	93	7.6	17.9	0	3.8	3.3
27	Ill. 200	62.4	15.4	96	6.5	27.8	0	4.0	3.8
28	Embro 49	54.6	15.3	93	20.5	38.4	0	3.8	3.3

\* White hybrids.

Average yield 71.5 bushels.

Differences in yield between any two entries of less than 14.6 bushels are not considered significant.

## PART II

## EXPERIMENTAL HYBRIDS

**1949 RESULTS ON EXPERIMENTAL HYBRIDS** Performance tests for experimental hybrids of the following maturities were conducted in 1949: midseason yellow (U. S. 13 maturity), late yellow (Mo. 8 maturity), midseason white (Ill. 200 maturity), and late white (Mo. 8 maturity). Tests were conducted in the same manner and locations as the commercial tests. Hybrids labelled C. B. are experimental hybrids from the cooperative work of the Corn Belt Experiment stations, and N. E. hybrids are similar hybrids from the cooperative work of the Northeastern experiment stations. The data for experimental hybrids are being made available for folks who are interested in the breeding progress of new experimental hybrids, and for experiment station workers in other states. As the results are for a single year, specific recommendations will not be made until further testing has been accomplished.

TABLE 16--AVERAGE PERFORMANCE DATA ON MIDSEASON EXPERIMENTAL HYBRIDS (U. S. 13 MATURITY) TESTED IN NODAWAY, CLINTON, AND SHELBY COUNTIES.

Rank	Hybrid	Moisture			Lodged Plants		Husk Cover Grade	Ear Height Grade
		Acre Yield Bu.	in Grain %	Stand %	Root %	Stalk %		
1	Mo. 843	97.7	16.1	83	2.7	7.3	3.4	4.1
2	N. E. 7830	97.0	13.9	83	0	10.9	3.3	4.1
3	Iowa 4531	93.9	14.4	84	1.3	10.6	3.7	3.9
4	C. B. 7530	93.3	14.9	83	4.7	8.2	3.7	3.9
5	C. B. 7539	92.0	14.4	79	3.0	5.1	3.7	4.0
6	N. E. 7847	91.1	16.6	81	5.8	7.2	3.5	3.9
7	N. E. 7826	90.4	16.4	78	1.7	4.5	3.1	3.8
7	Mo. 829	90.4	15.0	83	2.6	9.6	4.0	3.8.
9	Mo. 831	89.6	14.1	85	4.3	4.2	3.7	3.7
10	Iowa 4476	89.1	16.3	82	0	11.4	3.2	3.9
11	Nebr. 701	88.2	16.3	82	0.3	15.5	3.4	4.0
12	Mo. 841	87.7	17.2	78	3.5	7.6	3.7	4.3
13	C. B. 7522	87.5	14.8	83	2.9	9.7	3.7	4.1
14	U. S. 13	87.3	15.8	79	0.4	10.7	3.9	4.3
15	N. E. 7802	86.5	14.0	81	0.3	7.3	3.7	4.0
16	Mo. 842	86.3	16.9	79	2.6	8.3	3.7	4.5
17	Kan. 1639	85.6	15.1	81	1.7	10.8	2.9	3.4
18	N. E. 7803	85.5	15.1	84	1.7	8.6	3.3	4.0
19	N. E. 7805	85.2	15.6	82	8.2	13.5	3.6	4.3
19	Mo. 833	85.2	15.8	83	1.6	11.5	3.9	3.8
21	Mo. 832	84.6	14.7	77	3.5	4.0	3.6	3.3
22	C. B. 7516	84.0	15.4	83	2.7	11.1	3.8	4.0
23	Mo. 837	81.8	16.7	77	1.7	12.6	4.0	4.4
24	C. B. 7533	81.4	14.8	84	1.0	9.9	3.8	3.8
25	C. B. 7525	79.7	16.9	81	4.0	13.6	3.5	4.4
26	C. B. 7517	79.4	15.6	77	2.3	13.7	3.9	3.7
27	Mo. 830	79.1	15.0	75	0.9	9.3	4.0	3.8
28	C. B. 7544	77.6	13.6	79	2.1	6.2	4.0	4.0

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TABLE 17--1949 PERFORMANCE DATA ON MIDSEASON EXPERIMENTAL HYBRIDS (U. S. 13 MATURITY) TESTED NEAR MARYVILLE, MISSOURI, IN NODAWAY COUNTY.

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants			Ear Height Grade
			in Grain %	Stand %	Root %	Stalk %	Dropped Ears %	
1	C.B. 7530	110.6	14.7	76	1.1	6.0	1.1	3.8
2	Mo. 843	109.1	14.7	66	.6	5.1	1.9	4.0
3	Mo. 842	106.0	17.9	68	0	7.3	1.8	4.3
3	N.E. 7830	106.0	12.8	69	0	8.4	2.4	4.0
5	C.B. 7539	104.3	14.9	63	0	2.6	0	4.0
6	Iowa 4531	103.9	13.1	69	0	4.8	.6	4.0
7	N.E. 7847	103.4	15.0	71	0	5.3	1.2	3.5
8	Mo. 841	103.1	16.6	66	0	4.4	1.9	4.0
9	N.E. 7826	102.9	15.7	67	0	5.6	0	3.8
10	Iowa 4476	100.4	16.3	60	0	4.2	.7	4.0
11	Nebr. 701	99.4	15.0	70	0	6.5	.6	3.8
12	C.B. 7516	99.2	14.9	72	0	4.7	.6	4.0
13	Mo. 831	98.8	13.3	68	0	3.0	0	3.5
14	N.E. 7805	98.3	15.1	73	0	13.7	3.4	4.0
15	C.B. 7522	95.8	15.8	63	.7	7.2	.7	3.8
16	Mo. 833	94.1	15.0	63	1.3	1.3	.7	3.8
17	C.B. 7525	94.0	15.8	72	0	10.9	.6	4.0
18	C.B. 7533	92.6	14.0	71	0	6.5	0	3.8
18	N.E. 7802	92.6	12.5	68	0	6.7	.6	3.8
20	N.E. 7803	91.7	14.9	68	0	9.1	1.2	4.0
20	Mo. 829	91.7	13.6	63	0	9.9	.7	3.5
22	Mo. 832	88.3	15.0	62	0	2.7	.7	3.0
23	Kan. 1639	88.2	14.8	64	0	5.8	3.9	3.0
24	U.S. 13	87.7	15.9	53	0	5.5	3.9	4.0
24	C.B. 7517	87.7	16.1	52	1.6	13.7	3.2	3.5
26	C.B. 7544	87.3	13.0	61	.7	4.1	0	3.8
27	Mo. 830	77.3	13.8	45	0	3.7	3.7	4.0
28	Mo. 837	70.3	15.1	45	0	3.7	0	3.8

