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KANSAS CORN TESTS, 1945



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SUMMARY

This bulletin presents the results of corn tests conducted in Kansas during 1945 and summarizes the results of tests conducted during the past six years. The state has been divided into seven districts on the basis of soil, rainfall, and length of growing season. The 1945 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 reported upon in these tests together with the names and addresses of the agencies entering corn in the tests are reported in Table 1. Not all the hybrids tested are available commercially. Further information can be secured on the hybrids by writing direct to the companies producing the hybrids. Information on all Kansas hybrids, U. S. 13, U. S. 35 and Illinois 200 can be obtained by writing to the Agronomy Department, Kansas State College, Manhattan, Kansas.

Data obtained in 1945 and summaries of those entries grown more than one year are reported in Table 3 to 16. Commercially-available hybrids in the Experiment Field Tests or Corn Performance Tests that stood up as well as or better than the open-pollinated varieties and produced at least 10 percent more grain are listed following the brief discussion about each district. Hybrids that yielded 10 percent more grain than the open-pollinated varieties in the Cooperative Corn Tests are also listed.

Growers should carefully study the tests most nearly representing the location of their farm. Results obtained for two or more years are more reliable than results obtained in only one 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. The 1945 season for corn production varied throughout the state. When it was possible to plant early the late varieties appeared superior in yield. When planting was delayed the early hybrids tended to give the best performance. The average production of corn in Kansas over a period of several years will probably be less variable if several hybrids differing in maturity dates are grown together. Relative maturity is indicated in some of the tables by the moisture content of the grain at harvest. Using different hybrids in each planter box is usually a desirable practice. As one cannot predict whether early- or late-planted corn will yield best, the date of planting should be spread over a period of two or three weeks.

KANSAS CORN TESTS, 1945¹

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INTRODUCTION

Sixty-four percent of the corn acreage of Kansas in 1945 was planted with hybrid seed. There has been a steady increase in the acreage of hybrid corn in Kansas since 1938. At that time a little more than one percent of the total corn acreage was planted to hybrid. The ability of good hybrids to stand well and produce high yields will result in a continued increase of hybrid corn in the state.

PLAN OF THE TESTS

The 1945 corn tests were similar to the tests of previous 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) Corn Performance Tests, (2) Experiment Field Tests, and (3) Cooperative Corn Tests. The entries in these trials are listed in Table 1.

CORN PERFORMANCE TESTS

Corn Performance Tests were located in Districts 1, 4, 5, and 6. (Fig. 1) Tests were planned for Districts 2 and 3 but were abandoned because of wet weather. The trials in 1945 were made possible through the cooperation of the following men on whose farms the tests were located: Brown County, E. Steiner, Morrill; Jackson County, C. F. M. Stone, Whiting; Cloud County, Roland Davies, Concordia; Decatur County, J. C. Vernon, Oberlin; and Harvey County, W. Challender, Sedgwick. This portion of the Kansas Corn Tests is partly financed by commercial companies who enter their hybrids in these tests.

Seed of commercial hybrids were obtained direct from the companies. Other entries were supplied by the Kansas Agricultural Experiment Station.

Four seeds were dropped per hill with hand planters and later thinned to two or three plants per hill. Plots were two rows wide and 10 hills long. In order to equalize the influence of soil and other differences, each kind of corn was distributed at random within each of five replications. Location of fields, procedure, and climatic information are given in Table 2. Records on yield, lodging, stand, and dropped ears were obtained

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at harvest. Shelling percent was determined on one replication. Moisture samples were taken from two replications and the moisture percent of shelled corn was made with a Tag-Heppenstall Moisture Meter. 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.

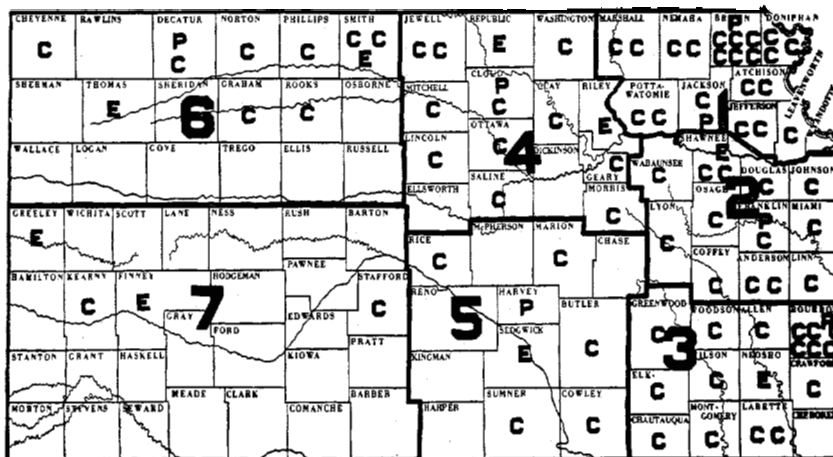


Fig. 1. Kansas Corn Testing program, 1945 indicating the seven districts and counties in which corn tests were planted.

- E—Experiment Field Tests, data reported from two locations.
- P—Corn Performance Tests, data reported from four locations.
- C—Cooperatives Corn Tests, data reported from 45 locations.

EXPERIMENT FIELD TESTS

Corn tests were conducted at the Northcentral Experiment Fields located at Smith Center and Belleville, Kansas, and at the Southcentral Experiment Field located at Wichita, Kansas. The Wichita Field is located in District 5, and the data reported were obtained by Walter Moore, Superintendent.

In District 4 a test was grown on the Agronomy farm at Manhattan. Tests also were planted at Smith Center and Belleville under the supervision of M. C. Axelton but were not harvested because of poor stands due to unfavorable weather conditions. The tests from Wichita and Manhattan contained a number of commercially-available hybrids and are being reported for that reason. The trials were handled in a manner similar to that of the Corn Performance Tests except that three instead of five replications were planted.

COOPERATIVE CORN TESTS

Strip tests of corn varieties and hybrids were conducted

by the Department of Agronomy of the Kansas Agricultural Experiment Station 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 his 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 of each strain was harvested to determine acre yields. The yields were calculated on an ear corn basis, using 70 pounds per bushel. When moisture tests were available, the yield was calculated on the basis of 15.5 percent moisture. 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.

The data obtained are summarized in Tables 3 to 16 inclusive. As all hybrids are not equal in performance, an arbitrary measure has been set up to indicate the hybrids that have the best record. The commercially-available hybrids in the Experiment Field Tests, or Corn Performance Tests that stood up as well as or better than the average of the adapted open-pollinated varieties and produced at least 10 percent more grain are listed for each district. Those yielding 10 percent more grain than the open-pollinated are listed for the Cooperative Corn Tests.

INTERPRETATION OF RESULTS

The entries in the tests listed in tables 3 to 16 are in order of their yield. Erect plants indicate the number of standing plants at harvest. Stalk lodging is due to stalk breaking below the ear and root lodging may be due to weak root system, root rot or rootworm damage. The percent of erect plants in relationship to the open-pollinated varieties in the test is given. Stand indicates the percentage of plants of a perfect stand. Moisture is the percent moisture in the grain at harvest. Shelling percent indicates the ratio between shelled corn and cobs of each hybrid. Ears per cwt. indicates size of ear and is given as the number of ears it takes to weigh 100 pounds. Dropped ears is the actual percent of ears dropped on the ground at harvest time. Only yield is reported for the Cooperative Corn Tests.

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. Chance has played a part in determining the yield and variability in the soil and other

growing conditions will cause differences in yield that are not inherent in the hybrids themselves.

A figure representing the estimated difference between varieties that is due to chance has been calculated. The approximate difference there must be between any two entries for significant difference is stated for each Corn Performance and Experiment Field Test. Unless two hybrids differ by at least this amount, they can not be considered different in yielding ability.

The results given in Tables 3 to 16 inclusive should be used as a basis in selecting 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 in 1941 to 1944. In 1945, the early strains appeared the best in some districts especially when planted late. When planted early, the late varieties were superior.

In Kansas where periods of drought and heat are frequent most of the pollen may be killed and poor seed set result on those strains which happen to be in flower during one of these periods. Observations indicate that a variety in which there is considerable variation in date of pollination among individual plants is likely to yield more grain during seasons of adverse weather conditions than a more uniform variety.

Hybrid corn is well known and liked because of its uniformity. Because of its uniformity, it does have a shorter period of pollination than open-pollinated varieties. Since there is less variation in date of pollination in hybrid corns, it is advisable to plant in the same field two or more adapted hybrids differing in maturity. The approximate maturity of a hybrid (early, midseason or late) can be estimated from the data on silking date and the moisture content of the grain at harvest. The early strains will tend to have a low percentage of moisture while the late strains a higher moisture content. Moisture percentages are given in many of the tables.

As it cannot be predicted at planting time whether an early, midseason or late-maturing hybrid will yield best, it may be desirable to use hybrids differing in maturity in each planter box, thus planting two hybrids in the same field. It is also recommended that the time of planting be spread over several weeks.

KANSAS CORN TESTS, 1945

TABLE 1. ENTRIES IN THE KANSAS CORN TESTS 1945.

Hybrid or varietal designation	Color of grain	Performance record in Table No.	Entered by
HYBRIDS			
Carlson 939A	Y	10	Kansas Agr. Expt. Sta., Manhattan, Kansas
Carlson 33A	Y	10	
Carlson 115W	W	10	
Cornhusker 30	Y	3, 4, 5, 6, 10	Cornhusker Hybrid Company, Fremont, Nebraska
Cornhusker 40	Y	5, 10	
Cornhusker 50	Y	3, 5, 9, 10, 11	
Cornhusker 148	Y	3, 9, 10	
Cornhusker 49W (Expt.)*	W	9, 10	
DeKalb 721	Y	10	Kansas Agr. Expt. Sta., Manhattan Kansas
DeKalb 800A	Y	10	
DeKalb 817A	Y	10	
DeKalb 835	Y	10	
DeKalb 840	Y	10	
DeKalb 847	Y	10	
DeKalb 922	Y	10	
Embros 1001	Y	3, 5, 7, 10, 12, 13	Ed. F. Mangelsdorf & Bros., Inc., Box 74, Atchison, Kan.
Embros 1020	Y	3, 5, 7, 9, 10	
Embros 1325	Y	3, 5, 7, 10, 12	
Embros 133-W	W	3, 10, 12, 13	
Funk G-53	Y	3, 9, 10, 12	Peppard Seed Co., 1101 West 5th St. Kansas City, Missouri
Funk G-80	Y	3, 4, 5, 7, 9, 10, 11, 12, 16	
Funk G-88	Y	5, 7	
Funk G-94	Y	3, 5, 7, 9, 10, 12	
Funk G-97	Y	5, 7, 9, 10, 12	
Funk G-135	Y	5, 7, 9, 10, 12, 13	
Funk G-150	Y	7	
Funk G-535W	W	3, 9, 10	
Funk G-722	Y	5, 7	
Funk G-711	Y	5, 6, 7, 8, 10, 12, 13, 14	
Funk G-723	Y	5	
Funk G-789W	W	10, 12, 13	
Funk G-92	Y	7	
Funk G-96	Y	5, 7	
Funk G-98	Y	7	
Funk G-131	Y	5, 7	
Funk G-517W	W	5, 7	
Funk G-523W	W	5	
Funk 2516 (Expt.)	Y	3, 9, 10, 12	Funk Bros. Seed Company, Bloomington, Illinois
Funk 4407 (Expt.)	Y	3, 9, 10	
Funk 4408 (Expt.)	Y	3, 9, 10	
Funk 4439 (Expt.)	Y	10, 12	
Funk 4471 (Expt.)	Y	3, 9, 10	
Funk 4523 (Expt.)	Y	10, 12	
Jewett 6	Y	5	
Jewett 421	Y	3, 4, 9, 10, 11	
Jewett 453	Y	5, 6, 7, 8, 10, 13, 14	
Jewett 12	Y	3, 5, 7, 9, 10, 13	
Kansas 1517	Y	5, 7, 10, 12, 13	Jewett Associated Growers, Butler, Missouri
Kansas 1533	Y	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	
Kansas 1585	Y	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	Sewell Hybrid Corn Co., Sabetha, Kansas
Kansas 1646	Y	3, 9, 10, 12, 13, 15	Kansas Agr. Expt. Sta., and U. S. Department Agriculture, Manhattan, Kansas
Kansas 1777	Y	12, 13	
Kansas 1731	Y	3, 5, 7, 9, 10, 12, 13, 15	
Kansas 1732	Y	5, 7, 15	
Kansas 1733	Y	3, 5, 7, 9, 10, 12, 13, 15	
Kansas 1734	Y	3, 5, 7, 9, 12, 13, 15	
Kansas 2234	W	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	
Kansas 2275	W	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	
Kansas 2290	W	3, 9, 10, 12, 13, 15	
Kansas 2298	W	5, 7, 13	
Kansas 2299	W	3, 5, 7, 9, 10, 12, 13, 15	

* (Ept.) indicates this is an experimental hybrid.

