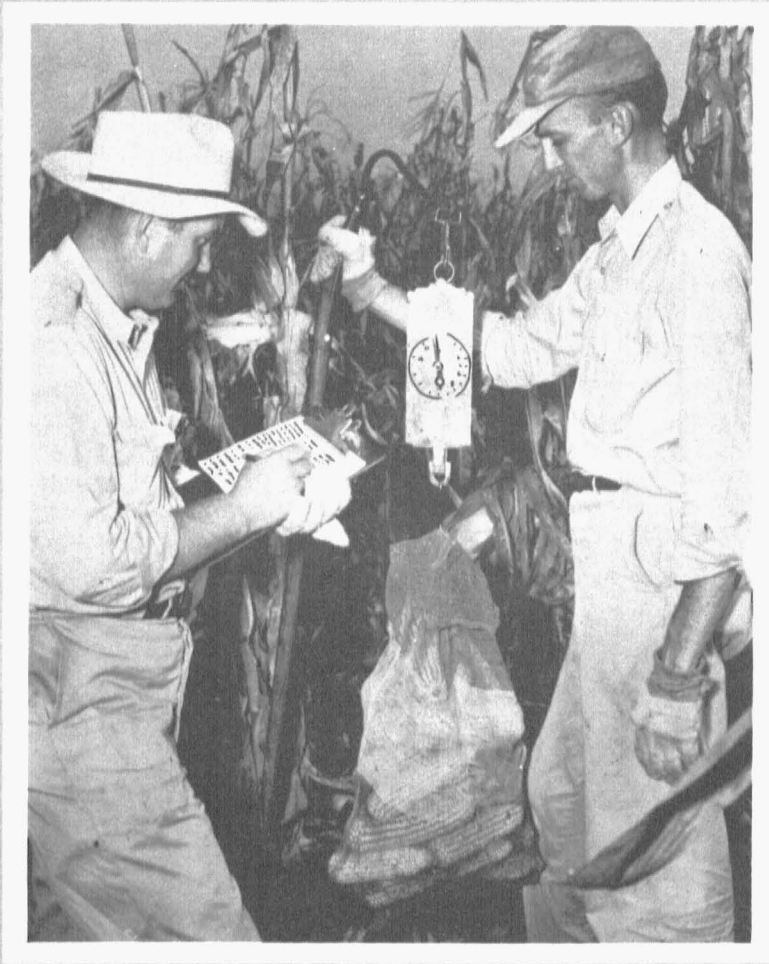


1950 YIELD TRIALS
WITH
CORN HYBRIDS IN MISSOURI



UNIVERSITY OF MISSOURI COLLEGE OF AGRICULTURE
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1950 YIELD TRIALS WITH CORN HYBRIDS IN MISSOURI¹

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INTRODUCTION

The 1950 corn yield trials of commercial and experimental hybrids were planted in fourteen locations, including five each in the Southern and Central regions and four in the Northern region (Figure 1 and Table 1). The trials at Deering and Elsberry, Missouri, were lost due to excessive rainfall after planting.

EXPERIMENTAL METHODS

1. TYPE OF FIELD DESIGN All trials consisted of 49 hybrids. Each hybrid was planted in a plot consisting of two rows, 10 hills long and replicated four times. The field design was a 7 x 7 lattice square with four replications.

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 a lower moisture content than 15.5 per cent moisture were adjusted upward. Yields were also adjusted for missing hills, but not for other variations in the stand.

3. MOISTURE AT HARVEST The percentage of moisture at harvest was determined by drawing ten ears at random from one replication and removing two rows of kernels from each ear. The shelled corn from these ears was mixed and the percentage of moisture determined with a Tag-Heppenstall moisture meter.

4. STAND PERCENTAGE The stand percentage was determined by making actual counts of the plants present and computing the per cent based on a perfect stand. All tests were planted at the rate of four seeds per hill and later thinned to either two or three plants per hill, depending upon the soil fertility.

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5. PER CENT LODGING A plant was classified as "root lodged" when it leaned more than thirty degrees from the vertical, and "stalk lodged" if the stalk was broken below the ear. If a plant was both root and stalk lodged, it was counted in both categories.

6. EAR HEIGHT GRADE Each hybrid was graded for the approximate number of feet from the ground to the point where the upper ear was attached to the stalk.

7. SIGNIFICANT DIFFERENCES Differences necessary for significance between the acre yields for any two hybrids are given at the foot of each table at a particular location, but are not given for the period-of-year summaries or the regional summaries. It is not possible to determine the yield ability of a hybrid with absolute accuracy due to variations caused by soil fertility and other factors such as damage to stand by rodents and insects. Each hybrid was planted in each testing field in four different plots and by a method of calculation, the difference in bushels necessary for significance between any two hybrids is computed. For example, in the Maryville test, Table 9, the difference between any two hybrids necessary for significance is 16.9 bushels. A difference less than 16.9 bushels between any two hybrids would suggest that the difference was due more likely to chance variation than to inherent differences in the yielding abilities of the two hybrids.

SEASONAL CONDITIONS

The growing conditions of 1950 were very favorable for corn production, giving three consecutive years with the average corn yields for Missouri of over 40.0 bushels per acre. The Agricultural Statistician of the United States Department of Agriculture, located at Columbia, Missouri, estimated the 1950 average corn yield for Missouri to be 45.0, as compared with 41.0 bushels in 1949 and 45.5 bushels in 1948.

Temperature and rainfall records for May 1 to September 15 were assembled by Wayne L. Decker, Assistant Professor of Climatology at the Missouri Agricultural Experiment Station, and are given in Table 2. Excessive rainfall occurred in the Southwest part of the state where the total rainfall was about 37 inches for the period; whereas the lowest amount was received at Palmyra in northeastern Missouri. All locations experienced a dry period of 10 days or longer, with less than .25 of an inch of precipitation. Palmyra and Shelbina, in the northeastern part of Missouri, had two dry periods in July and early August; lasting for a total of 30 days, which lowered corn yields at these locations. Maryville was the only other location having two dry periods of 10 days or longer; however, one of these occurred in late August and early September, and may have been beneficial in maturing corn and probably did not reduce yields to any extent. The average temperatures for the state were from 1.4 to 4.0 degrees lower than normal.

Due to excessive rainfall several days after planting, the tests at Deering and Elsberry, Missouri, were abandoned.

A heavy rain accompanied by a hard wind in early September caused a high percentage of root lodging in the tests at Sikeston and Caruthersville, Missouri.

The large amount of stalk lodging in the Malta Bend and Palmyra tests were caused by the second brood of the European corn borer.

SEED SOURCES FOR THE 1950 TESTS

Seed for the closed-pedigree commercial hybrids was supplied by the respective hybrid corn companies. Seed of the certified hybrids was a composite of samples from each growers' lot. Seed of experiment station experimental hybrids was obtained from the respective experiment stations. Various hybrids and seed sources are listed in Table 3.

SOIL ANALYSIS AND CULTURAL PRACTICES

Soil analyses were made on the various testing fields. The results of these analyses as well as the soil type, previous crop, fertilizer application, the average number of plants per acre, and the average yields are given in Table 4. The highest average yield was produced at Carrollton, followed closely by the average yield at Lathrop. Where the average yields were low, a soil deficiency was revealed by the soil analysis.

INTERPRETATION OF RESULTS

PERIOD OF YEARS RESULTS The evaluation of hybrids for yield and standing ability for a period of years is more valuable than the results from a single year. A hybrid may be outstanding one year, while in the next several years it may be very undesirable. For example, environmental conditions may not be present every year to cause root or stalk lodging. Results over a period of years tend to average these fluctuations. Tables 5, 6, and 7 give the period of year averages for hybrids that have been tested for 5, 4, 3, and 2 years in each of the Northern, Central, and Southern regions.

1950 RESULTS The results for the 1950 yield tests are summarized for each of the three regions (Tables 8, 13, and 18), and the performance data for each of the four locations of each region follow the regional tables. Most of the experimental hybrids from the Missouri Agricultural Experiment Station have been tested previously in experimental tests and are entered in these state-wide tests for the first time. Seed of the experimental hybrids is not available commercially, with the exception of a limited quantity of Missouri 804. Missouri 804, a late yellow experimental hybrid of about the same maturity as Missouri 8, has been tested for two years. It has made a good yield and standing record and should be a replacement for Missouri 8. Most farmers who have grown Missouri 8 do not like its poor standing ability. Missouri 804 is also more desirable than Missouri 8 for harvesting with a mechanical picker. Ten acres of Missouri 804 double-crossed seed was produced in 1950, and single-cross seed stocks are available to interested producers for 1951.

TABLE 1--COOPERATORS, LOCATION OF TESTING FIELD AND DATES PLANTED AND HARVESTED

Cooperators	Location	County	Region	Date Planted	Date Harvested
1. R. T. Wright Northwest State College	Maryville, Missouri	Nodaway	Northern	May 12	October 26
2. C. L. Van Buren, Northwest Missouri Agri. Exp. Station	Lathrop, Missouri	Clinton	Northern	May 11	October 27
3. Nichols Hilt	Palmyra, Missouri	Marion	Northern	May 20	October 31
4. Roy Chinn	Shelbina, Missouri	Shelby	Northern	May 22	October 30
5. Missouri Pfister Associated Growers	Carrollton, Missouri	Carroll	Central	May 3	November 13
6. Platner & McRoberts	Malta Bend, Missouri	Saline	Central	May 25	November 1
7. South Farm, Mis- souri Agricultural Experiment Station	Columbia, Missouri	Boone	Central	May 5	October 20
8. Missouri State Prison Farm, Col. Paul Renz, Supt.	Jefferson City, Missouri	Cole	Central	May 18	October 17
9. Missouri Bottomland Agricultural Experi- ment Field	Elsberry, Missouri	Pike	Central	June 8	-----
10. Dan A. Turner	Stark City, Missouri	Newton	Southern	April 20	October 11
11. Southwest Missouri Agricultural Experi- ment Station	Pierce City, Missouri	Lawrence	Southern	April 20	October 12
12. Southeast Missouri Agricultural Experi- ment Station	Sikeston, Missouri	New Madrid	Southern	April 19	October 5
13. Deering Farms	Deering, Missouri	Pemiscot	Southern	April 18	-----
14. S. Crews Reynolds	Caruthers- ville, Missouri	Pemiscot	Southern	April 17	October 6

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**TABLE 2--TEMPERATURE AND RAINFALL AT THE VARIOUS TESTING LOCATIONS
FOR THE PERIOD OF MAY 1st TO SEPTEMBER 15th, 1950***

Location	RAINFALL			TEMPERATURE		
	Closest Weather Station	Total Rain	Driest** Periods	Closest Weather Station	Average Temper- ature	Departure From Normal
1. Maryville	Maryville	20.52	6/19-7/4 8/29-9/15	Maryville	67.0	-3.0
2. Lathrop	Lathrop	21.30	8/29-9/15	Lathrop	68.2	-2.6
3. Palmyra	Hannibal	12.30	7/4-7/15 7/20-8/7	Hannibal	68.7	-3.2
4. Shelbina	Shelbina	20.65	7/4-7/16 7/20-8/7	Shelbina	69.3	-3.0
5. Carrollton	Carrollton	21.95	8/31-9/15	Carrollton	69.6	-2.1
6. Malta Bend	Waverly	18.29	6/4-6/16 7/4-7/16	Marshall	70.0	-2.7
7. Columbia	Columbia	19.39	7/2-7/16	Columbia	69.5	-3.1
8. Jefferson City	Jefferson City	17.17	7/5-7/16	Jefferson City	69.3	-4.0
10. Stark City	Granby	37.36	6/11-6/20	Neosho	71.2	-2.4
11. Pierce City	Pierce City	36.56	6/11-6/20	Mount Vernon	69.7	-3.7
12. Sikeston	Sikeston	18.97	6/22-7/16	Sikeston	73.3	-1.4
14. Caruthers- ville	Caruthers- ville	19.63	6/23-7/4	Caruthers- ville	74.3	-3.1

* The authors wish to acknowledge the services of Wayne L. Decker, Assistant Professor of Climatology of the Missouri Agricultural Experiment Station who secured and assembled these weather data from the U.S. Weather Bureau.

