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KANSAS CORN TESTS, 1943

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SUMMARY

This bulletin presents the results of extensive corn tests in Kansas during 1943 and summarizes the results of extensive tests conducted during the past five years. The state was divided into seven districts on the basis of soil, rainfall, and growing season. The 1943 Kansas corn testing program, outlined in Figure 1, included open-pollinated varieties and hybrids developed and distributed by federal, state, and commercial agencies. The entries in these trials are listed in Table 1. The results of tests of more than 400 Kansas-developed experimental hybrids have not been reported since they are not yet commercially available.

The names and addresses of the commercial companies entering hybrids in the tests are given in Table 1. Names of producers of certified seed of hybrid combinations with a state name as a prefix may be obtained from the various corn belt agricultural experiment stations. Information on seed of Kansas 2234, Kansas 1583, Kansas 1585, U. S. 13, U. S. 35, III. 200, and K.I.H. 38 can be obtained by writing to the Kansas Crop Improvement Association, Manhattan, Kansas.

Data obtained from the Kansas corn tests are summarized in Tables 3 to 15. Entries in Experiment Station or Corn Performance Tests that stood up as well as the average of the better adapted open-pollinated varieties and produced at least 10 percent more corn are listed on pages 12 and 13. The better strains in the Cooperative Corn Tests are listed on page 14.

The tests most nearly representing the location of the farm should be studied carefully. Results obtained in several districts and over two or more years are more reliable than results obtained in only one district and season.

More satisfactory results will usually be obtained if the corn acreage is planted to several tested hybrids of varying maturity instead of only one. Relative maturity is indicated in the tables by the moisture content of the grain at harvest. Using different hybrids in each planter box is usually a desirable practice. Since one cannot predict whether early or late planted corn will yield best, date of planting should be spread over several weeks or a month.

KANSAS CORN TESTS, 1943[1]

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INTRODUCTION

An effective method of obtaining maximum corn production is through greater use of desirable hybrids. The 12 Corn Belt States increased their acreage of hybrid corn from 143 thousand acres to 46 million acres during the past 11 years. The United States Department of Agriculture estimates that the extensive use of hybrid corn in these states added 669 million bushels to the 1943 corn crop. This additional yield would produce about 7 billion pounds of pork. Still more efficient production is necessary, however, if corn growers are to meet their 1944 war goals. These goals must be met if we are to feed increased livestock populations and supply our greatly expanded

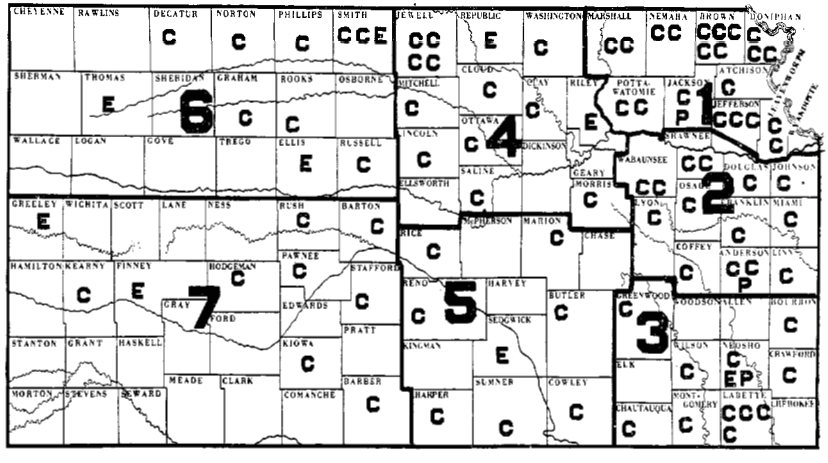

Fig. 1 Kansas corn testing program, 1943.
Kansas Corn Districts 1, 2, 3, 4, 5, 6, and 7.
E-Experiment Station Tests, 9 locations.
P-Kansas Corn Performance Tests, 3 locations.
C-Cooperative Corn Tests, 81 locations.

industrial needs. These industries require enormous quantities of corn for the manufacture of alcohol, sugar, starch, and many other products vital to the war effort. These goals must be attained in spite of decreased agricultural labor and machin-

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ery. The requirements for oil crops, hemp and other emergency war crops may also restrict corn acreage. With seed of superior hybrids available, a considerably larger proportion of the better corn growing area in Kansas should be planted with hybrid seed corn this next season.

MATERIALS AND METHODS

This bulletin summarizes the results of extensive corn tests in Kansas during the past five years. The state was divided into seven districts on the basis of soil, rainfall, and growing season. The Kansas corn testing program, outlined in Figure 1, included hybrids and open-pollinated varieties developed and distributed by federal, state, and commercial agencies. These trials were grouped into three divisions as follows: (1) Experiment Station Tests, (2) Corn Performance Tests, and (3) Cooperative Corn Tests. The entries in these trials are listed in Table 1. Results of Experiment Station Tests of hundreds of Kansas-developed experimental hybrids have not been reported as these hybrids are not yet commercially available.

CORN PERFORMANCE TESTS

Corn Performance Tests were located in Districts 1, 2, and 3 of eastern Kansas in 1943 (Fig. 1). These trials were made possible by the cooperation of the following men on whose farms the tests were located: Jackson County, C. F. M. Stone, Whiting: Anderson County, Lloyd Jefferson, Garnett; and Neosho County, Francis Volmer, Parsons. Forty-four to eighty commercial or promising experimental entries were planted in each field. Each kind of corn was replicated five times at each place in order to equalize the influence of soil and other differences. Entries were distributed at random within each replication. Plots were two rows wide and 10 hills long. Seed was obtained from commercial sources whenever possible. Each entry was given a code number by which it was known throughout the season. This code number was replaced by the original designation after the results had been computed. Location of fields, procedure, and climatic information are given in Table 2. Hand-planters were used to insure a uniform planting rate. Two kernels were planted in hills spaced 42 inches apart. Proper spacing was assured by cross marking. Records on yield, lodging, stand, and dropped ears were obtained at harvest. Representative samples on all entries from two replications of each test were used to determine shelling percentage and moisture content. The moisture determinations were made on shelled corn with a Tag-Heppenstall Moisture Meter by the A. A. A. Testing Laboratory, Manhattan, Kansas. The yields of the entries in each test are reported on a comparable basis of shelled grain, adjusted to a moisture content of 15.5 percent. Stand of each entry was reported as percentage of a perfect stand. The percentage of erect plants was determined from plant counts for each entry.

TABLE 1. ENTRIES IN THE KANSAS CORN TESTS, 1943.

Hybrid or varietal designation	Color of grain	Entered by	Performance record in Table No.
		HYBRIDS	
Carlson C-20A	Y	Kans. Agr. Expt. Sta., & U. S. D. A., Manhattan, Kans.	9
C-33	Y		9
DeKalb 816	Y	Kans. Agr. Expt. Sta., & U. S. D. A., Manhattan, Kans.	9
817A	Y		9
827	Y		13
888	Y		9
Funk G-80	Y	Funk Bros. Seed Co., Bloomington, Ill.	3, 5, 7, 9, 10
G-88	Y		5, 7, 9
G-94	Y		3, 5, 9, 13, 14
G-104	Y		3, 5
G-131	Y		5
G-132	Y		3, 5
G-133	Y		3, 5
G-134	Y		5
G-136	Y		3
G-149	Y		3, 4, 5, 6, 7, 8
G-150	Y		3, 5, 7, 11, 12, 15
G-212	Y		13
G-515W	W		3, 5
G-711	Y		3
Funk G-53	Y	Peppard Seed Co., Kansas City, Mo.	7
G-88	Y		5, 7
G-135	Y		7, 9
G-169	Y		3
Hendriks Cross L	Y	J. A. Hendriks, Garnett Kans.	5, 6, 8, 11, 12
Cross L2	Y		5, 15
Henry Field 135R	Y	Henry Field Seed Co., Shenandoah, Iowa.	3, 5, 9
129-1	Y		3, 5
Huey H-23	Y	Huey Seed Co., Carthage, Ill.	3, 5
H-42	Y		3, 5

TABLE 1 (Continued).

Hyline E	Y	Swinger Hybrid Corn Co., Marshall, Mo.	3, 5
M	Y		3, 5
M-1	Y		3, 5
Ill. 200	Y	Kans. Agr. Expt. Sta., U. S. D. A., & Kans. Crop Imp. Assn., Manhattan, Kans.	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
Iowa 939	Y	Kans. Agr. Expt. Sta., & U. S. D. A., Manhattan, Kans.	9, 10, 13, 14, 15
Iowealth 25A	Y	Michael-Leonard Seed Co., Sioux City, Iowa.	3, 4, 5, 6, 8, 11, 12
25A2	Y		3, 5
25	Y		3, 10
29A	Y		3, 5, 13
TX 1	Y		3, 5, 7, 9
Jewett 6	Y	Breitweiser & Sewell, Sabetha, Kans., & Walter F. Keuper, Cole Camp, Mo.	3, 5, 7
12	Y		3, 4, 5, 6, 7, 9, 11
20	Y		7
Kansas 7	Y	Kans. Agr. Expt. Sta., & U. S. D. A. Manhattan, Kans.	13
9	Y		3, 13
11	Y		9, 11, 13
13	Y		9, 13
15	Y		9
16	Y		3, 5, 9, 11
17	Y		11, 13
19	Y		13
1104	Y		7, 9, 11, 13
1340	Y		13
1356A	Y		3, 5, 9
1358	Y		7, 13
1412	Y		13
1466	Y		7, 9, 11, 13
1516	Y		9
1549	Y		13
1580	Y		9
1582	Y		9
Kansas 1583	Y	Kans. Agr. Expt. Sta., U. S. D. A., & Kans. Crop Imp. Assn., Manhattan, Kansas.	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15
1585	Y		3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 15

TABLE 1 (Continued).

Kansas	1589	Y	Kans. Agr. Expt. Sta., & U. S. D. A., Manhattan, Kans.	3, 5, 9, 13
	1597	Y		9
	1611	Y		9, 13
	1614	Y		3, 5, 7, 9, 13
	1614A	Y		9
	1617	Y		9
	1623	Y		7, 13
	1624	Y		9
	1625	Y		9, 13
	1628	Y		9, 13
	1638	Y		7, 13
	1639	Y		9, 13
	1641	Y		13
	1643	Y		9, 13
	1646	Y		7
	1648	Y		9
	1649	Y		13
	1659	Y		3, 5, 9
	1665	Y		9, 13
	1673	Y		3, 5, 9, 11
	1679	Y		9
	1712	Y		7, 9, 13
	1713	Y		13
	1714	Y		13
	1727	Y		13
	1739	Y		9
	1749	Y		9
	2189	W		9
	2216	W		7, 9, 13
	2225	W		3, 5, 9, 11
	2232	W		3, 5, 7, 9, 11, 13
Kansas	2234	W	Kans. Agr. Expt. Sta., U. S. D. A., & Kans. Crop Imp. Assn., Manhattan, Kans.	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
Kansas	2242	W	Kans. Agr. Expt. Sta., & U. S. D. A., Manhattan, Kans.	3, 5, 9
	2250	W		9
	2269	W		9
	2270	W		9
	2275	W		3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15
	2289	W		9
	2292	W		3, 5, 9, 11

TABLE 1 (Continued).