TABLE 1 (Continued)

Hybrid or varietal designation	Color of grain	Performance record in Table No.	Entered by
Kansas 2305	W	3, 5, 7, 10, 13, 15	
Kansas 9011	Y	9, 10, 13, 15	
Kansas 9016	Y	5, 7, 12, 13	
Kansas 9017	Y	12, 13, 15	
Kellogg's KK-77	Y	3, 5, 7, 9, 10	Kellogg-Kelly Seed Co., St. Joseph, Missouri
Kellogg's KK-88	Y	5, 7	
Kellogg's KK-99A	Y	3, 5, 7, 9, 10	
K. I. H. 38	Y	5, 7	Kansas Agr. Expt. Sta., Manhattan, Kansas
Keystone 38	Y	3, 10, 13	Cornell Seed Co., 1001 Chateau Ave., St. Joseph, Missouri
Keystone 40	Y	3, 10, 13	
Lauber's 222W	W	10	Kansas Agr. Expt. Sta., Manhattan, Kansas
Maygold 39	Y	3, 5, 7, 9, 10, 12, 15	Earl E. May Seed Co., Shenandoah, Iowa
Maygold 49	Y	3, 5, 7, 9, 10, 12, 13, 15	
Maygold 50	Y	5, 7	
Maygold 59	Y	3, 5, 7, 9, 10, 12, 15	
Maygold 99A	Y	9, 10, 12, 15	
Goldline 378	Y	3, 10	Bruns Seed Co., 317-321 East 2nd St., Davenport, Iowa
Green Bros T 10W	W	9, 10	Green Brothers, 328 4th Ave. So., Nashville 10, Tenn.
Hendriks L	Y	3, 4, 5, 6, 7, 8, 10, 12, 13, 14	J. A. Hendriks, Garnett, Kansas
Hendriks L2	Y	5, 7, 11, 13	Kansas Agr. Expt. Sta., Manhattan, Kansas
Henry Field 129-1	Y	5, 9, 10	Henry Field Seed Co., Shenandoah, Iowa
Henry Field 129L	Y	9, 10	
Henry Field 129S	Y	5, 9, 10	
Henry Field 135	Y	3, 5, 7, 9, 10	
Henry Field 135L	Y	3, 5, 7, 9, 10	
Henry Field 135R	Y	3, 5, 7, 9, 10	
Henry Field 904	Y	5	
Hoosier-Crost 840	Y	4, 5, 6, 7, 8, 10	Edw. H. Funk & Son, Kentland, Indiana, (1944)
Hoosier-Crost 1005	Y	5, 7	
Hy-line M	Y	5	Swinger Hybrid Corn Co., Marshall Missouri (1944)
Hy-line M-1	Y	5	
Hy-line M-2	Y	5	
Illinois 200	Y	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	Kansas Agr. Expt. Sta., Manhattan, Kansas
Iowealth 16	Y	16	Kansas Agr. Expt. Sta., Manhattan, Kansas
Iowealth 25	Y	5	Michael-Leonard Co., Sioux City 6, Iowa
Iowealth 25A	Y	5, 6, 14	
Iowealth D25	Y	3, 10, 15	
Iowealth L25	Y	3, 9, 10, 12, 13	
Iowealth 29A	Y	3, 4, 5, 9, 10, 11, 15	
Iowealth D29	Y	3, 10	
Iowealth L29	Y	3, 10	
Iowealth TX 1	Y	5, 7, 8, 10, 12, 13	
McCurdy 95M	Y	7	W. O. McCurdy & Sons, Fremont, Iowa
McCurdy 112M	Y	10, 12	
McCurdy 117M	Y	5	
McCurdy 120	Y	7	
McCurdy 123M	Y	5, 7, 10	
McCurdy 124M	Y	3, 5, 10	
McCurdy 130M	Y	5, 7, 10	
McCurdy 350M	Y	9, 10	

KANSAS CORN TESTS, 1945

TABLE 1 (Concluded)

Hybrid or varietal designation	Color of grain	Performance record in Table No.	Entered by
McCurdy 810	Y	3, 9, 10	
McCurdy 820	Y	3, 10	
McCurdy 977M	Y	5	
McCurdy 987M	Y	10, 12, 13	
Mo. King 103	Y	3, 5, 7, 10	Missouri Hybrid Corn Co., Inc., Fulton, Missouri
Reid Nat'l. 125	Y	10	
Reid Nat'l. 127	Y	5	
Reid Nat'l. 129	Y	3, 7, 9, 10, 15	Reid National Corn Company, Anamosa, Iowa
Reid Nat'l. 130W	W	5	
Reid Nat'l. 134	Y	3, 4, 5, 7, 9, 10, 15	
Reid Nat'l. 134TH	Y	10, 12, 13	
Reid Nat'l. 136D	Y	10	
Reid-Midland	Y	3, 5, 6, 7, 8, 10, 13	
Pfister 164	Y	3, 5, 6, 7, 8, 9, 10, 11, 14	Pfister Associated Growers, El Paso, Illinois
Pfister 165	Y	9, 10	
Pfister 180	Y	9, 10	
Pfister 330	Y	5, 7	
Pfister 390	Y	9, 10	
Pfister 630	W	3, 9, 10	
Pfister 660	Y	3, 9, 10	
Pfister 1897	Y	4, 5, 7, 9, 10	
Pfister 4897	Y	5, 7	
Pioneer 300	Y	3, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16	Garst & Thomas Hybrid Corn Company, Coon Rapids, Iowa
Pioneer 332	Y	3, 4, 5, 7, 9, 10, 11, 12, 15	
Pioneer 334	Y	10, 15	
Pioneer 339	Y	3, 5, 7, 9, 10, 12, 15	
Pioneer 505W	W	3, 9, 10, 12, 13	
Standard 613	Y	10	Kansas Agr. Expt. Sta., Manhattan, Kansas
Standard 830	Y	10	
Steckley 100A	Y	3, 10, 15	Steckley Hybrid Corn Co., Weeping Water, Nebraska
Steckley 780	Y	3, 10, 15	
Steckley 790	Y	3, 10, 15	
Steckley 884W	W	3, 10, 15	
Steckley 888W	W	3, 10, 15	
Stephens' Midwest 23	Y	3, 5, 7, 10	Stephens Brothers, Buckner, Missouri
Trinoka 7	Y	5, 7	Kansas Agr. Expt. Sta., Manhattan, Kansas
U. S. 13	Y	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	Kansas Agr. Expt. Sta., Manhattan, Kansas
U. S. 35	Y	3, 5, 7, 9, 10, 11, 12, 13, 15, 16	
OPEN-POLLINATED VARIETIES			
Colby Yellow Cap	Y	16	Kansas Agr. Expt. Sta., Manhattan, Kansas
Hays Golden	Y	9, 10, 11, 12, 13, 15, 16	
Kansas Sunflower	Y	9, 10, 15	
Midland	Y	3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14	
Pride of Saline	W	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	
Reid Yellow Dent	Y	3, 4, 10, 15	

TABLE 2. LOCATION, PROCEDURE AND CLIMATIC INFORMATION ON CORN PERFORMANCE AND EXPERIMENT FIELD TESTS, 1945.

Location and Cooperator	District 1 N. E. Kansas E. Steiner Morrill	District 4 N. C. Kansas R. Davies Concordia	District 4 N. C. Kansas Agronomy Dept. Manhattan	District 5 S. C. Kansas W. Moore Kingman	District 5 S. C. Kansas W. Challender Sedgwick	District 6 N. W. Kansas J. C. Vernon Oberlin
No. of entries	78	65	116	43	49	59
No. of replications planted and harvested	5	5	3	3	5	5
Size of plot (hills)	2 x 10	2 x 10	2 x 10	2 x 20	2 x 10	2 x 10
Hill spacing inches	42 x 42	42 x 42	42 x 42	40 x 30	42 x 42	42 x 42
Rate of planting	4	4	4	2	4	4
Thinned to plants per hill	3	2	2	1	2	2
Date of planting	May 30	May 26 & 30	May 12 & 28	May 9 & 13	May 21	May 19 & 20
Date of harvest	Oct. 22 & 23	Nov. 18 & 14	Nov. 2 & 28	Nov. 1, 2 & 3	Oct. 15 & 16	Nov. 5 & 6
Seedbed preparation	Disked and listed	Disked and listed	Plowed, disked and harrowed	Plowed, disked and harrowed	Disked and listed	One-wayed and listed
Rainfall, inches*						
May	7.54	7.38	4.50	1.28	1.05	1.85
June	8.43	4.38	7.93	4.00	3.48	3.45
July	4.86	4.04	7.53	5.01	5.14	4.15
Aug.	1.48	1.55	2.25	4.11	1.86	2.23
Sept.	5.94	2.29	4.49	7.25	10.29	1.27
Total, 5 months	28.25	19.59	26.70	21.65	21.82	12.95

*Record from closest official weather station, Climatological Data, Kansas Section, Vol. 59, 1945.

DISTRICT 1, NORTHEASTERN KANSAS

Two corn performance tests were planted, one in Brown County, the other in Jackson County. Continued wet weather after planting caused irregular stands in the Jackson County test and for that reason is not reported. Stands in the Brown County test were irregular at harvest. Early in the season the stand of this test was good and was thinned to 3 plants per hill. Later in the season the stand was damaged by rootworm resulting in irregularity of stand. Rootworm and rot root caused a large amount of lodging in this test. The earlier strains tended to yield higher in the Brown County test. Although not reported, the later hybrids tended to yield most in the Jackson County test.

STRAINS HIGH IN YIELD AND ERECT PLANTS FOR DISTRICT I, NORTHEAST KANSAS

Corn Performance Test

1945: Goldline 378, Reid Midland, Pioneer 300, Cornhusker 148, Embro 1325, Iowealth 29A, Pfister 164, Keystone 40, Funk G-94, Keystone 38, Steckley 100A, Kansas 1585, Iowealth L25, Iowealth L29, Steckley 790, McCurdy 124M, Kellogg's KK-77, Hendriks L, Pioneer 339, McCurdy 820, Pioneer 332, Steckley 780, U. S. 35, Maygold 49, Henry Field 135L, Cornhusker 50, Kansas 1583, U. S. 13, Illinois 200, Stephens' Midwest 23, Embro 1020, Jewett 421, Henry Field 135, Funk G-80, Iowealth D25, Henry Field 135R, Reid Nat'l. 134, Pfister 630, Maygold 39, Kansas 2275, Kellogg's KK-99A, Mo. King 103, Steckley 888W, Cornhusker 30, McCurdy 810, and Funk G-53.

1944-1945, two-year average: Kansas 1585, Funk G-94, Pioneer 300, Funk G-80, Iowealth 29A, Pfister 164, Stephens' Midwest 23, Illinois 200, Henry Field 135, Henry Field 135L, Kansas 1583, Kansas 2275, Pioneer 339, U. S. 35, Kansas 2234, Kellogg's KK-77, U. S. 13 and Pioneer 332.

1943-1945, three-year average: Kansas 1585, Funk G-80, Funk G-94, Pioneer 300, Kansas 2275, and Kansas 1583.

1942-1945, four-year average: Kansas 1585, Funk G-80, Kansas 2234, and Funk G-94.

1941-1945, five-year average: Kansas 1585, Funk G-94, Kansas 2234, Pioneer 300, U. S. 35, and U. S. 13.

1940-1945, six-year average: Funk G-94, U. S. 35, U. S. 13, and Illinois 200.

Cooperative Corn Tests

1945: Kansas 2234, Pfister 1897, Kansas 2275, Pioneer 332, Kansas 1585, and Iowealth 29A.

1944-1945, two-year average: Kansas 2234, Kansas 1585, and Kansas 1583.

1943-1945, three-year average: Kansas 2234, Kansas 1585, and Kansas 1583.