** Dry period must have had 10 or more days with less than .25 inches of precipitation.

TABLE 3--SEED SOURCES FOR THE 1950 CORN YIELD TESTS

DEKALB HYBRIDS	Dekalb Agricultural Association, Marshall, Missouri
DEXIE HYBRIDS	Tennessee Agricultural Experiment Station, Nashville, Tennessee
EMBRO HYBRIDS	Ed. F. Mangelsdorf & Bro., Inc., St. Louis, Missouri
FUNK G HYBRIDS	Columbiana Seed Co., Eldred, Illinois
IOWA HYBRIDS	Iowa Agricultural Experiment Station, Ames, Iowa
KANSAS HYBRIDS	Kansas Agricultural Experiment Station, Manhattan, Kansas
KEYSTONE HYBRIDS	Corneli Seed Company, St. Louis, Missouri
KK HYBRIDS	Kellogg-Kelly Seed Co., St. Joseph, Missouri
MAYGOLD HYBRID	Earl May Seed Company, Shenandoah, Iowa
MIDWEST HYBRID	Stephens Brothers, Buckner, Missouri
MISSOURI, C. B. AND N. E. EXPERIMENTAL HYBRIDS	Missouri Agricultural Experiment Station, Columbia, Missouri
MISSOURI 8	Craft Seed & Grain Co., Morehouse, Missouri C. F. McMullin Estate, Sikeston, Missouri D. A. Turner, Stark City, Missouri M. F. A. Seed Division, Marshall, Missouri
ILLINOIS 200	M. F. A. Seed Division, Marshall, Missouri
MISSOURI 148	C. F. McMullin Estate, Sikeston, Missouri C. H. E. Walther, Boonville, Missouri
MISSOURI 313	Corneli Seed Co., St. Louis, Missouri C. F. McMullin Estate, Sikeston, Missouri Joseph L. Frerer, Jasper, Missouri
NEBRASKA EXPERIMENTAL HYBRIDS	Nebraska Agricultural Experiment Station, Lincoln, Nebraska
OHIO C-92	M. F. A. Seed Division, Marshall, Missouri
OLD NICK'S HYBRID	Fruendt Seed Company, Pella, Iowa
P. A. G. HYBRIDS	Pfister Associated Growers, Inc., Carrollton, Missouri
PIONEER HYBRIDS	Garst and Thomas Hybrid Corn Company, Coon Rapids, Iowa
T. R. F. 3	Texas Research Foundation, Renner, Texas
UNITED HYBRIDS	United Hybrid Growers Association, Shenandoah, Iowa
U. S. 13	Ray Bolomey, Frankford, Missouri Craft Seed & Grain Co., Morehouse, Missouri Corneli Seed Co., St. Louis, Missouri H. C. Decker, Sikeston, Missouri P. B. Eubank, Huntsville, Missouri M. F. A. Seed Division, Marshall, Missouri Ed. F. Mangelsdorf & Bro., Inc., Atchison, Kansas Dan McCoy Seed Co., Sikeston, Missouri McRoberts Farm, Malta Bend, Missouri Ralph Thomas, Sedalia, Missouri Rollie Thomas, Hughesville, Missouri Morton Tuttle & Son, Prairie Home, Missouri C. H. E. Walther, Boonville, Missouri Earl Woolston, Rushville, Missouri
U. S. 35	M. F. A. Seed Division, Marshall, Missouri
U. S. 523W	Joseph L. Frerer, Jasper, Missouri C. F. McMullin Estate, Sikeston, Missouri

TABLE 4--SOIL TYPE, PREVIOUS CROP, FERTILIZER APPLICATION, SOIL ANALYSIS, NUMBER OF PLANTS PER ACRE TOGETHER WITH THE AVERAGE YIELD OF ALL HYBRIDS TESTED AT THE VARIOUS LOCATIONS IN 1950

Location	Soil Type	Previous Crop	Fertilizer Applied	Soil Analysis*							Number Plants per Acre	Average Yield Bu. per Acre
				Organic Matter	P	K	Mg	Ca	pH	Lime Requirement		
1. Maryville, Missouri	Upland	Oats and Sweet Clover	150 lbs. 20% Phosphate	3.9	76	280+	860	6308	5.2	7500	9249	86.4
2. Lathrop, Missouri	Bottom-land	Alfalfa	None	3.7	106	280+	580	4816	5.0	8000	9772	112.9
3. Palmyra, Missouri	Upland	Wheat	None	3.0	42	244	320	5152	5.9	5000	10348	93.5
4. Shelbina, Missouri	Upland	Corn	None	2.2	28	84	300	3920	5.3	6500	7377	62.7
5. Carrollton, Missouri	Bottom-land	Corn	500 lbs. Rock Phosphate, 80 lbs. Muriate Potash, Side Dressed 60 lbs. Nitrogen	3.0	67	280+	1020	5600	5.5	7500	10619	113.8
6. Malta Bend, Missouri	Bottom-land	Oats and Sweet Clover	Side Dressed 100 lbs. Ammonium Nitrate	3.0	94	280+	580	5152	5.8	5000	10325	107.0
7. Columbia, Missouri	Upland	Wheat	600 lbs. 20% Phosphate, 200 lbs. Ammonium Nitrate, 150 lbs. 8-8-8	1.8	48	116	580	2404	4.7	8500	9132	78.9
8. Jefferson City, Missouri	Bottom-land	Oats and Sweet Clover	200 lbs. 8-8-8	2.4	224+	280+	860	7280	7.2	None	9078	98.1
9. Elsberry, Missouri	Bottom-land	-----	-----	2.3	76	128	860	6808	4.9	7000	-----	-----
10. Stark City, Missouri	Bottom-land	Red Clover	100 lbs. 2-16-6 in row	1.8	13	174	330	840	5.7	3000	9217	80.3
11. Pierce City, Missouri	Upland	Sorghum Plowed for Green Manure	200 lbs. 8-8-8	2.2	13	236	370	782	5.3	5000	9591	69.8
12. Sikeston, Missouri	Sikeston Ridge	Alfalfa	300 lbs. 3-12-12, 150 lbs. Ammonium Nitrate	3.0	224+	280+	320	5152	6.6	None	11207	88.8
13. Deering, Missouri	Miss. Delta	-----	-----	2.6	26	280+	800+	1064	4.8	7000	-----	-----
14. Caruthersville, Missouri	Miss. Delta	Soybeans	500 lbs. 8-12-12, 100 lbs. Ammonium Nitrate, 100 lbs. Anhydrous Ammonia Side Dressed	2.4	56	280+	800+	1120	6.6	None	9559	78.1

* The authors wish to express their appreciation to the Soils Department of the Missouri Agricultural Experiment Station for making the soil analysis.

TABLE 5--SUMMARY OF AVERAGE PERFORMANCE RECORDS FOR HYBRIDS
TESTED IN THE NORTHERN REGION 1946-1950

Hybrid	Averages											
	5-Year			4-Year			3-Year			2-Year		
	Acre Yield	Lodging		Acre Yield	Lodging		Acre Yield	Lodging		Acre Yield	Lodging	
Bu.	Root	Stalk	Bu.	Root	Stalk	Bu.	Root	Stalk	Bu.	Root	Stalk	
U. S. 13	83.6	1.4	7.2	84.9	1.5	8.9	93.4	0	9.8	85.7	0	11.4
Mo. 313	80.1	1.3	8.4	81.2	0.6	10.3	89.0	0	11.4	82.2	0	14.4
Ill. 200	83.8	0.3	9.1	82.4	0.4	11.3	89.3	0.5	11.4	81.9	0.6	13.5
Mo. 148	83.0	0.8	9.6	84.3	0.7	11.8	89.7	0.4	13.1	81.6	0.6	15.1
Ohio C. 92	84.8	0.6	5.0	85.6	0.5	5.3	93.5	0.2	4.4	88.0	0.3	6.0
U. S. 35	80.1	0.5	6.9	79.6	0.6	8.1	86.3	0.2	7.2	82.1	0.2	8.5
Kan. 1639				87.6	1.8	7.8	91.8	0.6	8.4	86.3	0.6	9.8
Kan. 1784				86.2	2.8	6.4	92.2	0.2	7.2	86.5	0.3	9.1
Pioneer 300				83.5	4.9	8.1	88.4	0.3	9.2	82.9	0.4	12.6
Pioneer 332				82.5	4.6	9.0	87.4	0.9	10.3	82.1	0.8	12.8
P. A. G. 170				84.1	3.0	6.7	89.7	0.2	6.6	86.6	0.3	8.7
Dekalb 800A				82.4	0.4	8.2	89.5	0.2	8.3	83.9	0	11.0
U. S. 523W							97.0	1.2	4.8	90.6	1.1	6.1
Mo. 836										90.2	0.3	15.3
Mo. 840										88.2	0.2	11.8
Keystone 38										84.5	0.1	10.5
P. A. G. 392										84.6	0.9	8.6

TABLE 6--SUMMARY OF AVERAGE PERFORMANCE RECORDS FOR HYBRIDS
TESTED IN THE CENTRAL REGION 1946-1950

Hybrid	Averages											
	5-Year			4-Year			3-Year			2-Year		
	Acre Yield	Lodging		Acre Yield	Lodging		Acre Yield	Lodging		Acre Yield	Lodging	
Bu.	Root	Stalk	Bu.	Root	Stalk	Bu.	Root	Stalk	Bu.	Root	Stalk	
U. S. 13	73.5	9.2	6.0	73.1	8.6	6.5	81.4	3.6	8.0	87.1	5.5	11.4
Mo. 313	72.6	13.3	5.7	72.1	12.7	6.3	79.2	3.3	7.8	85.6	4.9	11.2
Ill. 200	72.6	17.5	6.5	71.4	16.6	7.1	76.7	5.3	8.1	82.2	7.9	11.0
Mo. 148	72.1	15.8	6.4	71.1	16.1	6.7	79.6	6.0	9.0	84.6	9.0	12.7
Ohio C. 92	74.6	10.0	3.4	73.9	10.6	3.3	78.7	3.2	4.4	84.5	4.8	6.2
Mo. 8	70.8	19.6	8.5	70.9	17.4	10.6	79.2	9.7	10.8	85.6	14.6	14.7
Dekalb 816	72.7	10.5	6.2	74.0	10.3	6.7	78.7	4.4	7.9	83.0	6.7	11.3
Kan. 1639				77.6	15.1	3.9	84.0	4.6	5.1	91.2	7.0	7.0
Kan. 1784				72.1	12.6	5.1	81.4	5.2	6.2	88.4	7.8	8.6
Pioneer 300				72.3	18.4	6.2	78.2	6.7	7.6	82.5	9.9	10.1
U. S. 523W							93.1	7.8	4.7	100.3	11.7	7.1
Midwest 23							79.5	3.7	7.0	84.2	5.5	9.9
Embro 49							82.6	4.4	9.5	85.7	6.6	12.9
P. A. G. 170							78.3	6.3	6.0	84.2	9.1	8.2
Mo. 804										94.9	10.2	11.9
Mo. 840										86.6	6.1	10.6
Keystone 45										92.2	3.5	10.5

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TABLE 7--SUMMARY OF AVERAGE PERFORMANCE RECORDS FOR HYBRIDS
TESTED IN THE SOUTHERN REGION 1946-1950