Average yield 96.0 bushels.

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

TABLE 18--1949 PERFORMANCE DATA ON MIDSEASON EXPERIMENTAL HYBRIDS (U. S. 13 MATURITY) TESTED NEAR LATHROP, MISSOURI, IN CLINTON COUNTY.

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants		Dropped Ears %	Husk Cover Grade	Ear Height Grade
			in Grain %	Stand %	Root %	Stalk %			
1	N. E. 7830	120.1	14.1	98	0	21.2	2.1	3.0	4.3
2	Mo. 843	115.9	16.3	95	7.4	14.0	1.3	3.3	4.5
3	C. B. 7539	115.2	13.9	97	9.1	7.8	1.3	3.8	4.5
4	Mo. 841	113.9	17.0	94	10.6	16.8	2.7	3.5	4.8
5	Iowa 4531	112.7	15.0	96	2.6	24.2	0	3.3	4.0
6	Mo. 829	112.4	15.3	98	7.7	16.2	.9	4.0	4.0
7	N. E. 7826	111.5	17.3	91	5.0	6.4	.5	3.0	4.0
8	N. E. 7802	109.9	15.1	97	.9	12.0	5.2	3.5	4.3
9	C. B. 7530	109.7	15.7	97	12.9	13.8	2.6	3.5	4.0
10	N. E. 7803	109.3	15.4	95	5.2	10.9	.9	3.0	4.3
11	U. S. 13	108.2	16.5	98	1.3	21.2	3.0	4.0	4.5
12	Mo. 837	108.1	17.9	98	5.1	23.5	.4	4.0	4.5
13	Mo. 832	107.6	15.2	95	10.5	5.3	.4	3.3	3.5
14	Nebr. 701	106.8	15.9	96	.9	32.6	3.9	3.3	4.3
15	Kan. 1639	106.6	15.6	96	5.2	22.1	1.3	2.5	3.8
16	N. E. 7847	106.3	16.6	98	17.4	12.3	.9	3.5	4.3
17	Mo. 831	106.2	14.8	95	10.5	7.9	.4	3.8	3.5
18	C. B. 7522	105.5	15.3	95	7.9	15.0	1.8	3.8	4.5
19	Iowa 4476	105.3	16.4	96	0	21.3	2.6	2.8	4.0
20	Mo. 833	105.1	15.4	96	2.2	24.2	.4	3.8	3.5
21	Mo. 842	104.8	16.4	90	7.9	13.4	4.6	3.5	4.8
22	Mo. 830	104.3	15.3	97	2.6	18.5	0	4.0	3.8
23	C. B. 7525	103.1	17.1	97	10.3	22.0	.4	3.5	5.0
24	N. E. 7805	101.0	16.0	96	24.7	22.1	2.6	3.8	5.0
25	C. B. 7516	97.3	15.1	94	8.0	16.4	.9	3.8	4.5
26	C. B. 7533	96.7	15.3	95	3.1	12.8	2.2	3.5	3.8
26	C. B. 7517	96.7	15.3	95	5.3	23.8	1.3	3.8	3.8
28	C. B. 7544	92.5	14.3	92	5.5	8.6	.9	4.0	4.5

Average yield 107.3 bushels.

Differences in yield between any two entries of less than 9.4 bushels are not considered significant.

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TABLE 19--1949 PERFORMANCE DATA ON MIDSEASON EXPERIMENTAL HYBRIDS (U. S. 13 MATURITY) TESTED NEAR SHELBYNA, MISSOURI, IN SHELBY COUNTY.

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants			Dropped Ears %	Husk Cover Grade	Ear Height Grade
			in Grain %	Stand %	Root %	Stalk %				
1	Mo. 843	68.0	17.2	88	0	2.8	3.3	3.5	3.8	
2	Mo. 829	67.2	16.1	89	0	2.8	.9	4.0	4.0	
3	Mo. 837	66.9	17.2	87	0	10.6	1.4	4.0	4.8	
4	U. S. 13	65.9	14.9	85	0	5.4	2.0	3.8	4.3	
5	Iowa 4531	65.1	15.2	86	1.4	2.9	1.9	4.0	3.8	
6	N. E. 7830	64.9	14.8	81	0	3.1	1.5	3.5	4.0	
7	Mo. 831	63.7	14.0	92	2.3	1.8	0	3.5	4.0	
7	N. E. 7847	63.7	18.1	74	0	4.0	.6	3.5	4.0	
9	Kan. 1639	61.9	15.0	83	0	4.5	0	3.3	3.5	
10	Iowa 4476	61.5	16.1	90	0	8.8	2.3	3.5	3.8	
11	C. B. 7522	61.2	13.3	92	0	6.8	2.3	3.5	4.0	
12	C. B. 7530	59.7	14.2	77	0	4.9	1.8	3.8	4.0	
13	Nebr. 701	58.5	17.9	80	0	7.3	1.6	3.5	4.0	
14	Mo. 832	57.9	13.9	74	0	4.0	.6	3.8	3.3	
15	N. E. 7802	57.0	14.3	79	0	3.2	2.1	3.8	3.8	
16	N. E. 7826	56.9	16.3	76	0	1.6	1.1	3.3	3.5	
17	C. B. 7539	56.5	14.5	76	0	4.9	0	3.5	3.5	
18	Mo. 833	56.4	17.0	89	1.4	8.9	0	4.0	4.0	
19	N. E. 7805	56.2	15.8	78	0	4.8	1.6	3.3	4.0	
20	Mo. 830	55.8	16.0	82	0	5.6	1.5	4.0	3.5	
21	C. B. 7516	55.4	16.1	83	0	12.1	1.0	3.8	3.5	
21	N. E. 7803	55.4	15.1	88	0	5.7	0	3.5	3.8	
23	C. B. 7533	55.0	15.1	85	0	10.3	1.0	4.0	3.8	
24	C. B. 7517	53.9	15.3	83	0	3.5	.5	4.0	3.8	
25	C. B. 7544	53.1	13.5	85	0	5.9	.5	4.0	3.8	
26	Mo. 842	48.1	16.5	80	0	4.2	1.6	3.8	4.3	
27	Mo. 841	46.2	17.9	75	0	1.7	1.7	3.8	4.0	
28	C. B. 7525	41.9	17.8	75	1.7	7.8	.6	3.5	4.3	

