1952 YIELD TRIALS WITH CORN HYBRIDS IN MISSOURI

UNIVERSITY OF MISSOURI COLLEGE OF AGRICULTURE AGRICULTURAL EXPERIMENT STATION Bulletin 592 J. H. LONGWELL, Director January, 1953

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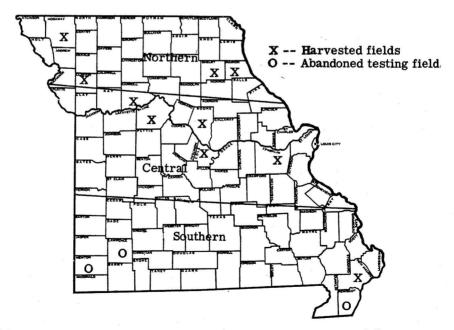


Figure 1--Outline map of Missouri showing the three regions and the locations of replicated testing fields in 1952.

I952 YIELD TRIALS WITH CORN HYBRIDS IN MISSOURI M. S. Zuber*

INTRODUCTION

The 1952 Missouri Corn Yield Trials, consisting of replicated yield tests conducted in the same manner as in previous years, are reported in Section I. Mechanical picker tests with the objective of measuring the picking performance of certified and promising new experimental hybrids, reported in Section II, were conducted in several locations of the state for the second year.

Section |

1952 REPLICATED YIELD TRIALS

Replicated yield trials of certified open pedigreed and experimental hybrids were planted in thirteen locations, including five in the central and four each in the southern and northern regions (Figure 1). Yields were not determined for the tests on the A. L. Kidwell farm near Caruthersville, the Dan A. Turner farm near Stark City, and on the Southwest Missouri Outlying Field at Pierce City because extreme drought had so reduced production that results would have been without significance. All other tests were harvested and are reported upon in this bulletin.

The increased costs of testing plus a shortage of personnel that necessitated discontinuation of the testing of closed pedigreed hybrids in 1951 also prevented their general inclusion in the 1952 tests.

EXPERIMENTAL METHODS

1. <u>Type of Field Design</u>. All trials consisted of 35 hybrids. Each hybrid was planted in a plot consisting of two rows, five hills long and replicated five times. The field design was a modified Latin square with five replications.

2. <u>Yield Determinations</u>. The corn was harvested by hand and each plot weighed. Acre yields were computed on the basis of shelled corn with 15,5% moisture. Yields of hybrids exceeding this moisture percentage were

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adjusted downward, and yields of hybrids having a lower moisture content than 15.5% 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 Steinlite moisture tester.

4. <u>Stand Percentage</u>. The stand percentage was determined by making actual counts of the plants present and computing the percent based on a perfect stand. All tests were planted at the rate of five seeds per hill and later thinned to three plants per hill, except the test in Franklin County which was thinned to four plants per hill.

5. <u>Per Cent Lodging</u>. 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.

SEASON CONDITIONS

Extreme drought throughout Southern Missouri caused abandonment of the tests at Stark City, Pierce City and Caruthersville. The yield of the Sikeston test was lowered by drought and hot winds. The Franklin County test (Labadie bottoms) made a good yield despite severe drought as a result of good rains during the critical period from July 15 to August 15. The yield at Shelbyville was lowered by drought and what was thought to have been an attack by grape colapsis (clover root worm). Dry conditions in late summer reduced yields in the Boone County test below early season expectations. The remaining tests encountered generally favorable growing conditions throughout the season, although the dry fall did make for more dropped ears than normal.

The average corn yield for Missouri was estimated by the Agricultural Statistician of the U.S. Department of Agriculture, located at Columbia, Missouri, to be 41.0 bushels per acre. This was the third highest average yield on record for the state, and indicates how good a corn year it was in North Missouri since yields in the southern portion of the state were severely limited by drought.

SEED SOURCES FOR THE 1952 TESTS

Seed for the open pedigreed hybrids were a composite of remnant samples secured from each grower's lot for certification requirements. Seeds of experimental hybrids were obtained from the respective experiment stations.

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 on page 6_*

INTERPRETATION OF 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. Pages 9 and 10 give the period-of-years averages for hybrids that have been tested for 5, 4, 3, and 2 years in each of the northern, central and southern regions. The results for 1952 are summarized on pages 11 to 22.

NORTHERN REGION

For the 3, 4, and 5-year periods Kansas 1639 has an outstanding performance record for this region, followed closely by Ohio C-92. Both hybrids are superior to U. S. 13 and Mo. 148 in yield and standing ability. Kansas 1639 and Ohio C-92 are both more desirable from the standpoint of harvesting with a mechanical picker. In addition, Kansas 1639 has a lower ear height and better husk coverage than any of the other hybrids. Kansas 1639 has been recommended for certification in Missouri since 1947; however very little seed has been produced.

Several of the experimental yellow hybrids adapted to this region show promise. Mo. 843 has exceeded U. S. 13 in yield by 13.3 bushels, and is equal to it in root lodging and about 5% better in stalk lodging. This variety is being released for production but planting seed will not be available in quantity before 1955.

CENTRAL REGION

Among the midseason hybrids of U. S. 13 maturity, Kansas 1639 is again the outstanding hybrid for the 3, 4, and 5-year periods. In the later group, U. S. 523W, a late white hybrid, and Mo. 804, a late yellow hybrid, excel in their performance. Several late yellow experimental hybrids have been tested for a sufficient period to justify their release at this time.

SOUTHERN REGION

It is of interest to note the comparative performance of Kansas 1639 and U. S. 13 in this region versus the same comparisons in the central and northern regions. Although Kansas 1639 is not inferior to U. S. 13 in this region, it is not as superior in its performance as it was in the northern and central regions.

Late yellow hybrids Mo. 804 and Dixie 22 were excellent, while U.S. 523W, Mo. 536W and Dixie 33 were the best late white hybrids.

of a hybrid are probably its moisture content, the amount of stalk lodging at the time of harvest, and the tendency of the hybrid to drop ears. In general, higher moisture content results in less shelled corn and in a higher percent of cleanly picked corn. Two exceptions are Mo. 8, which was not included in the 1952 picker tests, and U. S. 523W, which apparently are difficult to pick cleanly. In other respects U. S. 523W is an excellent picker corn and very little corn was left in the field. As might be expected, there is usually more corn left in the field when the stalk lodging percentage is high.

Different results may have been obtained by harvesting at earlier or later dates. The stage of maturity and weather conditions will greatly influence the results from mechanical picker tests.

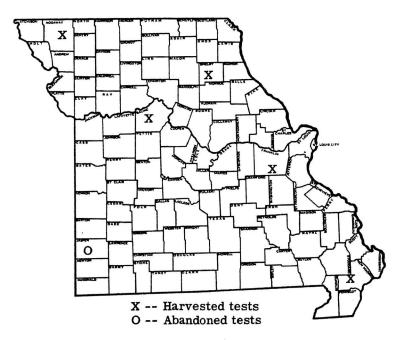


Figure 2--Location of 1952 mechanical picker tests.

Section II

1952 MECHANICAL PICKER TESTS INTRODUCTION

Mechanical picker tests were planted in six locations of the state (Figure 2). Five tests were completed but the test in cooperation with Joe Frerer and Ralph Schell near Jasper was not harvested as a result of the effects of drought. The objective of the mechanical picker test was to measure the relative "pick ability" of certified and promising new experimental hybrids.

EXPERIMENTAL METHODS

All tests were planted in two row plots 40 hills long with two replications. All tests are planted by hand and later thinned. Although the acre yields were calculated and are given in the various tables of the mechanical picker tests, the reader should be warned not to put too much value on the yield data. The acre yields given in the yield trials which contained more replications are more accurate and should be used in preference to the less accurate acre yield data presented in Section II.

Each of the two rows from each plot was harvested by a mechanical picker. The test at Sikeston was picked with a John Deere 2 row pull type picker, the Franklin County and Marshall tests with a 2 row mounted type International picker, the Shelbyville test with a 2 row mounted Oliver picker, and the Maryville test with a single row John Deere No. 101 picker. The tests were harvested with a picker available on the farm of the cooperator or furnished locally.* The weight of ear corn harvested, plus the weight of the ear corn gleaned, was used to calculate the acre yield. The bushels per acre remaining in the field was calculated by the weight of the gleaned corn. Bushels of shelled corn were calculated from the weight of the shelled corn which remained on the floor of the box used to collect the corn from the picker. Stand percent and number of stalk lodged plants are the results of comparing counts of plants present in relation to a perfect stand, and the number of plants broken below the ear in percent of the total number of plants present. Corn harvested by the mechanical picker was separated into ears with shucks attached and cleanly picked ears. The percent of picked clean corn and picked corn with shucks was calculated from these data.

RESULTS

The results of the five mechanical picker tests harvested are given on pages 23 and 24. Considerable differences are apparent between hybrids. The three most important factors affecting the mechanical "pick ability"

^{*}The picker of the Sikeston test were furnish by Edward C. Mathews, Jr., Sikeston, Mo. The Tri-County Equipment Company furnished and operated the picker for the Franklin County test. The picker for the Marshall test were supplied by the MFA Seed Division and operated by John Franklin, Marshall, Mo. Alvin Hollenbeck furnished the picker for the Shelbyville test. The services and cooperation of Extension Agronomists J. Ross Fleetwood and William J. Murphy, in conducting the mechanical picker tests are gratefully acknowledged.