Kellogg KK-77	Y	Kellogg-Kelly Seed Co., St. Joseph, Mo.	3, 4, 5, 6, 8, 9, 10
KK-88	Y		3, 5
KK-88A	Y		7
Keystone 38	Y	Corneli Seed Co., St. Louis, Mo.	3, 5, 7
39	Y		3, 5
40	Y		3, 5
Ill. 784	Y		3, 5
K.I.H. 5	Y	Kans. Independent Hybrid Corn Producers Assn., Manhattan, Kans.	3, 5
38	Y		3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
440	Y		7
447	Y		3, 5
McCurdy 118M	Y	W. O. McCurdy & Sons, Fremont, Iowa.	3, 5, 9
123M	Y		5, 6, 7
124M	Y		3, 4, 5
130M	Y		5, 8
977M	Y		3, 5
Mangelsdorf 1001	Y	Ed F. Mangelsdorf & Bros., Atchison, Kans.	3, 5, 7
Embro 10-20	Y		3, 5
Embro Multicross	Y		7
Maygold 39	Y	Earl May Seed Co., Shenandoah, Iowa.	3, 4, 5, 6, 9
49	Y		3, 5
59	Y		3, 5
Midwest 23	Y	Stephens Bros., Buckner, Mo.	3, 5
Missouri 8	Y	Kans. Agr. Expt. Sta., & U. S. D. A., Manhattan, Kans.	5, 6, 7, 8
47	Y		13
Missouri King 103	Y	Missouri Hybrid Corn Co., Fulton, Mo.	3, 5, 7, 9
Nebraska 238	Y	Kans. Agr. Expt. Sta., & U. S. D. A., Manhattan, Kans.	13
728	Y		3
729	Y		11
Ohio C-88	Y	Kans. Agr. Expt. Sta., & U. S. D. A., Manhattan, Kans.	3

TABLE 1 (Concluded).

Pfister 160	Y	Kans. Agr. Expt. Sta., & U. S. D. A., Manhattan, Kans.	9
1234	Y		9
2834	Y		9
5830	Y		9
Pioneer 300	Y	Garst & Thomas Hybrid Corn Co., Coon Rapids, Iowa.	3, 5, 7, 9
307	Y		7, 13
313D	Y		3, 4, 5, 6, 8, 9, 10, 11, 12
324	Y		13
332	Y		7
334	Y		7
336	Y		3, 5, 9
Reid Natl. 126-1	Y	Reid National Corn Co., Anamosa, Iowa.	9, 10
129	Y		3, 5
132-1	Y		13
134	Y		3, 4, 5, 6, 9
Reid-Midland	Y		5, 7, 8
Steckley 100A	Y	Steckley Hybrid Corn Co., Weeping Water, Nebr.	3, 5
300	Y		9, 10, 12, 14
S770	Y		13
790	Y		3, 4, 5
865	Y		3, 5
U. S. 13	Y	Kans. Agr. Expt. Sta., U. S. D. A., & Kans. Crop Imp. Assn., Manhattan, Kans.	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
35	Y		3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
OPEN-POLLINATED VARIETIES			
Cassell	W	Kans. Agr. Expt. Sta., U. S. D. A., & Kans. Crop Imp. Assn., Manhattan, Kans.	13
Colby Yellow Cap	W		9, 10, 13, 14
Hays Golden	Y		7, 9, 10, 11, 12, 13, 14, 15
Midland A	Y		3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 15
C	Y		7
O	Y		3, 5
Pride of Saline	W		3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
Reid Yellow Dent	Y		3, 4
Calico	W	Kans. Agr. Expt. Sta., & U. S. D. A., Manhattan, Kans.	9
Commercial White	W		3, 5
Kuhn	Y		9, 13
Midland S	Y		5, 12
St. Charles White	W		9, 13

EXPERIMENT STATION TESTS

Corn Performance Tests were not planted in Districts 4 or 5 because funds and personnel were not available. Data obtained from the Experiment Station Tests conducted by R. F. Sloan, and Clare Porter on the Northcentral and Southcentral Experiment Fields respectively are reported, therefore, as they contained a number of commercially-available hybrids. These trials were replicated in a manner similar to that of the Corn Performance Tests.

COOPERATIVE CORN TESTS

Strip tests of corn varieties and hybrids were conducted by the Department of Agronomy of Kansas State College in cooperation with county agricultural agents, vocational teachers, and farmers. Seed for these tests was assembled and distributed by the Department of Agronomy through the Seed Distribution Project. The tests were planted and harvested by the farmer cooperator, and county agent or vocational teacher. The entries in these tests were planted in four-row plots of sufficient length to obtain reliable areas for harvesting. One thirty-fifth or one seventieth of an acre was harvested for yield data. The yields were calculated on an ear corn basis, using 70 pounds per bushel. Seed of standard varieties was obtained from growers of certified seed. The hybrids included in the tests were nominated by commercial producers or Experiment Stations interested in them. The policy is to include only those hybrids in Cooperative Corn Tests which previously have shown superiority in the Corn Performance Tests.

STRAINS HIGHEST IN YIELD AND RESISTANCE TO LODGING

The data obtained are summarized in Tables 3 to 15 inclusive. However, the following entries in the Experiment Station Tests and Corn Performance Tests stood up as well as the average of the better adapted open-pollinated varieties and produced at least ten percent more grain:

DISTRICT 1, NORTHEASTERN KANSAS

1943: Funk G-711 and Funk G-80.

1942-1943, two-year average: Funk G-150, Funk G-149, Funk G-80, **K 2234,** and K **1585.**

1941-1943, three-year average: K 1585, and K 2234.

1940-1943, four-year average: Funk G-94, U. S. 35, K.I.H. 38, U. S. 13, McCurdy 118M, and K 2232.

1939-1943, five-year average: Funk G-94, U. S. 35, U. S. 13, and KK 77.

DISTRICT 2, EASTCENTRAL KANSAS

1943: Reid-Midland, Funk G-80, Iowealth TX 1, K 2292, K 1585, Hendriks Cross L, Hyline M-1, Funk G-149, Funk G-150, U. S. 13, Hendriks Cross L2, K 2234, K 16, Funk G-94, and U. S. 35.

1942-1943, two-year average: Funk G-149, K 1585, Funk G-150, Funk G-80, Reid-Midland, and K 2234.

1941-1943, three-year average: Funk G-150, K 1585, Funk G-149, and Reid-Midland.

1940-1943, four-year average: Illinois 200.

1939-1943, five-year average: Funk G-94, Illinois 200, U. S. 35, U. S. 13, and Missouri 8.

DISTRICT 3, SOUTHEASTERN KANSAS

1942: Funk G-88, K 2234, Funk G-149, Illinois 200, Funk G-135, Jewett 20, and K 1585.

1940-1942, three-year average: Funk G-88, and K 2232.

DISTRICT 4, NORTHCENTRAL KANSAS

1943: Funk G-94, Pioneer 313D, Pfister 2834, K 1597, Pfister 5830, U. S. 13, Illinois 200, McCurdy 118M, K 1639, K 1617, Pioneer 300, K 1679, Pioneer 336, Calico, Reid National 126-1, K 1712, K 1356A, Mo. King 103, Iowa 939, Steckley 300, DeKalb 817 A, K 1739, KK-77, K.I.H. 38, Maygold 39, K 11, K 1665, DeKalb 816, K 1659, K 1466, K 2216, K 1648, K 1628, K 1583, K 1614, Carlson C-33, and K 1611.

1942-1943, two-year average: K 1648, K 16, K 1639, K 1611, K 1614, Jewett 12, K 2234, K 1665, Illinois 200, K 1516, K 2216, Funk G-88, Funk G-94, K 1104, K 2232, U. S. 13, K 1582, K 1625, K 1643, K 1466, K 1628, K 11, K 1712, McCurdy 118M, K 15, KK-77, K.I.H. 38, Pioneer 300, and Kuhn.

DISTRICT 5, SOUTHCENTRAL KANSAS

1943: K 17, Pioneer 313D, U. S. 35, K 1673, K 11, U. S. 13, K 2234, Hays Golden, Nebraska 729, K 13, K 2232, K 1104, K.I.H. 38, Jewett 12, Illinois 200, K 2275, K 2225, and Hendriks L.

1942-1943, two-year average: K 2234, K 13, K 1104, K 11, U. S. 13, U. S. 35, and K 2232.

1941-1943, three-year average: K 17, K 13, K 11, K 1104, U. S. 13, and U. S. 35.

DISTRICT 6, NORTHWESTERN KANSAS

1942: K 1712, K 1466, K 1625, K 2234, K 1639, K 1643, K 19, K 2216, K 1611, K 1549, K 1665, K 1340, U. S. 35, K 2232, DeKalb 827, K 1623, K 1641, U. S. 13, K 1727, Iowealth 29A, K 1358, Steckley S770, Pioneer 307, K 13, K 1714, K 1614, K 1104, K 1638, K 7, K 1713, Illinois 200, Funk G-94, K 1628, Funk G-212, K 1412, and K.I.H. 38.

Notes on erect plants were not reported in the Cooperative Corn Tests. The following entries, however, produced at least ten percent more grain than the better adapted open-pollinated varieties:

DISTRICT 1, NORTHEASTERN KANSAS

1943: K 2234, K 2275, K 1583, Pioneer 313D, and Reid National 134.

1942-1943, two-year average: Reid National 134, Jewett 12, Illinois 200, and K.I.H. 38.

1941-1943, three-year average: Reid National 134, Illinois 200, and K.I.H. 38.

DISTRICT 2, EASTCENTRAL KANSAS

1943: K 2234, and K 2275.

DISTRICT 3, SOUTHEASTERN KANSAS

1943: K 2234, K 2275, K 1583, Hendriks Cross L, K.I.H. 38, and Kansas 1585.

DISTRICT 4, NORTHCENTRAL KANSAS

1943: K 2275, K 2234, K 1583, K 1585, U. S. 13, Pioneer 313D, Funk G-80, Pride of Saline, Illinois 200, K.I.H. 38, KK-77, Reid-National 126-1, and Iowealth 25.

1942-1943, two-year average: Pride of Saline, Illinois 200, U. S. 13, K.I.H. 38, and Midland A.

1941-1943, three-year average: Illinois 200, Pride of Saline, and U. S. 13.

DISTRICT 5, SOUTHCENTRAL KANSAS

1943: K 2275, K 2234, K 1583, Hendriks Cross L, Funk G-150, Pride of Saline, K.I.H. 38, and U. S. 13.

1942-1943, two-year average: Hendriks Cross L, Pride of Saline, and Midland A.

1941-1943, three-year average: Pride of Saline.

DISTRICT 6, NORTHWESTERN KANSAS

1943: K 2234, K 2275, U. S. 13, Illinois 200, Funk G-94, and Pride of Saline.

1942-1943, two-year average: Pride of Saline, Illinois 200, K.I.H. 38, and Funk G-94.

DISTRICT 7, SOUTHWESTERN KANSAS

1943: K 2234, Funk G-150, Pride of Saline, K 2275, K.I.H. 38, and U. S. 13.

INTERPRETATION OF RESULTS

It is not possible to determine the relative yielding ability with absolute accuracy and small differences do not prove that one hybrid is better than another. Experience has shown that differences in yield may be expected among plots planted from

the same seed. These differences may be due to such things as soil or stand variations, but they are reduced to a large extent by repeating or "replicating" the same corn several times in the same test. Even with replication, differences remain which are said to be due to chance. These differences are called "experimental error." Methods are available for utilizing the differences among replicated plots of a strain in calculating such chance errors and for determining the minimum difference between strains that may be considered a real difference. These differences are called "significant differences" and are shown In many of the tables. For example, in Table 3 the highest yielding hybrid produced 75.1 bushels per acre. In this district 7.7 bushels per acre has been calculated as the required size of a significant difference. Subtracting 7.7 bushels from 75.1 bushels leaves 67.4 bushels per acre. Since the 12 highest yielding entries yielded more than 67.4 bushels per acre, they are not considered to be significantly different from the best entry. In other words, any two entries in Table 3 must differ by at least 7.7 bushels before they may be considered as differing in yielding ability.