Average yield 58.3 bushels.

Differences in yield between any two entries of less than 12.0 bushels are not considered significant.



TABLE 20--1949 PERFORMANCE DATA ON MIDSEASON EXPERIMENTAL HYBRIDS (U. S. 13 MATURITY) TESTED NEAR JEFFERSON CITY, MISSOURI, IN COLE COUNTY.

Rank	Hybrid	Acre Yield Bu.	Moisture	Lodged Plants			Dropped Ears %	Husk Cover Grade	Ear Height Grade
			in Grain %	Stand %	Root %	Stalk %			
1	Mo. 837	95.3	15.4	92	.9	2.7	.5	4.0	3.8
2	N. E. 7847	94.9	16.6	92	0	5.9	0	3.3	4.0
3	Mo. 842	94.6	16.5	94	0	4.4	0	3.8	4.0
4	Kan. 1639	93.3	16.2	95	2.6	5.3	0	2.8	3.5
5	Mo. 843	92.4	14.6	93	0	1.8	.6	2.5	2.8
5	Mo. 844	92.4	17.1	95	0	5.7	0	3.3	4.0
7	N. E. 7826	92.3	16.1	92	0	2.7	0	3.3	4.0
8	N. E. 7803	91.0	16.3	86	0	2.9	0	2.5	4.0
9	Nebr. 701	90.9	15.5	99	0	5.9	0	3.8	3.8
10	C. B. 7526	90.7	14.7	93	0	2.2	0	3.8	3.5
11	N. E. 7802	90.1	16.1	99	0	1.7	.4	3.0	4.0
12	Iowa 4476	88.0	16.3	94	0	.9	.4	2.8	3.5
13	C. B. 7528	86.9	15.6	90	0	1.4	.9	3.3	3.5
14	Mo. 831	86.4	14.8	96	0	1.3	0	3.5	3.5
15	Mo. 841	85.9	18.7	91	1.4	3.2	.9	3.0	3.8
16	C. B. 7520	85.6	14.7	95	0	3.5	0	3.0	3.8
17	Mo. 838	85.5	15.1	95	0	3.1	0	3.8	4.0
18	C. B. 7502	85.2	17.1	97	0	3.9	.9	3.0	3.8
19	Mo. 829	84.8	14.9	89	0	2.3	0	3.8	3.5
20	Mo. 830	84.5	16.5	90	0	.9	0	4.0	3.8
21	Mo. 832	84.4	15.1	91	0	3.2	0	3.0	3.5
22	U. S. 13	82.8	16.0	87	0	3.4	.5	3.0	3.5
23	N. E. 7805	82.5	16.4	88	3.8	3.8	0	2.8	4.0
24	Mo. 833	81.6	17.9	95	0	1.8	0	3.3	3.0
25	N. E. 7830	79.9	16.2	92	0	4.5	1.4	3.5	3.8
26	C. B. 7503	71.0	17.4	90	0	4.2	1.9	3.0	3.5
27	C. B. 7512	63.5	15.5	85	0	2.5	0	3.3	3.0
28	C. B. 7504	59.3	15.4	95	0	2.2	0	3.0	3.0

Average yield 85.6 bushels.

Differences in yield between any two entries of less than 14.6 bushels are not considered significant.

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TABLE 21--AVERAGE PERFORMANCE DATA ON MIDSEASON EXPERIMENTAL HYBRIDS (U. S. 13 MATURITY) TESTED IN NEW MADRID AND PEMISCOT COUNTIES.

Rank	Hybrid	Acre Yield Bu.	Stand %	Lodged Plants		Husk Cover Grade	Ear Height Grade
				Stalk %			
1	Iowa 4476	68.2	96	20.5		3.7	3.3
2	Mo. 832	66.2	97	13.1		3.8	2.9
2	C. B. 7516	66.2	95	19.3		3.9	3.2
4	Mo. 844	65.7	97	22.4		4.0	3.6
5	Mo. 831	64.8	94	11.9		3.9	3.0
6	C. B. 7520	64.2	95	21.3		3.9	3.3
7	C. B. 7526	62.7	96	27.0		3.7	3.3
8	Mo. 829	62.5	97	15.5		4.0	3.0
9	C. B. 7528	62.3	99	17.6		4.1	2.5
10	C. B. 7539	61.9	98	13.6		3.6	3.2
11	Mo. 833	61.2	99	16.6		4.0	3.0
12	Kan. 1639	60.8	98	14.2		3.6	3.2
12	C. B. 7544	60.8	98	17.2		4.0	3.3
12	C. B. 7525	60.8	97	24.0		3.7	3.6
15	C. B. 7517	60.6	96	19.0		4.0	3.3
16	C. B. 7522	60.4	97	22.6		3.9	3.1
17	N. E. 7802	60.3	94	12.8		3.4	3.0
17	C. B. 7502	60.3	98	20.0		3.7	3.0
19	Nebr. 701	59.9	97	21.0		3.9	3.2
20	Mo. 837	59.7	94	17.8		3.8	3.3
21	Mo. 838	59.6	94	26.6		3.9	3.2
22	C. B. 7533	59.5	96	14.2		3.9	2.7
23	C. B. 7530	59.4	96	14.9		3.5	3.2
24	Mo. 830	59.1	88	13.7		4.0	3.3
25	U. S. 13	56.5	98	17.6		3.8	3.4
26	C. B. 7512	53.5	94	23.3		3.7	2.7
27	C. B. 7504	48.9	94	16.6		3.7	2.5
28	C. B. 7503	48.6	96	17.5		3.9	3.3