		D		A		Soil An	alysis			Lime	No.	Av.
Location	Soil Type	Previous Crop	Fertilizer Applied	Organic Matter	р	K	Mg	Ca	pН	Require- ment	Plants Per/A	Yield Bu/A
Maryville, Missouri	Upland	Oats	3 T Manure/acre 1000# rock phosphate 50# Nitrogen (anhydrous ammonia)	3.4	208	280+	800	4000	5.7	3500	10,348	114.8
Lathrop, Missouri	Bottomland	Oats	200# 8-8-8	3.9	157	280	600	4700	5.7	3500	10,218	117.1
Palmyra, Missouri	Upland	Soybeans	125# 4-24-12 100# Am. Nit. side dressed	2.8	224+	280+	600	2100	5.5	3500	9,975	99.7
Shelbyville, Missouri	Upland	Oats & Ladino clover, Ladino- (under)	1000# rock phos. in 1950 100# am, sulfate and 200# 4-24-12 plowed under 60# Anhydrous ammonia sidedressed	2.2	59	156	600	4300	6.4	2000	9,655	64.7
Carrollton, Missouri	Bottomland	Corn - (flooded out)	80# nit. (Anhydrous ammonia)								9,932	94.8
Marshall, Missouri	Upland	Corn	1000# rock phosphate 200# 4-24-12 106# Nitrogen	2.6	59	280+	400	3900	6.1	3000	9,356	92.5
Columbia, Missouri	Upland	Soybeans	250# 8-8-8 plowed under 150# Am. nit. sidedressed	2.0	224+	148	600	2500	5.7	2500	9,804	92.5
Jefferson City, Missouri	Bottomland	Corn - (flooded out)	Manure	1.8	224+	280+	800	6700	7.5	None	9,687	96.1
Washington, Missouri (Labadie bottom)	Bottomland	Corn - (flooded out)	200# Am. sulphate 200# 8-8-8 150# 8-8-8 starter 150# Am. nit. sidedressed	1.0	224+	280	400	6800	7.5	None	13,656	124.0
Sikeston, Missouri	Sikeston Ridge	Cotton	250# 3-12-12 150# Am. nit. sidedressed	2.4	112	200	200	3100	6.4	1500	9,953	59.7
Caruthersville, Missouri	Mississippi Delta	Cotton	300# 3-12-12 200# Anhydrous ammonia	2.2	224+	280+	1020	5300	6.6	1000	Abar	ndoned
Stark City, Missouri	Bottomland	Corn	100# 2-12-12 75# Am. nit. sidedressed	2.0	70	150	80	3800	6.4	2000		ndoned
Pierce City, Missouri	Upland	Oats	300# 8-8-8 100# Am, nitrate	2.2	31	188	240	1800	5.4	5000	Abar	doned

TABLE 1 SOIL TYPE, PREVIOUS CROP,	, FERTILIZER APPLICATION, SOIL ANALYSIS, NUMBER OF	F PLANTS PER ACRE AND THE AVERAGE
VIELD OF ALL HYBRIDS TES	TED AT THE VARIOUS LOCATIONS IN 1952.	

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		5-Year	1948-19	4	-Year			3-Year			2-Year	
	Acre Yield	Lodg		Acre Yield	Lodg		Acre Yield	Lodg		Acre Yield	Lodg	ing
Hybrid	Bu.	Root	Stalk	Bu.	Root	Stalk	Bu.	Root	Stalk	Bu.	Root	Stalk
U.S. 13	93.8	5.8	10.0	90.8	6.1	11.3	91.5	6.7	12.2	91.1	8.3	17.2
Mo. 148	91.2	9.2	12.1	88.2	9.8	13.1	87.9	10.8	13.4	89.6	13.8	15.5
Ohio C92	95.1	4.9	5.5	93.2	5.3	6.7	94.6	5.9	7.5	95.2	8.1	11.1
Kan. 1639	97.1	5.2	7.2	95.5	5.6	7.9	98.0	6.2	7.6	99.4	8.8	9.6
U.S. 523W	99.9	8.4	5.3	97.5	8.8	6.1	97.1	9.8	6.6	98.1	12.9	9.1
Mo. 843							104.8	4.7	7.8	105.9	6.2	12.1
Ia. 4531							92.4	2.8	7.7	96.0	4.4	13.2
N.E. 7847							98.8	5.4	7.8	101.9	8.4	12.2
C.B. 7530							96.1	7.0	10.0	95.5	11.7	16.6
Mo. 4022W							96.5	3.5	6.4	98.8	4.9	10.9
Ia. 4476							96.3	3.0	9.4	97.9	3.7	15.1
Mo. 4009W							104.5	10.6	13.5	105.8	15.2	20.6
Mo. 4029W										98.0	5.7	2.3
Mo. 4039W										96.8	11.0	10.9
Mo. 4040W										94.1	21.2	9.5
C.B. 8805										96.1	10.3	9.8
Ia. 4527										95.6	2.7	7.8
Means	95.4	6.7	8.0	93.0	7.1	9.0	96.5	6.4	9.2	97.5	9.3	12.0

TABLE 2. -- SUMMARY OF AVERAGE PERFORMANCE RECORDS FOR HYBRIDS TESTED IN THE NORTH-ERN REGION 1948-1952.

TABLE 3. -- SUMMARY OF AVERAGE PERFORMANCE RECORDS FOR HYBRIDS TESTED IN THE CENTRAL REGION 1948-1952

		5-Year			4-Year			3-Year		-	2-Year	
	Acre			Acre		• married at	Acre			Acre		
Hybrid	Yield Bu.	Lodg Root	Stalk	Yield Bu.	Lodg Root	ing Stalk	Yield	Lod	ging Stalk	Yield	Lod	ging
							Bu.		Statk	Bu.	Root	Stalk
U.S. 13	88.0	1.9	7.5	89.5	2.3	8.6	91.6	2.3	8.3	85.0	0.5	7.4
Mo. 148	86.6	3.3	12.6	87.7	4.0	12.8	88.1	3.7	13.0	81.9	1.0	11.7
Ohio C92	84.1	1.5	4.9	85.5	1.9	5.3	92.6	1.6	5.1	80.3	0.3	3.5
Mo. 8	88.1	5.8	10.0	89.8	7.2	11.0	91.5	7.6	9.9	84.9	4.2	7.7
Kan. 1639	89.0	2.2	6.0	90.9	2.8	6.5	92.5	2.6	6.4	85.0	0.5	5.0
U.S. 523W	101.5	4.7	5.5	103.8	5.7	6.1	105.9	5.1	6.0	100.6	1.8	4.2
Mo. 804				98.3	3.9	7.5	101.5	3.1	7.1	95.3	0.5	3.8
C.B. 7610							101.5	2.3	7.1	92.3	1.0	5.2
Mo. 862							105.2	3.3	4.6	94.2	1.0	2.6
Mo. 842							94.9	1.4	6.3	87.2	0	4.0
C.B. 7530							90.7	2.0	4.9	86.4	0.2	2.3
Mo. 4022W							96.8	4.3	2.7	91.4	0.8	2.1
N.E. 7830							95.8	2.6	4.3	88.5	0.2	2.5
Ia. 4476							93.6	0.6	6.4	87.5	0.1	5.8
U.S. 561										94.2	1.4	3.4
(Kan. 1639)												
(U.S. 561)										88.9	0.3	4.8
C.D. 9909										92.4	0.8	3.3
Mo. 843										90.3	002	3.5
Mo. 876										90.5	0.8	5.5
C.B. 9953										89.0	2.2	4.8
Mo. 877										86.9	0.4	4.5
C.B. 7632										90.6	0.2	3.7
Mo. '860										88.0	0.3	6.0
C.B. 8805										84.8	0.9	3.2
Mo. 845										87.3	0.3	4.3
Means	89.6	3.2	7.8	92.2	4.0	8.3	95.9	3.0	6.6	88.9	0.8	4.6

		5-Year	N 1948-19		4-Year			3-Year			2-Year	
	Yield	Lodg	ing	Yield	Lod	ging	Yield	Lod	ging	Yield		ging
Hybrid	Bu.	Root	Stalk	Bu.	Root	Stalk	Bu.	Root	Stalk	Bu.	Root	Stalk
U.S. 13	72.3	2.6	9.1	71.7	3.4	10.1	72.5	3.0	6.6	77.2	0	8.7
Mo. 148	70.2	3.5	12.7	69.2	4.6	14.1	70.1	5.8	10.5	72.6	0	13.1
Ohio C92	68.9	2.7	5.6	68.5	3.6	6.2	70.3	4.5	5.0	73.5	0.2	6.9
Mo. 8	71.0	8.4	16.3	69.9	10.0	16.9	71.6	10.7	13.2	73.6	2.4	15.7
Kan. 1639	70.3	2.7	6.0	70.2	3.5	6.9	71.0	4.2	5.7	74.6	0	7.1
U.S. 523W	78.8	6.2	14.4	78.7	7.6	15.4	80.5	8.9	14.2	85.5	1.4	16.1
Mo. 804				75.2	3.8	15.5	76.9	4.2	12.1	79.9	0	14.3
Dixie 17				81.3	9.6	29.8	82.3	9.4	26.3	88.0	2.3	30.3
Dixie 33							85.2	9.0	7.9	88.6	1.8	9.0
Dixie 22							82.9	6.7	23.9	85.3	1.4	28.5
Mo. 862							76.7	9.5	12.7	79.1	2.6	15.2
C.B. 7610							78.3	4.9	9.6	82.2	0	11.8
N.E. 7830							67.8	7.9	5.6	74.3	2.9	7.1
Ia. 4476							70.8	0.8	11.0	75.6	0	14.6
Mo. 5365W							87.5	7.5	16.7	91.0	0.7	19.6
C.B. 7632										79.7	0	12.9
Mo. 847										78.4	0	9.3
Mo. 845										75.4	0.2	14.5
Mo. 843										75.6	2.2	7.7
Mo. 842										77.1	0.2	18.2
Mo. 860										75.6	0	11.7
C.D. 8805		1								71.7	0.5	8.4
Means	71.9	4.4	10.7	73.1	5.8	14.4	76.3	6.5	12.1	78.8	0.9	13.7

TABLE 4. -- SUMMARY OF AVERAGE PERFORMANCE RECORDS FOR HYBRIDS TESTED IN THE SOUTH-ERN REGION 1948-1952

TABLE 5. -- NORTHERN REGION, 1952 AVERAGE PERFORMANCE RECORDS FOR HYBRIDS TESTED IN SHELBY, MARION, CLINTON, AND NODAWAY COUNTIES