Hybrid	Averages											
	5-Year			4-Year			3-Year			2-Year		
	Acre Yield	Lodging		Acre Yield	Lodging		Acre Yield	Lodging		Acre Yield	Lodging	
Bu.	Root	Stalk	Bu.	Root	Stalk	Bu.	Root	Stalk	Bu.	Root	Stalk	
U. S. 13	67.4	13.1	11.1	69.2	15.8	13.5	78.0	6.9	12.0	74.5	10.2	15.4
Mo. 313	65.9	10.9	9.5	67.1	13.5	11.7	75.4	5.8	9.9	73.5	8.0	12.5
Ill. 200	67.1	11.1	10.9	67.0	13.7	13.5	75.3	7.3	11.4	71.2	11.0	14.4
Mo. 148	69.3	14.1	13.4	69.5	17.4	16.6	79.7	9.2	13.8	75.9	13.7	18.2
Ohio C. 92	65.5	11.5	7.4	66.7	14.3	8.7	76.3	7.1	6.6	73.8	10.6	8.0
Mo. 8	70.6	22.1	14.0	71.1	26.6	17.6	81.1	16.5	16.7	77.1	23.3	18.8
Pioneer 300	63.2	15.2	13.1	66.3	18.5	15.6	73.7	9.4	14.1	72.7	14.1	17.0
Kan. 1639				68.0	15.8	9.6	78.7	7.0	6.4	77.3	10.6	8.6
Kan. 1784				68.1	20.3	7.5	77.1	11.5	7.0	73.2	17.3	8.7
Funk G 711				77.6	14.3	33.0	91.4	8.8	29.0	88.6	12.0	35.3
Dekalb 875				64.8	11.1	11.6	73.0	3.4	7.8	68.9	5.2	9.8
U. S. 523W							91.7	12.9	6.4	89.4	18.7	9.0
Mo. 804										84.8	11.4	16.6
Mo. 840										77.7	14.6	14.1
Keystone 222										88.7	18.5	33.0
Dixie 17										97.3	24.3	29.5

TABLE 8--NORTHERN REGION, AVERAGE PERFORMANCE RECORDS FOR HYBRIDS TESTED IN NODAWAY, CLINTON, SHELBY, AND MARION COUNTIES

Rank	Hybrid	Moisture				Lodged Plants		Ear Height Grade
		Acre Yield Bu.	in Grain %	Stand %	Root %	Stalk %		
1	Mo. 843 (Exp)	101.9	17.9	91.8	0	4.4	3.9	
2	N.E. 7830 (Exp)	98.3	16.3	90.0	0	3.2	4.0	
3	N.E. 7847 (Exp)	98.2	19.2	88.0	0.3	5.7	4.0	
4	Mo. 4009W (Exp)	98.1	19.5	88.5	0.2	6.2	4.5	
5	Mo. 837 (Exp)	98.0	19.2	91.1	0	7.6	4.4	
6	N.E. 7826 (Exp)	97.7	18.8	90.5	0.3	4.7	4.0	
7	Mo. 836 (Exp)	96.9	20.1	90.2	0.5	10.4	5.0	
8	Keystone 45	96.3	18.7	91.4	0	8.8	4.5	
9	Mo. 860 (Exp)	95.3	18.2	93.9	0	8.2	4.1	
10	Maygold 59A	94.4	16.3	88.3	0	3.9	4.0	
11	Embros 49	93.5	17.7	89.1	0.7	12.0	4.3	
12	P.A.G. 185	93.0	16.9	91.1	0	7.8	4.0	
13	C.B. 7530 (Exp)	92.8	18.2	88.8	0	6.0	3.7	
14	Kan. 1639	92.2	19.8	91.8	0	6.6	3.6	
14	P.A.G. 170	92.2	16.7	91.5	0.5	8.3	3.9	
16	Ohio C. 92	91.4	17.2	90.4	0	4.8	4.2	
17	Pioneer 332	91.0	20.2	89.6	0	10.4	4.2	
18	Dekalb 800A	90.6	16.7	90.6	0	9.7	4.1	
19	KK 77B	89.8	17.2	88.1	0.4	5.4	4.5	
20	Mo. 840 (Exp)	89.4	17.6	92.9	0	6.0	3.6	
21	C.B. 7502 (Exp)	89.3	18.2	93.1	0	6.9	3.8	
22	Old Nick's 126B	89.2	16.4	90.2	0.5	8.0	4.0	
23	Midwest 23	88.7	17.2	87.1	0	7.4	4.0	
24	Mo. 831 (Exp)	88.2	16.1	88.3	0	4.3	3.5	
24	U.S. 523W	88.2	19.3	90.2	0.7	5.1	4.6	
26	Nebr. 1219B (Exp)	88.1	18.0	88.1	0	2.8	3.4	
27	U.S. 13	87.9	18.5	87.2	0	8.8	4.1	
27	Kan. 1784	87.9	18.6	85.5	0	6.8	4.2	
27	C.B. 7539 (Exp)	87.9	16.5	86.9	0	2.5	3.6	
30	Ia. 4476	87.7	18.8	81.7	0	4.7	4.0	
31	Funk G 95	87.4	15.8	86.1	0	8.3	3.9	
32	Mo. 841 (Exp)	85.9	19.2	69.1	0.2	5.0	4.0	
33	United U59	85.7	17.8	83.7	0	7.8	3.8	
34	P.A.G. 392	85.0	14.7	88.1	0.4	7.7	3.8	
35	Pioneer 300	84.9	18.4	83.1	0.3	10.1	3.8	
36	U.S. 35	84.8	17.2	86.8	0	7.4	3.8	
37	Pioneer 302	84.4	19.6	88.5	0.4	4.5	3.9	
37	Funk G 99	84.4	19.0	89.7	0.6	8.7	4.2	
39	Ill. 200	84.1	18.9	86.8	1.1	10.1	4.6	
40	Keystone 38	84.0	18.4	82.8	0	10.7	4.1	
41	Dekalb 847	83.4	16.1	87.3	0	9.0	3.8	
42	Mo. 313	83.2	19.4	85.1	0	10.7	4.1	
43	Mo. 4022W (Exp)	82.8	19.6	91.6	0.3	1.7	3.7	
44	Funk G 50	82.6	17.3	88.0	0	8.0	3.7	
45	Ia. 4531	82.5	17.9	79.6	0	3.3	3.7	
46	Mo. 4021W (Exp)	79.2	19.9	92.0	0.4	1.7	4.0	
47	Embros 115W	78.9	15.3	86.6	0	5.8	3.6	
48	Mo. 148	78.7	19.1	80.1	0.6	13.6	4.5	
49	Dekalb 825	78.6	18.4	90.3	0.2	6.3	3.5	
	Means	88.9	18.0	88.0	0.2	6.9	4.0	

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TABLE 9--1950 PERFORMANCE RECORD FOR COMMERCIAL AND EXPERIMENTAL
HYBRIDS TESTED NEAR MARYVILLE, MISSOURI, IN NODAWAY COUNTY

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants		Ear Height Grade
			Grain %	Stand %	Root %	Stalk %	
1	Mo. 843 (Exp)	105.8	16.7	91.2	0	6.4	4.0
2	N.E. 7826 (Exp)	100.6	19.5	90.0	0.5	5.1	4.0
3	Mo. 836 (Exp)	98.8	20.3	90.8	0	11.9	5.0
4	P.A.G. 170	98.0	16.7	89.2	0	12.1	3.8
5	Mo. 831 (Exp)	96.8	15.8	90.0	0	6.0	3.3
6	Mo. 840 (Exp)	94.9	18.2	90.0	0	4.2	3.5
7	Keystone 45	94.6	20.3	89.2	0	9.3	4.8
8	C.B. 7530 (Exp)	94.3	20.9	90.8	0	3.2	4.0
9	KK 77B	94.2	17.8	89.2	0	11.2	5.0
10	Mo. 860 (Exp)	93.0	19.0	88.7	0	8.5	4.3
11	Pioneer 300	92.9	20.2	85.0	1.0	12.7	4.0
11	Maygold 59A	92.9	17.8	88.3	0	3.3	4.0
13	Pioneer 332	92.4	21.1	88.7	0	8.5	4.5
14	C.B. 7539 (Exp)	91.3	17.6	90.4	0	2.3	4.0
15	N.E. 7830 (Exp)	90.9	19.6	89.6	0	3.7	4.3
16	Embros 49	90.7	18.8	90.8	0	15.1	4.5
17	Mo. 837 (Exp)	90.1	20.7	83.7	0	9.5	4.5
18	P.A.G. 392	89.9	15.2	84.6	0	9.9	4.0
19	Nebr. 1219B (Exp)	89.7	19.4	89.6	0	3.3	3.5
20	Dekalb 800A	89.3	20.0	87.9	0	12.8	4.0
21	Midwest 23	89.0	18.7	85.8	0	8.3	4.0
22	Keystone 38	88.6	19.0	87.5	0	11.0	4.0
23	United U59	87.7	19.8	83.3	0	7.5	4.0
24	Ohio C. 92	87.2	18.8	90.0	0	7.0	4.0
25	P.A.G. 185	86.7	19.1	92.9	0	10.3	4.5
26	Funk G 95	86.5	17.0	73.3	0	10.8	4.3
27	Ia. 4531	86.4	19.4	79.6	0	7.3	4.0
28	Ia. 4476	84.5	20.6	78.7	0	10.0	4.0
29	U. S. 35	84.0	19.0	86.7	0	8.2	3.5
30	C.B. 7502 (Exp)	83.9	20.2	90.4	0	7.8	4.0
31	Mo. 4009W (Exp)	83.8	21.6	91.3	0	3.7	4.8
32	Kan. 1639	83.4	21.1	90.0	0	8.3	3.3
33	U.S. 523W	83.2	19.8	86.2	2.9	3.9	5.0
34	Funk G 50	82.6	17.4	84.2	0	8.9	3.8
35	Pioneer 302	82.0	22.1	87.1	1.4	5.3	4.0
36	N.E. 7847 (Exp)	81.6	19.8	82.1	0	5.6	3.8
37	Kan. 1784	81.4	19.4	82.1	0	6.1	4.3
38	Old Nick's 126B	81.3	18.8	86.2	0	12.1	4.0
39	Embros 115W	81.0	16.9	84.6	0	5.9	3.8
40	Funk G 99	80.3	22.3	91.2	0.9	10.0	4.3
41	U.S. 13	79.6	20.3	86.3	0	10.1	4.0
42	Mo. 313	79.5	22.4	84.2	0	10.9	4.0
43	Dekalb 847	77.5	17.3	84.2	0	18.3	4.0
44	Mo. 841 (Exp)	76.0	20.3	66.7	0	3.8	4.5
45	Mo. 148	74.3	22.1	82.5	0	15.2	4.5
46	Dekalb 825	73.6	20.2	92.5	0.9	9.0	3.3
47	Ill. 200	71.5	21.8	87.5	3.8	12.4	4.8
48	Mo. 4021W (Exp)	70.1	19.4	86.7	0	1.9	4.0
49	Mo. 4022W (Exp)	66.2	20.2	87.5	0	2.4	3.8
	Means	86.4	19.4	86.7	0.2	8.2	4.1

Differences in yield between any two hybrids of less than 16.9 bushels are not considered significant.