TABLE 22--1949 PERFORMANCE DATA ON MIDSEASON EXPERIMENTAL HYBRIDS (U. S. 13 MATURITY) TESTED NEAR SIKESTON, MISSOURI, IN NEW MADRID COUNTY.

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants		Dropped Ears %	Husk Cover Grade	Ear Height Grade
			Grain %	Stand %	Root %	Stalk %			
1	N. E. 7802	77.0	12.7	96	6.5	1.3	.6	3.8	3.0
2	C. B. 7530	76.1	12.5	98	6.4	5.1	0	3.5	3.3
3	C. B. 7526	75.7	13.1	98	3.8	18.5	0	3.8	3.5
4	Mo. 844	75.5	13.1	98	1.3	17.3	1.3	4.0	3.8
5	Mo. 832	74.9	12.3	97	2.6	.6	0	3.5	3.0
6	Iowa 4476	74.8	13.3	97	3.2	10.3	0	3.5	3.5
7	C. B. 7502	74.4	13.5	99	4.4	5.7	0	3.8	3.0
8	C. B. 7528	73.7	12.6	99	1.3	8.8	0	4.3	3.0
9	C. B. 7517	73.6	12.8	99	1.3	11.4	0	4.0	3.5
10	C. B. 7516	73.3	12.9	98	1.3	9.0	0	3.8	3.3
11	C. B. 7539	73.0	13.0	98	5.1	1.3	0	3.3	3.3
11	Mo. 831	73.0	13.0	93	2.7	1.3	0	3.8	3.0
13	Mo. 830	72.9	12.8	94	6.6	4.0	0	4.0	3.5
14	C. B. 7525	72.5	13.2	97	6.5	16.1	0	3.8	3.8
15	Mo. 829	72.3	13.0	98	6.4	4.5	0	4.0	3.0
15	Mo. 837	72.3	13.1	98	3.8	8.3	0	3.8	3.5
17	U. S. 13	72.2	13.2	98	1.9	5.8	0	3.5	3.8
18	C. B. 7520	71.7	13.4	98	1.3	9.0	0	4.0	3.5
19	Mo. 833	71.5	13.0	99	7.5	10.1	0	4.0	3.0
20	Kan. 1639	71.3	13.8	99	6.3	6.3	0	3.8	3.3
21	Nebr. 701	70.6	13.0	96	5.2	5.2	.6	4.0	3.3
22	Mo. 838	69.9	13.3	92	5.4	23.8	0	4.0	3.3
23	C. B. 7522	69.0	13.3	98	3.8	9.6	0	4.0	3.3
24	C. B. 7533	68.8	12.8	99	0	1.9	0	4.0	2.8
25	C. B. 7544	67.3	13.2	99	3.8	5.1	0	4.0	3.3
26	C. B. 7503	62.1	13.2	97	5.8	7.1	0	4.0	3.5
27	C. B. 7512	58.2	13.4	98	1.3	11.5	0	3.8	2.8
28	C. B. 7504	56.2	12.8	96	2.6	10.5	0	3.8	2.5

Average yield 71.3 bushels.

Differences in yield between any two entries of less than 5.0 bushels are not considered significant.

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TABLE 23--1949 PERFORMANCE DATA ON MIDSEASON EXPERIMENTAL HYBRIDS (U. S. 13 MATURITY) TESTED NEAR CARUTHERSVILLE, MISSOURI, IN PEMISCOT COUNTY.

Rank	Hybrid	Acre Yield Bu.	Lodged Plants		Husk Cover Grade	Ear Height Grade
			Stand %	Stalk %		
1	Iowa 4476	61.6	94	30.7	3.8	3.0
2	C. B. 7516	59.1	92	29.5	4.0	3.0
3	Mo. 832	57.4	97	25.6	4.0	2.8
4	C. B. 7520	56.7	92	33.5	3.8	3.0
5	Mo. 831	56.6	95	22.4	4.0	3.0
6	Mo. 844	55.9	95	27.5	4.0	3.3
7	C. B. 7544	54.2	97	29.2	4.0	3.3
8	Mo. 829	52.7	96	26.5	4.0	3.0
9	C. B. 7522	51.8	95	35.5	3.8	2.8
10	Mo. 833	50.8	99	23.1	4.0	3.0
10	C. B. 7528	50.8	98	26.3	3.8	2.0
12	C. B. 7539	50.7	97	25.8	3.8	3.0
13	Kan. 1639	50.3	96	22.1	3.3	3.0
14	C. B. 7533	50.1	92	26.4	3.8	2.5
15	C. B. 7526	49.6	94	35.4	3.5	3.0
16	Nebr. 701	49.2	97	36.8	3.8	3.0
16	Mo. 838	49.2	95	29.4	3.8	3.0
18	C. B. 7525	49.0	97	31.9	3.5	3.3
19	C. B. 7512	48.7	90	35.0	3.5	2.5
20	C. B. 7517	47.5	93	26.5	4.0	3.0
21	Mo. 837	47.1	90	27.2	3.8	3.0
22	C. B. 7502	46.1	97	34.2	3.5	3.0
23	Mo. 830	45.2	82	23.4	4.0	3.0
24	N. E. 7802	43.6	91	24.3	3.0	3.0
25	C. B. 7530	42.7	93	24.7	3.5	3.0
26	C. B. 7504	41.6	92	22.6	3.5	2.5
27	U. S. 13	40.8	98	29.4	4.0	3.0
28	C. B. 7503	35.0	95	27.8	3.8	3.0

Average yield 49.7 bushels.