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*	Actual	Relative*				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
ONE YEAR RESULTS, 1945									
1	Goldline 378	66.1	145	57	228	89	22.1	77.7	179
2	Reid Midland	66.0	145	74	296	81	20.4	77.6	200
3	Pioneer 300	65.6	144	71	284	93	30.1	77.8	196
4	Cornhusker 148	65.5	144	71	284	92	18.5	77.0	222
5	Embro 1325	64.8	142	58	232	89	23.2	83.2	217
6	Iowearth 29A	64.7	142	78	292	91	20.4	78.9	204
7	Pfister 164	64.7	142	46	184	89	19.3	78.3	208
8	Keystone 40	63.8	140	61	244	92	20.4	78.0	233
9	Funk G-94	63.4	139	71	284	89	19.6	77.6	213
10	Keystone 38	61.6	135	75	300	88	20.0	77.7	227
11	Steckley 100A	61.4	135	65	260	80	20.7	77.7	196
12	Kansas 1585	61.2	134	34	136	90	23.2	77.3	196
13	Iowearth L25	60.9	134	85	220	80	22.4	77.2	217
14	Funk 4408 (Expt.)	60.7	133	55	220	87	17.9	78.1	233
15	Iowearth L29	60.7	133	45	180	80	19.9	82.5	217
16	Steckley 790	59.7	131	61	244	87	20.2	77.2	233
17	McCurdy 124M	59.4	130	56	214	83	17.1	77.9	208
18	Kellogg's KK-77	59.2	130	68	272	87	19.8	77.9	217
19	Hendriks L	58.9	129	46	184	92	24.2	76.8	189
20	Kansas 1784	58.8	129	76	304	75	20.4	75.0	196
21	Pioneer 389	58.8	129	67	268	83	18.0	79.2	213
22	McCurdy 820	58.5	128	61	244	85	18.0	79.2	227
Differences in yield of less than 7.4 bushels an acre are not significant in this test									
23	Pioneer 332	58.5	128	54	216	89	21.7	77.6	256
24	Steckley 780	58.4	128	70	280	91	20.7	77.9	227
25	U. S. 35	58.1	127	78	312	82	18.7	81.3	192
26	Kansas 1646	58.1	127	67	268	79	29.1	75.9	196
27	Kansas 1783	58.0	127	62	248	80	18.1	77.2	185
28	Maygold 49	57.6	126	77	308	85	20.2	77.7	222
29	Henry Field 135L	57.6	126	56	224	89	19.2	77.0	233
30	Cornhusker 50	57.4	126	61	244	78	21.5	78.4	204
31	Funk 4471 (Expt.-)	56.9	125	78	312	83	19.4	78.2	238
32	Kansas 1583	56.8	125	36	144	92	25.8	72.9	227
33	Jewett 12	56.7	124	23	92	86	21.8	75.9	217
34	U. S. 13	56.6	124	68	272	86	19.3	77.7	238
35	Illinois 200	56.2	123	60	240	83	18.9	77.5	217
36	Stephens Midwest 23	56.1	123	68	252	89	23.5	75.5	227
37	Funk 2516 (Expt.)	56.0	123	42	168	90	25.7	77.1	217
38	Kansas 1781	55.5	122	71	284	84	17.3	80.2	222
39	Embro 1020	55.0	121	54	216	86	19.9	77.1	208
40	Jewett 421	54.8	120	55	220	87	19.3	76.2	217
41	Henry Field 135	54.8	120	45	171	89	22.9	75.8	227
42	Funk G-80	54.7	120	53	212	84	21.4	75.8	233
43	Iowearth D25	54.4	119	72	288	79	21.5	79.9	222
44	Henry Field 1 35R	54.4	119	59	236	84	18.6	76.7	213
45	Reid Nat'l. 134	54.2	119	39	156	83	21.3	77.0	208
46	Pfister 630	54.0	118	69	276	79	24.3	67.3	200
47	Maygold 39	53.7	118	43	192	89	21.1	77.5	227
48	Kansas 2299	53.4	117	44	176	88	22.1	77.3	238
49	Kansas 2275	53.2	117	62	248	90	21.2	79.1	213
50	Kellogg's KK-99A	53.0	116	55	220	84	17.8	76.9	200
51	Kansas 2305	52.7	116	52	208	85	22.2	70.7	238
52	Mo. King 103	52.7	116	52	208	83	20.5	76.3	222
53	Steckley 888W	52.4	115	56	224	88	25.1	65.9	204
54	Cornhusker 30	51.3	114	48	192	77	22.4	74.8	213
55	McCurdy 810	51.3	112	55	220	75	21.4	78.9	244

*Performance of entry relative to the average of open-pollinated varieties.

KANSAS CORN TESTS, 1945

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*	Actual	Relative*				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
56	Kansas 2290	51.2	112	86	144	78	19.3	78.0	208
57	Funk G-53	51.1	112	79	316	87	18.6	77.4	260
58	Local Yellow	50.8	111	22	88	90	21.4	76.9	270
59	Reid Nat'l. 129	50.2	110	64	256	79	22.8	74.5	213
60	Embro 133-W	50.0	110	69	276	81	21.5	77.3	290
61	Pfister 660	49.7	109	26	104	87	26.3	73.7	256
62	Kansas 2234	49.4	108	48	192	88	23.5	67.5	217
63	Steckley 884W	49.3	108	47	188	83	21.8	79.0	286
64	Midland	48.4	106	34	136	90	26.9	74.0	244
65	Iowearth D29	47.6	104	68	272	75	21.5	75.6	208
66	Pioneer 505W	46.5	102	56	224	89	23.5	74.6	286
67	Funk 4407 (Expt.)	46.5	102	55	220	82	20.4	77.2	241
68	Maygold 59	46.3	101	70	280	75	20.2	74.8	217
69	Reid Yellow Dent	45.1	99	25	100	92	22.4	76.5	238
70	Pride of Saline	42.5	93	16	64	89	24.2	71.7	250
71	Midland	41.2	90	24	96	89	26.7	73.8	238
72	Embro 1001	37.9	83	50	200	71	22.2	72.2	233
73	Funk G-535W	25.2	55	60	240	75	24.6	66.0	357
	Av. of 73 entries	55.2		56		85	21.2	76.8	223
	Av. of 5 open pollinated varieties	45.6	100	25	100	90	24.3	74.5	248
	Av. of 68 hybrids	55.9	123	58	232	85	21.0	76.9	221
TWO YEAR AVERAGE 1944-1945									
1	Kansas 1585	59.9	125	64	123	93	20.4	80.9	182
2	Jewett 12	57.8	120	50	96	92	18.1	80.7	193
3	Funk G-94	57.2	119	84	162	94	16.5	81.6	213
4	Kansas 1784	56.9	119	87	167	86	16.6	79.7	195
5	Pioneer 300	56.2	117	83	160	96	16.6	80.9	210
6	Funk G-80	56.0	117	75	144	91	18.8	80.4	199
7	Iowearth 29A	56.0	117	84	162	94	16.8	82.3	216
8	Pfister 164	55.7	116	72	138	93	16.4	81.1	200
9	Stephens' Midwest 23	55.2	115	78	150	94	18.5	80.2	214
10	Illinois 200	55.2	115	77	148	91	16.1	81.1	203
11	Henry Field 135	55.1	115	64	123	94	18.8	80.6	209
12	Kansas 1783	55.0	115	78	150	89	15.5	80.1	195
13	Henry Field 135L	54.8	114	73	140	94	16.5	80.5	214
14	Kansas 2305	54.7	114	76	146	91	18.4	77.0	204
15	Kansas 1583	54.5	114	62	119	93	21.8	83.4	213
16	Kansas 2275	54.2	113	80	154	95	17.4	81.6	212
17	Pioneer 339	54.1	113	88	160	90	15.5	82.2	212
18	U. S. 35	53.6	112	87	167	90	15.8	83.2	205
19	Kansas 2299	53.6	112	70	135	92	18.2	80.3	209
20	Kansas 2234	53.2	111	71	137	93	20.0	74.2	194
21	Kellogg's KK-77	53.1	111	79	152	91	16.4	81.7	207
22	U. S. 13	52.9	110	81	156	92	16.3	81.7	234
23	Pioneer 332	52.8	110	76	146	94	17.4	81.7	242
24	Maygold 49	52.5	110	84	162	90	16.6	81.5	219
25	McCurdy 124M	52.3	109	74	142	87	15.0	81.2	205
26	Cornhusker 50	52.1	109	78	150	87	17.6	82.4	215
27	Kansas 1781	52.0	108	83	160	91	15.2	82.5	215
28	Cornhusker 30	51.9	108	72	138	86	18.3	80.0	205
29	Mo. King 103	51.5	107	72	138	89	17.0	79.7	204
30	Henry Field 135R	50.9	106	76	146	89	16.0	80.8	232
31	Maygold 39	50.2	105	71	137	93	17.2	80.4	216
32	Reid Nat'l. 129	50.1	104	80	154	88	18.2	79.6	204
33	Embro 1020	50.0	104	74	142	91	16.3	80.8	202
34	Kellogg's KK-99A	49.2	103	72	138	90	15.4	80.3	209
35	Reid Yellow Dent	48.8	102	51	93	93	18.8	79.9	218

*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*	Actual	Relative*				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
36	Midland	48.2	100	58	112	94	21.8	79.5	212
37	Maygold 59	47.0	98	83	160	83	16.6	80.8	195
38	Pride of Saline	47.0	98	48	92	94	19.8	76.3	215
39	Reid Nat'l. 134	45.8	95	62	119	88	17.0	81.0	249
Av. of 39 entries		53.0		74		91	17.4	80.6	219
Av. of 3 open pollinated varieties		48.0	100	52	100	94	20.1	78.6	215
Av. of 36 hybrids		53.4	111	75	144	91	17.2	80.8	209
THREE YEAR AVERAGE 1943-1944-1945									
1	Jewett 12	62.7	119	61	94	93	17.6	81.0	188
2	Kansas 1585	61.7	117	75	115	90	19.5	80.8	176
3	Funk G-80	60.7	115	82	126	91	18.3	81.7	183
4	Funk G-94	60.6	115	88	135	93	15.5	82.5	201
5	Pioneer 300	60.4	114	88	135	95	15.7	82.0	201
6	Kansas 2275	59.2	112	86	132	95	17.5	81.4	179
7	Kansas 1583	58.2	110	78	112	98	21.7	76.1	183
8	Kansas 2234	58.0	110	80	123	88	19.9	75.2	207
9	U. S. 13	57.5	109	86	132	92	15.6	82.7	213
10	U. S. 35	57.3	109	89	137	91	15.0	83.7	193
11	Stephens' Midwest 23	55.5	105	83	128	99	17.7	80.1	201
12	Embro 1020	54.9	104	82	126	92	15.7	81.8	187
13	Iowearth 29A	54.4	103	88	135	88	16.2	82.4	203
14	Kellogg's KK-77	54.2	103	85	131	87	15.2	82.7	201
15	Illinois 200	54.1	102	82	126	88	16.2	81.3	193
16	McCurdy 124M	53.5	101	82	126	86	14.1	82.0	200
17	Henry Field 135R	53.3	101	83	128	89	15.2	81.9	223
18	Mo. King 103	53.2	101	80	123	85	16.1	80.7	184
19	Reid Yellow Dent	53.1	101	64	98	93	17.8	80.9	145
20	Reid Nat'l. 129	53.0	100	85	131	88	17.7	80.7	200
21	Maygold 49	53.0	100	87	134	86	15.4	82.3	205
22	Pride of Saline	52.7	100	62	95	95	19.1	77.1	196
23	Midland	52.5	99	70	108	94	20.7	79.8	199
24	Maygold 39	51.8	98	80	123	88	16.1	81.5	195
25	Reid Nat'l. 134	49.4	94	72	111	86	17.0	82.3	220
26	Maygold 59	47.5	90	88	135	80	15.4	82.1	205
Av. of 26 entries		55.5		80		90	17.0	81.0	195
Av. of 3 open pollinated varieties		52.8	100	65	100	94	19.2	79.3	180
Av. of 23 hybrids		55.8	106	82	126	89	16.7	81.3	197
FOUR YEAR AVERAGE 1942-1943-1944-1945									
1	Kansas 1585	65.0	116	79	116	86	19.3	81.0	
2	Funk G-89	64.2	115	84	124	87	18.3	81.6	
3	Jewett 12	63.4	113	65	96	89	17.5	80.9	
4	Kansas 2234	62.7	112	83	122	86	17.5	75.1	
5	Funk G-94	61.6	110	87	128	87	15.6	82.9	
6	Pioneer 300	60.9	109	90	132	91	15.6	82.1	
7	Kansas 1583	60.8	109	78	115	84	20.5	79.6	
8	U. S. 35	59.1	106	89	133	86	14.8	83.9	
9	Midwest 23	58.6	105	83	122	87	17.3	80.5	
10	Illinois 200	58.5	105	83	122	85	16.5	81.3	
11	U. S. 13	58.5	105	87	128	86	15.5	82.8	
12	Mo. King 103	57.1	102	82	121	82	16.3	80.7	
13	Midland	56.5	101	74	109	90	20.5	79.8	
14	Pride of Saline	55.3	100	65	96	91	19.1	79.3	
15	Maygold 49	55.7	100	88	129	82	15.2	83.0	
16	Reid Nat'l. 129	55.4	99	85	125	83	16.8	81.0	
17	McCurdy 124M	55.3	99	83	122	81	14.0	82.5	

*Performance of entry relative to the average of open-pollinated varieties.