The results given in Tables 3 to 15 inclusive should be used to select corn hybrids for planting. The tests most nearly representing the location of the farm should be studied carefully. Two- or three-year averages are usually more reliable than results obtained in only one season. Seasonal conditions vary from year to year and cause a difference in the response of corn hybrids and varieties. A period of early prolonged drought and high temperature is likely to favor an early maturing entry, whereas a later maturing strain often is able to take advantage of a longer growing season when the drought period does not occur until later. In general, the early to midseason entries were favored in 1939 and 1940, whereas the later maturing strains tended to be most productive in 1938, and in the past three years.

In Kansas where the periods of extreme drought and heat are frequent and variable, the most desirable varieties, over a period of years have been those in which the individual plants varied considerably in date of pollination. Experimental evidence has shown that double-cross hybrids pollinate over a shorter period than do the open-pollinated varieties. It appears, therefore, that the most desirable hybrids for use in Kansas might be those with considerable variation in date of pollination. This may be accomplished by mixing two or more adapted hybrids differing in maturity.

Evidence is available to show that more satisfactory results will often be obtained if a field is planted to two or more adapted hybrids of varying maturity instead of only one. Using different hybrids in each planter box is usually a desirable practice. Since one cannot predict whether the early or late planted corn will prove to be the better, it is recommended that planting be spread over several weeks.

TABLE 2. LOCATION, PROCEDURE AND CLIMATIC INFORMATION ON CORN PERFORMANCE AND EXPERIMENT STATION TESTS, 1943.

	District 1	District 2	District 3	District 4	District 5
	N. E. Kansas	E. C. Kansas	S. E. Kansas	N. C. Kansas	S. C. Kansas
Cooperator	Chas. Stone Whiting	L. Jefferson Garnett	F. Volmer Parsons	R. F. Sloan Belleville	C. Porter Wichita
No. of entries	78	81	62	82	29
No. of replications					
Planted	5	5	5	3	3
Harvested	5	5	2	3	3
Size of plot (hills)	2 x 10	2 x 10	2 x 10	2 x 20	2 x 23
Hill spacing (inches)	42 x 42	42 x 42	42 x 42	40 x 24	40 x 30
Rate of planting (kernels per hill)	3	3	3	2	2
Thinned to kernels per hill	2	2	2	1	1
Date of planting	May 5	Apr. 23	Apr. 22	May 25	Apr. 24
Date of harvest	Oct. 22	Oct. 20	Nov. 16	—	Oct. 15
Seedbed preparation	Plowed	Plowed	Plowed	Plowed	Plowed
Rainfall[1]					
May	15-4.36	17-10.41	13-18.04	12- 3.80	17- 6.59
June	9-7.82	9- 8.08	8-11.70	13-11.77	10- 3.43
July	9-2.66	5- 1.60	3- 1.96	10- 2.16	6- 6.51
Aug.	5-1.31	5- 2.03	2- .92	7- 0.86	6- 1.95
Sept.	6-2.40	4- 4.20	4- 6.32	4- 1.18	9- 3.14
Total, 5 months	44-18.55	40-26.32	30-38.94	46-19.77	48-21.62

[1] First figure represents number of rains and second the total monthly rainfall in inches.

TABLE 3. RESULTS, CORN PERFORMANCE TEST, **DISTRICT 1, NORTHEASTERN** KANSAS.

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand	Moisture	Shelling	Ears per cwt.
		Actual	Relative[1]	Actual	Relative[1]				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
	ONE-YEAR RESULTS, 1943								
1	Funk G-150	75.1	119	90	98	99	14.6	82.7	197
2	Jewett 12	72.5	115	83	90	95	16.6	81.5	168
3	Jewett 6	71.4	113	81	88	97	17.3	81.4	152
4	Funk G-711	70.3	111	94	102	82	20.4	83.3	173
5	Funk G-80	70.0	111	97	105	91	16.5	84.2	150
6	Kansas 2275	69.1	109	100	109	95	17.8	81.1	112
7	Funk G-149	69.1	109	96	104	93	12.2	83.4	235
8	Pioneer 300	68.8	109	99	108	95	13.8	84.3	185
9	Kansas 16	68.7	109	92	100	98	20.0	80.4	156
10	Kansas 2234	67.5	107	97	105	79	19.8	77.3	234
11	Funk G-136	67.5	107	97	105	97	18.8	82.2	158
12	Funk G-94	67.4	106	97	105	91	13.6	84.4	178
	Differences in yield of less than 7.7 bushels an acre are not significant in this test.								
13	Huey H-42	67.1	106	97	105	93	13.6	83.6	158
14	Hyline M-1	67.0	106	97	105	92	14.4	83.2	159
15	U. S. 13	66.9	106	98	107	93	13.2	84.8	173
16	Nebraska 728	66.6	105	96	104	97	12.0	85.0	183
17	Keystone 38	66.3	105	98	107	91	13.5	84.0	154
18	Huey H-23	66.2	105	98	107	91	13.5	85.5	166
19	Kansas 1583	65.8	104	95	103	83	21.6	81.6	125
20	Kansas 1585	65.4	103	99	108	83	17.7	80.7	165
21	Commercial White	65.3	103	90	98	94	21.1	77.3	130
22	Kansas 2292	65.2	103	99	108	87	15.3	83.3	160
23	K.I.H. 447	64.9	103	90	98	86	16.5	83.8	189
24	U. S. 35	64.9	103	95	103	93	13.4	84.6	168
25	Funk G-133	64.7	102	92	100	97	19.0	78.2	152
26	Embro 10-20	64.7	102	98	107	95	14.5	83.9	159
27	Midland O	64.5	102	96	104	96	20.8	80.0	152
28	Pride of Saline	64.2	101	90	98	97	17.6	78.7	159
29	Kansas 2232	64.0	101	98	107	96	19.2	77.2	145
30	Kansas 1673	63.7	101	98	107	89	18.7	78.9	145
31	Keystone, Ill. 784	63.3	100	95	103	93	17.5	82.0	158
32	Hyline M	62.7	99	95	103	91	12.4	84.6	206
33	K.I.H. 38	62.5	99	87	95	91	13.2	85.2	186
34	Steckley 865	62.2	98	98	107	90	13.8	83.1	168
35	Pioneer 313D	62.0	98	96	104	95	15.3	83.9	201
36	Reid Yellow Dent	61.6	97	91	99	94	15.8	83.1	152
37	Funk G-104	61.3	97	98	107	88	12.8	85.0	149
38	Midland A	61.1	97	94	102	96	19.5	80.6	173
39	Keystone 39	61.1	97	93	101	90	12.4	83.6	185
40	Ohio C88	59.1	93	97	105	89	12.5	84.0	188
41	Funk G-132	59.1	93	95	103	97	16.4	75.5	179
42	KK-88	59.0	93	96	104	84	14.1	82.7	182
43	Reid National 129	58.8	93	97	105	88	15.8	83.0	193
44	Hyline E	58.2	92	93	101	87	12.2	86.1	184
45	Henry Field 135R	58.1	92	98	107	89	13.7	84.1	207
46	Kansas 1659	58.0	92	97	105	81	13.6	84.6	163
47	Iowealth 25	57.5	91	98	107	82	14.8	83.9	185
48	Iowealth TX 1	57.0	90	79	86	75	18.8	81.9	207
49	Missouri King 103	56.7	90	97	105	78	14.4	82.8	145
50	Reid National 134	56.7	90	93	101	82	17.0	84.9	180
51	KK-77	56.5	89	96	104	80	13.0	84.7	189
52	Midwest 23	56.2	89	94	102	84	16.1	80.0	176
53	Funk G-169	56.2	89	96	104	84	13.3	82.5	168
54	McCurdy 118M	56.1	89	98	107	84	12.5	84.4	206
55	McCurdy 124M	55.9	88	99	108	84	12.4	83.7	172
56	Henry Field 129-1	55.5	88	95	103	81	12.6	84.8	178
57	K.I.H. 5	54.9	87	96	104	78	16.0	83.3	179
58	Maygold 39	54.9	87	99	108	79	13.9	83.6	154
59	Steckley 100A	54.7	86	100	109	78	14.4	85.1	179
60	McCurdy 977M	54.5	86	99	108	80	12.9	85.4	214

[1] Performance of entry relative to the average of open-pollinated varieties.

TABLE 3. RESULTS, CORN PERFORMANCE TEST, **DISTRICT 1, NORTHEASTERN** KANSAS (Continued).

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand	Moisture	Shelling	Ears per cwt.
		Actual	Relative[1]	Actual	Relative[1]				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
61	Iowealth 25A	54.1	85	89	97	81	17.2	84.0	194
62	Maygold 49	54.0	85	92	100	79	12.9	85.0	179
63	Kansas 1356A	53.5	85	94	102	84	15.2	82.7	159
64	Steckley 790	53.3	84	99	108	81	12.9	82.2	190
65	Pioneer 336	53.2	84	98	107	82	14.0	83.2	175
66	Kansas 1614	52.9	84	95	103	76	19.1	77.6	129
67	Iowealth 25A2	52.5	83	99	108	74	13.8	83.9	189
68	Illinois 200	52.0	82	94	102	81	16.4	81.6	173
69	Iowealth 29A	51.2	81	97	105	77	15.2	82.8	177
70	Maygold 59	48.7	77	99	108	73	13.1	85.7	224
71	Keystone 40	47.4	75	99	108	79	14.0	82.4	173
72	Funk G-515W	47.3	75	99	108	74	17.7	78.1	170
73	Kansas 1589	43.5	69	87	95	68	20.6	79.6	165
74	Kansas 2225	43.2	68	96	104	72	23.6	70.6	145
75	Mangelsdorf 1001	38.0	60	93	101	58	19.5	79.1	207
76	Kansas 2242	17.0	27	100	109	29	20.8	75.3	156
Av. of 76 entries		59.6		95		86	15.7	82.3	173
Av. of 5 adapted open-pollinated varieties		63.3		92		95	19.0	79.9	153
Av. of 71 hybrids		59.3		95		85	15.5	82.5	174
	TWO-YEAR AVERAGE, 1942-1943								
1	Funk G-150	74.3	116	86	102	89	15.8	81.8	
2	Funk G-149	72.5	113	94	112	93	14.0	82.5	
3	Funk G-80	72.4	113	97	115	84	17.9	82.9	
4	Kansas 2234	72.3	113	95	113	80	20.0	76.0	
5	Kansas 1585	70.2	110	95	113	80	18.3	80.7	
6	Jewett 12	69.4	109	81	96	83	17.0	82.0	
7	Kansas 1583	67.1	105	95	113	75	19.2	80.8	
8	Keystone 88	66.8	105	92	110	85	14.3	84.4	
9	Funk G-94	66.0	103	92	110	82	14.7	83.9	
10	Kansas 2232	65.5	103	91	108	87	18.7	77.2	
11	Pioneer 300	65.5	103	98	117	86	14.7	83.3	
12	Pride of Saline	65.2	102	83	99	88	18.5	77.8	
13	Midland A	64.8	102	90	107	87	19.4	80.2	
14	U. S. 35	64.6	101	95	113	84	13.9	84.5	
15	Reid National 134	64.5	101	89	106	80	18.3	83.0	
16	K.I.H. 38	64.4	101	82	98	84	14.6	84.3	
17	U. S. 13	64.1	100	94	112	81	14.6	83.9	
18	Missouri King 103	62.8	98	92	110	75	15.6	81.8	
19	Iowealth TX 1	62.7	98	82	98	74	18.9	81.8	
20	Midwest 23	62.0	97	94	112	80	16.1	80.9	
21	Kansas 1614	61.9	97	89	106	75	18.9	78.4	
22	Illinois 200	61.9	97	90	107	80	16.6	81.5	
23	Reid Yellow Dent	61.7	97	80	95	82	17.1	81.6	
24	McCurdy 118M	61.1	96	93	111	79	13.4	84.2	
25	Iowealth 25A	60.9	96	87	104	77	17.8	82.6	
26	KK-77	60.8	95	91	108	75	13.6	84.0	
27	Reid National 129	60.6	95	90	107	78	15.4	82.5	
28	Maygold 39	60.4	95	93	111	77	14.5	83.7	
29	Funk G-169	59.2	93	94	112	78	14.5	83.6	
30	Maygold 49	58.9	92	92	110	76	13.8	84.6	
31	McCurdy 124M	58.4	91	93	111	76	13.1	83.8	
32	Steckley 790	57.2	90	92	110	77	14.3	81.9	
33	Maygold 59	52.8	83	94	112	72	14.4	84.1	
34	Mangelsdorf 1001	45.0	70	85	101	59	19.5	78.8	
Av. of 34 entries		63.5		91		80	16.2	82.0	
Av. of 3 adapted open-pollinated varieties		63.9		84		86	18.3	79.9	
Av. of 31 hybrids		63.4		91		79	16.0	82.2	

[1] Performance of entry relative to the average of open-pollinated varieties.