	COUNTIES		Moint	•••••				
		Acre	Moist- ure in		Lodged	Plants	Dronre	d For
		Yield	Grain	Stand	Root	Stalk		
Rank	Hybrid	Bu.	%	%	%	%	%	Grade
1	Mo. 4046W* (Exp)	108.5	18.6	94.5	14.8	6.2	0.2	4.2
2	Mo. 4009W* (Exp)	108.5	19.5	93.7				
					11.8	6.6	0.3	4.5
3	Mo. 843	105.6	18.4	95.4	6.3	2.5	0.4	3.2
4	Mo. 4022W* (Exp)	105.4	20.3	94.7	3.8	2.1	0.2	3.0
5	U.S. 523W*	103.8	21.8	94.3	12.4	3.2	1.0	4.1
6	Keystone 45	103.4	17.1	92.0	2.0	5.2	1.4	4.3
7	Mo. 900 (Exp)	102.9	19.2	95.3	2.7	1.7	0.2	3.7
8	Mo. 4045W* (Exp)	102.8	19.0	89.5	10.5	7.1	0.9	4.2
9	Mo. 4043W* (Exp)	102.7	17.9	93.8	16.0	4.2	0.4	3.9
9	Mo. 4042W* (Exp)	102.7	20.5	97.2	8.5	1.6	0	3.5
11	Mo. 902 (Exp)	102.3	19.1	93.5	2.2	2.6	1.0	3.7
12	Mo. 897 (Exp)	102.1	18.8	94.7	1.3	2.5	0.2	3.7
13	Ia. 4476 (Exp)	101.6	17.8	95.8	4.4	2.4	0.7	3.4
13	Mo. 901 (Exp)	101.6	18.5	94.8	2.3	1.7	0.4	3.5
15	Mo. 892 (Exp)	101.4	18.2	96.2	5.7	3.5	0.7	3.5
16	Kan. 1639	100.8	16.5	95.3	7.2	4.4	0.7	3.3
16	Mo. 4041 W* (Exp)	100.8	19.9	95.2	11.6	4.3	0.4	4.0
18	Mo. 894 (Exp)	99.6	17.0	94.0	5.3	4.8	0.2	3.3
19	Mo. 895 (Exp)	99.3	17.9	93.2	3.0	5.1	0.7	3.8
20	C.B. 7530 (Exp)	98.6	18.3	92.3	4.6	0.9	0.4	3.4
21	Mo. 4039 W* (Exp)	97.8	19.9	96.3	4.6	2.7	0.7	3.4
22	C.B. 8805 (Exp)	97.1	17.6	93.8	7.9	2.7	1.1	3.5
23	AES 801 (Ia. 4527)	96.6	19.4	95.0	1.3	2.1	1.1	3.1
24	Ohio C92	96.5	15.0	91.3	7.5	2.9	0.9	3.8
25	U.S. 13	95.8	16.9	92.8	9.9	5.3	4.7	4.2
26	Mo. 4029W* (Exp)	95.4	20.2	94.5	1.8	0.5	0.4	3.6
27	Mo. 893 (Exp)	95.3	18.9	94.7	8.5	1.6	0.5	3.5
28	Ia. 4531 (Exp)	95.1	16.9	94.7	2.2	1.1	1.0	3.3
29	M.F.A. 120A	94.8	17.2	94.2	8.0	6.3	1.2	3.7
30	Mo. 148	93.6	20.0	93.5	14.9	8.9	3.3	4.7
31	N.E. 7847 (Exp)	93.2	18.2	96.3	4.5	1.2	0.5	3.8
32	Mo. 4040W (Exp)	92.7	22.6	95.2	14.1	3.0	0.2	3.3
33	Pfister 383	92.3	15.6	91.5	10.8	1.6	0.7	3.0
34	Mo. 890 (Exp)	89.7	19.6	92.8	11.6	11.6	0.7	3.7
35	Embro 36	86.1	17.9	93.2	1.9	2.9	1.1	3.7
	Means	99.0	18.6	94.1	7.0	3.6	0.8	3.7

TABLE 6	CENTRAL REGION, 1952 AVERAGE PERFORMANCE RECORDS FOR
	HYBRIDS TESTED IN CARROLL, SALINE, BOONE, COLE, AND FRANK-
	LIN COUNTIES

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	LIN COUN	11110	Maint		and a second of			
			Moist-		* . 1	D1- 4	-	
		Acre	ure in	Chan 1		Plants I		
Donla	The last A	Yield	Grain	Stand	Root	Stalk	Ears	Height
Rank		Bu.	%		%	%	%	Grade
1	U.S. 523W*	110.5	16.4	90.5	3.5	7.1	0.1	4.6
2	Mo. 862 (Exp)	110.3	18.0	93.5	0.7	4.6	0.1	4.9
3	Mo. 883 (Exp)	109.0	17.9	93.9	0.3	3.9	0.4	4.6
4	Mo. 4021W* (Exp)	107.4	17.2	93.0	0.5	3.3	0.6	3.6
5	Mo. 804B (Exp)	106.7	17.4	95.5	0.2	5.7	0.3	5.0
6	Mo. 845 (Exp)	105.5	16.2	93.1	0.5	6.7	0.1	5.2
7	C.B. 7632 (Exp)	105.3	15.6	92.7	0.4	6.0	0.1	5.0
8	Mo. 4022W* (Exp)	105.2	17.6	91.3	1.6	2.3	0.1	3.4
9	Mo. 804	104.9	15.4	92.2	0.9	6.8	0.4	5.1
10	C.B. 9909 (Exp)	103.7	16.2	88.3	0.3	2.0	0.3	4.6
11	Mo. 892 (Exp)	103.2	15.0	93.0	0.2	6.8	0.4	3.6
12	C.B. 7610 (Exp)	102.2	15.2	91.6	0.1	9.0	0.1	4.6
13	U.S. 561 (Exp)	102.1	17.3	96.2	0.9	3.6	0.6	5.5
14	Mo. 860 (Exp)	101.8	15.4	92.5	0.6	6.7	0.6	4.8
15	Mo. 876 (Exp)	100.6	15.8	89.8	0.3	7.2	0.3	4.7
16	Mo. 843	100.2	15.0	92.3	0.4	5.0	0.3	3.5
17	N.E. 7830 (Exp)	99.4	13.8	91.8	0.3	3.7	0.9	3.6
18	Mo. 8	98.9	15.9	90.4	2.9	10.7	0	4.8
19	C.B. 9953 (Exp)	98.8	14.2	90.1	0.5	7.7	2.4	4.6
20	C.B. 8805 (Exp)	98.7	13.8	92.3	1.7	3.6	0.9	4.0
21	Ia. 4476 (Exp)	98.2	15.0	90.7	0.2	7.5	0.3	3.8
22	Mo. 148	96.8	14.5	90.3	2.0	14.0	2.2	4.8
23	Kan. 1639	96.7	13.1	91.7	0.9	7.5	1.0	3.5
24	Mo. 842 (Exp)	96.6	14.8	91.9	0	5.3	0.1	4.4
25	U.S. 13	96.5	12.3	89.2	1.0	7.1	1.2	4.3
26	Mo. 902 (Exp)	96.4	15.4	89.2	0.3	3.3	0.9	3.7
27	Keystone 111W	96.0	17.1	93.3	3.3	1.1	0	4.6
28	Mo. $804A$ (Exp)	95.6	15.4	91.9	0.5	4.3	0.2	5.0
28	(Kan 1639)	00.0						
20	(U.S. 561) (Exp)	95.6	16.1	90.7	0.6	6.3	0.3	4.4
30	Pfister 403	95.5	13.6	86.7	0.6	1.4	0.2	3.4
31	Mo. 877 (Exp)	95.2	14.0	86.8	0.7	7.1	0.5	3.8
32	C.B. 7530 (Exp)	95.0	15.5	92.0	0.4	3.2	1.4	3.7
32	M.F.A. 120A	94.2	14.4	89.6	0.3	9.7	0.3	4.0
		94.2	13.6	88.5	0.6	6.3	0.6	3.8
34	Ohio C92	87.8	13.8	89.5	0.4	7.1	1.1	4.0
35	Embro 36			91.3	0.4	5.8	0.6	4.3
	Means	100.1	15.4	91.0	0.0	0.0	0.0	1.0