KANSAS CORN TESTS, 1945

TABLE 3. 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*	Actual	Relative*				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
18	Reid Yellow Dent	55.3	99	65	96	87	17.9	80.7	
19	Reid Nat'l. 184	55.1	99	75	110	84	17.6	82.0	
20	Kellogg's KK-77	54.5	97	85	125	93	15.0	82.8	
21	Maygold 59	49.9	89	88	129	79	15.5	82.4	
	Av. of 21 entries	58.9		81		86	17.0	81.2	
	Av. of 8 open pollinated varieties	55.9	100	68	100	89	19.2	79.9	
	Av. of 18 hybrids	59.4	106	83	122	85	16.6	81.5	
FIVE YEAR AVERAGE 1941-1942-1943-1944-1945									
1	Jewett 12	63.6	119	68	95	84	17.5	81.3	‡184
2	Kansas 1585	62.4	117	77	117	84	18.9	80.9	183
3	Funk G-94	60.8	114	85	129	85	15.8	83.7	200
4	Kansas 2234	59.7	112	74	112	85	19.8	75.3	214
5	Pioneer 300	59.4	111	87	132	88	15.6	82.6	205
6	U. S. 35	59.3	111	87	132	85	15.0	84.2	194
7	U. S. 13	59.2	111	80	121	84	15.5	83.3	214
8	Kellogg's KK-77	56.5	106	83	126	81	15.4	83.3	202
9	Illinois 200	56.2	105	80	121	83	16.6	81.5	205
10	McCurdy 124M	55.5	104	81	123	81	14.3	82.9	202
11	Midland	55.2	103	71	108	88	20.3	80.1	‡201
12	Pride of Saline	54.5	102	62	94	89	18.8	77.4	202
13	Reid Nat'l. 184	52.9	99	69	105	83	17.8	81.9	227
14	Reid Yellow Dent	50.5	95	64	97	85	17.9	81.0	208
	Av. of 14 entries	57.6		76		85	17.1	81.4	203
	Av. of 8 open pollinated varieties	53.4	100	66	100	87	19.0	79.5	204
	Av. of 11 hybrids	58.7	110	78	118	84	16.6	81.9	203
SIX YEAR AVERAGE 1940-1941-1942-1943-1944-1945									
1	Funk G-94	59.9	118	86	128	85	15.5	82.9	200
2	U. S. 35	58.4	115	88	131	86	14.5	83.9	201
3	U. S. 13	57.3	113	82	122	85	15.3	82.2	226
4	Illinois 200	55.9	110	81	121	85	16.3	81.3	209
5	Kellogg's KK-77	55.5	109	85	127	82	16.9	82.7	205
6	Reid Nat'l. 184	52.5	104	71	106	84	17.4	81.6	228
7	Pride of Saline	52.3	103	64	96	89	18.6	77.0	209
8	Midland	51.0	101	73	109	88	20.0	79.6	213
9	Reid Yellow Dent	48.9	96	65	97	86	19.1	81.5	225
	Av. of 9 entries	54.6		77		86	17.1	81.4	213
	Av. of 8 open pollinated varieties	50.7	100	67	100	88	19.2	79.4	216
	Av. of 6 hybrids	56.6	112	82	122	85	16.0	82.6	212

*Performance of entry relative to the average of open-pollinated varieties.

‡This column—average five years, 1940-1941-1943-1944-1945.

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

Hybrid or variety	1945 15 tests		1944-1945 32 tests		1943-1945 46 tests	
	Yield	Rank	Yield	Rank	Yield	Rank
	Bu.		Bu.		Bu.	
Kansas 2234	60.7	1	66.3	1	68.5	1
Pfister 1897	60.5	2	.....	.....	.....	.....
Kansas 2275	59.2	3	.....	.....	.....	.....
Pioneer 332	59.1	4	.....	.....	.....	.....
Kansas 1585	59.0	5	63.3	2	63.2	2
Iowearth 29A	58.7	6	57.2	8	.....	.....
Kansas 1583	57.0	7	61.5	3	63.1	3
Illinois 200	56.7	8	59.5	5	60.8	4
Hendriks L	56.7	8	.....	.....	.....	.....
Funk G-80	56.3	10	59.5	5	.....	.....
U. S. 13	55.6	11	59.6	4	59.5	6
Hoosier Crost 840	55.2	12	.....	.....	.....	.....
Cornhusker 30	54.4	13	.....	.....	.....	.....
Reid Yellow Dent	54.0	14	54.6	10	55.2	9
Pride of Saline	53.4	15	55.7	9	57.1	7
Jewett 421	52.3	16	.....	.....	.....	.....
Reid National 184	51.2	17	57.9	7	60.0	5
Midland	49.9	18	54.1	11	55.8	8

DISTRICT 2, EAST CENTRAL KANSAS

No corn performance tests were planted in District 2 in 1945. Data for 1944 and previous years are reported. Data from Cooperative Corn tests were secured in this district in 1945.

STRAINS HIGH IN YIELD AND ERECT PLANTS FOR DISTRICT 2, EAST CENTRAL KANSAS

Corn Performance Test

1944: Kellogg's KK-99A, Hoosier Crost 1005, and Embro 1001.

1943-1944, two-year average: Funk G-80, and Iowearth TX1.

1942-1944, three-year average: Funk G-80, and K1585.

1941-1944, four-year average: Illinois 200.

1939-1944, six-year average: Illinois 200, and Funk G-94.

Cooperative Corn Tests

1945: Jewett 453, Kansas 1583, Illinois 200, Kansas 2275, Kansas 2234, Kansas 1585, Funk G-711, Reid Midland, and Hendriks L.

1944-1945, two-year average: Kansas 2234, Kansas 1585, Kansas 1583, Hendriks L, and Funk G-711.

1943-1945, three-year average: Kansas 2234, Kansas 1585, Kansas 1583, Hendriks L, and Funk G-711.

KANSAS CORN TESTS, 1945

TABLE 5. RESULTS. CORN PERFORMANCE TEST, DISTRICT 2. EAST-CENTRAL KANSAS. NO RESULTS 1945.

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand	Moisture	Shelling	Ears per cwt.
		Actual	Relative*	Actual	Relative*				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
ONE-YEAR RESULTS, 1944									
1	Kellogg's KK-88	65.9	132	55	87	94	14.7	83.9	160
2	Kansas 2275	62.7	126	90	143	93	16.0	84.9	160
3	Kellogg's KK-99A	60.3	121	64	102	88	12.5	84.9	138
4	Hoosier Crost 1005	59.4	119	67	106	96	17.8	82.5	199
5	Stephens' Midwest 23	56.7	114	58	92	96	13.7	84.9	185
6	Kansas 1517	56.3	113	71	113	78	19.1	82.0	157
7	Kansas 1783	55.7	112	65	103	94	12.9	85.5	172
8	Embros 1001	55.4	111	66	105	93	14.8	85.3	166
9	Jewett 453	55.1	110	42	67	109	18.5	81.8	168
10	Kansas 1781	54.7	110	79	125	96	12.7	86.4	159
11	Funk G-88	54.5	109	66	105	97	12.1	83.8	173
12	Funk G-711	53.8	108	54	86	96	17.4	83.8	158
13	Kansas 2298	53.2	107	75	119	92	15.2	82.3	168
14	Pioneer 339	53.1	106	54	86	94	12.5	86.4	176
15	Funk G-80	53.0	106	71	113	96	17.2	83.9	187
16	Illinois 200	53.0	106	68	108	83	15.7	84.1	159
17	Iowahealth TX I	53.0	106	67	196	97	17.9	85.0	202
18	K. I. H. 38	53.0	106	33	52	91	13.3	86.2	189
19	Pride of Saline	52.9	106	56	89	98	16.7	81.7	179
20	U. S. 35	52.8	106	63	100	91	12.3	86.7	175
21	Hylline M-1	52.5	105	51	81	90	16.4	83.6	150
22	Reid-Midland Hybr.	52.4	105	56	89	89	13.8	83.8	184
23	Hendriks L	52.3	105	65	103	91	15.2	85.0	199
24	Funk G-96	52.0	104	68	108	92	13.6	83.5	189
25	Hendriks L2	51.7	104	56	89	98	18.8	82.7	180
26	Hylline M-2	51.6	103	75	119	91	13.7	83.0	200
27	Cornhusker 30	51.3	103	60	95	98	12.7	85.0	252
28	Pfister 164	50.9	102	69	110	90	14.8	85.5	154
Differences in yield of less than 15.4 bushels an acre are not significant in this test.									
29	McCurdy 977M	50.9	100	74	117	98	13.4	86.4	207
30	Maygold 59	49.9	100	64	102	91	13.2	87.0	190
31	Pioneer 300	49.9	100	37	59	92	12.7	86.0	198
32	Cornhusker 40	49.8	100	84	133	95	17.6	82.9	195
33	Iowahealth 25	49.8	100	59	94	95	12.2	86.2	256
34	Pfister 4897	49.3	99	55	87	95	12.5	85.9	210
35	Embros 1020	49.1	98	81	129	88	17.0	84.6	187
36	Funk G-94	49.1	98	66	105	91	13.1	86.0	194
37	Henry Field 135	49.0	98	65	103	98	17.2	83.7	178
38	Hoosier Crost 840	49.0	98	62	98	96	13.9	85.1	175
39	Kansas 1585	48.6	97	74	117	96	16.9	82.0	238
40	Funk G-135	48.5	97	29	46	96	16.0	83.9	204
41	Reid Nat'l. 130 W	48.3	97	83	132	81	17.0	81.5	146
42	Pioneer 332	48.1	96	44	70	95	13.4	86.4	187
43	Maygold 49	47.9	96	65	103	95	12.7	86.5	171
44	McCurdy 124M	47.8	96	77	122	96	12.1	87.2	256
45	Kansas 2305	47.8	96	74	117	93	14.8	82.1	208
46	Kansas 1583	47.6	95	79	125	94	18.7	82.4	200
47	Pfister 1897	47.3	95	63	100	96	11.8	86.0	217
48	Iowahealth 25A	47.2	95	58	92	96	12.9	84.8	186
49	McCurdy 117M	47.1	94	74	117	84	14.1	87.3	193
50	Jewett 12	47.0	94	53	92	93	17.2	82.6	178
51	Midland A	46.9	94	71	112	96	18.2	81.3	192
52	Maygold 39	46.9	94	51	81	94	13.8	85.6	185
53	Mo. King 103	46.8	94	54	86	91	14.0	83.7	160
54	Embros 1325	46.7	94	67	106	88	13.3	84.0	190
55	Kellogg's KK-77	46.1	92	49	78	88	13.3	85.8	181