TABLE 8. RESULTS, CORN PERFORMANCE TEST, **DISTRICT 1, NORTHEASTERN** KANSAS (Concluded).

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand	Moisture	Shelling	Ears per cwt.
		Actual	Relative[1]	Actual	Relative[1]				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
	THREE-YEAR AVERAGE, 1941-1942-1943								
1	Jewett 12	67.4	116	72	97		17.1		
2	Kansas 1585	64.1	110	82	114		18.0		
3	Kansas 2234	64.0	110	76	103		19.7		
4	U. S. 13	63.4	109	80	111		15.1		
5	Funk G-94	63.3	109	86	116		15.2		
6	U. S. 35	63.1	109	88	119		14.5		
7	K.I.H. 38	62.2	107	77	104		15.1		
8	Kansas 2232	62.0	107	74	100		18.7		
9	Pioneer 300	61.5	106	90	122		15.0		
10	Iowealth TX 1	60.8	105	76	103		18.5		
11	Midland A	60.0	103	79	107		19.4		
12	Pride of Saline	59.5	102	71	96		18.3		
13	KK-77	58.7	101	85	115		14.9		
14	McCurdy 124M	58.7	101	86	116		15.6		
15	McCurdy 118M	57.9	100	87	118		14.1		
16	Illinois 200	56.8	98	83	112		16.9		
17	Reid Yellow Dent	54.9	94	72	97		17.4		
18	Mangelsdorf 1001	46.3	80	72	97		18.8		
	Av. of 18 entries	60.3		80			16.8		
	Av. of 3 adapted open-pollinated varieties	58.1		74			18.4		
	Av. of 15 hybrids	60.7		81			16.5		
	FOUR-YEAR AVERAGE, 1940-1941-1942-1943								
1	Funk G-94	61.3	118	85	113		18.8		
2	U. S. 35	60.8	117	89	119		14.4		
3	K.I.H. 38	60.7	117	79	105		14.8		
4	U. S. 13	59.5	114	88	117		14.8		
5	McCurdy 118M	57.8	111	89	119		14.2		
6	Kansas 2232	57.6	111	76	101		18.8		
7	KK-77	56.4	108	88	117		14.7		
8	Illinois 200	56.1	108	83	111		16.5		
9	Reid National 134	56.1	108	75	100		17.6		
10	Pride of Saline	55.0	106	73	97		17.9		
11	Midland A	52.4	101	81	108		19.2		
12	Reid Yellow Dent	48.9	94	72	96		17.1		
	Av. of 12 entries	56.9		82			16.6		
	Av. of 3 adapted open-pollinated varieties	52.1		75			18.1		
	Av. of 9 hybrids	58.5		84			16.1		
	FIVE-YEAR AVERAGE, 1939-1940-1941-1942-1943								
1	Funk G-94	65.6	122	87	116		13.8		
2	U. S. 35	65.5	122	89	119		13.3		
3	U. S. 13	63.9	119	87	116		13.8		
4	KK-77	60.1	112	88	117		13.6		
5	Pride of Saline	57.2	107	73	97		16.5		
6	Midland A	52.3	97	81	108		17.7		
7	Reid Yellow Dent	51.5	96	70	93		15.6		
	Av. of 7 entries	59.4		82			14.9		
	Av. of 3 adapted open-pollinated varieties	53.7		75			16.6		
	Av. of 4 hybrids	63.8		88			13.6		

[1] Performance of entry relative to the average of open-pollinated varieties.

TABLE 4. RESULTS, COOPERATIVE TESTS, **DISTRICT 1, NORTHEASTERN** KANSAS.

Hybrid or variety	1943 14 tests		1942-1943 38 tests		1941-1943 66 tests	
	Yield	Rank	Yield	Rank	Yield	Rank
	Bu.		Bu.		Bu.	
Kansas 2234	73.5	1	.....	....	.....	....
Kansas 2275	71.0	2	.....	....	.....	....
Kansas 1583	66.8	3	.....	....	.....	....
Pioneer 313D	65.8	4	.....	....	.....	....
Reid National 134	64.8	5	65.9	1	59.1	1
Illinois 200	63.8	6	64.1	3	58.5	2
Funk G-149	63.3	7	.....	....	.....	....
Kansas 1585	63.1	8	.....	....	.....	....
K.I.H. 38	63.0	9	63.7	4	58.1	3
Maygold 39	60.9	10	.....	....	.....	....
Steckley 790	60.5	11	56.9	9	.....	....
Pride of Saline	60.1	12	61.9	5	54.6	5
Midland A	59.7	13	.....	....	.....	....
U. S. 13	59.2	14	61.4	6	56.6	4
KK-77	59.1	15	57.2	8	53.6	7
Jewett 12	59.1	15	64.8	2	.....	....
Iowealth 25A	57.6	17	.....	....	.....	....
Reid Yellow Dent	56.6	18	53.9	10	50.2	8
McCurdy 124M	55.2	19	.....	....	.....	....
U. S. 35	55.1	20	57.4	7	53.9	6

TABLE 5. RESULTS, CORN PERFORMANCE TEST, **DISTRICT 2, EAST-CENTRAL** KANSAS.

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand	Moisture	Shelling	Ears per cwt.
		Actual	Relative[1]	Actual	Relative[1]				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
	ONE-YEAR RESULTS, 1943								
1	Reid-Midland	75.2	121	98	100	94	13.8	83.5	185
2	Funk G-131	74.8	120	94	96	94	13.4	83.3	205
3	Funk G-80	73.7	119	99	101	94	12.7	83.5	165
4	Funk G-134	72.9	117	94	96	96	12.8	82.5	180
5	Iowealth TX 1	72.2	116	98	100	88	14.8	83.9	190
6	Kansas 2292	72.2	116	99	101	93	12.5	84.3	163
7	K.I.H. 447	71.1	114	96	98	93	13.7	82.8	176
8	Kansas 1585	70.6	114	99	101	89	13.4	84.4	170
9	Jewett 12	70.3	113	96	98	93	12.8	83.2	168
10	Hendriks Cross L	69.9	113	99	101	94	14.0	82.5	165
11	Hyline M-1	69.6	112	99	101	93	12.3	82.7	209
12	Funk G-149	69.2	111	99	101	96	12.1	83.0	240
13	Funk G-150	68.8	111	98	100	90	13.0	84.5	205
14	U. S. 13	68.8	111	99	101	95	12.6	83.4	170
15	Hendriks Cross L2	68.4	110	98	100	95	14.6	83.3	166
16	Kansas 2234	68.1	110	99	101	93	15.4	83.0	194
17	Kansas 16	68.1	110	99	101	93	16.2	84.4	165
18	Funk G-94	68.1	110	99	101	88	12.6	84.8	214
19	U. S. 35	68.1	110	99	101	95	12.1	84.6	180
20	Kansas 2232	67.7	109	99	101	96	13.2	79.5	189
21	Kansas 1583	67.4	109	99	101	90	15.3	83.0	203
22	Pioneer 336	67.3	108	99	101	93	12.6	84.6	184
23	Illinois 200	67.3	108	99	101	91	12.6	82.7	189
24	Kansas 1589	66.9	108	98	100	96	14.8	82.6	175
25	Reid National 134	66.9	108	98	100	93	13.4	83.8	204
26	Huey H-42	66.9	108	98	100	93	12.4	83.8	203
27	Pioneer 300	66.9	108	100	102	95	12.6	83.8	196
28	McCurdy 124M	66.6	107	99	101	91	12.5	83.2	184
29	Funk G-515W	66.6	107	100	102	91	13.7	81.5	170
30	Keystone 39	66.6	107	99	101	94	12.2	85.1	185
31	Iowealth 29A	66.2	107	100	102	93	12.3	83.6	194
32	Commercial White	66.2	107	96	98	94	16.1	79.7	143
33	K.I.H. 38	66.2	107	99	101	93	12.3	84.1	200
34	Kansas 2275	65.8	106	100	102	94	14.0	82.7	194
35	Missouri King 103	65.8	106	99	101	91	12.5	82.0	165
36	KK-88	65.4	105	97	99	90	12.4	82.8	184
37	McCurdy 977M	65.4	105	98	100	87	12.7	83.5	200
	Differences in yield of less than 9.8 bushels an acre are not significant in this test.								
38	Keystone, Ill. 784	65.0	105	99	101	93	13.0	82.9	215
39	Iowealth 25A2	64.7	104	98	100	93	13.7	84.5	156
40	KK-77	64.3	104	100	102	86	12.4	83.3	180
41	Huey H-23	64.3	104	99	101	92	12.2	83.2	173
42	Pioneer 313D	64.3	104	99	101	89	13.6	84.0	205
43	Kansas 1673	64.3	104	99	101	90	13.9	83.6	153
44	Reid National 129	63.9	103	98	100	87	12.5	83.1	205
45	Keystone 40	63.9	103	98	100	89	12.6	85.6	184
46	Missouri 8	63.9	103	95	97	96	13.0	82.8	170
47	Funk G-104	63.5	102	99	101	91	12.5	84.1	184
48	Iowealth 25A	63.5	102	100	102	87	13.8	83.1	190
49	Hyline M	63.5	102	98	100	91	12.6	83.3	182
50	Pride of Saline	63.4	102	98	100	96	14.0	81.4	193
51	Midwest 23	63.2	102	99	101	89	12.6	83.0	175
52	McCurdy 118M	63.2	102	99	101	83	12.5	84.2	175
53	Henry Field 135R	63.2	102	100	102	89	12.6	84.0	195
54	Maygold 39	62.8	101	99	101	94	14.3	83.3	163
55	Jewett 6	62.8	101	93	95	91	13.2	82.8	189
56	Steckley 100A	62.4	100	99	101	95	12.3	84.5	170
57	Maygold 49	61.7	99	99	101	88	12.5	84.2	179
58	Funk G-88	61.7	99	97	99	91	14.6	83.9	176

[1] Performance of entry relative to the average of open-pollinated varieties.

TABLE 5. RESULTS, CORN PERFORMANCE TEST, **DISTRICT 2, EAST-CENTRAL** KANSAS (Continued).