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	MISSOURI, I	N SHELBY						
			Moist-					
		Acre	ure in	-		Plants	Dropped	Ear
		Yield	Grain	Stand	Root	Stalk	Ears	Height
Rank	Hybrid	Bu.	%	%	%	%	%	Grade
1	U.S. 523W*	77.0	20.2	92.7	33.1	4.3	0	3.4
1	Mo. 4046W* (Exp)	77.0	20.9	96.0	38.2	5.6	0	3.4
3	Mo. 4043W* (Exp)	76.0	19.9	93.3	38.6	3.6	0	3.0
4	Mo. 4009W* (Exp)	74.0	19.1	89.3	17.9	1.5	0	3.4
5	Mo. 4042 W* (Exp)	73.5	22.4	96.0	25.0	0	0	3.0
6	Mo. 4045W* (Exp)	71.9	19.3	84.7	29.9	6.3	0	3.4
7	Mo. 843	70.9	18.2	91.3	19.7	1.5	0	2.6
8	U.S. 13	70.6	17.2	92.0	35.5	2.9	0	3.6
9	Mo. 148	67.6	21.6	92.0	49.3	5.8	0	3.8
9	Mo. 4041W* (Exp)	67.6	21.7	92.0	28.3	2.2	0	3.0
11	Keystone 45	67.2	18.8	84.0	7.9	4.0	0	3.8
12	Mo. 900 (Exp)	66.6	20.7	94.7	9.2	1.4	0	3.2
12	M.F.A. 120A	66.6	18.2	91.3	28.5	5.1	0	2.8
14	N.E. 7847 (Exp)	66.2	19.8	95.3	11.2	0.7	0.7	3.4
15	Mo. 4022W* (Exp)	66.1	19.4	90.0	10.4	3.7	0	2.2
16	C.B. 8805 (Exp)	65.9	18.8	92.0	26.8	0	0	3.0
17	Ohio C92	65.8	16.0	86.0	23.3	0.8	0	3.0
18	Mo. 902 (Exp)	65.0	18.8	88.0	6.8	0	0	2.8
19	C.B. 7530 (Exp)	63.8	18.6	90.7	16.9	0	0	2.8
20	Mo. 4039W* (Exp)	63.4	21.5	92.0	10.9	0.7	0	3.0
21	Mo. 892 (Exp)	62.6	18.6	93.3	22.9	10.0	0	3.2
22	Mo. 901 (Exp)	62.4	20.7	88.7	9.0	3.8	0	3.2
23	Kan. 1639	62,3	16.3	90.0	24.4	6.7	0	3.0
24	Mo. 4040W* (Exp)	61.5	24.3	94.0	27.7	1.4	0	3.0
25	Mo. 897 (Exp)	60.8	18.6	89.3	5.2	3.0	0	3.0
26	Ia. 4476	60.6	17.9	92.0	17.4	0	0	2.6
27	AES 801	60.2	20.5	91.3	2.9	1.5	0	2.4
28	Pfister 383	59.0	16.3	82.0	39.0	1.6	0.8	2.4
29	Mo. 893 (Exp)	58.8	19.8	89.3	29.1	1.5	0	3.0
30	Mo. 894 (Exp)	58.3	19.0	88.7	21.1	3.0	0	3.0
31	Mo. 890 (Exp)	57.8	21.0	90.0	31.1	14.1	0	3.0
32	Mo. 4029W* (Exp)	56.2	20.9	90.7	6.6	0	0	3.0
33	Embro 36	55.6	18.3	88.0	7.6	1.5	0.8	3.0
34	Ia. 4531 (Exp)	54.3	18.6	88.0	6.1	0.8	0	2.6
35	Mo. 895 (Exp)	51.7	18.8	89.3	11.2	7.5	ō	3.0
	Means	64.7	19.4	90.5	20.8	3.0	0.1	3.0
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TABLE 7. -- 1952 PERFORMANCE RECORD FOR OPEN-PEDIGREED AND EXPERIMENT-AL HYBRIDS TESTED ON THE EDWARD COE FARM NEAR SHELBYVILLE, MISSOURI, IN SHELBY COUNTY

 TABLE 8. -- 1952 PERFORMANCE RECORD FOR OPEN-PEDIGREED AND EXPERIMENT-AL HYBRIDS TESTED ON THE NORTHWEST MISSOURI STATE COLLEGE FARM, R. T. WRIGHT, SUPERINTENDENT, NEAR MARYVILLE, MISSOURI IN NODAWAY COUNTY

			Moist-			terre in the state of the second		
		Acre	ure in			ed Plants		Ear
		Yield	Grain	Stand	Root	Stalk	Ears	Height
Rank	Hybrid	Bu.	%	%	%	%	%	Grade
1	Mo. 4009W* (Exp)	131.4	17.8	99.3	0	16.1	1.3	4.8
2	Mo. 4046W* (Exp)	129.4	16.5	99.3	2.0	14.1	0.7	4.4
3	Mo. 902 (Exp)	122.3	18.7	97.3	0	4.8	4.1	3.6
4	Mo. 895 (Exp)	121.8	17.0	97.3	0	4.8	1.4	3.6
5	Ia. 4476 (Exp)	121.4	17.0	96.7	0	3.4	2.8	3.4
6	Mo. 897 (Exp)	120.5	17.5	98.0	0	2.7	0.7	3.6
7	Keystone 45	120.3	15.6	94.7	0	7.7	5.6	4.0
8	Ia. 4531	119.2	15.7	97.3	0	0.7	2.1	3.4
9	Mo. 4045W* (Exp)	119.0	16.8	94.0	0	5.7	3.5	4.2
10	AES 801	118.7	15.6	96.0	0	3.5	2.8	3.0
11	Mo. 4042W* (Exp)	117.6	19.6	100.0	0	1.3	0	3.2
11	Mo. 900 (Exp)	117.6	17.1	97.3	0	3.4	0	3.4
13	Mo. 4041W* (Exp)	117.5	19.1	98.7	0	10.1	1.4	4.0
13	C.B. 7530 (Exp)	117.5	16.4	95.3	0	0.7	1.4	3.0
15	U.S. 523W*	117.2	19.0	97.3	0	4.1	4.1	4.4
16	Mo. 4039W* (Exp)	116.7	19.0	97.3	0	4.8	2.1	3.4
17	Kan. 1639	116.5	16.6	98.0	0	4.1	2.0	3.0
18	Mo. 843	116.2	17.9	94.7	0	3.5	0.7	3.0
19	Mo. 4043W* (Exp)	115.5	16.8	98.0	0	8.8	1.4	4.0
20	U.S. 13	114.7	13.8	97.3	0	8.2	17.8	4.2
21	Mo. 901 (Exp)	114.6	18.2	97.3	0	0	1.4	3.4
22	Mo. 894 (Exp)	114.2	15.8	94.7	0	2.1	0.7	3.0
23	Mo. 892 (Exp)	113.2	17.8	98.0	0	2.0	2.7	3.2
24	Mo. 893 (Exp)	113.1	18.3	98.0	0	2.0	2.0	3.2
25	C.B. 8805 (Exp)	112.4	17.0	96.0	0	4.2	3.5	3.6
26	Mo. 4022W* (Exp)	112.3	21.7	98.7	0	2.0	0.7	3.0
27	Ohio C92	112.1	13.3	94.0	0	6.4	3.5	3.8
28	Mo. $4029W*$ (Exp)	110.5	19.1	97.3	Ō	1.4	1.4	3.2
29	Mo. $4040W*(Exp)$	108.9	18.1	98.7	õ	5.4	0.7	3.0
30	Mo. 148	106.3	19.2	97.3	Ō	15.8	11.6	5.0
31	N.E. 7847 (Exp)	106.0	17.6	98.0	ŏ	0.7	1.4	3.6
32	Mo. 890 (Exp)	102.9	18.5	96.7	õ	11.7	2.8	3.4
33	Pfister 383	100.7	15.4	94.7	ŏ	2.1	0.7	3.0
34	M.F.A. 120A	100.3	16.6	96.0	ŏ	9.7	4.9	3.8
35	Embro 36	98.8	16.2	96.0	õ	4.9	3.5	3.6
55	Means	114.8	17.3	97.0	0.1	5.2	2.7	3.6
*176	ite Hybrids							

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TABLE 9. -- 1952 PERFORMANCE RECORD FOR OPEN-PEDIGREED AND EXPERIMENT-AL HYBRIDS TESTED ON THE NORTHWEST MISSOURI OUTLYING EXPERI-MENTAL FIELD, C. L. VAN BUREN, COOPERATOR, NEAR LATHROP, MIS-SOURI, IN CLINTON COUNTY

			Moist-					
		Acre	ure in		Lodge	d Plants	Dropped	Ear
		Yield	Grain	Stand	Root	Stalk	Ears	Height
Rank	Hybrid	Bu.	%	%	%	%	%	Grade
1	Mo. 902 (Exp)	128.5	17.5	94.0	2.1	3.5	0	3.5
1	U.S. 523W*	128.5	19.0	93.3	15.7	2.1	0	4.2
3	Mo. 897 (Exp)	127.8	17.6	97.3	0	0.7	0	3.6
4	Mo. 4045W* (Exp)	126.3	20.1	94.7	12.0	2.1	0	4.4
5	Mo. 4009W* (Exp)	125.4	19.2	95.3	29.4	1.4	0	4.6
6	Mo. 895 (Exp)	124.7	18.3	96.0	0.7	2.1	0	4.0
7	Mo. 4022W* (Exp)	124.4	21.0	94.7	4.2	0	0	3.0
8	Mo. 901 (Exp)	122.9	18.4	98.0	0	1.4	0	3.6
9	Ia. 4476 (Exp)	122.6	19.0	99.3	0	2.7	0	3.6
10	Mo. 900 (Exp)	121.7	21.3	93.3	1.4	0	0	4.0
11	Mo. 4046W* (Exp)	121.5	18.7	94.0	19.1	0.7	0	4.2
11	Mo. 843	121.5	20.7	96.7	5.5	1.4	0.7	3.2
13	Mo. 892 (Exp)	121.2	18.4	96.0	0	0.7	0	3.2
14	C.B. 7530 (Exp)	119.5	18.4	96.0	1.4	2.1	0	3.6
15	Mo. 4042W* (Exp)	119.3	20.3	96.7	6.9	0.7	0	3.8
16	Mo. 894 (Exp)	119.2	17.6	98.0	0	0.7	0	3.0
17	Keystone 45	119.1	17.6	94.0	0	2.8	0	4.4
18	Kan. 1639	118.4	17.4	96.0	4.2	0	0.7	3.2
18	Mo. 4041W* (Exp)	118.4	18.9	95.3	16.1	0	0	4.2
20	Mo. 4043W* (Exp)	116.9	18.3	92.7	21.6	0	0	4.0
21	Mo. 4029W* (Exp)	116.5	21.3	96.7	0	0	0	4.2
21	Ia. 4531	116.5	17.3	99.3	2.0	0	2.0	3.2
23	Mo. 893 (Exp)	114.3	19.7	96.0	4.9	1.4	0	3.6
24	C.B. 8805 (Exp)	113.9	17.6	98.0	4.1	2.0	0.7	3.4
25	M.F.A. 120A	113.3	17.4	92.0	3.6	1.4	0	3.8
26	Mo. 4039W* (Exp)	112.7	20.0	97.3	4.8	0	õ	3.4
27	Ohio C92	111.6	16.4	92.0	6.5	0.	õ	4.0
28	U.S. 13	111.2	17.4	94.7	4.2	0.7	Ō	4.4
29	Mo. 4040W* (Exp)	110.4	23.7	95.3	28.7	0	õ	3.4
30	Pfister 383	108.8	15.6	94.0	4.3	õ	1.4	3.0
31	AES 801	107.5	23.0	96.0	2.1	1.4	1.4	3.0
32	N.E. $7847 (Exp)$	105.9	17.9	98.0	5.4	0.7	0	4.0
33	Mo. 148	105.7	21.3	92.7	10.1	2.9	õ	4.8
34	Mo. 890 (Exp)	102.8	19.4	95.3	15.4	4.9	õ	3.6
35	Embro 36	100.4	18.1	96.0	0	2.8	õ	3.6
30	Means	117.1	19.0	95.6	6.8	1.2	0.2	3.7
	ito Hybride							