TABLE 10--1950 PERFORMANCE RECORD FOR COMMERCIAL AND EXPERIMENTAL HYBRIDS TESTED NEAR LATHROP, MISSOURI, IN CLINTON COUNTY

Rank	Hybrid	Moisture			Lodged Plants		Ear Height Grade
		Acre Yield Bu.	in Grain %	Stand %	Root %	Stalk %	
1	Mo. 4009W (Exp)	131.6	21.5	92.1	0.9	6.8	4.8
2	N.E. 7830 (Exp)	130.3	16.9	91.2	0	5.0	4.0
3	N.E. 7847 (Exp)	128.2	21.2	93.3	0	2.7	4.0
4	C.B. 7530 (Exp)	125.1	18.8	81.2	0	5.1	3.8
5	C.B. 7502 (Exp)	124.4	19.4	92.9	0	5.4	4.0
6	Kan. 1639	123.2	20.8	88.3	0	5.2	4.0
7	Mo. 860 (Exp)	122.3	20.6	94.2	0	6.2	4.5
8	Mo. 836 (Exp)	121.6	22.1	86.2	1.9	5.8	5.3
9	Dekalb 800A	121.3	17.8	90.4	0	6.9	4.5
9	Mo. 843 (Exp)	121.3	20.7	84.6	0	2.5	3.8
11	Mo. 837 (Exp)	120.3	21.3	91.7	0	6.8	4.5
12	U.S. 523W	120.0	21.5	87.5	0	3.3	4.5
13	P.A.G. 185	119.5	17.2	86.7	0	4.8	4.3
14	Pioneer 332	118.8	21.6	82.9	0	7.5	4.0
15	Maygold 59A	118.4	17.4	81.7	0	5.1	4.3
16	Midwest 23	117.6	18.7	82.1	0	6.1	4.3
17	Kan. 1784	117.3	19.5	81.7	0	4.6	4.5
18	Embro 49	116.7	19.8	80.4	2.6	4.1	4.3
19	N.E. 7826 (Exp)	116.6	21.1	81.2	0.5	2.6	4.0
20	Keystone 45	115.1	21.4	83.7	0	7.0	5.0
21	Funk G 99	114.3	19.8	82.5	1.5	9.6	4.8
22	Dekalb 847	114.2	16.5	82.9	0	7.0	4.0
23	Funk G 95	113.9	17.2	85.4	0	4.9	4.0
24	Ohio C. 92	113.4	20.8	84.6	0	2.0	4.5
25	Old Nick's 126B	113.0	18.1	84.6	1.0	3.0	4.3
26	Mo. 831 (Exp)	112.8	19.2	81.7	0	2.0	3.8
27	Funk G 50	112.3	20.5	87.5	0	5.2	4.0
28	KK 77B	112.2	19.5	88.7	1.4	4.2	4.5
29	P.A.G. 392	111.8	16.4	88.3	1.4	2.4	3.8
30	Mo. 840 (Exp)	111.5	18.1	92.9	0	4.9	4.0
31	P.A.G. 170	111.4	18.8	87.5	1.9	2.4	4.0
32	Pioneer 300	110.9	18.2	76.2	0	6.0	4.0
33	Iowa 4476	109.8	22.1	74.6	0	1.7	4.0
34	Pioneer 302	109.1	21.1	87.5	0	2.4	4.0
35	Mo. 4022W (Exp)	108.3	22.6	93.7	1.3	0.9	4.0
36	U.S. 13	108.0	20.3	82.1	0	4.6	4.0
37	Mo. 313	105.7	19.0	80.4	0	11.9	4.5
38	Mo. 148	104.8	18.1	72.9	2.3	10.3	4.8
39	C.B. 7539 (Exp)	104.5	20.4	70.4	0	1.8	3.8
40	Dekalb 825	104.1	19.0	90.0	0	4.2	4.0
41	Mo. 4021W (Exp)	103.5	24.5	90.8	1.4	1.8	4.3
41	Mo. 841 (Exp)	103.5	21.1	68.3	0.6	3.0	4.0
43	Nebr. 1219B (Exp)	103.3	19.8	77.9	0	2.1	3.5
44	U.S. 35	103.0	17.2	72.1	0	7.5	4.0
45	Ill. 200	102.0	18.5	77.1	0.5	7.0	5.0
46	United U59	101.7	20.3	69.2	0	4.2	4.0
47	Keystone 38	95.5	20.2	67.1	0	5.6	4.3
48	Embro 115W	92.7	14.7	80.8	0	4.1	3.3
49	Iowa 4531	91.8	21.8	60.0	0	0.7	3.8
	Means	112.9	19.7	83.1	0.4	4.7	4.2

Differences in yield between any two hybrids of less than 5.69 bushels are not considered significant.

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TABLE 11--1950 PERFORMANCE RECORD FOR COMMERCIAL AND EXPERIMENTAL HYBRIDS TESTED NEAR SHELBYNA, MISSOURI, IN SHELBY COUNTY

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants		Ear Height Grade
			in Grain %	Stand %	Root %	Stalk %	
1	Mo. 843 (Exp)	74.0	19.0	95.6	0	0.7	3.8
2	N.E. 7847 (Exp)	73.9	18.1	94.4	0	1.3	3.8
3	Embros 49	71.8	15.8	93.8	0	2.7	4.0
4	N.E. 7830 (Exp)	70.5	16.1	95.0	0	0	3.8
5	Mo. 4009W (Exp)	68.5	18.9	84.4	0	3.0	4.0
6	N.E. 7826 (Exp)	68.4	17.4	95.6	0	0	4.0
7	Keystone 45	68.0	17.6	96.9	0	2.6	3.8
8	Mo. 4022W (Exp)	67.5	17.2	95.6	0	0	3.0
9	P.A.G. 185	66.9	16.6	91.3	0	0	3.3
10	Mo. 837 (Exp)	65.6	17.0	96.3	0	3.9	3.8
11	Pioneer 332	65.5	20.2	98.1	0	0	4.0
12	Mo. 860 (Exp)	64.8	17.8	98.8	0	3.2	3.8
13	Mo. 831 (Exp)	64.6	15.4	95.6	0	1.3	3.0
14	KK 77B	64.4	14.8	95.6	0	0.7	4.0
15	Mo. 840 (Exp)	64.3	17.4	98.1	0	0	3.3
16	U.S. 13	64.2	17.2	93.8	0	0.7	4.0
16	P.A.G. 170	64.2	15.7	97.5	0	0.6	3.8
18	Nebr. 1219B (Exp)	64.0	15.7	95.0	0	0	3.3
19	Kan. 1639	63.9	19.8	93.1	0	0	3.3
20	Kan. 1784	63.8	17.8	91.9	0	0	4.0
21	Ill. 200	63.7	18.5	88.8	0	2.8	4.0
21	Ia. 4476	63.7	16.6	94.4	0	0.7	4.0
21	Old Nick's 126B	63.7	15.7	98.8	0	1.3	4.0
24	Maygold 59A	63.1	16.9	94.4	0	0.7	3.8
25	Ia. 4531	62.8	16.6	95.6	0	0.7	3.3
26	U.S. 523W	62.5	16.9	98.1	0	1.3	4.0
27	Ohio C. 92	62.1	14.9	96.9	0	0	3.8
28	Mo. 313	61.9	20.0	95.0	0	1.3	3.8
29	Mo. 836 (Exp)	61.6	19.4	93.8	0	2.7	4.5
30	Midwest 23	61.3	16.9	95.6	0	2.0	4.0
30	Funk G 99	61.3	18.2	95.6	0	2.0	4.0
32	Keystone 38	61.1	16.7	95.0	0	2.6	4.0
33	Funk G 95	60.8	14.2	91.3	0	3.4	3.8
34	U.S. 35	60.4	16.0	93.8	0	0	3.8
35	Mo. 841 (Exp)	60.3	18.5	68.1	0	0	3.5
36	C.B. 7502 (Exp)	60.2	16.5	97.5	0	0.6	3.3
37	C.B. 7539 (Exp)	59.6	14.1	91.9	0	0	3.3
38	P.A.G. 392	59.4	13.9	94.4	0	1.3	4.0
39	Funk G 50	58.7	15.8	95.6	0	2.0	3.5
40	Dekalb 825	58.2	18.7	96.3	0	1.3	3.0
41	United U59	57.9	17.2	91.9	0	0.7	3.5
42	C.B. 7530 (Exp)	57.5	16.7	92.5	0	1.4	3.0
43	Embros 115W	57.4	14.6	96.3	0	1.9	3.5
44	Mo. 148	57.2	18.7	91.3	0	2.7	4.3
45	Mo. 4021W (Exp)	55.5	17.9	95.0	0	0	4.0
46	Dekalb 847	55.4	15.4	96.3	0	0.6	3.5
47	Pioneer 300	55.0	19.8	93.8	0	0	3.3
48	Dekalb 800A	54.8	16.3	95.0	0	1.3	3.8
49	Pioneer 302	54.7	18.6	92.5	0	0	3.5
	Means	62.7	17.1	94.1	0	1.1	3.7

Differences in yield between any two hybrids of less than 8.48 bushels are not considered significant.

TABLE 12--1950 PERFORMANCE RECORD FOR COMMERCIAL AND EXPERIMENTAL HYBRIDS TESTED NEAR PALMYRA, MISSOURI, IN MARION COUNTY

Rank	Hybrids	Moisture			Lodged Plants		Ear Height Grade
		Acre Yield Bu.	in Grain %	Stand %	Root %	Stalk %	
1	Mo. 837 (Exp)	116.1	17.8	92.8	0	10.2	4.8
2	N.E. 7847 (Exp)	109.2	19.3	82.1	1.0	13.2	4.5
3	Mo. 4009W (Exp)	108.5	16.1	86.3	0	11.1	4.5
4	Keystone 45	107.6	15.4	95.8	0	16.1	4.3
5	Mo. 843 (Exp)	106.4	15.0	95.8	0	7.8	3.8
6	Mo. 836 (Exp)	105.6	18.4	90.0	0	21.3	5.0
7	N.E. 7826 (Exp)	105.0	17.2	95.0	0	11.0	4.0
8	Mo. 841 (Exp)	103.9	16.9	73.3	0	13.1	4.0
9	Maygold 59A	103.2	13.2	88.8	0	6.6	4.0
10	Ohio C. 92	102.9	14.1	90.0	0	10.2	4.3
11	N.E. 7830 (Exp)	101.5	12.5	83.8	0	4.0	4.0
12	Mo. 860 (Exp)	100.9	15.2	93.8	0	14.7	3.8
13	U.S. 13	99.8	16.3	86.7	0	19.7	4.3
14	Ill. 200	99.0	16.7	93.8	0	18.2	4.5
14	P.A.G. 185	99.0	14.7	93.3	0	16.1	3.8
16	Old Nick's 126B	98.9	12.8	91.3	0.9	15.5	3.8
17	Kan. 1639	98.3	17.6	95.8	0	13.0	3.8
18	Dekalb 800A	96.9	12.6	89.2	0	17.8	4.0
19	C.B. 7539 (Exp)	96.1	14.0	95.0	0	5.7	3.3
20	United U59	95.6	13.7	90.4	0	18.9	3.8
21	Nebr. 1219B (Exp)	95.3	17.2	90.0	0	5.6	3.3
21	P.A.G. 170	95.3	15.4	91.7	0	18.2	3.8
23	Embryo 49	94.8	16.5	91.3	0	26.0	4.5
24	C.B. 7530 (Exp)	94.3	16.5	90.8	0	14.2	3.8
25	Ia. 4476	92.9	16.0	79.2	0	6.3	3.8
26	U.S. 35	91.7	16.4	94.6	0	13.7	3.8
27	Pioneer 302	91.6	16.4	86.7	0	10.1	4.0
28	Keystone 38	90.9	17.8	81.7	0	23.5	4.0
29	Mo. 4022W (Exp)	89.3	18.4	89.6	0	3.3	4.0
30	Ia. 4531	89.0	13.8	83.8	0	4.5	3.8
30	Kan. 1784	89.0	17.8	86.3	0	16.4	4.0
32	C.B. 7502 (Exp)	88.7	16.5	91.7	0	13.6	3.8
33	Funk G 95	88.5	14.9	94.2	0	14.2	3.5
34	KK 77B	88.4	16.5	78.8	0	5.3	4.3
35	Mo. 4021W (Exp)	87.6	17.8	95.4	0	3.1	3.8
36	U.S. 523W	87.1	18.8	88.8	0	11.7	4.8
36	Pioneer 332	87.1	17.8	88.8	0	25.4	4.3
38	Mo. 840 (Exp)	87.0	16.7	90.4	0	14.7	3.5
38	Midwest 23	87.0	14.4	85.0	0	13.2	3.8
40	Dekalb 847	86.6	15.0	85.8	0	10.2	3.8
41	Mo. 313	85.6	16.0	80.8	0	18.6	4.0
42	Embryo 115W	84.5	14.9	84.6	0	11.3	3.8
43	Funk G 99	81.7	15.6	89.6	0	13.0	3.5
44	Pioneer 300	80.6	15.3	77.5	0	21.5	4.0
45	P.A.G. 392	78.9	13.3	85.0	0	17.2	3.5
46	Mo. 831 (Exp)	78.5	14.0	85.8	0	7.8	3.8
47	Mo. 148	78.4	17.5	73.8	0	26.0	4.5
48	Dekalb 825	78.3	15.7	82.5	0	10.6	3.5
49	Funk G 50	76.7	15.4	84.6	0	15.8	3.3
	Means	93.5	15.9	88.0	0.1	13.5	4.0

Differences in yield between any two hybrids of less than 20.2 bushels are not considered significant.