*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*	Actual	Relative*				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
56	McCurdy 130M	45.5	91	65	103	93	12.8	84.2	214
57	Henry Field 135R	45.5	91	53	84	91	13.3	85.7	278
58	Henry Field 135L	45.4	91	57	91	93	13.8	85.4	175
59	Iowealth 29A	45.2	91	64	102	87	12.9	84.8	215
60	Maygold 50	45.0	90	85	135	83	12.5	85.0	167
61	Cornhusker 50	44.5	89	54	86	95	13.9	87.0	203
62	Kansas 1782	44.4	89	49	78	88	12.9	84.2	205
63	Hyline M	44.3	89	60	95	78	14.7	85.4	258
64	Funk G-517W	44.0	88	85	135	84	17.0	78.0	177
65	McCurdy 123M	43.9	88	74	117	88	12.5	86.1	230
66	Pfister 380	43.9	88	59	94	93	12.1	86.9	217
67	Funk G-702	43.4	87	64	102	79	17.9	82.7	178
68	Kansas 2284	43.2	87	76	121	96	14.4	82.0	237
69	Funk G-97	42.8	85	41	65	83	12.7	85.4	272
70	Jewett 6	42.0	84	59	94	80	16.5	82.7	167
71	Kansas 1784	41.7	84	58	92	90	12.8	86.1	210
72	Reid Nat'l. 134	41.6	83	77	122	86	12.9	84.1	190
73	Henry Field 129-1	40.4	81	71	113	87	17.8	83.3	242
74	Trinoka 7	40.0	80	37	59	91	16.8	83.5	191
75	Kansas 16	39.7	80	46	73	87	20.8	83.3	230
76	Henry Field 994	39.3	79	66	105	90	12.5	83.6	264
77	Funk G-523W	38.4	77	74	117	98	19.5	77.9	205
78	U. S. 13	38.3	77	62	98	92	12.5	84.5	253
79	Reid Nat'l. 127	37.4	75	69	110	91	12.3	84.6	224
80	Henry Field 129S	37.4	75	40	63	81	12.9	85.3	276
81	Funk G-723	36.0	72	44	70	94	19.6	79.0	250
82	Kansas 2299	34.3	69	72	114	96	15.7	82.1	265
	Av. of 82 entries	48.3		63		92	14.8	84.3	196
	Av. of 2 adapted open-pollinated varieties	49.9	100	64	100	97	17.5	81.5	186
	Av. of 80 Hybrids	48.2	97	63	98	91	14.8	84.4	197
TWO-YEAR AVERAGE, 1943-1944									
1	Kellogg's KK-88	65.7	118	76	94	92	13.6	83.4	172
2	Kansas 2275	64.3	115	95	117	94	15.0	83.8	177
3	Reid Midland Hybr.	63.8	114	77	95	92	13.8	83.7	185
4	Funk G-80	63.4	113	85	105	95	15.0	83.7	151
5	Iowealth TX I	62.6	112	83	102	93	16.4	84.5	196
6	Hyline M-1	61.1	109	75	93	92	14.4	83.2	180
7	Hendriks L	61.1	109	82	101	93	14.6	83.8	182
8	U. S. 35	60.5	108	81	100	93	12.2	85.7	178
9	Illinois 200	60.2	108	84	104	87	14.2	83.4	174
10	Hendriks L2	60.1	108	77	95	97	16.7	83.0	173
11	Stephens' Midwest 23	60.0	107	79	98	93	13.2	84.0	180
12	Kansas 1585	59.6	107	87	107	93	15.2	83.2	204
13	K. I. H. 38	59.6	107	66	81	92	13.1	85.2	195
14	Jewett 12	58.7	105	77	95	93	15.0	82.9	173
15	Funk G-94	58.6	105	83	103	90	12.9	85.4	204
16	Pioneer 300	58.4	104	69	85	94	12.7	87.4	197
17	Pride of Saline	58.2	104	77	95	97	15.4	81.6	186
18	Funk G-88	58.1	104	82	101	94	13.4	83.9	175
19	McCurdy 977M	57.7	103	86	106	93	13.1	85.0	204
20	Kansas 1583	57.5	103	89	110	92	17.0	82.7	202
21	McCurdy 124M	57.2	102	88	109	94	12.3	85.2	220
22	Mo. King 103	56.3	101	77	95	91	13.3	82.9	163
23	Kansas 2284	55.7	100	88	109	95	14.9	82.5	216
24	Iowealth 29A	55.7	100	82	101	90	12.6	84.2	205
25	Iowealth 25A	55.4	99	79	98	92	13.4	84.0	188

*Performance of entry relative to the average of open-pollinated varieties.

KANSAS CORN TESTS, 1945

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*	Actual	Relative*				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
26	Kellogg's KK-77	55.2	99	75	93	87	12.9	84.6	181
27	Maygold 39	54.9	98	75	93	94	14.1	84.5	174
28	Embroid 1020	54.8	98	91	112	88	14.9	84.1	162
29	Maygold 49	54.8	98	82	101	92	12.6	85.4	175
30	Henry Field 185R	54.4	97	77	95	90	13.0	84.9	237
31	Reid Nat'l. 134	54.3	97	88	109	90	13.2	84.0	197
32	Maygold 59	54.1	97	82	101	88	12.9	85.5	199
33	Hyline M	53.9	96	79	98	85	13.7	84.4	220
34	Kansas 16	53.9	96	78	90	90	13.5	83.9	198
35	Midland A	53.6	96	85	105	95	16.5	82.3	184
36	U. S. 13	53.6	96	81	100	94	12.6	84.0	212
37	Jewett 6	52.4	94	76	94	86	14.9	82.3	178
38	McCurdy 180M	50.0	89	83	102	89	12.5	83.4	185
39	McCurdy 123M	49.6	89	87	107	91	12.5	84.2	298
40	Henry Field 129-1	45.4	81	85	105	85	15.1	83.4	217
	Av. of 40 entries	57.1		81		92	14.1	84.0	190
	Av. of 2 adapted open-pollinated varieties	55.9	100	81	100	96	16.0	82.0	185
	Av. of 38 hybrids	57.2	102	81	100	91	14.0	84.1	190
THREE-YEAR AVERAGE, 1942-1943-1944									
1	Funk G-80	63.1	111	90	105	93	14.6	84.1	
2	Kansas 1585	67.7	110	90	105	93	15.2	83.0	
3	Reid Midland Hybr.	67.4	110	84	98	89	14.7	83.3	
4	Illinois 200	65.5	107	89	103	88	14.0	83.7	
5	Iowalth TX 1	65.4	107	88	102	89	13.2	82.8	
6	Funk G-88	65.0	106	87	101	92	14.2	83.8	
7	K. I. H. 38	65.0	106	77	99	91	13.0	85.0	
8	U. S. 35	64.7	105	87	101	92	12.4	85.5	
9	Stephens' Midwest 23	64.4	105	85	99	91	13.2	83.9	
10	Kansas 1583	64.3	105	92	107	91	16.3	82.8	
11	Jewett 12	64.3	105	83	97	91	14.5	82.7	
12	Pride of Saline	63.8	104	84	98	96	15.2	81.4	
13	Kansas 2284	63.5	103	92	107	93	14.9	81.8	
14	Funk G-94	63.1	103	88	102	89	12.9	85.1	
15	Pioneer 300	62.8	102	79	92	93	13.0	86.2	
16	Reid Nat'l. 134	62.7	102	91	106	89	13.7	84.1	
17	Mo. King 103	62.0	101	84	98	90	13.2	82.9	
18	McCurdy 124M	61.9	101	92	107	91	12.5	85.0	
19	Iowalth 25A	61.4	100	86	100	89	13.6	84.0	
20	Jewett 6	61.2	100	83	97	87	14.6	82.6	
21	Maygold 39	60.3	99	83	97	93	13.7	84.4	
22	U. S. 13	60.6	99	87	101	92	12.8	84.3	
23	Maygold 49	60.5	99	88	102	91	12.7	85.1	
24	Kellogg's KK-77	59.6	97	82	95	86	13.0	84.6	
25	Maygold 59	59.5	97	88	102	89	12.8	85.3	
26	Midland A	59.0	96	88	102	94	16.3	82.4	
27	McCurdy 123M	56.7	92	91	106	90	12.8	84.4	
	Av. of 27 entries	63.0	103	87	101	91	13.9	83.9	
	Av. of 2 adapted open-pollinated varieties	61.4	100	86	100	95	15.8	81.9	
	Av. of 25 hybrids	63.1	103	87	101	90	13.8	84.0	
FOUR-YEAR AVERAGE 1941-1942-1943-1944									
1	Kansas 1585	67.3	111	84	111	92	16.2	82.7	188
2	Reid Midland Hybrd.	66.9	110	77	101	90	16.5	82.9	181
3	Iowalth TX I	65.5	108	80	105	90	17.4	82.6	185
4	Funk G-88	65.2	107	84	111	92	15.8	83.1	172
5	Illinois 200	64.9	107	82	108	89	14.9	83.2	175

*Performance of entry relative to the average of open-pollinated varieties.
 †This column—average three years, 1941-1943-1944.

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	Rela- tive*	Actual	Rela- tive*				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
6	K. I. H. 88	63.9	105	70	92	91	14.3	84.1	192
7	Reid Nat'l. 134	63.7	105	77	101	90	15.5	83.4	189
8	Pride of Saline	61.9	102	72	95	94	16.5	80.0	182
9	Funk G-94	61.7	102	84	111	90	14.0	84.4	195
10	U. S. 85	61.6	101	80	105	90	14.4	84.7	182
11	Jewett 6	61.5	101	70	92	88	17.0	81.1	169
12	Pioneer 300	61.3	101	74	97	93	14.3	85.3	192
13	McCurdy 124M	60.7	100	84	111	90	13.9	84.5	206
14	U. S. 13	59.9	99	83	109	92	14.0	83.3	201
15	Midland A	59.6	98	80	105	93	17.1	82.2	174
16	Kellogg's KK-77	58.3	96	78	103	86	14.2	83.8	182
17	McCurdy 123M	57.2	94	87	114	90	14.1	84.1	195
Av. of 17 entries		62.4		79		91	15.3	83.3	186
Av. of 2 adapted open-pollinated varieties		60.7	100	76	100	94	16.8	81.1	178
Av. of 15 hybrids		62.6	103	80	105	90	15.1	83.6	187
FIVE-YEAR AVERAGE, 1940-1941-1942-1943-1944									
1	Illinois 200	55.3	110	85	110	91	14.6	80.9	§249
2	K. I. H. 88	55.0	109	75	97	91	14.0	82.0	239
3	Funk G-88	54.9	109	86	112	92	15.8	79.9	227
4	Reid Nat'l. 134	53.3	106	79	103	89	15.4	80.0	249
5	U. S. 35	53.2	106	82	106	90	13.9	83.8	230
6	Funk G-94	52.8	105	87	113	89	13.9	83.0	252
7	U. S. 13	52.1	103	85	110	92	13.9	83.1	242
8	Kellogg's KK-77	51.1	101	82	106	85	13.9	82.7	227
9	Pride of Saline	51.0	101	74	96	92	16.1	75.9	324
10	Midland A	49.3	99	80	104	92	16.8	80.7	250
Av. of 10 entries		52.8		82		90	14.8	81.1	249
Av. of 2 adapted open-pollinated varieties		50.4	100	77	100	92	16.5	77.8	237
Av. of 8 hybrids		53.4	106	83	108	90	14.4	81.9	239
SIX-YEAR AVERAGE, 1939-1940-1941-1942-1943-1944									
1	Illinois 200	51.4	112	87	107	86	13.6	80.7	§269
2	Funk G-94	50.7	110	89	110	89	13.1	83.3	265
3	U. S. 35	49.4	108	85	105	90	13.0	83.9	271
4	U. S. 13	47.9	104	88	109	92	13.1	82.7	292
5	Kellogg's KK-77	47.6	104	85	105	86	13.3	82.2	266
6	Pride of Saline	46.5	101	78	96	91	14.3	76.0	332
7	Midland A	45.3	99	83	102	90	16.2	80.6	278
Av. of 7 entries		48.4		85		89	13.9	81.4	282
Av. of 2 adapted open-pollinated varieties		45.9	100	81	100	91	15.5	78.3	305
Av. of 5 hybrids		49.4	108	87	107	88	13.2	82.6	273

*Performance of entry relative to the average of open-pollinated varieties.

‡This column—average four years, 1940-1941-1943-1944.

§This column—average for five years, 1939-1940-1941-1943-1944.

KANSAS CORN TESTS, 1945

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

Hybrid or variety	1945 5 tests		1944-1945 18 tests		1943-1945 25 tests	
	Yield	Rank	Yield	Rank	Yield	Rank
	Bu.		Bu.		Bu.	
Jewett 453	55.6	1	.....	....	.....	....
Kansas 1583	55.4	2	57.9	3	57.5	4
Illinois 200	54.5	3	56.4	6	56.1	5
Kansas 2275	54.5	3	.....	....	.....	....
Kansas 2234	54.4	5	60.0	1	61.5	1
Kansas 1535	54.2	6	59.9	2	59.3	2
Funk G-711	53.8	7	57.2	5	.....	....
Reid Midland	53.6	8	.....	....	.....	....
Hendriks L	52.9	9	57.9	3	58.5	3
Pioneer 800	51.7	10	.....	....	.....	....
U. S. 13	51.3	11	53.9	7	54.3	6
Pride of Saline	49.4	12	52.5	8	53.6	7
Cornhusker 30	49.2	13	.....	....	.....	....
Pfister 164	49.0	14	.....	....	.....	....
Iowealth 25A	48.7	15	.....	....	.....	....
Hoosier Crost 840	48.5	16	.....	....	.....	....
Midland	46.5	17	50.9	9	51.6	8

DISTRICT 3, SOUTHEASTERN KANSAS

Plans were made to plant a corn performance test in Bourbon County but wet weather delayed planting before June so the test was not planted. Data for 1944 and previous years are reported. There were some successful Cooperative Corn Tests in this district in 1945.

STRAINS HIGH IN YIELD AND ERECT PLANTS FOR DISTRICT 3, SOUTHEASTERN KANSAS

Corn Performance Test

1944: Jewett 453, Iowealth TX 1, Kansas 1583, Funk G-131, Funk G-80, Hendriks L2, Illinois 200, and Hoosier Crost 1005.