Differences in yield between any two entries of less than 12.6 bushels are not considered significant.

TABLE 24--AVERAGE PERFORMANCE ON LATE YELLOW EXPERIMENTAL HYBRIDS (MO. 8 MATURITY) TESTED IN COLE, NEW MADRID, AND PEMISCOT COUNTIES.

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants		Husk Cover Grade	Ear Height Grade
			Grain %	Stand %	Root %	Stalk %		
1	C. B. 7609	86.4	17.6	90	1.1	29.0	4.0	4.2
2	C. B. 7616	83.9	16.1	94	.7	16.9	3.8	4.1
3	Mo. 792	83.0	16.4	93	12.9	18.4	3.9	4.0
4	Mo. 800	82.5	17.2	95	3.8	12.3	3.5	4.2
4	C. B. 7632	82.5	17.6	97	2.8	13.0	3.6	4.1
6	C. B. 7605	81.6	16.8	95	6.0	14.4	3.9	4.0
7	Mo. 845	80.5	18.4	96	.9	8.7	3.5	4.3
8	Mo. 804	80.4	15.3	97	.8	16.5	3.7	3.9
9	Mo. 795	80.2	16.7	96	4.9	11.2	3.8	4.2
10	C. B. 7610	78.9	16.0	95	.6	14.1	3.7	3.8
11	C. B. 7613	78.0	17.0	93	3.0	20.2	4.1	4.1
12	C. B. 7603	77.7	18.0	96	.8	23.5	4.0	4.1
13	Mo. 809	77.0	15.7	92	2.2	8.1	3.5	4.0
14	Mo. 803	76.2	16.2	96	1.3	11.4	3.4	3.9
15	Mo. 846	76.1	16.7	98	.4	23.8	3.7	4.1
16	Mo. 802	75.3	17.6	94	5.1	7.8	3.2	4.0
17	Mo. 807	74.7	16.6	97	3.2	8.0	3.8	4.0
18	U. S. 13	74.5	15.9	96	.6	19.4	3.7	3.5
19	C. B. 7606	74.0	16.8	84	3.0	8.4	3.5	4.1
20	Mo. 8	73.8	16.0	97	4.0	22.7	3.4	3.8
21	C. B. 7624	72.8	18.3	94	1.3	9.5	3.9	4.1
22	Mo. 847	72.5	18.4	97	1.1	8.4	3.6	4.2
23	Mo. 808	72.2	16.1	94	2.3	10.2	3.4	4.1
24	Mo. 805	69.3	15.5	97	3.2	10.7	3.1	3.8
25	Mo. 801	68.9	16.2	95	3.7	7.9	3.5	3.9

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TABLE 25--1949 PERFORMANCE DATA ON LATE YELLOW EXPERIMENTAL HYBRIDS (MO. 8 MATURITY) TESTED NEAR JEFFERSON CITY, MISSOURI, IN COLE COUNTY.

Rank	Hybrid	Acre Yield Bu.	Moisture	Lodged Plants			Dropped Ears %	Husk Cover Grade	Ear Height Grade
			in Grain %	Stand %	Root %	Stalk %			
1	C. B. 7616	107.0	17.4	93	.9	3.1	0	3.5	4.0
2	C. B. 7609	103.1	20.1	92	1.4	4.5	0	4.0	4.0
3	C. B. 7605	99.8	18.5	94	1.3	3.5	0	3.5	4.0
4	Mo. 804	99.5	16.9	95	0	4.4	.4	3.3	4.0
5	C. B. 7632	97.8	20.2	95	.9	3.1	.4	3.0	4.0
6	Mo. 807	97.4	18.7	96	2.6	2.6	.4	3.3	3.8
7	Mo. 845	97.3	21.7	96	2.6	.4	0	3.3	4.0
8	Mo. 803	96.3	17.6	98	0	2.1	0	2.8	4.0
9	Mo. 8	96.0	17.9	96	3.9	4.8	0	3.0	4.0
10	Mo. 809	94.9	17.4	91	1.4	3.2	0	3.3	4.0
11	Mo. 792	94.4	18.1	95	16.2	3.9	0	3.5	3.8
12	Mo. 800	93.5	19.2	93	0	2.2	0	3.0	3.8
13	Mo. 8A	91.2	17.0	96	2.6	6.9	.4	3.3	3.8
14	C. B. 7613	91.0	18.1	92	4.5	3.6	1.4	4.0	3.8
15	C. B. 7610	90.2	17.8	95	0	.9	.4	3.5	3.5
16	C. B. 7603	90.0	21.7	95	1.8	3.5	0	3.8	4.0
17	Mo. 795	89.8	19.1	94	8.4	1.3	0	3.3	3.8
17	C. B. 7624	89.8	20.5	92	0	.5	0	3.8	4.0
19	U. S. 13	88.4	17.6	94	0	4.9	0	3.0	3.5
20	Mo. 802	87.0	21.1	94	14.6	0	0	2.8	4.0
21	Mo. 847	86.1	20.8	95	0	.9	0	3.3	4.0
22	Mo. 8C	84.8	17.4	96	1.3	3.9	2.6	3.0	4.0
23	Mo. 846	83.1	17.9	96	1.3	6.1	0	3.3	3.8
23	Mo. 808	83.1	17.9	92	2.7	.9	0	3.0	3.8
25	C. B. 7606	81.0	19.1	87	1.4	3.8	1.4	3.0	3.8
26	Mo. 805	80.9	17.5	96	2.6	1.7	.9	2.8	3.5
27	Mo. 801	79.5	17.7	92	8.6	5.0	0	3.0	3.5
28	Mo. 8B	73.4	18.7	94	0	2.7	0	3.0	3.8

Average yield 82.4 bushels.