	SOURI, IN M	IARION C						
			Moist-					
		Acre	ure in			l Plants	Dropped	Ear
-		Yield	Grain	Stand	Root	Stalk	Ears	Height
Rank	Hybrid	Bu.	%	%	%	%	%	Grade
1	Mo. 4022W* (Exp)	118.9	18.9	95.3	0.7	2.8	0	3.8
2	Mo. 843	113.9	17.3	98.7	0	3.4	0	3.8
3	Mo. 892 (Exp)	108.5	17.9	97.3	0	1.4	0	4.2
4	Keystone 45	107.1	16.4	95.3	0	6.3	0	5.0
5	Mo. 894 (Exp)	106.6	15.5	94.7	0	4.2	0	4.2
5	Mo. 901 (Exp)	106.6	16.6	95.3	0	1.4	0	3.8
7	Mo. 4046W* (Exp)	106.1	18.3	88.7	0	4.5	0	4.6
8	Kan 1639	105.9	15.5	97.3	0	6.8	0	4.0
9	Mo. 900 (Exp)	105.8	17.6	96.0	0	2.1	0.7	4.2
10	N.E. 7847 (Exp)	104.6	17.3	94.0	1.4	2.8	0	4.2
11	Mo. 4043W* (Exp)	102.4	16.7	91.3	3.6	4.4	0	4.4
12	Ia. 4476 (Exp)	101.6	17.1	95.3	0	3.5	0	4.0
13	Mo. 4009W* (Exp)	101:4	21.8	90.7	0	7.4	0	5.0
14	Pfister 383	100.8	14.9	95.3	0	2.8	0	3.6
15	Mo. 4042W* (Exp)	100.2	19.8	96.0	2.1	4.2	0	4.0
16	AES 801	99.9	18.3	96.7	0	2.1	0	3.8
17	Mo. 4041W* (Exp)	99.7	19.8	94.7	2.1	4.9	0	4.8
18	Mo. 897 (Exp)	99.2	21.5	94.0	0	3.5	0	4.4
19	M.F.A. 120A	99.1	16.7	97.3	0	8.9	0	4.4
20	Mo. 895 (Exp)	98.8	17.5	90.0	0	5.9	1.5	4.6
21	Mo. 4029W* (Exp)	98.5	19.4	93.3	0.7	0.7	0	4.0
22	Mo. 4039W* (Exp)	98.2	19.2	98.7	2.7	5.4	0.7	3.8
23	Ohio C92	96.3	14.3	93.3	0	4.3	0	4.2
24	C.B. 8805 (Exp)	96.0	17.1	89.3	0.7	4.5	Ō	4.0
25	Mo. 890 (Exp)	95.2	19.5	89.3	0	15.7	Ō	4.6
26	Mo. 893 (Exp)	94.8	17.9	95.3	Ō	1.4	õ	4.2
27	Mo. 148	94.6	17.8	92.0	0	10.9	1.4	5.2
28	Mo. 4045W* (Exp)	93.8	19.7	84.7	õ	14.2	0	4.8
29	C.B. 7530 (Exp)	93.7	19.7	87.3	ŏ	0.8	õ	4.0
30	Mo. 902 (Exp)	93.2	21.5	94.7	õ	2.1	ŏ	4.6
31	U.S. 523W*	92.4	29.0	94.0	0.7	2.1	õ	4.4
32	Ia. 4531	90.5	16.1	94.0	0.7	2.8	ŏ	4.0
33	Mo. 4040W* (Exp)	90.1	24.1	92.7	0	5.0	ŏ	3.8
34	Embro 36	89.5	18.9	92.7	ŏ	2.2	ŏ	4.4
35	U.S. 13	86.8	19.2	87.3	ŏ	9.2	0.8	4.4
50	Means	99.7	18.5	93.5	0.4	4.7	0.1	4.3
WTTTL 3	ite Hybride		10.0	30.0	v	241		1.0

TABLE 10. -- 1952 PERFORMANCE RECORD FOR OPEN-PEDIGREED AND EXPERIMENT-AL HYBRIDS TESTED ON THE NICHOLS HILT FARM NEAR PALMYRA, MIS-SOURL IN MARION COUNTY

TABLE 11. -- 1952 PERFORMANCE RECORD FOR OPEN-PEDIGREED AND EXPERIMENT-AL HYBRIDS TESTED ON THE MISSOURI STATE PRISON FARM, COL. PAUL RENZ, SUPERINTENDENT, NEAR JEFFERSON CITY, MISSOURI, IN COLE COUNTY

	-		Moist-					
		Acre	ure in		Lodged	l Plants	Dropped	Ear
		Yield	Grain	Stand	Root	Stalk	Ears	Height
Rank	HYBRID	Bu.	%	`%	%	%	%	Grade
1	U.S. 523W*	108.2	14.9	90.7	0	0.7	0.7	4.4
2	Mo. 4021W* (Exp)	106.2	14.2	90.7	0	0.7	0.7	3.6
2	Mo. 883 (Exp)	106.2	15.5	94.0	0	0	0	4.2
4	Mo. 862 (Exp)	103.9	16.2	91.3	0	2.9	0	4.6
5	U.S. 561 (Exp)	103.0	15.0	88.0	0	2.3	0.8	5.0
6	Mo. 804B (Exp)	102.7	16.7	96.7	0	2.1	0	5.0
7	Mo. 4022W* (Exp)	102.2	15.7	87.3	0	0	0	3.0
8	C.B. 7610 (Exp)	101.6	13.1	89.3	0	0.7	0	4.4
9	C.B. 9909 (Exp)	101.2	14.4	90.0	0	0	0	4.8
10	Ia. 4476 (Exp)	100.5	11.0	92.7	0	0.7	0	3.2
11	Mo. 845 (Exp)	100.2	12.4	94.7	0	1.4	0.7	5.0
12	Mo. 804	100.0	14.0	90.0	0	0.7	0	5.0
13	Mo. 876 (Exp)	99.6	13.8	86.0	0	0	0	4.6
14	Kan. 1639	98.2	10.0	94.7	1.4	2.8	0	3.6
15	Mo. 8	97.4	14.7	88.0	3.8	0.8	0	4.6
15	Mo. 902 (Exp)	97.4	10.8	93.3	0	0	0	3.8
17	Mo. 892 (Exp)	97.3	13.3	94.7	0	3.5	0.7	3.4
17	Mo. 860 (Exp)	97.3	13.8	90.7	0	0.7	0	4.6
19	Pfister 403	96.7	10.2	90.0	0	0	0	3.2
20	Mo. 804A (Exp)	96.0	11.7	92.0	1.4	0.7	0	4.8
21	Keystone 111W	95.8	14.2	93.3	0	0	0	4.4
22	C.B. 7632 (Exp)	94.6	12.1	94.7	0	2.1	0	4.8
22	C.B. 8805 (Exp)	94.6	10.4	93.3	0	0.7	1.4	4.0
24	C.B. 9953 (Exp)	94.5	13.6	94.7	0	0.7	0.7	4.4
25	Mo. 842 (Exp)	92.7	13.3	87.3	0	0.8	0	4.2
26	Mo. 148	92.3	10.8	88.7	0	2.3	2.3	5.0
27	N.E. 7830 (Exp)	92.1	11.3	87.3	0	0	0.8	3.4
28	Mo. 843	91.8	13.3	92.0	0	0.7	0	3.2
29	Embro 36	90.8	11.5	87.3	0	0	0.8	4.0
29	M.F.A. 120A	90.8	10.6	90.0	Ō	1.5	0	3.8
31	Mo. 877 (Exp)	90.0	12.2	92.7	0	0.7	0	3.4
32	U.S. 13	89.0	10.8	90.7	1.5	0	0.7	4.2
33	Ohio C92	86.2	12.1	87.3	0	0	1.5	4.0
34	(Kan. 1639)		•					
	(U.S. 561) (Exp)	85.9	13.6	86.0	0.8	0.8	0.8	4.0
35	C.B. 7530 (Exp)	83.4	13.9	89.3	0	0	0.7	3.8
1000-000	Means	96.1	13.0	90.8	0.3	0.9	0.4	4.2