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand	Moisture	Shelling	Ears per cwt.
		Actual	Relative[1]	Actual	Relative[1]				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
59	Hyline E	61.7	99	98	100	91	12.6	84.3	173
60	Kansas 1659	61.3	99	99	101	89	12.3	84.2	186
61	Midland O	60.9	98	100	102	97	16.6	82.0	175
62	Kansas 1356A	60.9	98	99	101	86	13.4	83.4	180
63	Embro 10-20	60.5	97	100	102	88	12.7	83.6	186
64	Midland A	60.2	97	98	100	94	14.8	83.3	176
65	Funk G-132	60.2	97	98	100	95	13.0	77.5	190
66	Steckley 790	59.8	96	99	101	88	12.6	81.5	205
67	Midland S	59.8	96	98	100	94	15.8	83.1	175
68	K.I.H. 5	59.8	96	99	101	84	12.7	84.5	175
69	Kansas 2225	58.7	95	99	101	83	14.5	79.5	180
70	Maygold 59	58.3	94	99	101	85	12.5	84.0	207
71	Funk G-133	56.8	91	99	101	94	14.5	78.9	164
72	Kansas 2242	56.4	91	99	101	83	15.2	79.2	185
73	McCurdy 123M	55.3	89	100	102	93	12.5	82.2	185
74	Kansas 1614	55.3	89	98	100	87	14.7	81.3	168
75	McCurdy 130M	54.5	88	100	102	84	12.2	82.5	156
76	Keystone 38	54.5	88	99	101	96	12.8	84.2	200
77	Henry Field 129-1	50.4	81	98	100	82	12.3	83.5	191
78	Mangelsdorf 1001	49.6	80	95	97	77	13.8	83.1	179
79	Steckley 865	47.8	77	99	101	89	12.5	83.9	207
Av. of 79 entries		64.2		99		91	13.3	83.2	184
Av. of 5 adapted open-pollinated varieties		62.1		98		95	15.5	81.9	172
Av. of 74 hybrids		64.4		99		91	13.2	83.3	185
	TWO-YEAR AVERAGE, 1942-1943								
1	Funk G-149	77.9	116	99	102	96	12.3	83.4	
2	Kansas 1585	77.3	115	99	102	92	14.4	83.5	
3	Funk G-150	76.1	113	98	101	91	13.3	83.8	
4	Funk G-80	75.7	113	99	102	92	13.3	84.2	
5	Reid-Midland	74.9	111	99	102	89	15.1	83.1	
6	Kansas 2234	73.6	110	100	103	92	15.2	81.8	
7	Reid National 134	73.2	109	98	101	91	14.1	84.1	
8	Jewett 12	73.0	109	96	99	91	13.1	82.8	
9	Kansas 1583	72.7	108	99	102	89	15.1	83.0	
10	Illinois 200	71.8	107	99	102	91	13.1	83.5	
11	Iowealth TX 1	71.7	107	98	101	86	15.3	81.7	
12	U. S. 13	71.7	107	100	103	93	13.0	84.3	
13	K.I.H. 38	71.0	106	99	102	92	12.7	84.5	
14	Jewett 6	70.8	105	95	98	90	13.6	82.5	
15	U. S. 35	70.7	105	99	102	93	12.4	84.9	
16	Funk G-88	70.3	105	98	101	90	15.2	83.9	
17	Funk G-94	70.1	104	100	103	88	12.8	84.7	
18	Missouri King 103	69.6	104	100	103	89	12.9	82.5	
19	Missouri 8	69.6	104	96	99	92	13.6	83.3	
20	Pioneer 300	69.3	103	100	103	94	13.1	86.4	
21	Pride of Saline	69.3	103	98	101	95	14.5	81.3	
22	McCurdy 124M	69.0	103	100	103	89	12.8	84.0	
23	McCurdy 118M	68.7	102	99	102	87	12.9	84.8	
24	Iowealth 25A	68.5	102	100	103	85	13.9	83.6	
25	Midwest 23	68.3	102	99	102	89	12.9	83.4	
26	Maygold 39	67.7	101	99	102	92	13.7	83.8	
27	Reid National 129	67.1	100	99	102	87	13.1	83.5	
28	Kansas 2232	66.9	100	99	102	93	14.5	79.2	
29	Maygold 49	66.8	99	99	102	89	12.7	84.5	
30	KK-77	66.4	99	99	102	85	12.9	84.1	
31	Steckley 790	65.6	98	100	103	88	13.1	82.8	
32	Midland A	65.1	97	96	99	93	15.4	83.0	
33	Kansas 1614	64.9	97	98	101	85	15.9	81.4	
34	Maygold 59	64.4	96	100	103	89	12.6	84.5	

[1] Performance of entry relative to the average of open-pollinated varieties.

TABLE 5. RESULTS, CORN PERFORMANCE TEST, **DISTRICT 2, EAST-CENTRAL KANSAS** (Concluded).

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand	Moisture	Shelling	Ears per cwt.
		Actual	Relative[1]	Actual	Relative[1]				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
35	McCurdy 123M	63.1	94	100	103	91	13.0	83.5	
36	Mangelsdorf 1001	56.1	83	96	99	73	14.2	83.8	
Av. of 36 entries		69.7		99		90	13.7	83.4	
Av. of 2 adapted open-pollinated varieties		67.2		97		94	15.0	82.2	
Av. of 34 hybrids		69.8		99		90	13.6	83.5	
THREE-YEAR AVERAGE, 1941-1942-1943									
1	Funk G-150	75.1	117	81	101		15.5		
2	Kansas 1585	73.5	114	88	110		15.9		
3	Funk G-149	73.3	114	87	109		14.3		
4	Reid-Midland	71.7	111	85	106		17.4		
5	Iowealth TX 1	69.7	108	85	106		17.3		
6	Illinois 200	68.8	107	86	108		14.6		
7	Funk G-88	68.7	107	90	113		17.0		
8	Missouri 8	68.0	106	81	101		15.7		
9	Jewett 6	68.0	106	73	91		17.1		
10	K.I.H. 38	67.5	105	82	103		14.5		
11	U. S. 13	67.1	104	90	113		14.5		
12	Funk G-94	65.9	102	90	113		14.3		
13	Pioneer 300	65.1	101	87	109		14.9		
14	McCurdy 124M	64.9	101	86	108		14.5		
15	Pride of Saline	64.9	101	77	96		16.4		
16	Kansas 2232	64.8	101	86	108		16.1		
17	U. S. 35	64.6	100	85	106		14.7		
18	Midland A	63.8	99	83	104		16.7		
19	McCurdy 118M	63.5	99	85	106		14.6		
20	KK-77	62.4	97	87	109		14.4		
21	McCurdy 123M	61.6	96	91	114		14.6		
22	Mangelsdorf 1001	56.5	88	76	95		17.0		
Av. of 22 entries		66.8		85			15.5		
Av. of 2 adapted open-pollinated varieties		64.4		80			16.6		
Av. of 20 hybrids		67.1		85			15.4		
FOUR-YEAR AVERAGE, 1940-1941-1942-1943									
1	Illinois 200	62.1	111	87	112		14.8		
2	Reid National 134	61.5	110	76	97		16.7		
3	K.I.H. 38	60.4	108	81	104		14.6		
4	Missouri 8	60.4	108	80	103		16.2		
5	U. S. 13	60.2	108	89	114		14.7		
6	Funk G-88	59.9	107	90	115		17.2		
7	Funk G-94	58.7	105	90	115		14.6		
8	U. S. 35	58.4	104	85	109		15.0		
9	Kansas 2232	58.0	104	84	108		16.3		
10	KK-77	56.5	101	87	112		14.6		
11	Midland A	56.2	100	80	103		17.1		
12	Pride of Saline	55.7	99	76	97		16.6		
Av. of 12 entries		59.0		84			15.7		
Av. of 2 adapted open-pollinated varieties		56.0		78			16.9		
Av. of 10 hybrids		59.6		85			15.5		
FIVE-YEAR AVERAGE, 1939-1940-1941-1942-1943									
1	Funk G-94	51.0	116	91	107		13.4		
2	Illinois 200	50.9	115	91	107		13.4		
3	U. S. 35	50.2	114	89	105		12.8		
4	U. S. 13	49.9	113	92	108		13.4		
5	Missouri 8	48.6	110	85	100		14.9		
6	KK-77	48.0	109	90	106		13.6		
7	Midland A	44.4	101	85	100		16.4		
8	Pride of Saline	43.7	99	84	99		14.6		
Av. of 8 entries		48.3		88			14.1		
Av. of 2 adapted open-pollinated varieties		44.1		85			15.5		
Av. of 6 hybrids		49.8		90			13.6		

[1] Performance of entry relative to the average of open-pollinated varieties.

TABLE 6. RESULTS, COOPERATIVE TESTS, **DISTRICT 2, EASTCENTRAL** KANSAS.

Hybrid or variety	1943 7 tests		1942-1943 12 tests		1941-1943 19 tests	
	Yield	Rank	Yield	Rank	Yield	Rank
	Bu.		Bu.		Bu.	
Kansas 2234	65.3	1	.....	....	.....	....
Kansas 2275	61.2	2	.....	....	.....	....
Hendriks Cross L	60.0	3	59.1	1	.....	....
Kansas 1585	57.5	4	.....	....	.....	....
Reid National 134	57.2	5	55.6	6	.....	....
Missouri 8	57.1	6	55.9	5	46.1	5
Kansas 1583	56.5	7	.....	....	.....	....
Pride of Saline	56.4	8	56.2	4	47.5	2
Jewett 12	56.2	9	57.3	3	.....	....
Funk G-149	56.1	10	.....	....	.....	....
U. S. 13	55.4	11	54.4	7	46.7	3
Illinois 200	55.3	12	58.3	2	48.0	1
Pioneer 313D	55.3	12	.....	....	.....	....
Midland A	53.4	14	53.0	10	44.3	7
K.I.H. 38	53.3	15	54.8	6	46.3	4
U. S. 35	53.1	16	53.8	8	44.9	6
Maygold 39	53.0	17	.....	....	.....	....
Iowealth 25A	53.0	17	.....	....	.....	....
KK-77	52.4	19	53.2	9	43.3	8
McCurdy 123M	49.0	20	.....	....	.....	....

TABLE 7. RESULTS, CORN PERFORMANCE TEST, **DISTRICT 3, SOUTHEASTERN** KANSAS.