Differences in yield between any two entries of less than 12.1 bushels are not considered significant.

TABLE 26--1949 PERFORMANCE DATA ON LATE YELLOW EXPERIMENTAL HYBRIDS (MO. 8 MATURITY) TESTED NEAR SIKESTON, MISSOURI, IN NEW MADRID COUNTY.

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants			Husk Cover Grade	Ear Height Grade
			Grain %	Stand %	Root %	Stalk %	Dropped Ears %		
1	C. B. 7609	104.3	15.1	98	1.9	34.6	0	4.0	4.5
2	C. B. 7603	99.6	14.3	99	.6	29.7	0	4.3	4.3
3	Mo. 800	97.1	15.2	99	11.4	12.7	0	3.8	4.8
4	C. B. 7616	95.8	14.7	100	1.3	12.5	0	4.0	4.3
5	C. B. 7632	94.4	14.9	100	7.5	13.8	0	3.8	4.3
6	Mo. 845	93.9	15.1	98	0	10.2	0	3.5	4.8
7	Mo. 792	91.8	14.7	100	22.5	13.1	0	4.3	4.3
8	C. B. 7605	91.7	15.1	98	16.7	13.5	.6	4.3	4.0
9	Mo. 795	90.8	14.3	99	6.3	4.4	0	4.0	4.8
10	C. B. 7606	90.6	14.4	99	7.5	9.4	0	3.8	4.5
11	C. B. 7610	90.1	14.2	99	1.9	8.9	0	3.8	4.0
12	Mo. 846	89.5	15.4	100	0	24.4	0	3.8	4.5
13	C. B. 7613	89.4	15.9	98	4.5	26.8	0	4.3	4.5
14	Mo. 804	87.9	13.7	98	2.5	9.6	0	3.8	4.3
15	C. B. 7624	86.4	16.1	99	3.8	11.9	0	4.0	4.3
16	Mo. 803	85.6	14.8	96	3.9	9.2	0	3.8	4.0
17	Mo. 807	85.5	14.4	99	7.0	2.5	0	4.0	4.3
18	Mo. 847	85.3	16.0	99	3.2	9.5	0	3.8	4.5
19	Mo. 8A	84.6	14.8	100	7.5	36.3	0	4.0	4.0
20	Mo. 809	84.4	13.9	98	5.1	5.1	0	3.3	4.0
21	Mo. 802	83.4	14.1	97	.6	6.5	0	3.3	4.0
22	Mo. 805	83.3	13.4	100	6.9	5.0	0	3.3	4.0
23	Mo. 808	83.2	14.3	93	4.1	8.8	0	3.5	4.5
24	Mo. 8B	82.5	14.8	99	1.9	15.8	0	3.8	4.0
25	Mo. 801	82.3	14.7	99	2.5	3.8	0	3.8	4.3
26	Mo. 8	82.0	14.0	100	8.1	21.9	0	3.8	4.0
27	U. S. 13	79.4	14.2	98	1.9	25.0	0	4.0	3.5
28	Mo. 8C	78.6	14.4	98	.6	14.6	0	4.3	4.0

Average yield 88.5 bushels.

Differences in yield between any two entries of less than 6.8 bushels are not considered significant.

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TABLE 27--1949 PERFORMANCE DATA ON LATE YELLOW EXPERIMENTAL HYBRIDS (MO. 8 MATURITY) TESTED NEAR CARUTHERSVILLE, MISSOURI, IN PEMISCOT COUNTY.

Rank	Hybrid	Acre Yield Bu.	Lodged Plants		Husk Cover Grade	Ear Height Grade
			Stand %	Stalk %		
1	Mo. 792	62.8	85	38.2	4.0	4.0
2	Mo. 795	60.1	95	27.8	4.0	4.0
3	Mo. 800	57.0	93	22.0	3.8	4.0
4	C. B. 7610	56.4	92	32.4	3.8	3.8
5	U. S. 13	55.7	96	28.3	4.0	3.5
6	Mo. 846	55.6	97	40.8	4.0	4.0
6	Mo. 802	55.6	92	16.8	3.5	4.0
8	C. B. 7632	55.4	95	22.0	4.0	4.0
9	Mo. 804	53.8	99	35.4	4.0	3.5
10	C. B. 7613	53.5	90	30.1	4.0	4.0
11	C. B. 7605	53.3	93	26.3	4.0	4.0
12	C. B. 7609	51.8	81	47.9	4.0	4.0
13	Mo. 809	51.6	86	16.0	4.0	4.0
14	Mo. 808	50.3	96	20.9	3.8	4.0
14	C. B. 7606	50.3	66	12.0	3.8	4.0
14	Mo. 845	50.3	95	15.4	3.8	4.0
17	C. B. 7616	48.8	90	35.2	4.0	4.0
18	Mo. 803	46.7	94	23.0	3.5	3.8
19	Mo. 847	46.0	96	14.7	3.8	4.0
20	Mo. 801	44.9	94	15.0	3.8	4.0
21	Mo. 8 A	44.4	95	51.1	3.5	3.3
22	C. B. 7603	43.6	94	37.3	4.0	4.0
22	Mo. 805	43.6	95	25.3	3.3	3.8
24	Mo. 8	43.4	95	41.4	3.3	3.5
25	C. B. 7624	42.1	90	16.1	4.0	4.0
26	Mo. 807	41.1	95	18.9	4.0	4.0
27	Mo. 8 B	40.9	92	44.1	4.0	3.3
28	Mo. 8 C	39.8	91	37.4	4.0	3.5

Average yield 49.9 bushels.