1942-1944, two-year average: Iowealth TX 1, Funk G-88, Kansas 1583, Illinois 200, and Funk G-135.

1941-1944, three-year average: Iowealth TX 1, Funk G-88, and Funk G-150.

1940-1944, four-year average: Funk G-88.

Cooperative Corn Tests

1945: Kansas 2234, Kansas 2275, and Jewett 453.

1944-1945, two-year average: Kansas 2234.

1943-1945, three-year average: Kansas 2234.

TABLE 7. RESULTS, CORN PERFORMANCE TEST. DISTRICT 3, SOUTHEASTERN KANSAS. No results 1945.

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand	Moisture	Shelling	Ears per cwt.
		Actual	Rela- tive*	Actual	Rela- tive*				
		Bu.	Pct.	Pct.	Pct.				
ONE-YEAR RESULTS, 1944									
1	Jewett 453	88.5	126	98	111	100	17.4	82.2	143
2	Kansas 2275	87.2	124	99	113	100	19.0	83.3	151
3	Iowearth TX 1	85.4	121	92	105	100	23.0	82.7	179
4	Kansas 2299	82.0	117	98	111	100	19.5	82.9	160
5	Kansas 1533	81.5	116	100	114	100	21.3	81.4	155
6	Funk G-131	80.3	115	91	103	100	19.3	81.9	163
7	Kansas 2305	79.8	114	98	111	100	20.0	80.2	139
8	Funk G-30	79.6	113	99	113	100	18.0	84.4	151
9	Kansas 2298	78.4	112	99	113	100	18.5	80.5	132
10	Embro 1001	78.1	111	81	92	100	16.0	83.0	180
11	Hendriks L2	77.5	110	93	106	99	21.5	82.4	169
12	Illinois 200	77.4	110	98	111	100	17.3	84.7	139
13	Hoosier Cross 1005	77.1	110	88	109	100	17.9	83.0	166
14	Funk G-150	76.9	109	95	108	100	15.7	82.3	188
15	Funk G-711	76.6	109	89	101	100	23.3	78.0	160
16	Funk G-135	76.3	109	95	108	109	15.3	83.7	164
17	Hendriks L	75.9	108	93	106	100	19.0	81.8	150
Differences in yield of less than 12.6 bushels an acre are not significant in this test									
18	Kellogg's KK-88	75.7	108	99	113	109	17.3	83.2	172
19	Funk G-88	74.7	106	96	109	100	20.2	82.2	158
20	Funk G-96	74.6	106	99	113	100	16.1	82.7	174
21	Kansas 1781	74.1	105	99	113	100	14.4	85.0	176
22	Jewett 12	74.1	105	90	102	109	18.6	82.7	160
23	Pride of Saline	74.1	105	83	94	100	20.1	79.1	156
24	Kansas 1585	73.8	105	99	113	100	21.6	82.4	148
25	Kansas 16	73.8	105	91	103	100	23.1	78.6	157
26	Funk G-517W	73.7	105	99	113	100	17.3	77.0	154
27	Henry Field 135L	72.5	103	98	111	100	14.9	85.2	175
28	Kansas 1783	72.4	103	99	113	100	15.6	85.5	155
29	Trinoka 7	72.1	103	89	101	100	19.3	79.3	145
30	Funk G-702	71.7	102	96	109	100	23.4	79.6	139
31	Maygold 59	71.6	102	99	113	99	13.6	86.5	169
32	Maygold 39	71.6	102	98	111	99	15.2	86.8	159
33	Reid-Midland hybrid	70.6	100	97	110	100	17.4	82.1	174
34	Kansas 1784	70.5	100	100	114	100	16.3	84.0	182
35	Kansas 2234	70.5	100	97	110	100	21.0	73.3	148
36	Funk G-97	70.3	100	96	109	100	16.3	84.4	182
37	Embro 1325	69.3	99	94	107	100	19.3	82.5	162
38	Funk G-93	69.3	99	99	113	100	15.4	82.9	189
39	Pfister 164	69.2	98	99	113	99	15.3	86.3	180
40	Pfister 1397	69.0	98	98	111	99	14.3	84.5	193
41	U. S. 13	68.7	98	98	111	100	15.6	86.0	180
42	Kellogg's KK-77	68.2	97	99	113	100	16.9	86.4	167
43	McCurdy 123M	68.2	97	94	107	100	14.3	86.3	185
44	Pfister 4897	68.1	97	99	113	97	14.2	85.2	191
45	Stephens' Midwest 23	67.8	96	96	109	99	16.1	85.0	171
46	Kansas 1782	67.5	96	95	108	100	17.4	83.6	169
47	Pioneer 300	67.5	96	95	108	100	15.3	82.9	188
48	McCurdy 120	67.4	96	98	111	100	15.6	85.7	181
49	Henry Field 135	67.4	96	94	107	100	17.0	84.1	153
50	Reid Nat'l. 134	66.9	95	92	105	99	13.8	86.4	219
51	Midland A	66.4	95	93	106	100	19.7	81.2	143
52	Pioneer 339	66.2	94	98	111	100	15.1	84.4	209
53	Funk G-92	66.2	94	92	105	100	16.2	84.4	192
54	U. S. 35	65.3	94	96	109	99	14.5	85.4	163
55	McCurdy 130M	65.4	93	99	113	100	19.1	82.7	170

*Performance of entry relative to the average of open-pollinated varieties.

KANSAS CORN TESTS, 1945

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

Rank in yield	Hybrid or variety	Acre yield		Fract+ plants		Stand	Moisture	Shelling	Ears per cwt.
		Actual	Relative*	Actual	Relative*				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
56	Funk G-94	64.5	92	98	111	99	15.1	85.3	199
57	Maygold 49	64.2	91	97	110	97	14.7	85.2	198
58	Kellogg's KK-99A	63.9	91	95	108	99	14.6	83.3	214
59	Mo. King 103	63.4	90	96	109	100	15.2	83.9	233
60	K. I. H. 38	62.8	89	91	103	97	14.1	84.6	180
61	Kansas 1517	62.6	89	95	108	88	26.0	79.3	147
62	Pfister 380	62.4	89	99	113	98	15.0	85.0	195
63	Henry Field 135R	62.4	89	94	107	99	15.0	86.4	203
64	Pioneer 332	61.5	88	97	110	99	15.4	85.6	202
65	Embros 1020	61.4	87	99	113	100	17.1	82.0	229
66	Hoosier Cross 840	60.1	85	96	109	97	17.5	85.1	182
67	Reid Nat'l 129	59.5	85	97	110	100	16.6	84.8	164
68	McCurdy 95M	58.7	76	100	114	96	16.8	80.7	279
69	Maygold 50	58.4	76	95	108	99	15.5	83.2	238
Av. of 69 entries		70.7		96		99	17.4	83.3	175
Av. of 2 adapted open-pollinated varieties		70.3	100	88	100	100	19.9	80.2	150
Av. of 67 hybrids		70.8	101	97	110	99	17.3	83.3	175
TWO-YEAR AVERAGE, 1942 and 1944									
1	Iowaleath TX 1	64.2	114	94	104	86	21.2	81.6	
2	Funk G-88	63.4	113	97	108	93	20.0	81.7	
3	Kansas 1583	63.2	112	98	109	91	20.3	81.3	
4	Illinois 200	62.7	111	97	108	93	16.7	84.5	
5	Funk G-135	62.0	110	96	107	91	17.1	82.9	
6	Funk G-150	61.5	109	96	107	91	16.1	82.5	
7	Funk G-80	61.2	108	99	110	90	17.0	83.8	
8	Kansas 2234	61.1	108	98	109	93	20.1	75.0	
9	Kansas 1585	60.5	107	99	110	90	20.7	81.3	
10	Jewett 12	59.6	106	86	96	89	17.7	82.5	
11	Pride of Saline	58.5	104	86	96	89	19.4	78.8	
12	Reid-Midland hybrid	56.8	101	96	107	89	19.0	80.2	
13	U. S. 13	55.2	98	94	104	92	15.4	85.3	
14	McCurdy 123M	55.0	97	95	106	93	15.3	85.3	
15	U. S. 35	54.4	96	95	106	90	15.0	84.7	
16	Midland A	54.4	96	95	106	88	19.7	81.2	
17	Pioneer 300	53.1	94	96	107	90	15.2	84.0	
18	K. I. H. 38	51.9	92	88	98	88	14.7	84.7	
19	Mo. King 103	51.1	90	98	109	89	15.7	85.4	
20	Pioneer 332	51.1	91	97	108	89	15.4	85.6	
Av. of 20 entries		58.0		95		90	17.6	82.6	
Av. of 2 adapted open-pollinated varieties		56.5	100	90	100	89	19.6	80.0	
Av. of 18 hybrids		58.2	103	96	107	90	17.4	82.9	
THREE-YEAR AVERAGE, 1941-1942 and 1944									
1	Iowaleath TX 1	49.6	113	76	100	80	19.9	81.7	‡248
2	Jewett 12	48.6	110	70	92	81	18.8	81.5	190
3	Funk G-88	48.5	110	85	112	84	19.9	81.0	224
4	Funk G-150	48.2	110	83	109	85	17.0	81.2	247
5	Illinois 200	47.9	109	84	111	85	16.9	82.6	256
6	Funk G-135	47.8	109	84	111	83	17.6	82.3	238
7	Kansas 1585	46.7	106	80	105	80	19.3	81.2	211
8	McCurdy 123M	44.8	102	87	115	87	15.6	84.1	240
9	Pride of Saline	44.5	101	70	92	81	19.3	77.6	232
10	Reid-Midland hybrid	44.1	100	80	105	84	18.9	79.8	248

*Performance of entry relative to the average of open-pollinated varieties.

‡This column—average 2-years, 1941 and 1944.

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

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand	Moisture	Shelling	Ears per cwt.
		Actual	Relative*	Actual	Relative*				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
11	U. S. 13	43.9	100	90	118	87	15.6	83.6	258
12	Midland A	43.6	99	82	108	83	19.4	81.0	206
13	U. S. 35	41.9	95	87	115	83	15.8	83.5	258
14	Pioneer 300	41.1	93	90	118	83	16.3	82.3	282
15	K. I. H. 33	41.1	93	77	101	80	15.2	83.8	264
16	Pioneer 332	31.5	71	91	120	83	15.6	84.3	254
	Av. of 16 entries	45.2		82		83	17.6	82.0	242
	Av. of 2 adapted open-pollinated varieties	44.1	100	76	100	82	19.3	79.3	219
	Av. of 14 hybrids	45.4	103	83	109	83	17.3	82.4	245
FOUR-YEAR AVERAGE, 1940-1941-1942 and 1944									
1	Funk G-88	47.1	111	88	111	86	18.1	81.3	253
2	Illinois 200	45.9	109	87	110	83	15.8	82.3	268
3	Funk G-135	45.5	108	85	108	83	16.4	81.6	264
4	U. S. 13	43.4	103	91	115	86	15.0	83.7	278
5	Pride of Saline	42.9	101	73	92	81	17.7	78.1	252
6	U. S. 35	42.8	101	89	113	84	15.0	83.2	284
7	Midland A	41.7	99	84	106	82	17.8	81.3	232
8	Pioneer 332	40.6	96	93	118	83	14.9	83.8	270
	Av. of 8 entries	43.7		86		83	16.4	81.9	263
	Av. of 2 adapted open-pollinated varieties	42.3	100	79	100	82	17.8	79.7	242
	Av. of 6 hybrids	44.2	105	89	113	84	15.9	82.7	269

*Performance of entry relative to the average of open-pollinated varieties.

†This column—average 3-years, 1940-1941 and 1944.

TABLE 8. RESULTS, COOPERATIVE TESTS, DISTRICT 3, SOUTHEAST KANSAS.

Hybrid or variety	1945 10 tests		1944-1945 15 tests		1943-1945 19 tests	
	Yield	Rank	Yield	Rank	Yield	Rank
	Bu.		Bu.		Bu.	
Kansas 2234	55.8	1	52.7	1	51.0	1
Kansas 2275	52.2	2	.....	.....	.....	.....
Jewett 453	51.7	3	.....	.....	.....	.....
Funk G-711	49.2	4	46.2	3	.....	.....
U. S. 13	48.3	5	44.7	7	43.3	5
Pioneer 300	48.1	6	43.9	10	.....	.....
Pride of Saline	48.1	6	44.7	7	42.5	8
Illinois 200	48.0	8	45.8	4	44.4	4
Hendriks L	48.0	8	45.7	5	44.5	3
Kansas 1585	47.5	10	46.3	2	44.8	2
Reid Midland	47.3	11	44.9	6	42.8	7
Pfister 164	46.3	12	.....	.....	.....	.....
Kansas 1583	44.9	13	44.0	9	43.3	5
Hoosier Crosst 840	43.8	14	.....	.....	.....	.....
Iowalth TX1	43.6	15	40.7	12	.....	.....
Midland	43.0	16	42.4	11	41.3	9

DISTRICT 4, NORTHCENTRAL KANSAS

Corn tests in District 4 were located at the Belleville Experiment Field, Concordia, Kansas, and Manhattan, Kansas. The Belleville test was not harvested. The corn performance test near Concordia was planted in very wet soil, but a good stand was obtained for most entries. Some damage was done because of standing water. The potential yield of this test was high in August and many of the entries started to develop two ears but did not have sufficient moisture to fully develop them. The open-pollinated varieties and earlier hybrids yielded the best in this test. Data from the Belleville Field of previous years was used in reporting the long time averages for the corn performance tests.