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TABLE 13--CENTRAL REGION, AVERAGE PERFORMANCE RECORDS FOR
HYBRIDS TESTED IN CARROLL, SALINE, BOONE, AND COLE COUNTIES

Rank	Hybrid	Moisture			Lodged Root %	Plants Stalk %	Ear Height Grade
		Acre Yield Bu.	in Grain %	Stand %			
1	Mo. 862 (Exp)	121.8	20.0	92.3	10.4	8.6	4.4
2	C.B. 7610 (Exp)	118.9	19.1	92.9	6.8	8.9	4.5
3	U.S. 523W	111.6	19.3	88.7	13.4	8.3	4.2
4	Mo. 804 (Exp)	110.4	18.5	91.9	10.6	14.1	4.4
5	T.R.F. 3	109.6	19.1	91.0	13.5	4.5	4.4
6	Mo. 842 (Exp)	108.5	18.2	90.3	5.4	11.9	4.0
7	N.E. 7830 (Exp)	106.8	15.3	92.0	9.8	8.3	3.8
8	Mo. 857 (Exp)	105.8	16.5	91.6	6.6	11.0	4.5
9	Mo. 4009W (Exp)	105.4	18.7	86.7	12.5	10.3	4.1
10	Kan. 1639	103.2	17.4	91.4	8.6	7.9	3.0
11	Pioneer 332	102.9	17.0	90.7	8.1	14.9	4.0
11	Funk G 98	102.9	17.0	87.0	10.2	10.8	3.8
13	Maygold 59A	102.5	14.4	89.5	7.3	10.9	3.8
14	KK 77B	101.9	14.9	86.5	8.6	9.9	3.8
14	C.B. 7616 (Exp)	101.9	18.4	72.6	10.7	10.4	4.1
16	Kan. 1784	101.5	16.0	87.3	8.2	9.9	3.7
17	Ia. 4476	101.0	17.9	83.7	1.9	6.5	3.5
18	Embro 49	100.8	16.4	90.5	9.2	12.8	3.9
19	Keystone 45	100.5	17.0	88.9	4.8	12.6	3.7
20	P.A.G. 185	100.3	15.2	88.5	7.7	6.3	3.7
21	U.S. 13	100.0	16.4	88.2	7.2	11.1	3.8
22	Mo. 4022W (Exp)	99.0	18.6	89.0	13.9	4.2	3.5
23	Funk G 95	98.4	15.3	89.8	5.7	11.6	3.7
24	Mo. 840 (Exp)	97.9	15.2	88.4	6.6	11.0	3.4
25	Midwest 23	97.8	16.3	88.0	7.7	10.9	3.7
26	Ohio C. 92	97.7	16.1	85.0	5.0	7.1	3.6
27	Pioneer 302	97.5	17.4	83.8	6.5	11.0	3.9
27	Nebr. 893B (Exp)	97.5	15.5	90.5	4.6	8.3	3.0
29	Mo. 8	96.9	18.9	87.9	19.2	13.5	4.2
29	Mo. 4021W (Exp)	96.9	18.8	89.0	15.2	3.6	3.9
29	Mo. 831 (Exp)	96.9	15.1	89.3	12.6	7.0	3.0
32	Embro 36	96.8	15.1	89.5	5.8	9.9	3.5
33	Dekalb 875	96.6	16.7	85.8	5.0	9.9	3.4
34	Nebr. 1219B (Exp)	96.5	15.3	88.7	11.9	7.3	3.3
35	Mo. 313	95.9	15.6	82.1	3.4	12.9	3.8
36	C.B. 7530 (Exp)	95.0	16.9	86.7	7.2	11.9	3.4
37	Mo. 800 (Exp)	94.3	19.1	63.4	4.6	4.3	4.4
37	Mo. 844 (Exp)	94.3	15.7	83.8	8.1	9.9	3.5
39	N.E. 7803 (Exp)	93.7	15.2	78.4	10.1	7.4	3.8
39	Dekalb 817A	93.7	15.2	90.2	6.7	9.8	3.4
41	Dekalb 816	93.5	16.9	86.1	9.6	11.3	3.5
41	Ill. 200	93.5	16.0	84.3	11.0	13.9	4.0
43	Pioneer 300	92.9	15.8	88.5	11.1	12.8	3.5
44	P.A.G. 392	92.2	14.9	89.6	4.5	9.6	3.4
45	P.A.G. 170	91.9	14.5	87.2	11.6	9.5	3.5
46	Mo. 148	91.8	16.5	82.2	10.7	14.6	3.9
47	C.B. 7502 (Exp)	91.1	15.9	86.2	8.4	11.5	3.3
48	United U65	90.4	16.6	82.3	15.4	9.8	3.8
49	Keystone 111W	86.6	17.0	80.6	5.7	13.9	3.5
	Means	99.5	16.7	86.9	8.8	10.0	3.8

TABLE 14--1950 PERFORMANCE RECORD FOR COMMERCIAL AND EXPERIMENTAL HYBRIDS TESTED NEAR CARROLLTON, MISSOURI, IN CARROLL COUNTY

Rank	Hybrid	Moisture			Lodged Plants		Ear Height Grade
		Acre Yield Bu.	in Grain %	Stand %	Root %	Stalk %	
1	C.B. 7610 (Exp)	139.5	13.2	97.5	19.7	16.7	5.0
2	Mo. 862 (Exp)	133.1	12.0	94.6	40.1	16.7	5.0
3	Mo. 804 (Exp)	125.5	13.4	97.9	35.7	22.6	5.0
4	Funk G 98	124.8	11.6	94.2	35.8	14.6	4.0
5	Mo. 842 (Exp)	122.3	15.4	95.8	19.1	17.4	4.3
6	Pioneer 332	121.6	12.5	95.0	29.4	15.4	4.8
7	KK 77B	120.5	11.7	94.6	33.5	10.1	4.3
8	Mo. 857 (Exp)	119.0	13.3	95.0	23.2	11.4	4.5
9	P.A.G. 185	117.9	11.7	92.5	23.9	7.7	3.8
10	N.E. 7830 (Exp)	117.6	13.9	95.8	37.4	17.8	4.3
11	Ia. 4476	117.4	14.3	82.9	7.5	5.5	4.0
12	U.S. 523W	117.3	18.6	88.8	40.4	10.8	4.8
12	Mo. 4022W (Exp)	117.3	12.1	96.3	52.8	3.9	4.3
14	C.B. 7616 (Exp)	116.5	13.3	79.2	36.3	24.7	4.5
15	Mo. 4021W (Exp)	116.0	12.8	92.1	59.7	4.5	4.5
16	Midwest 23	115.9	12.5	95.0	25.4	11.8	4.3
16	Pioneer 300	115.9	11.6	93.3	33.9	18.3	4.0
18	Keystone 45	115.8	12.0	90.0	19.0	15.7	4.0
19	Kan. 1784	115.7	11.9	92.5	30.2	13.1	4.0
20	Mo. 840 (Exp)	115.2	12.7	91.3	23.7	9.6	3.8
21	Ohio C. 92	114.6	12.3	89.2	19.2	7.9	3.8
22	Funk G 95	114.5	13.3	95.8	20.9	10.4	4.0
22	Mo. 4009W (Exp)	114.5	15.3	91.7	47.3	16.8	4.5
24	Nebr. 893B (Exp)	113.6	12.3	95.0	17.5	3.9	3.0
25	Kan. 1639	113.4	15.6	95.0	31.6	7.9	3.3
26	T.R.F. 3	113.2	11.7	93.3	43.8	7.6	5.0
27	C.B. 7530 (Exp)	112.9	12.7	90.4	27.6	13.8	4.0
28	Pioneer 302	112.8	12.0	86.3	26.1	4.8	4.3
29	United U65	112.7	10.1	85.4	55.1	16.6	4.0
30	Mo. 8	112.6	13.8	95.4	57.2	16.6	4.5
31	Maygold 59A	112.0	14.2	93.3	27.7	11.2	4.0
32	U.S. 13	111.5	12.5	91.3	28.8	11.0	4.3
32	Nebr. 1219B (Exp)	111.5	11.9	93.8	44.9	5.3	3.3
34	P.A.G. 392	111.4	13.0	94.6	17.6	9.3	3.5
34	Mo. 800 (Exp)	111.4	13.3	66.3	15.1	10.7	5.0
36	Embro 49	110.9	12.8	95.4	35.8	17.5	4.0
37	Embro 36	110.0	13.4	92.9	22.4	11.7	4.0
38	Dekalb 816	107.7	14.6	90.0	34.7	6.9	3.8
38	Il. 200	107.7	11.6	85.4	39.5	15.1	4.3
40	Mo. 831 (Exp)	107.3	12.8	92.5	44.1	7.7	3.3
41	Dekalb 817A	106.4	12.7	94.6	25.1	7.0	3.8
42	Keystone 111W	106.2	11.6	80.8	20.1	17.5	4.0
43	Mo. 148	105.7	11.6	87.9	35.5	20.4	4.3
44	Mo. 313	105.2	13.2	78.8	10.6	9.0	4.0
45	N.E. 7803 (Exp)	104.9	11.9	83.3	40.5	10.0	3.8
46	C.B. 7502 (Exp)	103.3	13.0	82.5	26.3	16.7	3.8
47	Dekalb 875	102.8	13.8	80.4	18.7	10.9	3.8
48	P.A.G. 170	101.1	12.0	85.4	40.5	11.2	4.0
49	Mo. 844 (Exp)	<u>100.1</u>	<u>11.9</u>	<u>82.1</u>	<u>32.5</u>	<u>14.2</u>	<u>3.5</u>
	Means	113.8	12.9	90.3	31.3	12.2	4.1

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

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TABLE 15--1950 PERFORMANCE RECORD FOR COMMERCIAL AND EXPERIMENTAL
HYBRIDS TESTED NEAR MALTA BEND, MISSOURI, IN SALINE COUNTY