Differences in yield between any two entries of less than 14.8 bushels are not considered significant.



TABLE 28--AVERAGE PERFORMANCE ON LATE WHITE EXPERIMENTAL HYBRIDS (MO. 8 MATURITY) TESTED IN NEW MADRID AND PEMISCOT COUNTIES.

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants		Husk Cover Grade	Ear Height Grade
			in Grain %	Stand %	Root %	Stalk %		
1	Dixie 17	86.2	15.7	96	19.5	48.2	2.2	4.5
2	Mo. 5372	78.8	14.6	87	4.7	45.0	2.7	3.8
3	U. S. 513 W	78.3	15.1	91	5.0	20.4	2.5	3.8
4	U. S. 528 W	78.0	14.0	95	4.6	18.9	2.4	3.9
5	U. S. 527 W	77.8	15.1	92	8.2	30.4	2.2	4.3
6	Mo. 5364	75.7	14.8	79	24.2	17.6	3.0	3.8
7	U. S. 523 W	75.2	14.1	96	1.3	15.0	2.6	3.9
7	Mo. 5373	75.2	14.2	79	12.4	38.9	2.5	3.9
9	C. B. 7663 W	72.8	14.3	98	1.3	8.6	3.2	3.9
10	Kan. 2275	72.4	14.2	98	5.1	23.7	2.8	3.8
11	U. S. 515 W	71.8	14.0	86	3.4	20.4	2.2	3.8
12	U. S. 522 W	71.7	13.9	96	.7	21.0	2.3	3.8
13	U. S. 525 W	71.4	15.2	92	3.8	20.1	2.0	4.2
13	Mo. 5357	71.4	14.2	99	4.5	10.3	2.6	3.7
15	U. S. 529 W	71.3	14.4	98	7.5	14.4	2.0	3.9
16	C. B. 7605 W	67.9	15.1	96	.6	10.3	3.7	4.0
17	Ill. 2119	67.1	15.4	85	.6	15.5	3.1	3.7
18	Mo. 5356	66.8	14.5	95	3.2	11.0	3.6	3.9
19	C. B. 7658 W	65.8	14.4	97	3.8	19.0	3.3	3.9
20	C. B. 7601 W	65.6	15.4	97	5.0	10.3	3.5	4.0
21	C. B. 7627 W	65.1	14.0	95	0	11.1	3.2	3.8
22	Mo. 5359	64.6	13.9	93	5.2	18.7	2.7	3.5
23	C. B. 7606 W	64.0	15.0	95	5.1	14.9	3.1	3.9
24	Mo. 5358	62.9	15.3	96	6.4	15.6	3.1	4.0
25	C. B. 7610 W	62.7	16.3	96	7.1	8.8	3.2	4.2
26	Mo. 5363	62.4	15.2	94	10.3	14.7	2.7	3.9
27	Mo. 5361	61.9	13.8	90	3.3	24.0	2.3	3.7
28	Mo. 5360	61.8	15.2	94	0	17.5	3.0	3.8

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TABLE 29--1949 PERFORMANCE DATA ON LATE WHITE EXPERIMENTAL HYBRIDS (MO. 8 MATURITY) TESTED NEAR CARUTHERSVILLE, MISSOURI, IN PEMISCOT COUNTY.

Rank	Hybrid	Acre Yield Bu.	Lodged Plants			
			Stand %	Stalk %	Husk Cover Grade	Ear Height Grade
1	U. S. 527 W	56.7	85	38.7	2.3	3.8
2	U. S. 513 W	55.3	81	27.7	2.5	3.5
3	U. S. 528 W	54.9	94	23.9	2.0	3.8
4	Kan. 2275	49.0	97	30.2	2.5	3.3
5	U. S. 515 W	48.3	81	29.2	2.3	3.5
5	C. B. 7663 W	48.3	96	12.2	2.8	3.8
7	Mo. 5357	48.2	99	13.5	2.8	3.3
8	Dixie 17	48.0	92	51.6	2.0	4.0
9	U. S. 523 W	45.8	93	14.8	2.3	3.8
10	U. S. 525 W	45.7	86	28.0	2.0	4.0
11	C. B. 7605 W	44.9	94	16.0	3.0	4.0
12	Mo. 5364	44.8	65	22.3	3.0	3.5
13	Mo. 5373	44.5	67	34.4	2.5	3.8
14	C. B. 7601 W	44.4	94	11.1	3.0	4.0
15	Ill. 2119	43.4	73	14.8	3.3	3.3
16	Mo. 5372	43.2	80	46.4	2.3	3.5
17	U. S. 522 W	42.4	96	25.7	2.3	3.5
17	C. B. 7606 W	42.4	91	17.0	2.3	3.8
19	U. S. 529 W	42.1	95	21.9	2.0	3.8
20	Mo. 5356	39.6	91	15.6	3.3	3.8
20	Mo. 5363	39.6	90	18.5	2.0	3.5
22	C. B. 7627 W	38.1	91	18.3	2.3	3.5
23	C. B. 7658 W	35.4	95	27.8	2.8	3.8
24	C. B. 7610 W	35.3	95	11.8	2.8	4.0
25	Mo. 5358	34.1	94	17.8	2.8	4.0
26	Mo. 5359	33.5	89	15.4	3.0	3.0
27	Mo. 5360	30.2	91	11.0	2.5	3.5
28	Mo. 5361	27.0	85	17.1	2.5	3.3

Average yield 43.1 bushels.

Differences in yield between any two entries of less than 13.1 bushels are not considered significant.

TABLE 30--1949 PERFORMANCE DATA ON LATE WHITE EXPERIMENTAL HYBRIDS (MO. 8 MATURITY) TESTED NEAR SIKESTON, MISSOURI, IN NEW MADRID COUNTY.