	NEAR COL	UMBIA, M		IN BOOM	NE COUN	TY		
			Moist-					
		Acre	ure in			Plants	Dropped	Ear
_		Yield	Grain	Stand	Root	Stalk	Ears	Height
Rank	Hybrid	Bu.	%	%	%	%	%	Grade
1	Mo. 862 (Exp)	107.2	14.7	94.0	2.1	2.8	0	4.8
2	Mo. 892 (Exp)	104.3	13.8	95.3	0	1.4	0	3.6
3	Mo. 843	103.7	14.2	89.3	0.7	1.5	0	3.2
4	Mo. 4022W* (Exp)	102.9	18.4	95.3	3.5	0	0	3.0
5	Mo. 4021W* (Exp)	100.1	15.9	88.0	0	0.8	0	3.2
6	C.B. 7610 (Exp)	99.9	12.8	95.3	0	3.5	0	4.6
7	C.B. 9953 (Exp)	99.6	13.8	94.7	0.7	2.1	1.4	4.4
8	U.S. 523W*	99.5	17.3	92.0	9.4	3.6	0	4.4
9	Mo. 860 (Exp)	98.5	14.5	97.3	2.1	4.1	0.7	4.8
10	Mo. 883 (Exp)	96.1	17.4	96.7	0	2.1	0.7	4.6
11	Ia. 4476 (Exp)	95.4	13.9	94.7	0	0	0.7	3.8
12	C.B. 9909 (Exp)	94.8	16.4	91.3	0.7	0	0	4.2
13	N.E. 7830 (Exp)	94.1	14.3	94.0	0	0.7	0	3.8
14	C.B. 8805 (Exp)	94.0	13.9	94.0	0	0.7	1.4	4.0
15	Mo. 902 (Exp)	93.7	14.5	94.7	0	2.8	0	3.8
16	C.B. 7632 (Exp)	93.5	15.0	92.7	2.2	3.6	0	5.0
17	Mo. 8	93.2	14.2	90.0	2.2	3.7	0	4.6
18	Mo. 845 (Exp)	92.3	15.9	90.7	0	5.1	0	5.2
19	U.S. 13	91.8	11.4	87.3	2.3	3.1	1.5	4.4
20	Mo. 842 (Exp)	91.3	13.9	96.0	0	3.5	0	4.4
21	Mo. 877 (Exp)	89.6	12.8	72.0	0	0.9	0	3.4
22	Ohio C92	89.0	12.3	94.0	0	1.4	0.7	4.0
23	Pfister 403	88.1	13.3	83.3	0	0	0	3.0
24	C.B. 7530 (Exp)	87.7	14.9	85.3	0	0	0	3.8
25	Kan 1639	87.2	12.3	94.0	0	1.4	0.7	3.0
25	Mo. 804B (Exp)	87.2	16,7	96.7	0.7	2.8	0	5.0
27	Mo. 804	87.1	15.5	87.3	0.8	3.8	0.8	5.0
28	Mo. 148	86.5	14.7	92.0	2.9	3.6	5.1	4.6
28	(Kan. 1639)							
	(U.S. 561) (Exp)	86.5	17.4	91.3	0.7	3.6	0	4.6
30	M.F.A. 120A	85.9	14.8	90.7	0	4.4	õ	3.8
31	Mo. 876 (Exp)	85.0	15.0	94.0	õ	2.1	0.7	4.4
32	Mo. 804A (Exp)	84.6	15.4	92.7	ŏ	2.9	0.7	5.0
33	Keystone 111W	83.9	16.7	92.0	10.9	0	0	4.4
34	U.S. 561 (Exp)	82.1	16.9	97.3	0.7	1.4	ŏ	5.6
35	Embro 36	80.2	13.1	90.7	0	3.7	0.7	3.8
	Means to Hubrido	92.5	14.8	91.9	1.2	2.2	0.5	4.2

TABLE 12. -- 1952 PERFORMANCE RECORD FOR OPEN-PEDIGREED AND EXPERIMENT-AL HYBRIDS TESTED ON THE SOUTH FARM, UNIVERSITY OF MISSOURI, NEAR COLUMBIA, MISSOURI, IN BOONE COUNTY

	50010, 21		Moist-		1 10/11/12			
		Acre	ure in		Lodged	Plants	Dropped	Ear
		Yield	Grain	Stand	Root	Stalk	Ears	Height
Rank	Hybrid	Bu.	%	%	%	%	%	Grade
1	Mo. 4021W* (Exp)	140.0	21.9	97.0	2.6	3.6	0	4.6
2	C.B. 7632 (Exp)	138.8	19.1	95.5	õ	1.0	ŏ	5.8
3	Mo. 883 (Exp)	137.5	21.2	95.0	1.6	2.1	õ	5.4
4	Mo. 804B (Exp)	136.6	20.7	96.0	0.5	1.0	õ	6.0
5	Mo. 4022W* (Exp)	134.0	21.2	86.5	4.6	3.5	ō	4.4
6	C.B. 9909 (Exp)	133.9	19.3	91.5	0	2.2	0	5.6
7	Mo. 862 (Exp)	133.2	23.3	98.0	1.5	6.1	0	5.8
8	Ia. 4476 (Exp)	132.5	17.4	90.0	1.1	5.0	0	5.0
9	Mo. 845 (Exp)	130.0	21.9	92.5	1.1	2.2	ō	5.8
10	Mo. 892 (Exp)	128.8	18.6	89.0	0	7.9	0.6	4.6
10	Mo. 860 (Exp)	128.8	19.5	94.0	1.1	3.7	0	5.8
12	U.S. 523W*	127.8	20.1	92.5	8.1	2.7	0	5.2
13	Mo. 804	127.6	18.2	94.5	3.7	2.1	0	6.0
14	Mo. 876 (Exp)	126.1	19.3	88.5	0.6	1.1	0	5.8
15	N.E. 7830 (Exp)	124.8	18.2	93.5	1.6	10.2	0	4.2
16	C.B. 7610 (Exp)	123.9	19.5	94.0	0.5	4.3	0	5.6
17	U.S. 561 (Exp)	123.7	20.9	99.0	2.0	0	0	6.0
18	U.S. 13	123.2	14.0	90.5	1.1	5.5	0	5.0
19	C.B. 7530 (Exp)	120.9	18.7	95.0	2.1	4.7	1.6	4.2
20	Mo. 843	120.8	17.1	95.0	0.5	2.6	0	4.0
21	Mo. 804A (Exp)	120.2	18.8	97.0	1.0	1.5	0.5	6.0
22	M.F.A. 120A	120.1	16.3	96.0	0.5	9.9	0.5	5.0
23	Mo. 148	118.9	17.8	89.5	7.3	16.2	2.2	5.8
24	Mo. 8	118.8	21.0	90.0	8.3	9.4	0	5.6
25	Kan. 1639	118.4	17.8	96.5	3.1	7.3	1.0	4.2
26	Pfister 403	118.0	15.0	87.5	2.9	0	0	4.4
27	Mo. 877 (Exp)	117.9	19.5	94.5	1.6	4.2	1.1	4.8
27	Keystone 111W	117.9	20.1	93.0	5.4	0.5	0	5.4
29	Mo. 842 (Exp)	117.2	19.0	95.5	0	3.1	0	5.4
30	C.B. 8805 (Exp)	116.9	17.2	94.0	6.9	2.7	0	4.4
31	C.B. 9953 (Exp)	116.2	18.0	91.0	1.6	3.8	1.1	5.2
32	Ohio C92	112.7	17.3	88.0	2.3	3.4	0	4.4
33	Embro 36	112.0	18.0	93.0	2.2	2.7	0	4.8
34	(Kan. 1639)							
	(U.S. 561) (Exp)	111.7	18.3	93.0	1.6	4.3	0	5.0
35	Mo. 902 (Exp)	109.8	20.2	88.0	1.7	4.0	0	4.8
	Means	124.0	19.0	93.0	2.3	4.1	0.2	5.1
*1176	te Hybrids							

TABLE 13. -- 1952 PERFORMANCE RECORD FOR OPEN-PEDIGREED AND EXPERIMENT-AL HYBRIDS TESTED ON THE BEN GEISERT FARM, WASHINGTON, MIS-SOURI, IN THE LABADIE BOTTOMS IN FRANKLIN COUNTY

	DEPARTME MISSOURI,	IN CAPPO	PLOT, F	RANK T	RINDLE 1	FARM N	EAR CARE	OLLTON,
	MISSOONI,	IN CARRO	Moist-	11				
		Acre	ure in		Lodged	Dlante	Dropped	For
		Yield	Grain	Stand	Root	Stalk	Ears	Ear Height
Rank	Hybrid	Bu.	%	%	%	%	%	Grade
1	U.S. 523W*	115.0	13.8	90.7	0	15.4	0	4.6
2	C.B. 7632 (Exp)	106.2	14.9	94.7	ŏ	16.2	0.7	5.4
3	Mo. 804	106.1	13.7	96.7	ŏ	12.4	1.4	4.8
4	Mo. 804B (Exp)	104.9	16.8	94.7	ŏ	12.0	0.7	4.6
5	Mo. 845 (Exp)	103.5	14.7	98.7	1.4	11.5	0	4.2
6	C.B. 9909 (Exp)	103.3	14.8	90.0	0.7	4.4	1.5	4.8
6	Mo. 876 (Exp)	103.3	15.4	94.0	0	18.4	0	4.6
8	Mo. 883 (Exp)	102.9	18.1	93.3	ŭ	7.1	ŏ	4.6
9	(Kan. 1639)				•		U U	
-	(U.S. 561) (Exp)	102.2	16.7	95.3	. 0	17.5	0	4.2
10	U.S. 561 (Exp)	101.3	17.3	98.7	0	9.5	0.7	5.8
10	Mo. 862 (Exp)	101.3	18.3	94.7	Ō	15.5	0	4.8
12	C.B. 9953 (Exp)	99.5	12.2	93.3	õ	24.3	2.9	5.0
13	C.B. 8805 (Exp)	98.1	12.8	94.7	1.4	8.5	0.7	3.8
14	Mo. 148	96.9	12.7	90.0	0	27.4	1.5	4.6
14	Mo. $4022W^*$ (Exp)	96.9	15.3	94.7	õ	4.2	0	3.4
16	Mo. 892 (Exp)	95.9	13.3	98.0	õ	11.6	0.7	3.4
17	Mo. 860 (Exp)	94.9	13.4	96.7	õ	18.6	0.7	4.4
18	Keystone 111W	94.6	16.4	94.7	õ	3.5	0	5.0
19	N.E. 7830 (Exp)	93.7	11.9	96.0	õ	6.9	0.7	3.2
20	Mo. 842 (Exp)	93.4	13.4	93.3	õ	13.6	0.7	4.4
20	C.B. 7530 (Exp)	93.4	14.7	95.3	õ	2.1	2.1	3.6
22	Mo. 8	93.3	14.6	92.7	õ	28.1	0	4.8
23	C.B. 7610 (Exp)	92.6	15.5	90.7	õ	23.5	0.7	4.2
24	Mo. 4021W* (Exp)	91.1	16.9	96.0	Ō	8.3	1.4	3.6
25	Mo. 843	90.7	15.7	90.7	0.7	16.9	0.7	4.2
26	Mo. 804A (Exp)	90.5	14.3	93.3	0	10.0	0	4.6
27	U.S. 13	90.1	13.0	90.7	0	20.6	2.2	4.0
28	Mo. 902 (Exp)	88.5	16.1	87.3	Ō	3.1	3.8	3.0
29	Kan. 1639	88.1	11.8	92.0	õ	20.3	0.7	3.4
30	Mo. 877 (Exp)	87.3	12.5	93.3	2.1	25.0	0.7	3.8
31	Pfister 403	86.0	14.9	86.7	0	3.8	0	3.4
32	Ohio C92	82.3	12.6	88.0	0.8	15.9	0	3.8
33	M.F.A. 120A	82.2	16.5	87.3	0	20.6	0	3.8
34	Ia. 4476 (Exp)	74.4	18.8	90.0	Ō	20.0	0.7	4.0
35	Embro 36	73.9	12.7	92.7	0	25.2	2.2	3.8
	Means	94.8	14.8	93.1	0.2	14.3	0.8	4.2