Rank	Hybrid	Moisture			Lodged Root %	Plants Stalk %	Ear Height Grade
		Acre Yield Bu.	in Grain %	Stand %			
1	Mo. 862 (Exp)	133.9	20.5	92.9	1.3	14.8	5.0
2	Mo. 804 (Exp)	123.9	17.2	90.8	5.0	24.3	5.0
3	C.B. 7610 (Exp)	122.2	19.8	92.1	4.5	15.8	5.0
4	U.S. 523W	121.7	15.8	87.9	8.5	17.5	4.8
5	Mo. 4009W (Exp)	121.3	19.5	89.6	2.8	20.0	4.5
6	Kan. 1639	117.6	16.3	95.0	2.6	18.4	3.5
7	N.E. 7830 (Exp)	115.7	14.9	95.0	0	9.2	4.0
7	T.R.F. 3	115.7	20.2	93.8	8.4	9.8	5.0
9	Mo. 857 (Exp)	114.7	14.8	95.0	3.1	24.6	5.3
10	Embros 49	114.4	15.2	91.7	0.9	26.4	4.5
11	Mo. 842 (Exp)	114.3	18.1	91.3	1.8	22.8	4.8
12	Dekalb 875	113.2	16.1	90.0	1.4	21.8	4.0
13	U.S. 13	113.0	15.0	90.8	0	31.7	4.0
14	Nebr. 1219B (Exp)	112.9	13.2	92.5	2.7	17.6	3.8
15	Pioneer 302	112.0	15.2	91.3	0	19.2	4.3
16	Funk G 98	111.8	16.7	90.0	5.1	19.9	4.5
17	Maygold 59A	111.1	13.6	90.4	1.4	27.2	4.3
18	Mo. 840 (Exp)	110.4	14.8	92.9	2.7	25.1	4.0
19	Ia. 4476	109.6	18.5	84.2	0	13.4	4.0
20	Nebr. 893B (Exp)	108.4	14.2	92.1	0.9	24.4	4.0
21	Pioneer 332	107.8	18.6	92.9	3.1	35.9	4.3
22	KK 77B	107.6	13.6	92.5	0.9	25.2	4.3
23	P.A.G. 185	107.5	13.8	87.5	6.2	13.3	4.0
24	Keystone 45	107.2	16.1	90.0	0	29.2	4.3
25	Kan. 1784	107.1	15.0	83.3	2.5	20.5	3.8
26	Mo. 8	106.4	16.9	84.2	17.3	21.8	5.0
27	Ohio C. 92	105.2	14.4	83.3	0	16.0	4.0
28	Mo. 831 (Exp)	104.8	14.3	91.3	6.4	18.7	3.5
29	Embros 36	103.5	14.3	90.4	0.9	24.4	3.8
30	Funk G 95	103.3	14.6	88.3	1.4	25.9	4.3
31	Mo. 844 (Exp)	103.2	15.9	85.4	0	15.1	4.0
32	C.B. 7616 (Exp)	103.1	17.8	62.5	4.0	10.7	4.5
33	C.B. 7530 (Exp)	103.0	18.1	93.8	1.3	22.7	3.8
34	Dekalb 816	102.9	15.2	87.9	3.8	28.4	4.0
35	Ill. 200	100.6	16.4	90.0	4.6	25.9	4.5
36	Mo. 313	100.5	15.6	81.7	1.5	33.7	4.3
36	Dekalb 817A	100.5	14.0	91.3	1.8	28.3	4.0
38	Midwest 23	100.0	16.5	89.2	4.2	25.2	4.3
38	P.A.G. 170	100.0	13.8	89.6	4.2	18.6	3.8
40	P.A.G. 392	99.7	12.8	90.8	0.5	25.2	3.8
41	N.E. 7803 (Exp)	99.5	14.4	74.2	0	14.6	4.3
42	Mo. 4022W (Exp)	98.9	20.3	89.2	1.4	10.3	3.5
43	C.B. 7502 (Exp)	96.6	14.7	87.1	6.2	22.0	3.5
44	Mo. 4021W (Exp)	96.4	18.6	90.4	0.9	8.8	4.0
45	United U65	95.9	15.9	83.3	3.5	16.0	4.3
46	Mo. 148	95.7	16.5	79.2	7.4	26.3	4.3
47	Pioneer 300	94.9	15.2	83.8	8.5	21.4	3.8
48	Mo. 800 (Exp)	90.3	19.1	57.1	1.5	4.4	4.5
49	Keystone 111W	85.2	16.1	80.4	2.6	26.4	4.3
	Means	107.0	16.1	87.8	3.1	20.8	4.2

Differences in yield between any two hybrids of less than 10.6 bushels are not considered significant.

TABLE 16--1950 PERFORMANCE RECORD FOR COMMERCIAL AND EXPERIMENTAL HYBRIDS TESTED NEAR COLUMBIA, MISSOURI, IN BOONE COUNTY

Rank	Hybrids	Acre Yield Bu.	Moisture		Lodged Plants		Ear Height Grade
			in Grain %	Stand %	Root %	Stalk %	
1	C.B. 7610 (Exp)	102.8	20.6	90.1	2.9	0.6	3.5
2	T.R.F. 3	98.4	21.0	93.7	0.6	0	3.0
3	Mo. 862 (Exp)	96.6	24.3	93.7	0	1.1	3.0
4	Mo. 842 (Exp)	93.8	20.3	90.1	0.6	1.7	3.0
5	N.E. 7830 (Exp)	91.3	16.5	88.0	1.8	3.0	3.0
6	U.S. 523W	86.5	22.1	88.2	4.7	2.4	3.0
7	Mo. 4009W (Exp)	86.0	18.5	88.9	0	3.9	3.0
8	Kan. 1784	85.4	18.6	89.6	0	0.6	2.8
9	Pioneer 332	84.5	20.3	90.1	0	2.3	3.0
10	KK 77B	84.0	18.1	71.4	0	1.5	2.7
11	Mo. 4021W (Exp)	83.1	21.6	89.1	0	0.6	3.0
12	Funk G 95	82.6	16.9	91.1	0.6	4.0	2.5
12	Mo. 804 (Exp)	82.6	22.4	89.1	1.8	2.9	3.0
14	Mo. 4022W (Exp)	82.3	20.3	82.8	1.3	1.9	3.0
15	P.A.G. 185	82.0	18.1	90.6	0	1.1	3.0
16	Mo. 8	81.6	21.5	87.0	2.4	4.2	3.3
17	Mo. 857 (Exp)	81.3	19.8	86.8	0	4.8	3.3
18	Embro 49	80.5	19.8	90.1	0	1.7	3.0
19	Kan. 1639	80.3	18.8	90.3	0	3.8	2.0
20	U.S. 13	79.9	19.8	86.5	0	0	3.0
21	Maygold 59A	79.3	15.8	82.8	0	0.6	2.8
22	Funk G 98	79.1	19.8	75.5	0	3.4	3.0
23	Dekalb 875	78.9	19.4	92.2	0	3.4	2.3
24	Mo. 844 (Exp)	78.8	16.7	84.9	0	3.7	2.5
25	Dekalb 817A	78.3	16.9	87.0	0	1.2	2.8
26	Mo. 313	78.0	17.2	82.3	1.3	2.5	3.0
27	Keystone 45	77.9	21.2	88.0	0	1.8	2.8
28	Mo. 831 (Exp)	77.4	16.9	86.8	0	1.6	2.0
29	Dekalb 816	77.1	18.8	84.9	0	1.8	2.5
30	Embro 36	76.9	17.2	88.0	0	1.2	2.5
31	C.B. 7616 (Exp)	75.6	22.4	62.5	2.5	4.2	3.5
32	Ia. 4476	75.1	20.2	82.8	0	4.4	2.3
33	Keystone 111W	74.3	20.5	80.7	0	5.8	2.3
34	P.A.G. 170	74.1	16.5	88.5	1.8	4.7	2.8
35	C.B. 7530 (Exp)	73.8	17.8	81.2	0	6.4	2.3
36	Mo. 840 (Exp)	73.6	17.2	85.9	0	7.9	2.3
37	Midwest 23	73.4	20.2	82.3	1.3	3.2	2.3
38	Ohio C. 92	73.0	20.5	82.8	0.6	3.8	2.8
39	Mo. 148	72.6	19.8	81.2	0	3.8	2.8
40	Ill. 200	71.9	18.6	77.1	0	10.8	2.8
40	Pioneer 300	71.9	19.8	89.1	1.8	5.8	2.5
42	N.E. 7803 (Exp)	71.5	18.1	80.2	0	0.6	3.0
43	C.B. 7502 (Exp)	70.5	18.5	86.5	1.2	0.6	2.3
43	Nebr. 1219B (Exp)	70.5	17.6	84.4	0	6.2	2.5
45	Nebr. 893B (Exp)	69.9	18.6	88.0	0	2.4	2.0
46	P.A.G. 392	69.6	18.2	87.5	0	0	3.0
47	Pioneer 302	68.1	20.2	70.3	0	0.7	3.0
48	Mo. 800 (Exp)	67.0	23.2	54.2	0	1.0	3.3
49	United U65	64.9	21.2	75.0	1.4	2.1	2.8
	Means	78.9	19.4	85.6	0.6	2.8	2.8

Differences in yield between any two hybrids of less than 12.9 bushels are not considered significant.

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TABLE 17--1950 PERFORMANCE RECORD FOR COMMERCIAL AND EXPERIMENTAL
HYBRIDS TESTED NEAR JEFFERSON CITY, MISSOURI, IN COLE COUNTY

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants		Ear Height Grade
			in Grain %	Stand %	Root %	Stalk %	
1	Mo. 862 (Exp)	123.7	23.2	87.9	0	1.9	4.5
2	U.S. 523W	120.8	20.5	90.0	0	2.3	4.0
3	C.B. 7616 (Exp)	112.3	20.2	86.3	0	1.9	4.0
4	T.R.F. 3	111.2	23.5	83.3	1.0	0.5	4.5
5	C.B. 7610 (Exp)	111.1	22.9	91.7	0	2.3	4.3
6	Mo. 804 (Exp)	109.7	21.1	89.6	0	6.5	4.5
7	Mo. 800 (Exp)	108.4	20.7	75.8	1.6	1.1	4.8
8	Mo. 857 (Exp)	108.0	18.2	89.6	0	3.3	4.8
9	Maygold 59A	107.5	14.0	91.3	0	4.6	4.0
10	Mo. 842 (Exp)	103.7	19.0	83.8	0	5.5	4.0
11	N.E. 7830 (Exp)	102.5	15.8	89.2	0	3.3	3.8
12	Midwest 23	101.9	15.8	85.4	0	3.4	3.8
13	Ia. 4476	101.8	18.5	85.0	0	2.5	3.5
14	Kan. 1639	101.3	18.8	85.4	0	1.5	3.3
15	Keystone 45	101.2	18.7	87.5	0	3.8	3.8
16	Mo. 313	99.9	16.5	85.4	0	6.3	4.0
17	Mo. 4009W (Exp)	99.8	21.5	76.7	0	0.5	4.3
18	N.E. 7803 (Exp)	98.7	16.5	75.8	0	4.4	4.0
19	Ohio C. 92	98.1	17.2	84.6	0	0.5	3.8
20	Mo. 831 (Exp)	98.0	16.4	86.7	0	0	3.0
21	Nebr. 893B (Exp)	97.9	16.9	86.7	0	2.4	3.0
22	Kan. 1784	97.7	18.5	83.8	0	5.5	4.0
23	Pioneer 332	97.6	16.7	84.6	0	5.9	3.8
24	Embro 49	97.4	17.6	84.6	0	5.4	4.0
25	Mo. 4022W (Exp)	97.3	21.5	87.5	0	0.5	3.3
26	Pioneer 302	96.9	22.1	87.1	0	19.1	3.8
27	Embro 36	96.6	15.4	86.7	0	2.4	3.8
28	Funk G 98	96.0	20.0	88.3	0	5.2	3.8
29	U.S. 13	95.7	18.2	84.2	0	1.5	3.8
30	KK 77B	95.3	16.3	87.5	0	2.9	4.0
31	Mo. 844 (Exp)	94.9	18.2	82.9	0	6.5	3.8
32	C.B. 7502 (Exp)	94.1	17.2	88.8	0	6.6	3.5
33	Ill. 200	93.7	17.5	84.6	0	3.9	4.3
34	P.A.G. 185	93.6	17.0	83.3	0.5	3.0	3.8
35	Funk G 95	93.2	16.3	83.8	0	6.0	3.8
36	Mo. 148	93.0	17.9	80.4	0	7.8	4.3
37	P.A.G. 170	92.4	15.7	85.4	0	3.4	3.3
38	Mo. 840 (Exp)	92.2	16.1	83.3	0	1.5	3.3
39	Mo. 4021W (Exp)	92.1	22.1	84.2	0	0.5	4.0
40	Dekalb 875	91.5	17.3	80.4	0	3.6	3.5
41	Nebr. 1219B (Exp)	91.0	18.6	84.2	0	0	3.5
42	C.B. 7530 (Exp)	90.2	19.1	81.3	0	4.6	3.3
43	Dekalb 817A	89.6	17.3	87.9	0	2.8	3.0
44	Pioneer 300	89.0	16.7	87.9	0	5.7	3.5
45	P.A.G. 392	88.1	15.4	85.4	0	3.9	3.3
46	United U65	87.9	19.2	85.4	1.5	4.4	4.0
47	Mo. 8	87.0	23.2	85.0	0	11.3	4.0
48	Dekalb 816	86.1	18.9	81.7	0	8.2	3.5
49	Keystone 111W	80.7	19.8	80.4	0	5.7	3.3
	Means	98.1	18.5	85.1	0.1	4.0	3.8

Differences in yield between any two hybrids of less than 9.2 bushels are not considered significant.