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand	Moisture	Shelling
		Actual	Relative[1]	Actual	Relative[1]			
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
	ONE-YEAR RESULTS, 1942							
1	Funk G-88	52.1	123	97	104	86	19.8	81.2
2	Kansas 2234	51.6	121	99	106	85	19.1	76.6
3	Funk G-149	48.8	115	98	105	84	15.6	81.8
4	Illinois 200	47.9	113	96	103	86	15.6	84.2
5	Funk G-135	47.6	112	97	104	82	18.3	82.0
6	Jewett 20	47.3	111	94	101	77	16.8	79.3
7	Kansas 1585	47.2	111	99	106	80	19.8	80.2
8	Kansas 2216	46.5	109	96	103	81	18.4	77.0
9	Kansas 2232	46.4	109	98	105	84	17.0	77.3
10	Funk G-150	46.0	108	96	103	81	16.4	82.6
11	Kansas 1614	45.8	108	96	103	76	18.4	81.2
12	Jewett 6	45.6	107	84	90	81	16.4	82.2
13	Jewett 12	45.1	106	82	88	78	16.7	82.2
14	Kansas 1583	45.0	106	96	103	82	19.2	81.1
15	Keystone 38	43.4	102	94	101	83	14.9	85.1
16	U. S. 35	43.0	101	94	101	80	15.4	84.0
17	Iowealth TX 1	43.0	101	96	103	71	19.3	80.4
18	Pride of Saline	42.9	101	88	95	78	18.7	78.5
19	Reid-Midland	42.9	101	95	102	78	20.6	78.3
20	Missouri 8	42.8	101	95	102	76	17.8	81.5
21	Funk G-80	42.7	100	98	105	80	15.9	83.2
22	K.I.H. 440	42.6	100	81	87	74	14.5	83.6
23	Midland C	42.4	100	96	103	81	19.0	80.7
24	Multicross EMBRO 1	42.4	100	98	105	75	16.6	82.4
25	Midland A	42.3	100	96	103	75	19.7	81.2
26	KK-88A	42.2	99	96	103	78	18.1	81.2
27	Mangelsdorf 1001	42.0	99	98	105	72	17.2	81.6
28	Kansas 1358	41.8	98	98	105	74	18.6	83.4
29	Kansas 1712	41.7	98	93	100	81	16.0	82.9
30	McCurdy 123M	41.7	98	96	103	86	15.8	84.2
31	U. S. 13	41.6	98	90	97	84	15.1	84.6
32	Kansas 1104	41.0	96	96	103	78	16.1	83.1
33	K.I.H. 38	41.0	96	85	91	78	15.2	84.8
34	Kansas 1466	40.6	96	99	106	76	16.5	81.0
35	Pioneer 332	40.6	96	96	103	78	15.3	85.5
36	Kansas 1646	39.4	93	99	106	73	17.4	82.8
37	Missouri King 103	38.8	91	99	106	77	16.2	81.8
38	Pioneer 300	38.7	91	96	103	79	15.0	85.0
39	Kansas 1623	37.7	89	96	103	77	15.4	85.6
40	Kansas 1638	37.6	88	96	103	78	16.2	83.3
41	Funk G-53	37.5	88	96	103	80	14.3	83.0
42	Pioneer 307	34.7	82	99	106	78	15.6	85.3
43	Pioneer 334	33.3	78	94	101	76	14.5	82.2
44	Hays Golden	33.0	78	92	99	74	16.6	80.6
	Av. of 44 entries	42.7		95		79	16.9	82.0
	Av. of 3 adapted open-pollinated varieties	42.5		93		78	19.1	80.1
	Av. of 40 hybrids	42.9		95		79	16.8	82.2
	TWO-YEAR AVERAGE, 1941-1942							
1	Jewett 6	37.8	120	49	68		18.3	
2	Jewett 12	35.8	113	60	83		18.2	
3	Kansas 2232	34.4	109	80	111		17.8	
4	Funk G-149	34.2	108	84	117		16.5	
5	Funk G-150	33.9	107	78	108		17.6	
6	Funk G-135	33.6	106	79	110		18.5	
7	Kansas 1585	33.2	105	71	99		19.0	
8	Illinois 200	33.2	105	78	108		16.4	
9	Midland A	33.2	105	77	107		19.2	
10	McCurdy 123M	33.1	105	84	117		16.0	

[1] Performance of entry relative to the average of open-pollinated varieties.

TABLE 7. RESULTS, CORN PERFORMANCE TEST, DISTRICT 3, SOUTHEASTERN KANSAS (Concluded).

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand	Moisture	Shelling
		Actual	Relative[1]	Actual	Relative[1]			
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
11	KK-88A	32.1	102	76	106		18.2	
12	Midland C	32.0	101	74	103		19.2	
13	Kansas 2216	31.8	101	64	89		18.9	
14	Iowealth TX 1	31.6	100	68	94		18.4	
15	U. S. 13	31.4	99	86	119		15.6	
16	Pioneer 332	31.4	99	88	122		15.8	
17	Kansas 1466	31.0	98	86	119		16.4	
18	Kansas 1104	30.9	98	70	97		16.7	
19	Reid-Midland	30.9	98	72	100		19.6	
20	Funk G-88	30.4	96	80	111		19.8	
21	K.I.H. 38	30.2	96	70	97		15.8	
22	U. S. 35	30.0	95	82	114		16.4	
23	Pride of Saline	29.6	94	64	89		18.9	
24	Missouri 8	29.2	92	74	103		19.2	
25	Kansas 1638	28.8	91	84	117		16.2	
26	Pioneer 300	27.9	88	88	122		16.8	
27	Pioneer 307	27.3	86	92	128		15.9	
28	Pioneer 334	24.8	79	78	108		15.5	
29	Hays Golden	22.0	70	64	89		17.2	
Av. of 29 entries		31.2		76			17.5	
Av. of 3 adapted open-pollinated varieties		31.6		72			19.1	
Av. of 25 hybrids		31.6		77			17.3	
	THREE-YEAR AVERAGE, 1940-1941-1942							
1	Funk G-88	37.9	115	86	116		17.4	
2	Kansas 2232	37.3	113	83	112		16.3	
3	Illinois 200	35.3	107	83	112		15.1	
4	Funk G-135	35.2	107	82	111		16.6	
5	U. S. 35	35.1	107	86	116		15.1	
6	U. S. 13	34.9	106	89	120		14.8	
7	Kansas 1466	33.9	103	89	120		15.3	
8	Kansas 1104	33.9	103	78	105		15.5	
9	Pioneer 332	33.7	102	91	123		14.8	
10	Midland C	33.3	101	79	107		17.1	
11	Pride of Saline	32.4	98	69	93		16.9	
12	Missouri 8	29.9	91	79	107		17.1	
13	Pioneer 307	28.4	86	93	126		14.9	
14	Pioneer 334	28.2	86	83	112		14.5	
15	Hays Golden	24.9	76	72	97		15.8	
Av. of 15 entries		33.0		83			15.8	
Av. of 2 adapted open-pollinated varieties		32.9		74			17.0	
Av. of 12 hybrids		33.6		85			15.6	

[1] Performance of entry relative to the average of open-pollinated varieties.

TABLE 8. RESULTS, COOPERATIVE TESTS, **DISTRICT 8, SOUTHEASTERN** KANSAS.

Hybrid or variety	1943 4 tests		1942-1943 13 tests		1941-1943 18 tests	
	Yield	Rank	Yield	Rank	Yield	Rank
	Bu.		Bu.		Bu.	
Kansas 2234	44.5	1	.....	....	.....	....
Kansas 2275	43.7	2	.....	....	.....	....
Kansas 1583	40.6	3	.....	....	.....	....
Hendriks Cross L	40.0	4	45.0	1	39.5	1
K.I.H. 38	39.4	5	41.9	4	36.6	4
Kansas 1585	39.4	5	.....	....	.....	....
Missouri 8	39.2	7	.....	....	.....	....
Illinois 200	39.1	8	43.1	3	37.9	2
KK-77	38.8	9	.....	....	.....	....
U. S. 13	38.1	10	40.3	6	35.1	5
U. S. 35	37.2	11	36.8	7	32.6	6
Midland A	37.1	12	40.5	5	.....	....
Pioneer 313D	35.6	13	.....	....	.....	....
Reid Midland	34.8	14	.....	....	.....	....
Pride of Saline	34.3	15	43.9	2	36.9	3
McCurdy 130M	33.7	16	.....	....	.....	....
Iowealth 25A	33.3	17	.....	....	.....	....
Funk G-149	32.1	18	.....	....	.....	....

TABLE 9. RESULTS, EXPERIMENT STATION TEST, **DISTRICT 4, NORTHCENTRAL KANSAS**[2].

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Smut	Height		Stand	Dropped ears	Ears per plt.	Ears per cwt.	Moisture
		Actual	Relative[1]	Actual	Relative[1]		Plt.	Ear					
		Bu.	Pct.	Pct.	Pct.	Pct.	Ft.	In.	Pct.	Pct.	No.	No.	Pct.
	ONE-YEAR RESULTS, 1943												
1	Funk G-94	42.7	148	86	125	3	7.7	38	99	13	1.0	253	13.7
2	Pioneer 313D	41.5	144	93	135	15	7.0	38	100	1	.9	215	14.8
3	Pfister 2834	41.0	142	86	125	6	7.0	38	99	19	1.1	277	13.2
4	Kansas 1597	40.6	140	76	110	3	8.3	42	99	6	1.0	190	26.2
5	Pfister 5830	40.1	139	84	122	7	7.2	36	99	11	.7	193	14.4
6	U. S. 13	39.6	137	78	113	2	7.5	36	98	13	1.0	298	14.7
7	Kansas 16	38.1	132	65	94	4	7.7	42	98	3	1.0	231	19.6
8	Illinois 200	37.6	130	81	117	2	7.8	44	98	15	1.0	223	19.2
9	McCurdy 118M	37.4	129	80	116	14	7.5	38	94	7	1.0	278	12.9
10	Kansas 2275	37.4	129	66	96	2	7.3	42	97	10	1.0	250	20.3
11	Kansas 1639	37.4	129	89	129	1	7.7	38	95	4	1.0	225	19.1
12	Kansas 1617	37.3	129	82	119	8	7.7	40	98	9	1.2	214	17.6
13	Pioneer 300	37.0	128	69	100	7	7.5	40	92	7	1.0	280	16.0
14	Kansas 1679	36.8	127	69	100	4	7.2	36	89	3	.9	258	17.0
15	Pioneer 336	36.7	127	85	123	9	7.5	36	98	2	.9	244	14.6
16	Calico	36.3	126	81	117	4	7.2	40	98	0	.9	204	18.4
17	Reid National 126-1	36.3	126	81	117	6	7.3	40	94	4	1.1	245	19.0
18	Jewett 12	36.1	125	63	91	5	7.5	42	99	0	1.0	239	20.0
19	Kansas 1712	35.6	123	81	117	7	7.7	42	89	13	1.2	284	18.4
20	Kansas 1356A	35.4	122	81	117	3	7.2	36	98	5	.9	255	20.1
21	Missouri King 103	35.2	122	90	130	13	7.0	32	99	4	.9	193	18.0
	Differences in yield of less than 7.8 bushels an acre are not significant in this test.												
22	Iowa 939	34.8	120	78	113	5	7.5	36	100	13	1.0	265	13.5
23	Steckley 300	34.6	120	70	101	0	7.5	36	96	10	1.0	238	15.4
24	DeKalb 817A	34.3	119	96	139	12	7.7	38	98	9	1.0	222	16.7
25	Funk G-135	34.2	118	66	96	6	7.8	44	97	5	.9	255	22.6
26	Kansas 1739	34.2	118	94	136	13	7.8	40	93	6	1.0	187	22.0
27	KK-77	33.8	117	78	113	5	7.7	40	97	3	1.0	295	15.9
28	K.I.H. 38	33.8	117	75	109	6	7.2	44	98	15	.9	247	14.4

[1] Performance of entry relative to the average of open-pollinated varieties.
[2] Data secured with the assistance of R. F. Sloan, superintendent.

TABLE 9. RESULTS, EXPERIMENT STATION TEST, **DISTRICT 4, NORTHCENTRAL** KANSAS (Continued).