TABLE 14. -- 1952 PERFORMANCE RECORD FOR OPEN-PEDIGREED AND EXPERIMENT-AL HYBRIDS TESTED ON THE PFISTER ASSOCIATED GROWERS RESEARCH DEPARTMENT TEST PLOT, FRANK TRINDLE FARM NEAR CARROLLTON, MISSOURI, IN CARROLL COUNTY

20

Moist-									
		Acre	ure in		Lodged	l Plants	Dropped	Ear	
		Yield	Grain	Stand	Root	Stalk	Ears	Height	
Rank	Hybrid	Bu.	%	%	%	%	%	Grade	
1	Mo. 862 (Exp)	105.8	17.3	89.3	0	11.2	0.7	4.4	
2	Mo. 804	103.9	15.5	92.7	0	15.1	0	4.8	
3	Mo. 883 (Exp)	102.5	17.3	90.7	0	8.1	1.5	4.2	
4	Mo. 804B (Exp)	102.3	16.3	93.3	0	10.7	0.7	4.6	
5	U.S. 523W*	101.9	16.1	86.7	0	13.1	0	4.2	
6	Mo. 845 (Exp)	101.4	16.3	88.7	0	13.5	0	4.6	
7	U.S. 561 (Exp)	100.4	16.3	98.0	2.0	4.8	1.4	3.0	
8	Mo. 4021W* (Exp)	99.4	17.1	93.3	0	2.9	0.7	3.0	
9	Mo. 843	94.0	14.9	94.7	0	3.5	0.7	3.0	
10	C.B. 7632 (Exp)	93.3	16.7	86.0	0	7.0	0	4.0	
11	C.B. 7610 (Exp)	92.9	15.2	88.7	0	12.8	0	4.0	
12	Mo. 902 (Exp)	92.7	15.2	82,7	0	6.5	0.8	3.2	
13	N.E. 7830 (Exp)	92.4	13.3	88.0	0	0.8	3.0	3.2	
14	M.F.A. 120A	92.0	13.8	84.0	0.8	11.9	0.8	3.6	
15	Mo. 8	91.9	15.1	91.3	0	11.7	0	4.2	
16	(Kan. 1639)								
	(U.S. 561) (Exp)	91.8	14.5	88.0	0	5.3	0.8	4.0	
17	Kan. 1639	91.7	13.6	81.3	0	5.7	2.5	3.2	
18	Mo. 877 (Exp)	91.0	13.0	81.3	0	4.9	0.8	3.4	
19	Mo. 4022W* (Exp)	90.1	17.6	92.7	0	3.6	0.7	3.0	
20	C.B. 8805 (Exp)	89.9	14.5	85.3	0	5.5	0.8	3.6	
21	Mo. 892 (Exp)	89.7	15.9	88.0	0.8	9.8	0	3.2	
21	Mo. 860 (Exp)	89.7	15.8	84.0	0	6.3	1.6	4.4	
23	Mo. 148	89.6	16.5	91.3	0	20.4	0	4.0	
24	C.B. 7530 (Exp)	89.4	15.1	95.3	0	9.1	2.8	3.2	
25	Ohio C92	89.1	13.6	85.3	0	10.9	0.8	3.0	
26	Mo. 876 (Exp)	88.9	15.3	86.7	0.8	14.6	0.8	4.2	
27	Pfister 403	88.7	14.5	86.0	0	3.1	0.8	3.0	
28	Mo. 842 (Exp)	88.5	14.5	87.3	0	5.3	0	3.8	
29	Ia. 4476 (Exp)	88.0	13.8	86.0	0	11.6	0	3.0	
30	Keystone 111W	87.7	17.9	93.3	0	1.4	0	4.0	
30	U.S. 13	87.7	12.4	86.7	0	6.2	1.5	4.0	
32	Mo. 804A (Exp)	86.5	16.7	84.7	0	6.3	0	4.4	
33	C.B. 9909 (Exp)	85.2	16.1	78.7	0	3.4	0	3.8	
34	C.B. 9953 (Exp)	84.4	13.5	76.7	0	7.8	6.1	4.0	
35	Embro 36	82.2	13.8	84.0	Q	4.0	1.6	3.4	
	Means to Fubrida	92.5	15.3	87.7	0,1	8.0	0.9	3.8	

TABLE 15. -- 1952 PERFORMANCE RECORD FOR OPEN-PEDIGREED AND EXPERIMENT-AL HYBRIDS TESTED ON THE M.F.A. SEED DIVISION CORN TEST PLOT NEAR MARSHALL, MISSOURI IN SALINE COUNTY

FARM NEAR SIKESTON, MISSOURI, IN NEW MADRID COUNTY									
			Moist-						
		Acre	ure in	-	Lodged		Dropped	Ear	
_		Yield	Grain	Stand	Root	Stalk	Ears	Height	
Rank	Hybrid	Bu.	%	%	%	%	%	Grade	
1	T.R.F. 3*	65.3	13.5	91.3	19.0	15.3	0	4.2	
2	Pfister 484	64.9	15.4	92.7	0	19.4	1.4	4.0	
3	Dixie 33*	64.0	16.6	96.7	1.4	9.7	0	5.0	
4	U.S. 13	63.3	10.0	95.3	0	6.3	2.1	3.0	
5	Dixie 22	63.2	14.5	93.3	2.1	32.9	0	4.8	
6	Mo. 883 (Exp)	63.1	16.1	96.7	2.8	4.1	0.7	3.4	
7	TO 142* (Tenn) (Exp)		16.9	88.7	0	15.0	0	4.8	
8	C.B. 7610 (Exp)	62.3	11.4	98.7	0	7.4	0.7	3.6	
9	Mo. 842 (Exp)	62.0	12.8	96.0	0	12.5	0.7	3.6	
10	Mo. 860 (Exp)	61.9	11.3	94.7	0	7.7	0	3.6	
11	U.S. 523W*	61.4	10.7	90.8	2.8	21.1	0	3.5	
12	M.F.A. 120A	61.2	10.0	92.0	0	9.4	1.4	3.0	
12	Mo. 5365W* (Exp)	61.2	14.3	95.3	0	23.8	0	4.8	
14	Mo. 804	60.9	11.3	98.0	0	15.6	0.7	3.8	
15	Okla. 0806	60.8	11.1	96.7	2.6	2.6	0	3.3	
16	Keystone 222A	60.7	15.1	90.7	1.5	24.3	0	4.6	
17	Mo. 862 (Exp)	60.3	16.9	96.0	4.2	17.4	1.4	3.8	
18	Mo. 148	59.1	11.4	89.3	0	11.2	0.7	3.8	
18	N.E. 7830 (Exp)	59.1	10.0	93.3	5.7	5.7	0.7	3.0	
20	Mo. 8	59.0	13.5	95.3	4.2	16.1	1.4	3.8	
21	Kan. 1639	58.9	10.2	94.7	0	4.9	0.7	2.6	
21	Dixie 17*	58.9	16.2	92.7	2.2	29.5	0	5.0	
23	Mo. 847 (Exp)	58.6	13.6	96.0	0	8.3	1.4	3.6	
24	Ohio C92	58.3	10.4	93.3	Ō	3.6	0	2.8	
24	Mo. 804B (Exp)	58.3	14.1	97.3	2.1	11.6	1.4	3.4	
26	Mo. 804A (Exp)	58.1	10.7	94.7	0	17.6	0	3.8	
26	Mo. 882 (Exp)	58.1	14.7	100.0	Ō	7.3	õ	3.4	
28	C.B. 7632 (Exp)	57.7	15.1	93.3	õ	11.4	0.7	4.0	
29	TOOO9 (Tenn)(Exp)	57.5	15.5	88.7	Õ .	18.0	3.0	4.8	
30	Mo. 843	56.9	10.9	94.0	4.3	5.0	0	3.0	
30	C.B. 8805 (Exp)	56.9	10.4	95.3	0	5.6	õ	2.8	
32	Ia. 4476	56.3	10.9	96.0	õ	13.2	0.7	2.6	
33	Mo. 845 (Exp)	54.3	16.2	98.7	Ō	14.2	0	4.0	
34	Mo. 845A (Exp)	54.2	15.3	92.7	õ	20.1	ŏ	4.2	
35	Embro 101	50.0	11.4	94.7	0	12.7	õ	3.4	
	Means	59.7	13.1	94.4	1.6	13.2	0.6	3.7	

TABLE 16. -- 1952 PERFORMANCE RECORD FOR OPEN-PEDIGREED AND EXPERIMENT-AL HYBRIDS TESTED ON THE SOUTHEAST MISSOURI EXPERIMENTAL

22

						Picked		
		Moist-		Stalk	Picked	Corn	Bu. Per	Shelled
	Acre	ure in		Lodged	Clean	With	Acre	Corn
	Yield	Grain	Stand	Plants	Corn	Shucks	Remaining	Bu, Per
Variety	Bu.	%	%	%	%	%	in Field	Acre
U.S. 13	103.1	15.9	94.0	9.3	40.6	59.4	25.8	4.2
Mo. 148	100.0	15.1	90.8	15.4	54.5	45.5	27.5	4.2
Ohio C92	93.0	15.4	81.2	6.9	38.8	61.2	8.4	5.4
U.S. 35	102.2	14.3	87.5	3.6	38.3	61.7	11.4	5.3
Kan. 1639	99.6	17.8	67.5	0.9	33.4	66.6	6.5	4.2
Mo. 843	111.1	18.6	93.5	1.6	25.8	74.2	5.7	3.1
AES 801	114.7	16.8	89.8	1.4	19.8	80.2	6.7	4.0
C.B. 7530	93.6	17.3	74.8	. 3.9	15.2	84.8	6.8	1.7
N.E. 7847	92.3	18.5	86.9	1.4	28.5	71.5	4.1	3.0
Mo. 4045W	117.3	16.1	68.5	4.0	9.7	90.3	13.9	1.7
C.B. 7502	97.9	15.8	94.6	2.6	23.1	76.9	7.1	3.1
Mo. 4029W	109.8	18.0	92.7	1.3	15.2	84.8	7.6	2.0
Means	102.9	16.6	85.2	4.4	28.6	71.4	11.0	3.5