TABLE 18--SOUTHERN REGION, AVERAGE PERFORMANCE RECORDS FOR HYBRIDS TESTED IN NEWTON, LAWRENCE, NEW MADRID, AND PEMISCOT COUNTIES

Rank	Hybrid	Moisture			Lodged Plants		Ear Height Grade
		Acre Yield Bu.	in Grain %	Stand %	Root %	Stalk %	
1	Mo. 5365W (Exp)	106.7	21.5	95.3	28.5	3.9	4.2
2	Dixie 33	99.6	22.1	93.4	30.9	3.6	5.1
3	Dixie 22	97.8	22.8	90.9	21.6	5.6	5.0
4	Dixie 17	94.3	19.5	91.9	30.6	15.2	5.1
5	Embros 155W	93.2	17.9	94.2	23.2	3.5	4.2
6	P.A.G. 661	90.0	19.5	95.1	27.6	2.8	4.2
7	U.S. 523W	89.4	18.9	93.9	29.9	3.4	4.1
8	Keystone 222	88.6	22.3	92.7	24.0	19.8	4.5
9	Mo. 862 (Exp)	88.1	22.2	94.1	28.6	2.9	4.1
10	Mo. 804 (Exp)	86.9	18.5	94.1	16.8	3.9	4.0
11	Funk G 711	86.5	22.9	92.8	16.5	18.3	4.2
12	C.B. 7610 (Exp)	86.3	20.2	93.5	19.4	7.4	4.1
13	P.A.G. 631W	85.9	19.3	92.7	32.6	5.1	3.9
14	Embros 101	84.8	19.3	93.6	18.6	3.7	4.2
15	N.E. 7830 (Exp)	83.3	17.3	95.2	19.9	2.3	3.7
16	Mo. 4009W (Exp)	82.2	18.3	91.5	25.9	6.0	3.6
17	Pioneer 302	81.2	19.2	89.5	24.1	2.3	3.6
18	C.B. 7616 (Exp)	80.8	20.6	83.6	17.6	3.3	4.1
18	C.B. 7526 (Exp)	80.8	17.0	92.8	7.7	2.4	3.3
20	Mo. 8	79.9	19.8	85.0	33.7	5.0	4.0
21	Pioneer 332	78.8	19.8	92.3	30.7	9.6	3.5
22	Funk G 98	78.4	18.7	90.7	19.2	4.0	3.6
23	Mo. 831 (Exp)	76.2	17.2	97.0	25.4	2.7	3.0
24	Mo. 148	76.1	17.3	87.4	23.0	4.7	3.8
25	Kan. 1639	75.8	19.4	94.8	16.5	3.7	3.0
26	Ohio C. 92	75.6	16.9	89.6	17.4	2.7	3.3
26	Ia. 4476	75.6	18.8	85.2	3.1	1.5	3.2
28	P.A.G. 185	75.1	17.8	90.3	20.8	2.0	3.3
29	Ill. 200	74.8	17.4	88.3	17.5	2.8	4.0
30	Funk G 145	74.6	19.1	79.2	19.7	7.4	3.7
31	Mo. 313	74.3	17.9	90.1	14.3	3.5	3.2
31	Mo. 840 (Exp)	74.3	18.6	91.5	24.6	4.1	3.2
33	Mo. 800 (Exp)	74.1	19.7	81.8	19.3	4.1	4.3
34	Kan. 1784	74.0	17.7	93.9	24.5	1.8	3.4
34	Midwest 23	74.0	17.1	91.3	14.1	4.9	3.6
36	Mo. 832 (Exp)	73.9	17.4	91.3	18.4	3.1	3.0
37	Dekalb 898	73.6	18.1	87.8	14.2	2.5	3.8
38	U.S. 13	72.3	17.9	89.5	11.8	2.7	3.1
39	Maygold 59A	72.2	16.6	90.1	16.2	4.4	3.2
40	Dekalb 897	72.0	17.4	89.6	14.6	4.6	3.4
41	Keystone 111W	71.5	18.0	86.9	3.6	8.9	3.3
42	Pioneer 300	70.9	17.6	91.0	16.6	5.9	3.2
42	United U67	70.9	17.5	87.6	21.6	5.0	3.4
44	Nebr. 893B (Exp)	70.7	17.6	91.3	7.8	1.5	3.0
45	C.B. 7530 (Exp)	70.4	18.3	89.4	14.3	7.1	3.0
46	Nebr. 1219B (Exp)	69.7	18.1	87.8	18.2	2.4	3.1
47	N.E. 7802 (Exp)	67.7	16.9	79.1	16.8	3.9	3.1
48	Dekalb 875	67.1	18.4	90.3	8.4	3.0	3.2
49	KK 88	64.0	17.3	84.5	15.1	2.6	3.4
	Means	79.3	18.8	90.3	19.7	4.8	3.7

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TABLE 19--1950 PERFORMANCE RECORD FOR COMMERCIAL AND EXPERIMENTAL HYBRIDS TESTED NEAR STARK CITY, MISSOURI, IN NEWTON COUNTY

Rank	Hybrid	Moisture			Lodged Root %	Plants Stalk %	Ear Height Grade
		Acre Yield Bu.	in Grain %	Stand %			
1	Mo. 5365W (Exp)	109.8	23.2	97.9	0.4	1.3	4.5
2	Dixie 33	108.6	22.6	92.9	0.9	2.7	5.5
3	Dixie 22	107.5	22.6	93.7	0.4	1.8	5.3
4	P.A.G. 661	100.3	20.2	94.2	0	0.9	4.3
5	Funk G 711	99.8	21.2	91.2	1.4	12.8	5.0
6	Mo. 862 (Exp)	95.9	21.8	89.2	0	1.9	4.0
7	Dixie 17	93.8	18.9	83.7	5.5	16.4	5.8
8	P.A.G. 631W	92.8	18.6	92.9	0	0.4	4.0
9	Embro 101	91.7	19.1	88.7	0	0.5	4.0
10	Keystone 222	90.6	22.4	96.2	1.7	8.2	5.0
11	Mo. 804 (Exp)	90.4	19.4	97.1	0	1.7	4.0
12	Embro 155W	89.8	18.7	91.7	0	0.5	4.3
13	C.B. 7610 (Exp)	89.0	20.5	95.0	0.4	3.9	4.3
14	Pioneer 302	88.1	18.7	88.3	0	0	4.0
15	U.S. 523W	87.8	18.6	92.1	0	0.5	4.0
16	Mo. 8	84.4	18.4	77.5	0	3.8	3.8
16	N.E. 7830 (Exp)	84.4	15.6	96.7	0	3.0	3.8
18	Ohio C. 92	82.6	15.4	93.3	0	0.9	3.0
19	Funk G 98	82.5	17.3	93.7	0	3.6	3.5
20	Pioneer 332	81.0	19.0	86.2	2.9	8.7	3.5
21	Mo. 4009W (Exp)	80.5	16.8	90.4	0	4.6	3.0
22	Mo. 831 (Exp)	79.6	16.4	96.7	0	3.0	3.0
23	Dekalb 898	79.4	18.9	85.4	0	2.0	4.0
24	Kan. 1639	78.9	19.1	92.1	0	3.2	3.0
25	Mo. 832 (Exp)	78.6	17.2	85.8	0	0	3.0
26	United U67	78.4	17.5	77.5	1.1	3.8	3.5
27	C.B. 7526 (Exp)	77.6	17.9	89.2	0	1.4	3.5
28	Ill. 200	76.9	17.5	82.9	0	2.0	4.0
29	Mo. 840 (Exp)	76.8	17.6	86.7	1.0	0.5	3.0
30	Kan. 1784	76.0	17.2	89.6	0	0.5	3.0
31	C.B. 7530 (Exp)	75.1	18.2	85.0	0	2.9	3.0
32	Midwest 23	75.0	16.9	87.1	0	4.3	3.0
33	C.B. 7616 (Exp)	73.6	19.6	65.4	0	0	4.0
34	Ia. 4476	71.7	17.2	70.0	0	0	3.0
35	Mo. 800 (Exp)	71.6	20.5	68.3	0	2.4	4.3
36	Dekalb 897	71.1	16.7	82.9	0	4.0	3.3
37	U.S. 13	71.0	17.8	85.8	0	1.5	3.0
38	Mo. 313	70.7	17.4	85.8	0	3.4	3.0
39	P.A.G. 185	70.3	18.1	86.2	0	1.4	3.0
40	Pioneer 300	70.2	16.8	89.2	0	6.5	3.3
41	Maygold 59A	69.0	16.0	86.7	0	4.3	3.0
42	Mo. 148	68.7	17.4	84.6	0	5.9	3.8
42	Keystone 111W	68.7	17.2	84.6	1.0	2.0	3.3
44	N.E. 7802 (Exp)	65.5	16.9	80.8	0	0.5	3.0
45	Nebr. 893B (Exp)	64.6	17.5	80.4	0	1.0	3.0
46	Dekalb 875	64.2	16.8	85.0	0	6.4	3.0
47	Nebr. 1219B (Exp)	62.7	16.5	81.7	0	0	3.0
48	Funk G 145	61.3	18.4	60.8	0	1.4	3.8
49	KK 88	58.5	15.0	73.3	0	0	3.3
	Means	80.3	18.4	86.4	0.3	2.9	3.7

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

TABLE 20--1950 PERFORMANCE RECORD FOR COMMERCIAL AND EXPERIMENTAL HYBRIDS TESTED NEAR PIERCE CITY, MISSOURI, IN LAWRENCE COUNTY