29	Maygold 39	33.6	116	94	136	5	7.5	42	99	9	1.1	220	16.7
30	Kansas 11	33.4	116	76	110	7	7.0	36	87	0	.9	239	18.7
31	Kansas 1665	33.4	116	83	120	5	7.5	42	97	9	1.4	268	16.2
32	DeKalb 816	33.1	115	89	129	5	**7.7**	**40**	**93**	16	1.0	293	14.0
33	Funk G-88	32.9	114	67	97	2	7.3	36	93	4	.8	268	17.9
34	Kansas 1659	32.9	114	94	136	4	7.2	40	84	2	1.5	270	14.0
35	Kansas 1466	32.9	114	82	119	7	6.8	34	93	0	1.0	220	15.7
36	Kansas 2289	32.6	113	62	90	2	7.3	42	98	2	.9	228	21.0
37	Kansas 2216	32.6	113	87	126	3	7.0	40	85	0	1.1	205	25.7
38	Kansas 1648	32.4	112	76	110	6	7.2	38	90	3	.9	272	18.0
39	Kansas 1628	32.3	112	76	110	4	7.5	40	78	5	.9	275	20.4
40	Kansas 1583	32.1	111	78	113	14	7.7	44	91	8	1.0	203	28.3
41	Funk G-80	32.0	111	65	94	1	7.2	40	87	18	.9	308	17.0
42	Kansas 1614	32.0	111	88	128	9	7.7	40	94	1	.7	217	26.2
43	Carlson C-33	31.7	110	78	113	6	7.7	40	90	10	.9	257	16.7
44	Kansas 1611	31.7	110	91	132	8	7.5	36	92	8	1.0	215	21.0
45	Kansas 2232	31.3	108	76	110	3	7.3	42	100	3	1.0	236	21.7
46	Pfister 1234	31.2	108	69	100	4	7.3	40	85	18	1.0	281	12.9
47	Kuhn	31.2	108	61	88	8	6.8	36	96	2	.9	233	15.2
48	Kansas 1749	30.7	106	51	74	9	7.5	40	91	3	1.0	235	13.4
49	Carlson C20A	30.6	106	85	123	7	7.3	34	94	3	1.1	278	17.3
50	Kansas 1104	30.5	106	93	135	10	7.2	36	76	2	.9	204	21.6
51	Kansas 1585	30.5	106	72	104	11	7.6	42	86	7	.9	223	22.3
52	Kansas 1673	30.4	105	96	139	1	7.5	34	83	11	.9	190	20.2
53	Kansas 1624	30.1	104	77	112	7	7.7	40	94	15	1.7	234	19.9
54	Kansas 2242	30.0	104	93	135	8	7.0	36	87	0	1.0	197	24.2
55	Kansas 2225	30.0	104	77	112	2	7.3	40	83	4	1.0	269	24.2
56	Kansas 2189	29.9	103	73	106	7	7.2	36	79	0	.9	228	18.3
57	Reid National 134	29.8	103	75	109	7	8.2	46	98	4	1.0	236	23.6
58	Kansas 2234	29.6	102	71	103	6	7.3	40	95	3	1.0	244	21.0
59	Kansas 1516	29.6	102	71	103	6	7.5	40	85	2	1.9	185	26.9
60	Henry Field 135R	29.5	102	87	126	4	7.3	40	97	17	1.0	224	18.9
61	U. S. 35	29.2	101	74	107	4	7.3	40	93	8	1.0	290	15.8
62	Kansas 2292	28.8	100	69	100	0	7.2	38	89	13	.9	245	18.8
63	St. Charles White	28.4	98	71	103	9	6.5	36	86	0	.8	230	20.4
64	Hays Golden	28.3	98	68	99	3	6.5	30	96	0	1.0	297	14.6
65	Midland A	28.1	97	72	104	8	7.2	38	91	3	.8	257	21.4
66	Kansas 1580	27.9	97	65	94	12	7.3	42	89	1	.9	256	22.8

TABLE 9. RESULTS, EXPERIMENT STATION TEST, **DISTRICT 4, NORTHCENTRAL** KANSAS[2], (Continued).

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Smut	Height		Stand	Dropped ears	Ears per plt.	Ears per cwt.	Moisture
		Actual	Relative[1]	Actual	Relative[1]		Plt.	Ear					
		Bu.	Pct.	Pct.	Pct.	Pct.	Ft.	In.	Pct.	Pct.	No.	No.	Pct.
67	Kansas 1589	27.7	96	88	128	6	7.7	44	73	6	1.0	201	20.8
68	Kansas 2270	27.6	96	86	125	4	7.2	36	84	1	1.0	208	23.6
69	Kansas 1643	27.5	95	76	110	11	7.2	40	92	7	.8	246	21.6
70	Kansas 1625	27.3	94	89	129	11	7.0	36	85	0	.8	258	21.4
71	Kansas 1582	26.6	92	90	130	17	7.5	40	87	3	.9	178	26.9
72	Iowealth TX 1	26.4	91	73	106	8	7.8	30	88	7	1.0	250	23.8
73	Kansas 15	26.0	90	79	114	8	7.3	40	98	4	.9	340	17.7
74	Colby Yellow Cap	25.7	89	65	94	9	6.2	26	82	1	2.0	340	14.4
75	Pfister 160	25.4	88	69	100	5	7.8	42	96	14	1.0	273	24.7
76	Kansas 2250	24.6	85	79	114	15	7.2	38	80	1	1.0	251	21.4
77	Pride of Saline	24.6	85	67	97	8	7.3	40	90	5	.7	284	22.6
78	DeKalb 888	23.3	81	92	133	2	7.8	40	54	18	1.0	250	20.6
79	Kansas 2269	23.0	80	82	119	6	6.8	36	87	1	1.0	265	27.6
Av. of 79 entries		31.1		78		6	7.1	37	88	6	1.0	236	18.4
Av. of 7 adapted open-pollinated varieties		28.9		69		7	6.8	35	91	2	1.0	264	18.1
Av. of 72 hybrids		32.6		79		6	7.4	39	92	7	1.0	243	19.2
	TWO-YEAR AVERAGE, 1942-1943												
1	Kansas 1648	45.4	144	88	133	4	7.2	36	95	2	1.0	215	18.8
2	Kansas 16	45.2	143	77	117	3	7.5	39	97	2	1.1	196	21.8
3	Kansas 1639	44.0	139	93	141	2	7.5	33	98	2	1.0	197	20.1
4	Kansas 1611	43.0	136	95	144	6	7.3	33	95	5	1.0	185	21.0
5	Kansas 1614	43.0	136	94	142	7	7.5	38	96	1	.9	182	25.0
6	Jewett 12	42.3	134	68	103	3	7.2	40	98	0	1.1	213	20.7
7	Kansas 2234	42.3	134	86	130	4	7.2	37	97	2	1.0	196	22.8
8	Kansas 1665	41.9	133	86	130	3	7.5	37	98	5	1.2	226	17.5
9	Illinois 200	41.8	132	84	127	1	7.6	38	99	9	1.1	211	20.6
10	Kansas 1516	41.2	130	84	127	4	7.4	39	91	1	1.6	177	26.7

[1] Performance of entry relative to the average of open-pollinated varieties.
[2] Data secured with the assistance of R. F. Sloan, superintendent.

TABLE 9. RESULTS, EXPERIMENT STATION TEST, **DISTRICT 4, NORTHCENTRAL** KANSAS (Concluded).

11	Kansas 2216	41.2	130	90	136	2	7.0	35	92	0	1.1	185	25.5
12	Funk G-88	41.1	130	83	126	1	7.6	36	95	3	1.0	220	21.5
13	Funk G-94	40.8	129	85	129	1	7.5	34	100	7	1.0	242	16.5
14	Kansas 1104	40.7	129	95	144	6	7.3	33	88	1	1.0	186	22.4
15	Kansas 2232	40.4	128	86	130	2	7.3	36	99	2	1.0	197	24.1
16	U. S. 13	40.3	128	82	124	2	7.4	36	99	7	1.0	254	17.3
17	Kansas 1582	40.3	128	92	139	11	7.4	38	93	2	1.0	164	26.0
18	Kansas 1625	39.5	125	93	141	6	6.9	34	91	0	.9	210	20.7
19	Kansas 1643	39.3	124	86	130	9	7.4	37	96	4	.9	205	21.8
20	Kansas 1466	39.2	124	91	138	5	6.8	32	96	0	1.0	199	18.7
21	Kansas 1628	39.1	124	84	127	4	7.4	36	86	3	1.0	215	25.2
22	Kansas 11	38.6	122	81	123	8	6.9	32	91	0	1.0	216	19.9
23	Kansas 1712	38.3	121	85	129	4	7.5	36	93	7	1.2	249	19.9
24	McCurdy 118M	38.3	121	84	127	9	7.2	33	96	4	1.0	253	14.6
25	Kansas 15	37.8	120	87	132	6	7.1	36	98	2	1.1	267	20.9
26	KK-77	37.4	118	82	124	4	7.5	36	97	2	1.0	264	15.3
27	K.I.H. 38	36.9	117	77	117	4	7.4	39	99	8	1.0	238	17.4
28	Pioneer 300	36.8	116	76	115	7	7.4	35	94	4	1.0	253	18.3
29	Kuhn	36.3	115	66	100	5	6.8	33	93	1	1.0	217	16.9
30	U. S. 35	34.4	109	82	124	2	7.1	35	94	4	1.0	259	16.5
31	Kansas 2242	34.0	108	87	132	4	6.5	31	90	0	1.1	203	24.7
32	Hays Golden	32.6	103	71	108	2	6.4	27	96	0	1.1	270	18.0
33	Iowa 939	31.9	101	62	94	3	6.9	32	99	7	1.0	293	14.3
34	Pride of Saline	31.0	98	75	114	7	7.4	38	90	3	.9	238	24.1
35	Colby Yellow Cap	26.4	84	53	80	5	6.3	24	87	1	1.6	321	18.5
Av. of 35 entries		38.9	123	83	126	4	7.2	35	95	3	1.1	223	20.4
Av. of 4 adapted open-pollinated varieties		31.6	100	66	100	4	6.7	31	91	1	1.1	261	19.4
Av. of 31 hybrids		35.8	113	76	115	4	6.4	32	83	3	.9	185	18.0

TABLE 10. RESULTS, COOPERATIVE TESTS, **DISTRICT 4, NORTH-CENTRAL** KANSAS.

Hybrid or variety	1943 8 tests		1942-1943 14 tests		1941-1943 18 tests	
	Yield	Rank	Yield	Rank	Yield	Rank
	Bu.		Bu.		Bu.	
Kansas 2275	51.2	1	.....	....	.....	....
Kansas 2234	49.0	2	.....	....	.....	....
Kansas 1583	46.0	3	.....	....	.....	....
Kansas 1585	45.7	4	.....	....	.....	....
U. S. 13	45.5	5	46.4	3	43.8	3
Pioneer 313D	45.2	6	.....	....	.....	....
Funk G-80	44.8	7	.....	....	.....	....
Pride of Saline	44.4	8	47.2	1	44.0	2
Illinois 200	43.7	9	46.7	2	44.3	1
K.I.H. 38	43.0	10	46.1	4	.....	....
KK-77	42.2	11	.....	....	.....	....
Reid National 126-1	41.4	12	.....	....	.....	....
Iowealth 25	40.2	13	.....	....	.....	....
U. S. 35	39.9	14	41.7	6	39.8	4
Iowa 939	38.6	15	.....	....	.....	....
Midland A	37.9	16	43.0	5	.....	....
Steckley 300	37.0	17	.....	....	.....	....
Hays Golden	34.3	18	35.0	7	33.5	5
Colby Yellow Cap	29.1	19	29.0	8	.....	....

TABLE 11. RESULTS, EXPERIMENT STATION TEST, **DISTRICT 5, SOUTHCENTRAL** KANSAS.