 TABLE 17. -- DATA SECURED FROM THE MECHANICAL PICKER TEST CONDUCTED NEAR

 MARYVILLE, MISSOURI, IN NODAWAY COUNTY ON OCTOBER 17, 1952

 TABLE 18. -- DATA SECURED FROM THE MECHANICAL PICKER TEST CONDUCTED NEAR

 SHELBYVILLE, MISSOURI, IN SHELBY COUNTY ON OCTOBER 23, 1952

						Picked		
		Moist-		Stalk	Picked	Corn	Bu. Per	Shelled
	Acre	ure in		Lodged	Clean	With	Acre	Corn
	Yield	Grain	Stand	Plants	Corn	Shucks	Remaining	Bu. Per
Variety	Bu.	%	%	%	. %	%	in Field	Acre
U.S. 13	56.2	18.5	87.5	6.0	91.9	8.1	13.3	1.0
Mo. 148	62.1	21.7	91.7	6.8	93.4	6.6	8.9	0.8
Ohio C92	62.4	19.0	88.5	1.4	84.3	15.7	6.3	1.1
U.S. 35	51.8	15.6	86.5	3.4	88.7	11.3	7.4	1.0
Kan. 1639	54.5	19.6	89.6	3.5	92.5	7.5	5.4	0.9
Mo. 843	61.7	17.4	87.7	1.9	86.0	14.0	6.9	0.7
AES 801	51.9	17.6	88.7	1.6	83.4	16.6	6.5	0.8
C.B. 7530	51.7	21.4	87.1	1.9	78.8	21.2	6.7	0.4
N.E. 7847	60.4	21.0	91.2	2.1	86.2	13.8	3.7	0.9
Mo. 4045W	72.2	20.3	92.5	14.6	55.2	44.8	6.5	0.7
C.B. 7502	43.4	17.1	86.2	4.8	75.5	24.5	3.3	0.7
Mo. 4029W	56.7	22.2	91.0	0.2	69.1	30.9	6.2	0.4
Means	57.1	19.3	89.0	4.0	82.1	17.9	6.8	0.8

 TABLE 19. -- DATA SECURED FROM THE MECHANICAL PICKER TEST CONDUCTED NEAR

 MARSHALL, MISSOURI, IN SALINE COUNTY ON OCTOBER 14, 1952

						Picked		
		Moist-		Stalk	Picked	Corn	Bu. Per	Shelled
	Acre	ure in		Lodged	Clean	With	Acre	Corn
	Yield	Grain	Stand	Plants	Corn	Shucks	Remaining	Bu. Per
Variety	Bu.	%	%	%	%	%	in Field	Acre
U.S. 13	85.1	14.0	78.3	8.2	72.7	27.3	4.7	5.1
Mo. 148	79.9	18.9	81.2	11.0	75.7	24.3	5.5	4.7
Ohio C92	82.3	13.6	81.2	6.7	69.7	30.3	2.4	5.9
Kan. 1639	86.3	14.5	79.6	5.5	61.3	38.7	2.8	6.1
Mo. 843	93.9	18.9	83.3	2.5	60.1	39.9	1.6	3.9
Mo. 804	91.1	19.5	86.2	7.7	71.3	28.7	2.3	3.0
C.B. 7610	95.9	15.2	79.0	4.7	56.5	43.5	3.4	5.1
Mo. 862	91.4	22.6	80.4	8.5	56.2	43.8	4.8	2.9
U.S. 523W	106.5	19.0	91.9	5.2	47.3	52.7	1.9	3.1
Mo. 804A	81.0	19.1	84.4	6.7	78.6	21.4	5.2	3.2
Mo. 845	91.3	19.9	87.5	5.2	44.8	55.2	5.2	3.3
Ia. 4476	88.1	19.1	85.8	6.6	68.4	31.6	3.4	3.9
MFA 120A	91.6	14.9	86.2	7.5	70.0	30.0	4.3	7.3
MFA 110	77.5	13.6	80.6	5.4	74.2	25.8	3.1	7.8
Ind. 909A	92.0	19.2	76.9	4.1	34.1	65.9	2.5	3.5
Means	88.9	17.5	82.8	6.4	62.7	37.3	3.5	4.6

TT ILD III.					Picked		
	Moist-		Stalk	Picked	Corn	Bu. Per	Shelled
Acre	and the second		Lodged	Clean	With	Acre	Corn
	1000 August 1000	Stand	Plants	Corn	Shucks	Remaining	Bu. Per
		%	%				Acre
		97.7	2.1				7.6
		91.0	6.9	88.1			5.1
		88.7	1.4	82.1			6.7
		94.8	1.5	69.1	30.9		6.3
		91.0	3.2	62.8	37.2	1.3	3.9
		95.4	1.3	76.2	23.8	2.0	3.0
		94.0	2.7	69.3	30.7	0.2	5.0
		97.3	2.1	63.8	36.2		3.6
			1.1	59.0	41.0		4.1
			2.4	87.5			3.4
		96.5	0.6	57.6			3.0
		92.7	1.6	68.6	31.4		4.7
		94.2	2.2	72.0	28.0	1.9	4.7
	Acre Yield Bu. 99.0 98.8 95.6 101.1 109.7 107.3 109.5 111.9 127.5 97.6 109.2 113.2 106.7	Yield Grain Bu. % 99.0 16.9 98.8 19.2 95.6 17.5 101.1 18.3 109.7 18.2 107.3 21.5 109.5 19.7 111.9 22.8 127.5 19.7 97.6 19.3 109.2 19.7 113.2 19.5	$\begin{array}{c cccc} Acre & ure in \\ \hline Yield & Grain & Stand \\ \hline Bu. & \% & \% \\ \hline 99.0 & 16.9 & 97.7 \\ 98.8 & 19.2 & 91.0 \\ 95.6 & 17.5 & 88.7 \\ 101.1 & 18.3 & 94.8 \\ 109.7 & 18.2 & 91.0 \\ 107.3 & 21.5 & 95.4 \\ 109.5 & 19.7 & 94.0 \\ 111.9 & 22.8 & 97.3 \\ 127.5 & 19.7 & 96.0 \\ 97.6 & 19.3 & 95.8 \\ 109.2 & 19.7 & 96.5 \\ 113.2 & 19.5 & 92.7 \\ \hline \end{array}$	Acre ure in Lodged Yield Grain Stand Plants Bu. % % % 99.0 16.9 97.7 2.1 98.8 19.2 91.0 6.9 95.6 17.5 88.7 1.4 101.1 18.3 94.8 1.5 109.7 18.2 91.0 3.2 107.3 21.5 95.4 1.3 109.5 19.7 94.0 2.7 111.9 22.8 97.3 2.1 127.5 19.7 96.0 1.1 97.6 19.3 95.8 2.4 109.2 19.7 96.5 0.6 113.2 19.5 92.7 1.6	Acreure inLodgedCleanYieldGrainStandPlantsCornBu. $\%$ $\%$ $\%$ $\%$ 99.016.997.72.179.798.819.291.06.988.195.617.588.71.482.1101.118.394.81.569.1109.718.291.03.262.8107.321.595.41.376.2109.519.794.02.769.3111.922.897.32.163.8127.519.796.01.159.097.619.395.82.487.5109.219.796.50.657.6113.219.592.71.668.6	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $

TABLE 20. -- DATA SECURED FROM THE MECHANICAL PICKER TEST CONDUCTED NEAR WASHINGTON, MISSOURI, IN FRANKLIN COUNTY ON OCTOBER 21, 1952

TABLE 21. -- DATA SECURED FROM THE MECHANICAL PICKER TEST CONDUCTED NEAR SIKESTON, MISSOURI, IN NEW MADRID COUNTY ON OCTOBER 3, 1952

Contraction in the second statement of the second statement of the second statement of the second statement of						Picked		
		Moist-		Stalk	Picked	Corn	Bu. Per	Shelled
	Acre	ure in		Lodged	Clean	With	Acre	Corn
	Yield	Grain	Stand	Plants	Corn	Shucks	Remaining	Bu. Per
'Variety	Bu.	%	%	%	%	%	in Field	Acre
U.S. 13	48.4	9.9	95.6	5.7	81.9	18.1	2.0	3.9
Mo. 148	39.0	9.9	94.6	11.9	86.5	13.5	3.1	3.0
Ohio C92	38.9	9.4	90.0	4.9	89.4	10.6	1.8	2.6
Kan. 1639	36.9	9.9	95.6	4.4	87.9	12.1	2.2	2.7
Mo. 843	36.4	10.7	93.5	3.8	85.2	14.8	2.8	1.5
Ia. 4476	44.8	9.7	92.9	5.8	92.5	7.5	2.5	2.7
Mo. 804	39.4	9.2	95.6	11.1	87.1	12.9	3.7	2.2
Mo. 804A	36.3	10.7	90.6	9.7	85.0	15.0	2.4	2.4
Mo. 845	18.5	11.9	93.3	3.3	71.4	28.6	1.0	0.6
U.S. 523W	41.9	13.0	94.0	6.2	73.1	26.9	1.7	1.7
Dixie 33	44.4	15.3	92.3	4.5	73.6	26.4	4.3	1.6
Mo. 5365W	38.8	11.9	94.6	9.0	74.6	25.4	3.6	1.8
Mo. 5305W Means	38.6	11.0	93.6	6.7	82.4	17.7	2.6	2,2