Rank	Hybrid	Moisture					Ear Height Grade
		Acre Yield Bu.	in Grain %	Stand %	Lodged Plants		
					Root %	Stalk %	
1	Mo. 5365W (Exp)	94.3	22.9	92.5	2.7	0	4.3
2	Dixie 22	89.8	24.5	88.7	2.8	0.7	4.8
3	Embros 155W	85.5	18.9	91.2	0	1.4	4.3
4	Keystone 222	84.1	23.2	91.9	1.4	6.8	5.0
5	Funk G 145	83.8	19.6	90.0	1.4	2.1	3.8
6	Mo. 862 (Exp)	82.2	23.5	93.1	0	0.7	4.0
7	Dixie 33	81.1	24.8	88.1	1.4	0.7	4.8
8	C.B. 7616 (Exp)	80.5	22.9	90.6	0.7	2.1	4.5
9	C.B. 7526 (Exp)	80.3	17.9	91.9	0	0	3.5
10	C.B. 7610 (Exp)	80.1	20.7	88.7	0	1.4	4.0
11	N.E. 7830 (Exp)	79.4	16.7	98.1	0	0	3.8
12	Mo. 804 (Exp)	79.0	19.4	89.4	0	0	4.0
13	Embros 101	78.5	20.4	97.5	1.3	0	4.3
14	P.A.G. 661	78.3	21.3	95.6	2.0	2.6	4.3
14	Dixie 17	78.3	22.4	90.6	1.4	4.1	5.0
16	U.S. 523W	75.5	20.2	93.7	1.3	3.3	4.3
17	Mo. 8	72.8	21.8	90.6	6.2	2.1	4.0
18	Mo. 4009W (Exp)	70.9	20.0	90.6	0	3.4	3.5
19	Mo. 148	70.7	18.8	82.5	0	3.0	3.5
20	P.A.G. 185	70.6	18.4	91.2	0	2.7	3.3
21	Mo. 831 (Exp)	70.0	17.8	98.1	0	1.9	3.0
22	U.S. 13	69.2	19.1	83.1	0	1.5	3.5
23	Funk G 98	68.5	20.7	81.9	0	1.5	3.5
24	Maygold 59A	68.4	17.8	88.1	1.4	0	3.0
25	Mo. 800 (Exp)	68.0	22.1	88.7	2.8	0.7	4.5
26	Kan. 1639	67.9	22.1	94.4	0	1.3	3.0
27	Dekalb 897	67.4	20.0	96.9	0	2.6	3.3
28	Mo. 313	66.6	19.5	88.8	0	1.4	3.5
29	Funk G 711	66.5	26.0	91.2	1.4	7.5	3.5
30	Nebr. 1219B (Exp)	66.3	18.5	98.1	0	0.6	3.0
31	Pioneer 332	65.5	22.4	88.7	0	3.5	3.3
32	Kan. 1784	64.5	17.9	95.0	0	1.3	3.3
33	P.A.G. 631W	64.3	21.8	95.0	1.3	3.9	3.8
33	Ia. 4476	64.3	19.8	92.5	0	0	3.3
35	Midwest 23	64.0	17.8	93.1	0	1.3	3.3
36	Keystone 111W	63.5	20.2	91.9	0	5.4	3.5
37	Ohio C. 92	62.2	18.9	80.0	3.1	2.3	3.5
37	KK 88	62.2	17.4	91.9	0	4.1	3.5
39	Ill. 200	61.3	18.7	86.9	0	2.9	4.0
40	Pioneer 302	60.0	21.1	83.7	0	3.7	3.3
40	Nebr. 893B (Exp)	60.0	17.5	90.6	0	0.7	3.0
42	Mo. 832 (Exp)	59.8	17.2	88.7	0	2.8	2.8
43	Dekalb 875	58.7	19.1	89.4	0	0	3.0
44	Pioneer 300	58.5	19.0	85.0	1.5	5.8	3.3
44	N.E. 7802 (Exp)	58.5	17.6	76.9	0	2.4	3.0
46	Mo. 840 (Exp)	57.7	19.0	91.2	0	5.5	3.0
47	Dekalb 898	57.3	18.5	79.4	0.8	3.9	3.3
48	United U 67	53.1	17.6	86.2	0	2.2	2.8
49	C.B. 7530 (Exp)	<u>52.2</u>	<u>18.4</u>	<u>85.0</u>	<u>0</u>	<u>6.6</u>	<u>2.8</u>
	Means	69.8	20.0	89.9	0.7	2.1	3.6

Differences in yield between any two hybrids of less than 17.4 bushels are not considered significant.

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TABLE 21--1950 PERFORMANCE RECORD FOR COMMERCIAL AND EXPERIMENTAL HYBRIDS TESTED NEAR SIKESTON, MISSOURI, IN NEW MADRID COUNTY

Rank	Hybrid	Moisture			Lodged Plants		Ear Height Grade
		Acre Yield Bu.	in Grain %	Stand %	Root %	Stalk %	
1	Mo. 5365W (Exp)	118.1	20.9	95.0	71.1	9.2	4.0
2	Dixie 33	115.4	20.6	98.1	72.6	5.1	5.0
3	Dixie 17	113.6	20.0	99.4	67.3	23.3	4.5
4	Dixie 22	106.6	22.1	91.3	43.8	11.0	5.0
5	Keystone 222	103.6	23.8	96.9	45.8	35.5	4.0
6	Funk G 711	100.8	23.6	96.9	17.4	25.2	4.3
7	Embro 155W	99.7	17.2	96.9	51.6	5.2	4.0
8	Pioneer 302	95.3	18.9	92.5	53.4	4.1	3.5
9	P.A.G. 661	94.1	18.9	95.6	60.1	5.2	4.0
10	C.B. 7610 (Exp)	93.5	20.1	97.5	37.2	11.5	4.0
11	P.A.G. 631W	93.1	19.1	93.8	67.3	7.3	3.8
12	C.B. 7616 (Exp)	92.9	20.2	96.3	33.1	6.5	3.8
13	Mo. 804 (Exp)	92.4	19.1	99.4	35.2	9.4	4.0
14	Mo. 8	91.5	20.5	92.5	72.3	8.1	4.0
15	U.S. 523W	91.3	19.8	95.0	61.8	5.3	4.0
16	Mo. 862 (Exp)	90.7	21.8	98.8	50.0	5.1	4.3
17	N.E. 7830 (Exp)	90.3	18.8	97.5	48.7	0.6	3.8
18	Mo. 4009W (Exp)	90.1	19.2	96.9	67.1	12.3	3.8
19	Embro 101	89.2	20.9	97.5	35.3	9.6	4.3
20	Funk G 145	88.2	18.8	91.9	49.7	15.0	3.3
20	Mo. 800 (Exp)	88.2	19.2	93.8	48.0	7.3	4.0
22	Nebr. 893B (Exp)	88.1	17.7	98.8	22.8	3.8	3.0
22	Mo. 313	88.1	18.0	96.9	38.1	7.1	3.0
24	Mo. 148	87.9	17.4	93.8	54.7	5.3	4.0
25	Ia. 4476	87.2	19.5	95.6	11.8	4.6	3.5
25	Keystone 111W	87.2	18.0	94.4	8.6	3.3	3.3
27	Pioneer 332	87.0	20.2	97.5	64.7	10.3	3.5
28	C.B. 7526 (Exp)	86.0	16.3	95.0	18.4	2.0	3.0
29	P.A.G. 185	85.9	18.2	93.1	53.0	3.4	3.3
30	N.E. 7802 (Exp)	85.4	17.4	90.6	48.3	4.1	3.3
31	Ill. 200	85.3	17.4	97.5	36.5	3.2	4.0
32	Dekalb 898	84.8	18.1	93.1	34.9	1.3	3.8
33	Midwest 23	84.0	17.4	94.4	24.5	2.0	4.0
34	Funk G 98	83.7	19.8	94.4	50.3	7.3	3.8
35	Mo. 832 (Exp)	83.2	17.1	97.5	53.2	4.5	3.0
36	Kan. 1639	81.9	18.1	96.3	41.6	7.1	3.0
37	Dekalb 897	81.7	17.4	90.6	40.0	6.2	3.3
38	Kan. 1784	81.6	18.6	96.3	56.5	2.6	3.8
39	Ohio C. 92	81.5	17.4	96.3	44.8	3.9	3.0
40	C.B. 7530 (Exp)	80.4	19.5	97.5	46.2	8.3	3.0
41	Nebr. 1219B (Exp)	80.1	19.0	91.9	42.9	4.8	3.3
42	Mo. 840 (Exp)	79.5	19.1	94.4	58.3	7.3	3.3
43	Mo. 831 (Exp)	79.3	17.0	98.1	47.8	2.5	3.0
44	Pioneer 300	79.2	17.1	95.6	41.8	3.9	3.0
45	United U67	79.0	18.1	94.4	53.6	7.3	3.3
46	Maygold 59A	78.1	17.1	90.0	37.5	4.2	3.3
47	U.S. 13	75.6	18.3	96.9	25.8	4.5	3.0
48	Dekalb 875	75.3	19.7	95.0	24.3	3.3	3.5
49	KK 88	73.8	21.0	92.5	43.2	0.7	3.3
	Means	88.8	18.8	95.3	45.2	7.2	3.7

Differences in yield between any two hybrids of less than 9.2 bushels are not considered significant.

TABLE 22--1950 PERFORMANCE RECORD FOR COMMERCIAL AND EXPERIMENTAL HYBRIDS TESTED NEAR CARUTHERSVILLE, MISSOURI, IN PEMISCOT COUNTY

Rank	Hybrid	Acre Yield Bu.	Moisture		Lodged Plants		Ear Height Grade
			in Grain %	Stand %	Root %	Stalk %	
1	Mo. 5365W (Exp)	104.5	19.1	95.8	39.6	5.2	4.0
2	U.S. 523W	102.9	16.9	94.6	56.4	4.4	4.0
3	Embros 155W	97.6	16.8	97.1	41.2	6.9	4.0
4	P.A.G. 631W	93.2	17.6	89.2	61.7	8.9	4.0
4	Dixie 33	93.2	20.4	94.6	48.5	5.7	5.0
6	Dixie 17	91.3	16.7	93.8	48.0	16.9	5.0
7	P.A.G. 661	87.4	17.4	95.0	48.2	2.6	4.0
8	Dixie 22	87.1	21.8	90.0	39.4	8.8	4.8
8	Mo. 4009W (Exp)	87.1	17.2	87.9	36.5	3.8	4.0
10	Mo. 804 (Exp)	85.8	16.0	90.4	31.8	4.6	4.0
11	Mo. 862 (Exp)	83.5	21.8	95.4	64.2	3.9	4.0
12	Mo. 840 (Exp)	83.1	18.5	93.8	39.1	3.1	3.3
13	C.B. 7610 (Exp)	82.4	19.6	92.9	39.9	12.6	4.0
14	Pioneer 302	81.5	18.1	93.3	42.9	1.3	3.5
14	Pioneer 332	81.5	17.4	96.7	55.2	15.9	3.8
16	Embros 101	79.8	16.9	90.8	37.6	4.6	4.0
17	Ia. 4476	79.2	18.8	82.5	0.5	1.5	3.0
17	C.B. 7526 (Exp)	79.2	16.0	95.0	12.3	6.1	3.3
19	N.E. 7830 (Exp)	78.9	17.9	88.3	30.7	5.7	3.5
19	Funk G 711	78.9	20.7	91.7	45.9	27.7	4.0
21	Funk G 98	78.8	16.8	92.9	26.5	3.6	3.5
22	Mo. 148	77.1	15.6	88.8	37.1	4.7	3.8
23	Ohio C. 92	76.2	15.8	88.8	21.6	3.8	3.5
23	C.B. 7616 (Exp)	76.2	19.6	82.1	36.5	4.6	4.0
25	Keystone 222	76.0	19.8	85.8	47.1	28.6	4.0
26	Mo. 831 (Exp)	75.9	17.6	95.0	53.9	3.5	3.0
27	Ill. 200	75.8	16.1	85.8	33.5	2.9	4.0
28	Pioneer 300	75.5	17.6	94.2	23.0	7.5	3.0
29	Kan. 1639	74.5	18.1	96.3	24.2	3.0	3.0
30	Kan. 1784	73.9	17.2	94.6	41.4	2.6	3.5
30	Mo. 832 (Exp)	73.9	18.1	93.3	20.5	4.9	3.0
32	C.B. 7530 (Exp)	73.7	17.0	90.0	11.1	10.6	3.0
33	P.A.G. 185	73.6	16.4	90.8	30.3	0.5	3.5
34	U.S. 13	73.5	16.5	92.1	21.3	3.2	3.0
35	Maygold 59A	73.2	15.6	95.4	25.8	9.2	3.5
36	United U67	73.0	16.6	92.1	31.7	6.8	4.0
37	Midwest 23	72.9	16.1	90.4	31.8	12.0	4.0
37	Dekalb 898	72.9	16.7	93.3	21.0	2.7	4.0
39	Mo. 313	71.6	16.5	88.8	19.2	1.9	3.3
40	Mo. 8	70.8	18.5	79.2	56.3	5.8	4.0
41	Dekalb 875	70.2	17.8	91.7	9.1	2.3	3.3
41	Nebr. 893B (Exp)	70.2	17.8	95.4	8.3	0.4	3.0
43	Nebr. 1219B (Exp)	69.6	18.5	79.6	29.8	4.2	3.0
44	Mo. 800 (Exp)	68.6	16.9	76.3	26.2	6.0	4.3
45	Dekalb 897	67.8	15.6	87.9	18.5	5.7	3.5
46	Keystone 111W	66.7	16.7	76.7	4.9	25.0	3.0
47	Funk G 145	65.1	19.4	74.2	27.5	11.2	4.0
48	KK 88	61.5	15.7	80.4	17.1	5.7	3.3
49	N.E. 7802 (Exp)	61.3	15.6	67.9	19.0	8.6	3.0
	Means	78.1	17.6	89.6	32.5	7.0	3.7

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