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants		Husk Cover Grade	Ear Height Grade
			Grain %	Stand %	Root %	Stalk %		
1	Dixie 17	124.3	15.7	99	19.5	44.7	2.3	5.0
2	Mo. 5372	114.4	14.6	93	4.7	43.6	3.0	4.0
3	Mo. 5364	106.5	14.8	93	24.2	12.8	3.0	4.0
4	Mo. 5373	105.8	14.2	91	12.4	43.4	2.5	4.0
5	U. S. 523 W	104.6	14.1	99	1.3	15.2	2.8	4.0
6	U. S. 513 W	101.2	15.1	100	5.0	13.1	2.5	4.0
7	U. S. 528 W	101.0	14.0	95	4.6	13.8	2.8	4.0
8	U. S. 522 W	100.9	13.9	96	.7	16.3	2.3	4.0
9	U. S. 529 W	100.5	14.4	100	7.5	6.9	2.0	4.0
10	U. S. 527 W	98.9	15.1	99	8.2	22.0	2.0	4.8
11	C. B. 7663 W	97.3	14.3	100	1.3	5.0	3.5	4.0
12	U. S. 525 W	97.0	15.2	98	3.8	12.1	2.0	4.3
13	Mo. 5361	96.7	13.8	95	3.3	30.9	2.0	4.0
14	C. B. 7658 W	96.2	14.4	99	3.8	10.1	3.8	4.0
15	Mo. 5359	95.7	13.9	97	5.2	21.9	2.3	4.0
15	Kan. 2275	95.7	14.2	99	5.1	17.1	3.0	4.3
17	U. S. 515 W	95.3	14.0	91	3.4	11.6	2.0	4.0
18	Mo. 5357	94.5	14.2	98	4.5	7.0	2.3	4.0
19	Mo. 5356	93.9	14.5	98	3.2	6.4	3.8	4.0
20	Mo. 5360	93.3	15.2	96	0	24.0	3.5	4.0
21	C. B. 7627 W	92.0	14.0	98	0	3.8	4.0	4.0
22	Mo. 5358	91.7	15.3	98	6.4	13.4	3.3	4.0
23	C. B. 7605 W	90.9	15.1	98	.6	4.5	4.3	4.0
24	Ill. 2119	90.8	15.4	97	.6	16.1	2.8	4.0
25	C. B. 7610 W	90.1	16.3	97	7.1	5.8	3.5	4.3
26	C. B. 7601 W	86.8	15.4	99	5.0	9.4	4.0	4.0
27	C. B. 7606 W	85.6	15.0	99	5.1	12.7	3.8	4.0
28	Mo. 5363	85.2	15.2	98	10.3	10.9	3.3	4.3

Average yield 97.4 bushels.

Differences in yield between any two entries of less than 7.4 bushels are not considered significant.

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TABLE 31--1949 PERFORMANCE DATA ON MIDSEASON WHITE EXPERIMENTAL HYBRIDS (ILL. 200 MATURITY) TESTED NEAR LATHROP, MISSOURI, IN CLINTON COUNTY.

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants		Dropped Ears %	Husk Cover Grade	Ear Height Grade
			Grain %	Stand %	Root %	Stalk %			
1	Mo. 4009	108.8	17.4	94	13.3	23.9	.4	3.0	4.5
2	U. S. 523W	105.8	18.5	98	36.3	6.4	1.3	2.0	4.5
3	Mo. 4019	105.5	16.9	98	4.7	20.1	.4	2.5	4.5
4	Mo. 4004	104.2	17.8	95	3.5	25.3	.4	2.0	5.0
5	Kan. 2275	103.8	16.7	97	12.4	15.5	0	3.0	4.8
6	Mo. 4006	102.4	17.9	97	3.9	25.8	0	2.8	4.3
7	Mo. 4020	101.2	15.8	98	3.8	19.5	.8	2.3	4.8
8	Mo. 4023	98.8	17.0	99	16.4	13.4	.4	2.0	5.0
9	Mo. 4013	98.2	17.5	95	19.7	37.1	.9	2.8	4.8
10	Mo. 4007	97.9	18.5	93	8.5	40.8	.9	2.0	4.8
11	Mo. 4001	97.7	18.3	98	.4	12.8	.9	2.0	4.0
12	Mo. 4011	97.4	17.5	94	4.9	32.4	.9	2.8	4.8
12	Mo. 4024	97.4	17.1	99	34.6	23.2	2.5	2.5	5.0
14	Mo. 4003	97.0	18.5	95	7.4	17.0	0	2.8	4.5
14	Mo. 4005	97.0	19.1	99	8.8	18.9	.4	2.3	5.0
16	Mo. 4014	96.3	17.6	96	7.0	11.7	0	2.3	4.3
16	Mo. 4015	96.3	18.3	99	0	12.6	.4	2.0	4.3
18	Mo. 4002	96.2	18.7	91	8.3	20.6	.5	2.5	4.3
19	Mo. 4010	95.9	18.8	99	13.1	36.7	0	2.3	5.0
20	Ind. 901A	94.7	17.5	96	36.4	16.9	.4	2.3	4.8
21	Mo. 4008	94.1	18.7	95	11.9	25.1	2.6	2.5	5.0
22	Mo. 4018	93.1	19.5	95	12.7	30.1	1.3	2.8	5.0
23	Mo. 4016	92.7	19.1	96	3.5	29.9	.9	3.0	4.3
24	Mo. 4022	92.1	18.0	95	21.0	17.5	.9	2.0	4.0
25	Mo. 4012	89.3	17.2	95	20.1	16.2	.4	3.0	4.0
26	Mo. 4021	89.0	16.0	93	11.6	12.1	0	2.3	4.8
27	Ind. 5501	88.9	15.6	96	5.2	19.0	3.5	3.0	4.5
28	Ind. 703B	76.8	17.4	79	35.3	8.4	.5	2.5	4.3

Average yield 96.9 bushels.

Differences in yield between any two entries of less than 9.1 bushels are not considered significant.