The test at Manhattan, Kansas, was on the Agronomy farm of the Kansas Agricultural Experiment Station. In addition to all the entries in the Corn Performance Tests in Kansas, some other commercial hybrids were tested. Additional data is recorded. Days to one-half silk give further information concerning the maturity. This is the number of days from date of planting until one half of the silks in each plot appeared. Ear and plant height are also given. This is the only test in which there was any appreciable percentage of dropped ears.

STRAINS HIGH IN YIELD AND ERECT PLANTS, DISTRICT 4, NORTHCENTRAL KANSAS

Corn Performance Test

1945: Pfister 164

1944-1945, two-year average: Kansas 2234, Kansas 2275, Kansas 1583, Pfister 164, Kansas 1585, Funk G-80, Jewett 12, Henry Field 135, Illinois 200, Iowearth 29A, Maygold 59, Reid Nat'l. 129, Kellogg's KK-77, and Pioneer 332.

1943-1945, three-year average: Kansas 2275, Kansas 2234, Kansas 1583, Funk G-80, Illinois 200, Kansas 1585, Pioneer 300, U. S. 13, and Kellogg's KK-77.

1942-1945, four-year average: Kansas 2234, Illinois 200, Kellogg's KK-77, U. S. 13 and Pioneer 300.

Manhattan Experiment Field

1945: Reid Nat'l. 136D, Funk G-711, Iowearth L25, Reid Midland, Goldline 378, Standard 613, Kansas 2275, McCurdy 130M, Pioneer 339, Steckley 888W, McCurdy 987M, Keystone 40, and Cornhusker 50.

Cooperative Corn Tests

1945: Kansas 2234, Funk G-80, Kansas 2275, Iowearth 29A, and Pioneer 332.

1944-1945, two-year average: Kansas 2234, Funk G-80, Kansas 1585, Illinois 200, Pride of Saline, and Kansas 1583.

1943-1945, three-year average: Illinois 200, and Pride of Saline.

TABLE 9. RESULTS, CORN PERFORMANCE TEST, DISTRICT 4, NORTHCENTRAL KANSAS.

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand	Moisture	Shelling	Fars per cwt.
		Actual	Relative*	Actual	Relative*				
ONE YEAR RESULTS 1945									
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
1	Funk 2516 (Expt.)	69.9	115	99	111	97	19.3	79.7	213
2	Pfister 164	69.4	115	100	112	95	13.3	83.4	179
3	Local Yellow	66.7	110	63	71	93	17.6	76.8	149
4	Iowearth L25	66.2	109	99	111	89	15.0	81.9	204
5	Henry Field 185	65.4	108	98	110	92	16.5	80.3	250
6	Henry Field 129L	63.5	105	99	111	92	13.3	81.1	189
7	Kansas 2299	63.3	104	99	111	89	17.6	79.8	200
8	Kansas 2290	63.1	104	100	112	87	15.4	78.4	227
9	Kansas 2275	63.1	104	99	111	91	14.8	80.7	192
10	Kansas 1585	62.7	103	98	110	96	18.2	76.8	179
11	Funk G-80	62.7	103	98	110	93	15.6	80.8	189
12	Jewett 12	62.3	103	96	108	91	15.4	81.0	227
13	Pfister 669	62.0	102	99	111	94	18.6	79.0	213
14	Jewett 421	61.3	102	98	110	93	14.3	81.7	189
15	Pfister 180	61.5	101	95	107	88	14.7	83.1	233
16	Maygold 49	61.4	101	97	109	95	12.7	83.7	179
Differences in yield of less than 8.5 bushels an acre are not significant in this test									
17	Kansas Sunflower	61.2	101	96	108	93	19.9	76.0	182
18	Illinois 200	60.8	100	100	112	95	15.9	79.5	192
19	Funk G-97	60.8	100	96	108	96	15.6	82.3	189
20	Kansas 1646	60.6	100	99	111	93	15.2	78.7	189
21	Hays Golden	60.3	99	94	106	93	14.9	81.4	200
22	Pfister 165	59.9	107	99	111	94	13.6	82.9	200
23	Reid Nat'l. 134	59.7	99	97	109	91	16.1	81.5	250
24	Henry Field 135L	59.5	98	97	109	92	14.7	81.6	200
25	Kansas 1784	59.4	98	98	110	90	13.9	79.2	159
26	Kansas 1583	59.3	98	98	110	98	19.4	75.2	213
27	Kellogg's KK-99A	59.2	98	96	108	85	13.5	82.2	208
28	Henry Field 135R	58.3	96	98	110	92	13.6	81.1	196
29	Kansas 1781	58.3	96	97	109	89	12.9	82.8	182
30	Kansas 2234	58.1	96	100	112	89	17.3	71.7	189
31	U. S. 13	57.8	95	98	110	94	13.3	81.0	185
32	Kellogg's KK-77	57.6	95	97	109	87	14.1	82.0	189
33	Kansas 9011	57.6	95	96	108	95	16.6	80.9	179
34	Pride of Sline	57.5	95	94	106	89	19.2	76.5	179
35	Maygold 39	57.3	95	99	111	96	13.4	82.4	185
36	Pride of Saline	57.2	94	98	110	93	18.6	74.6	192
37	Funk G-94	57.2	94	98	110	86	13.6	81.8	189
38	Green Bros. T10W	57.1	94	93	104	88	16.8	81.7	313
39	Funk 4471 (Expt.)	57.0	94	97	109	91	14.4	82.5	222
40	Pfister 1897	56.1	93	99	111	91	13.5	75.8	179
41	Maygold 59	56.9	94	98	110	88	13.1	84.3	189
42	Pioneer 332	55.6	92	100	112	84	14.7	82.9	182
43	Iowearth 29A	55.0	96	109	112	88	13.9	81.6	185
44	Funk G-135	55.0	91	96	108	84	17.5	81.5	263
45	Pfister 390	54.9	91	98	110	90	13.5	81.7	192
46	McCurdy 350M	54.9	91	99	111	93	13.2	82.5	189
47	Vornhusker 148	54.9	91	97	109	95	14.9	80.9	179
48	Pioneer 505W	54.9	91	97	109	89	15.0	80.0	217
49	Embro 1020	54.6	90	100	112	89	14.3	82.0	175
50	Pfister 330	54.3	90	100	112	91	18.3	71.1	182
51	Pioneer 300	54.3	90	98	110	85	13.7	83.5	189
52	Pioneer 339	54.2	89	97	109	93	13.6	80.2	182
53	Cornhusker 49W (Expt.)	54.1	89	99	111	90	12.6	82.2	185
54	Funk 4408 (Expt.)	53.7	89	96	108	92	15.7	83.3	213
55	McCurdy 810	53.6	98	99	111	90	13.5	82.5	238

*Performance of entry relative to the average of open-pollinated varieties.

KANSAS CORN TESTS, 1945

TABLE 9. RESULTS, CORN PERFORMANCE TEST, DISTRICT 4, NORTHCENTRAL KANSAS (Continued).

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand	Moisture	Shelling	Ears per cwt.
		Actual	Relative*	Actual	Relative*				
56	McCurdy 810	53.6	98	99	111	90	13.5	82.5	208
56	Maygold 99A	53.6	88	97	109	85	13.5	84.6	217
57	Cornhusker 50	53.4	88	98	110	93	15.1	82.6	208
58	Funk 4407 (Expt.)	52.7	87	99	111	93	15.4	80.7	196
59	Kansas 1783	52.4	86	99	111	87	13.6	81.2	179
60	Henry Field 129-1	52.3	86	96	108	95	13.0	79.9	192
61	Henry Field 129S	50.6	83	92	108	89	12.8	80.8	213
62	Reid Nat'l. 129	49.5	82	93	110	74	13.5	82.2	204
63	Funk G-53	48.8	81	98	110	88	13.0	82.2	189
64	U. S. 35	47.1	73	99	111	84	12.3	81.8	182
65	Funk G-535W	30.9	51	93	104	75	16.6	76.5	286
Av. of 65 entries		57.8		97		91	14.9	80.9	200
Av. of 5 open-pollinated varieties		60.6	100	89	100	93	18.0	77.1	180
Av. of 60 hybrids		57.6	95	98	110	90	14.6	81.2	201

TWO-YEAR AVERAGE 1944-1945

1	Kansas 2234	67.9	128	100	119	95	13.5		
2	Kansas 2299	67.4	127	95	113	93	17.8		
3	Kansas 2275	66.6	125	98	117	95	15.7		
4	Kansas 1583	65.7	124	98	117	98	18.9		
5	Pfister 164	65.5	123	96	114	97	15.1		
6	Kansas 1585	64.8	122	94	112	98	19.1		
7	Funk G-80	64.7	122	98	117	97	16.3		
8	Jewett 12	64.2	121	84	100	95	16.7		
9	Henry Field 135	63.6	120	93	111	95	17.4		
10	Illinois 200	61.2	115	95	113	96	16.6		
11	Iowearth 29A	59.5	112	98	117	93	15.5		
12	Maygold 59	59.5	112	92	110	92	14.6		
13	Reid Nat'l. 129	58.9	111	93	111	87	15.4		
14	Kansas 1784	58.7	111	97	117	94	14.8		
15	Kansas 1781	58.7	111	94	112	94	14.2		
16	Kellogg's KK 77	58.7	111	94	112	92	15.1		
17	Kansas 1783	58.6	110	100	119	91	15.5		
18	Pioneer 332	58.6	110	96	114	92	15.9		
19	Kansas 9011	58.3	110	96	114	96	17.3		
20	Pioneer 300	58.3	110	91	108	91	15.0		
21	Maygold 39	58.3	110	91	108	97	15.1		
22	Pioneer 339	58.0	109	90	107	96	14.5		
23	Iowearth 29A	57.9	109	93	117	93	15.5		
24	Kellogg's KK 99A	57.7	109	91	108	91	15.0		
25	Pfister 1897	56.8	107	91	108	93	14.8		
26	Maygold 49	55.6	105	93	111	97	14.8		
27	U. S. 13	55.9	105	93	111	95	14.6		
28	Pride of Saline	55.2	104	84	100	92	18.3		
29	Embro 1020	55.0	104	96	114	91	15.3		
30	Henry Field 129-1	53.2	100	93	111	96	14.1		
31	U. S. 35	53.0	100	92	110	92	14.3		
32	Hays Golden	51.0	96	83	99	91	16.0		
33	Reid Nat'l. 134	48.8	92	76	90	93	15.3		
Av. of 33 entries		59.4		93		94	15.8		
Av. of 2 open-pollinated varieties		53.1	100	84	100	92	17.2		
Av. of 31 hybrids		59.8	113	90	112	94	15.8		

THREE YEAR AVERAGE 1943-1944-1945

1	Kansas 2275	56.9	130	87	112	96	17.2		
2	Kansas 2234	55.2	126	90	115	95	19.3		
3	Jewett 12 ..	54.8	125	77	99	96	17.8		
4	Kansas 1583	54.5	124	90	115	96	22.0		
5	Funk G-80	53.8	123	87	112	93	16.5		

*Performance of entry relative to the average of open-pollinated varieties.

TABLE 9. RESULTS, CORN PERFORMANCE TEST, DISTRICT 4, NORTHCENTRAL KANSAS (Concluded).