Rank in yield	Hybrid or variety	Acre yield		Erect plants	
		Actual	Relative[1]	Actual	Relative[1]
		Bu.	Pct.	Pct.	Pct.
	ONE-YEAR RESULTS, 1943				
1	Kansas 17	33.7	149	58	135
2	Pioneer 313D	32.3	143	92	214
3	U. S. 35	29.6	131	78	181
4	Kansas 1673	29.5	131	68	158
5	Kansas 11	28.8	127	63	147
6	U. S. 13	28.5	126	82	191
7	Kansas 2234	27.7	123	68	158
8	Hays Golden	27.6	122	45	105
9	Nebraska 729	27.5	122	78	181
10	Kansas 13	27.5	122	70	163
11	Kansas 16	27.1	120	38	88
12	Kansas 2232	27.0	119	73	170
13	Kansas 1104	26.6	118	67	156
14	K.I.H. 38	26.5	117	88	205
15	Jewett 12	26.2	116	48	112
16	Illinois 200	26.1	115	75	174
17	Kansas 2275	26.1	115	50	116
18	Kansas 2225	25.9	115	60	140
	Differences in yield of less than 7.8 bushels an acre are not significant in this test.				
19	Kansas 1614A	25.8	114	42	98
20	Hendriks Cross L	24.8	110	50	116
21	Iowealth 25A	22.9	101	43	100
22	Pride of Saline	21.8	96	53	123
23	Kansas 2292	21.8	96	47	109
24	Kansas 1589	21.6	96	50	116
25	Kansas 1585	19.3	85	28	65
26	Funk G-150	18.9	84	47	109
27	Midland A	18.5	82	30	70
28	Kansas 1583	18.1	80	18	42
29	Kansas 1466	18.1	80	68	158
Av.	of 29 entries	25.4		58	
Av.	of 3 adapted open-pollinated varieties	22.6		43	
Av.	of 26 hybrids	25.7		60	
	TWO-YEAR AVERAGE, 1942-1943				
1	Kansas 2234	30.9	126	77	151
2	Kansas 13	30.7	125	68	133
3	Kansas 1104	30.0	122	74	145
4	Kansas 11	29.2	119	66	129
5	U. S. 13	28.4	116	75	147
6	U. S. 35	28.3	116	72	141
7	Kansas 2232	27.5	112	75	147
8	Hays Golden	25.7	105	51	100
9	Kansas 1466	24.7	101	77	151
10	Midland A	24.5	100	46	90
11	Kansas 1585	24.4	100	56	110
12	Pride of Saline	23.4	96	55	108
Av.	of 12 entries	27.3		66	
Av.	of 3 adapted open pollinated varieties	24.5		51	
Av.	of 9 hybrids	28.2		71	
	THREE-YEAR AVERAGE, 1941-1942-1943				
1	Kansas 17	29.9	126	53	129
2	Kansas 13	28.9	121	62	151
3	Kansas 11	28.0	118	54	132
4	Kansas 1104	27.3	115	66	161
5	U. S. 13	27.2	114	60	146
6	U. S. 35	26.9	113	65	159
7	Kansas 1466	25.4	107	71	173
8	Hays Golden	25.0	105	37	90
9	Illinois 200	24.3	102	58	141
10	Midland A	23.9	100	47	115
11	Pride of Saline	22.4	94	40	98
Av.	of 11 entries	26.3		56	
Av.	of 3 adapted open-pollinated varieties	23.8		41	
Av.	of 8 hybrids	27.2		61	

[1] Performance of entry relative to the average of open-pollinated varieties.

TABLE 12. RESULTS, COOPERATIVE TESTS, **DISTRICT 5, SOUTH-CENTRAL** KANSAS.

Hybrid or variety	1943 3 tests		1942-1943 6 tests		1941-1943 10 tests	
	Yield	Rank	Yield	Rank	Yield	Rank
	Bu.		Bu.		Bu.	
Kansas 2275	44.4	1	.....	....	.....	....
Kansas 2234	44.3	2	.....	....	.....	....
Kansas 1583	43.3	3	.....	....	.....	....
Hendriks Cross L	42.3	4	58.2	1	.....	....
Funk G-150	41.0	5	.....	....	.....	....
Pride of Saline	40.7	6	49.7	2	45.1	1
K.I.H. 38	40.3	7	45.6	5	.....	....
U. S. 13	39.5	8	43.9	6	44.2	3
Midland S	39.3	9	.....	....	.....	....
Illinois 200	38.8	10	46.1	4	43.7	4
Pioneer 313D	38.8	10	.....	....	.....	....
Kansas 1585	38.1	12	.....	....	.....	....
U. S. 35	37.7	13	42.8	7	42.8	5
Iowealth 25A	37.7	13	.....	....	.....	....
Midland A	36.6	15	47.0	3	44.6	2
Steckley 300	33.1	16	.....	....	.....	....
Hays Golden	26.8	17	30.2	8	32.9	6

TABLE 13. RESULTS, EXPERIMENT STATION TEST, **DISTRICT 6, NORTHWESTERN** KANSAS.

Rank in yield	Hybrid or variety	Acre yield		Erect plants	Suckers	Height		Stand	Ears per cwt.	Moisture
		Actual	Relative[1]			Plant	Ear			
		Bu.	Pct.	Pct.	Pct.	Ft.	In.	Pct.	No.	Pct.
	ONE-YEAR RESULTS, 1942									
1	Kansas 1712	48.6	145	99	44	7.3	36	100	168	17.4
2	Kansas 1466	48.4	144	100	8	6.0	30	97	142	21.4
3	Kansas 1625	45.1	135	99	9	6.5	30	99	148	20.5
4	Kansas 2234	44.9	134	100	9	6.3	34	100	149	22.3
5	Kansas 1639	44.3	132	100	7	6.5	30	100	153	20.2
	Differences in yield of less than 5.1 bushels an acre are not significant in this test.									
6	Kansas 1643	42.6	127	99	7	7.0	36	98	155	20.4
7	Kansas 19	42.1	126	99	10	6.0	26	91	170	18.4
8	Kansas 2216	42.0	125	99	13	6.2	32	100	156	26.5
9	Kansas 1611	41.9	125	100	5	6.7	34	99	159	23.4
10	Kansas 1549	41.7	124	100	11	6.5	32	99	162	21.7
11	Kansas 1665	41.7	124	99	11	6.7	34	98	167	21.1
12	Kansas 1340	41.6	124	100	31	6.8	30	97	156	21.1
13	U. S. 35	41.1	123	100	25	6.8	30	99	180	21.7
14	Kansas 2232	41.0	122	100	12	6.6	32	96	149	27.5
15	DeKalb 827	40.8	122	100	22	6.3	28	100	188	18.8
16	Kansas 1623	40.6	121	100	31	5.8	30	98	168	21.4
17	Kansas 1641	40.6	121	99	9	6.5	30	98	155	23.7
18	U. S. 13	40.6	121	100	12	7.0	34	96	174	18.6
19	Kansas 1727	40.5	121	100	51	6.8	34	95	166	22.3
20	Iowealth 29A	40.5	121	100	4	6.5	30	96	178	18.0
21	Kansas 1358	40.4	121	100	7	6.6	32	91	157	21.7
22	Steckley S770	39.9	119	100	8	7.0	32	94	173	19.6
23	Pioneer 307	39.8	119	99	18	6.0	30	98	222	18.8
24	Kansas 13	39.4	118	100	21	5.8	30	100	177	21.7
25	Kansas 1714	39.2	117	100	19	6.8	32	94	173	20.4
26	Kansas 1614	39.1	117	100	8	6.7	36	100	152	24.5
27	Kansas 1104	38.9	116	100	30	6.2	30	98	160	25.2
28	Kansas 1638	38.8	116	100	11	6.8	32	99	167	23.7
29	Kansas 7	38.3	114	98	18	6.5	32	99	169	25.9
30	Kansas 1713	38.2	114	100	6	6.8	34	98	169	22.6
31	Kansas 17	38.1	114	94	4	8.2	30	96	209	14.6
32	Illinois 200	37.9	113	100	6	6.8	34	99	182	22.0
33	Funk G-94	37.9	113	100	14	6.6	30	97	170	19.2
34	Kansas 9	37.9	113	95	14	6.3	30	95	179	21.0
35	Kansas 1628	37.8	113	100	18	6.3	30	100	155	27.5
36	Funk G-212	36.9	110	98	10	6.7	30	98	185	21.7
37	Kuhn	36.9	110	92	22	6.2	28	98	180	19.6
38	Kansas 1412	36.7	110	100	12	6.2	30	95	173	22.3
39	K.I.H. 38	36.7	110	97	12	6.8	32	99	183	20.4
40	Missouri 47	36.5	109	95	15	6.8	32	94	177	21.7
41	Pride of Saline	35.9	107	100	23	6.8	36	96	174	24.5
42	National 132-1	35.1	105	100	5	7.0	36	96	184	24.1
43	Kansas 11	34.5	103	98	1	6.2	28	97	185	23.1
44	Kansas 1649	33.9	101	98	2	7.2	34	89	171	24.0
45	St. Charles White	33.6	100	97	20	6.5	34	99	184	25.0
46	Hays Golden	33.4	100	95	8	5.3	22	97	204	21.4
47	Cassel	33.1	99	93	14	5.5	26	96	244	17.5
48	Iowa 939	28.4	85	95	16	5.8	28	96	244	16.2
49	Pioneer 324	28.4	85	95	13	6.0	24	99	276	14.6
50	Colby Yellow Cap	28.3	84	98	10	5.5	24	98	253	21.3
51	Nebraska 238	25.9	77	98	9	6.0	22	95	275	14.5
	Av. of 51 entries	39.3	117	98	14	6.4	31	97	179	21.3
	Av. of 5 adapted open-pollinated varieties	33.5	100	96	15	5.9	27	97	211	20.9
	Av. of 46 hybrids	39.9	119	99	14	6.6	31	97	176	21.4

[1] Performance of entry relative to the average of open-pollinated varieties.

TABLE 14. RESULTS, COOPERATIVE TESTS, **DISTRICT 6, NORTHWESTERN** KANSAS.

Hybrid or variety	1943 7 tests		1942-1943 10 tests		1941-1943 11 tests	
	Yield	Rank	Yield	Rank	Yield	Rank
	Bu.		Bu.		Bu.	
Kansas 2234	49.3	1	.....	....	.....	....
Kansas 2275	46.6	2	.....	....	.....	....
U. S. 13	43.2	3	41.4	5	42.1	3
Illinois 200	42.8	4	42.4	2	43.4	2
Funk G-94	41.4	5	42.3	4	.....	....
Pride of Saline	41.0	6	44.0	1	44.5	1
K.I.H. 38	40.7	7	42.4	2	.....	....
U. S. 35	39.3	8	40.1	6	40.5	4
Kansas 1583	39.0	9	.....	....	.....	....
Hays Golden	38.3	10	37.8	7	37.7	5
Iowa 939	38.1	11	.....	....	.....	....
Steckley 300	35.0	12	.....	....	.....	....
Colby Yellow Cap	32.0	13	32.5	8	.....	....

TABLE 15. RESULTS, COOPERATIVE TESTS, **DISTRICT 7, SOUTHWESTERN** KANSAS.*

Hybrid or variety	1943 3 tests	
	Yield	Rank
	Bu.	
Kansas 2234	36.0	1
Funk G-150	33.2	2
Pride of Saline	33.0	3
Kansas 2275	32.1	4
K.I.H. 38	30.1	5
U. S. 13	29.8	6
Kansas 1585	29.6	7
Illinois 200	28.7	8
Kansas 1583	28.3	9
Hendriks Cross L2	27.6	10
U. S. 35	27.2	11
Midland A	26.8	12
Hays Golden	21.5	13
Iowa 939	18.5	14

*These tests were located in Barton, Pawnee, and Stafford Counties.