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand	Moisture	Shelling	Ears per cwt.
		Actual	Rela- tive*	Actual	Rela- tive*				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
6	Illinois 200	53.3	121	90	115	97	14.1		
7	Kansas 1585	53.3	121	87	112	94	20.1		
8	Pioneer 300	51.2	117	84	108	91	15.3		
9	U. S. 13	50.5	115	88	113	96	14.9		
10	Kellogg's KK 77	50.4	115	88	113	93	15.3		
11	Kansas 9011	50.0	114	89	114	91	17.8		
12	Pride of Saline	45.0	103	78	100	91	19.8		
13	Hays Golden	42.3	97	78	100	92	15.5		
14	Reid Nat'l. 134	42.5	97	75	96	95	18.1		
15	U. S. 35	41.7	95	86	110	92	14.8		
	Av. of 15 entries	50.4		85		94	17.2		
	Av. of 2 open-pollinated varieties	43.9	100	78	100	92	17.7		
	Av. of 13 hybrids	51.4	117	86	110	94	17.2		
FOUR YEAR AVERAGE 1942-1943-1944-1945									
1	Kansas 2234	55.1	130	92	118	96	20.6		
2	Jewett 12	53.2	125	77	99	96	18.7		
3	Illinois 200	51.4	121	89	114	98	18.6		
4	Kansas 9011	48.4	114	88	113	93	18.6		
5	Kellogg's KK 77	48.0	113	87	112	94	15.1		
6	U. S. 13	48.0	113	87	112	97	15.9		
7	Pioneer 300	47.5	112	84	108	92	16.6		
8	U. S. 35	43.7	103	87	112	93	15.4		
9	Pride of Saline	43.1	102	79	101	91	21.3		
10	Hays Golden	41.8	93	77	99	93	17.0		
	Av. of 10 entries	48.0		82		94	17.8		
	Av. of 2 open-pollinated varieties	42.4	100	78	100	92	19.1		
	Av. of 8 hybrids	49.4	116	83	107	95	17.4		

*Performance of entry relative to the average of open-pollinated varieties.

KANSAS CORN TESTS, 1945

TABLE 10. RESULTS, COMMERCIAL AND EXPERIMENTAL HYBRIDS, MANIAT-TAN, KANSAS, DISTRICT 4, 1945

Rank in yield	Hybrid or variety	Acre yield	Erect plants	Stand	Moisture	Shelling	Ears per cwt.	½ silk	Height		Dropped ears
									plant	ear	
		Bu.	Pct.	Pct.	Pct.	Pct.	No.	Days	Ft.	Ft.	Pct.
ONE-YEAR RESULTS, 1945											
1	Kansas 1517	97.5	77	93	17.8	81.4	147	77	8.9	3.6	1
2	Green Bros. T 10W	96.4	72	95	15.9	84.2	217	77	10.7	4.6	10
3	Reid Nat'l. 136D	95.4	90	97	17.2	83.6	159	74	9.4	3.9	2
4	Funk G-711	94.8	57	82	18.4	80.7	164	78	9.4	4.4	3
Difference in yield of less than 6.3 bushels an acre are not significant in this test.											
5	Iowearth L25	90.4	91	93	14.4	82.6	159	71	8.9	3.9	6
6	Funk G-80	89.5	88	98	15.4	83.0	145	74	9.4	3.7	0
7	Jewett 12	88.3	64	96	15.5	81.3	164	73	9.3	3.9	1
8	Iowearth TX 1	87.5	67	95	17.3	81.0	172	78	9.3	4.5	9
9	Reid Midland	86.9	92	96	14.8	84.3	152	71	9.0	3.8	5
10	Kansas 1585	86.9	91	97	14.6	82.2	143	76	9.3	4.4	3
11	Goldline 373	86.7	92	98	14.4	83.5	152	73	9.7	3.8	4
12	Embro 1825	86.3	75	100	15.1	82.3	172	76	9.3	4.6	5
13	Standard 613	85.9	96	83	13.4	83.0	149	71	9.6	3.8	0
14	Kansas 2275	85.7	98	98	15.4	82.2	159	73	9.0	3.6	3
15	Midland	85.1	80	98	17.0	79.8	143	75	9.3	4.2	4
16	Stephens' Midwest 23	84.1	89	97	14.0	82.9	133	72	9.3	3.6	2
17	Pfister 660	84.0	78	94	16.5	80.9	161	70	10.1	4.7	3
18	Kansas 2290	83.9	97	91	15.0	80.8	147	74	9.7	4.0	2
19	Funk 4523 (Expt.)	83.6	89	89	16.0	79.8	175	76	9.9	4.3	8
20	Funk 2516 (Expt.)	83.2	85	89	15.5	76.3	141	75	9.7	4.3	9
21	Jewett 453	82.4	81	84	16.3	82.9	156	75	9.9	4.5	2
22	McCurdy 130M	82.3	96	84	14.2	81.9	139	72	9.1	3.4	4
23	Laubers 222W	82.2	81	98	14.9	82.8	141	74	9.7	4.0	6
24	Hendriks L	82.1	76	95	16.5	81.7	141	72	9.9	3.9	3
25	DeKalb 840	82.0	90	95	14.3	82.6	139	71	8.3	3.2	4
26	Pioneer 339	81.8	96	97	13.6	82.6	130	71	9.1	3.2	3
27	Kansas Sunflower	81.3	73	96	12.5	79.6	145	78	10.1	4.6	2
28	Steckley 888W	81.2	99	95	17.5	73.8	145	73	9.1	3.9	2
29	McCurdy 987M	80.9	96	92	12.8	84.1	141	72	9.1	3.5	2
30	Keystone 40	80.9	92	69	13.7	81.9	133	72	9.1	3.9	3
31	Cornhusker 50	80.6	95	93	15.2	83.2	141	72	9.1	3.9	3
32	Kansas 2299	80.5	93	88	15.6	81.4	151	73	9.5	3.7	5
33	DeKalb 800A	80.4	95	97	13.2	83.9	143	71	9.2	3.5	1
34	Embro 1001	80.4	73	87	15.4	83.6	161	76	9.9	4.5	5
35	Iowearth D29	80.1	95	84	15.2	82.5	139	72	8.9	3.2	1
36	Standard 800	80.1	93	98	13.6	84.3	159	71	8.9	5.6	3
37	Kansas 1583	80.1	93	92	15.9	80.5	156	75	9.3	4.6	6
38	DeKalb 922	80.0	97	83	15.2	81.4	130	74	8.9	3.3	1
39	Pfister 165	79.9	96	93	12.7	84.1	152	72	8.9	3.6	6
40	Cornhusker 49W (Expt.)	79.9	94	90	14.2	80.9	118	74	8.9	3.4	1
41	Funk 4439 (Expt.)	79.8	92	92	15.2	80.7	141	74	9.7	4.0	2
42	Henry Field 135L	79.7	90	97	13.7	83.0	152	73	9.3	3.7	1
43	Cornhusker 148	79.6	96	93	13.5	82.5	135	79	9.1	3.1	0
44	Carlson 33A	79.6	94	97	13.6	83.1	141	72	9.2	3.8	2
45	Maygold 59	79.0	99	93	13.4	83.9	147	72	9.3	3.6	1
46	Keystone 38	78.9	96	89	13.6	85.5	152	72	9.6	3.7	7
47	Pfister 180	78.9	95	94	13.6	83.2	143	72	9.2	3.8	1
48	Pfister 164	78.9	92	91	13.7	83.1	137	70	8.8	3.3	1
49	Steckley 790	78.7	92	97	14.6	82.3	154	71	8.9	3.7	4
50	Iowearth D25	78.6	95	88	13.7	81.9	154	72	8.8	3.6	0
51	Pioneer 300	78.3	95	95	15.3	82.2	141	71	9.2	3.9	1
52	Steckley 100A	78.3	93	96	18.2	80.4	139	72	9.8	4.4	1
53	Cornhusker 40	78.3	90	98	16.4	78.9	154	73	9.4	3.7	1
54	Pfister 1897	78.1	92	95	13.3	83.2	133	71	9.2	3.4	4
55	DeKalb 721	78.0	97	95	15.0	81.9	135	72	9.5	4.1	2
56	Illinois 200	78.0	89	92	14.0	82.0	156	73	9.7	3.9	5
57	Henry Field 129S	77.9	85	95	13.6	82.3	145	71	8.8	3.3	1
58	Kansas 2305	77.8	90	77	14.9	78.9	159	76	9.0	3.9	2
59	Steckley 884W	77.5	97	93	16.2	79.3	137	71	8.9	3.9	5

TABLE 10. RESULTS, COMMERCIAL AND EXPERIMENTAL HYBRIDS, MANHATTAN, KANSAS. DISTRICT 4, 1945 (Concluded).

Rank in yield	Hybrid or variety	Acre yield	Erect plants	Stand	Moisture	Shelling	Ears per cwt.	½ silk	Height		Dropped ears
									plant	ear	
		Bu.	Pct.	Pct.	Pct.	Pct.	No.	Days	Ft.	In.	Pct.
60	Iowearth L29	77.1	86	82	13.0	86.1	182	71	9.3	3.3	3
61	U. S. 35	77.0	98	88	12.8	83.6	149	71	8.9	3.6	0
62	Funk 4471 (Expt.)	77.0	89	93	14.1	83.6	152	71	9.2	3.6	4
63	Pioneer 334	76.9	99	95	13.6	82.6	147	70	8.9	3.6	2
64	McCurdy 810	76.5	96	82	13.2	82.8	141	71	8.7	3.5	4
65	Henry Field 135R	76.5	98	92	13.2	84.0	143	72	9.6	4.1	5
66	Pioneer 332	76.4	89	95	14.2	82.0	145	72	9.3	3.9	3
67	Kansas 1646	76.3	99	75	14.5	85.9	133	72	8.5	3.4	0
68	McCurdy 820	76.3	90	92	14.6	85.4	141	72	9.2	3.9	1
69	Kellogg's KK-99A	76.2	97	93	13.7	82.8	147	72	9.5	3.8	5
70	Reid National 125	76.2	95	91	14.5	81.6	143	73	8.8	3.6	4
71	Funk G-789W	76.2	90	92	15.4	82.5	149	76	10.1	4.5	3
72	McCurdy 124M	76.1	90	93	13.0	83.1	147	72	9.2	3.8	2
73	DeKalb 817A	75.6	97	91	13.2	81.8	143	71	9.0	3.5	1
74	Funk G-135	75.5	81	88	14.7	82.7	196	74	9.7	4.6	5
75	Pioneer 505W	75.4	97	92	15.0	81.9	130	76	9.9	4.1	5
76	U. S. 13	75.4	89	92	13.4	82.0	143	72	9.3	3.8	2
77	Reid National 134th	75.3	73	97	13.8	80.4	189	75	9.2	5.1	5
78	Maygold 39	75.2	85	91	14.0	82.4	147	72	9.6	3.9	5
79	Henry Field 129L	75.1	100	94	13.2	81.7	145	71	9.2	3.4	1
80	Reid National 134	75.1	90	86	15.8	82.6	152	73	9.1	4.0	5
81	Henry Field 135	75.1	83	100	15.4	74.5	175	76	10.1	4.4	3
82	Funk G-94	75.0	95	88	14.2	80.9	143	72	9.0	3.8	3
83	Pride of Saline	74.9	66	98	21.2	75.7	156	76	10.1	4.6	2
84	Mo. King 103	74.8	82	92	13.6	79.3	143	71	8.9	3.5	3
85	Kansas 1783	74.8	97	97	14.3	82.3	139	72	9.1	3.6	5
86	Funk G-53	74.7	94	94	12.6	83.6	156	70	8.6	3.3	0
87	Kellogg's KK-77	74.4	96	91	12.8	78.5	149	72	9.3	3.9	3
88	Embro 133-W	73.9	91	96	13.7	82.7	123	75	9.7	4.3	5
89	Kansas 2234	73.8	98	90	17.3	72.5	145	73	8.9	3.6	0
90	Iowearth 29A	73.6	98	95	13.7	82.5	145	72	9.4	3.6	3
91	DeKalb 847	73.1	99	87	13.4	76.5	145	71	8.8	3.4	0
92	Kansas 1781	73.1	95	92	12.7	84.2	141	72	8.5	3.1	1
93	Hoosier Crost 340	73.1	98	91	13.5	83.0	149	71	8.8	3.3	5
94	Henry Field 129-1	73.0	85	88	13.3	82.8	147	71	8.9	3.6	5
95	Cornhusker 30	72.7	89	86	14.8	79.4	139	75	9.7	3.9	5
96	McCurdy 112M	72.6	95	95	13.4	85.6	159	69	8.5	2.9	2
97	Reid National 129	72.3	97	89	14.9	81.2	149	73	9.3	3.6	1
98	Jewett 421	72.2	97	89	14.7	81.6	141	71	9.1	3.7	2
99	McCurdy 123M	71.7	95	88	14.4	84.9	143	71	9.5	4.7	6
100	Pfister 390	71.6	96	87	13.0	70.6	125	70	8.8	3.5	1
101	DeKalb 835	71.5	97	84	12.9	83.9	172	71	9.2	3.7	1
102	Funk 4408 (Expt.)	71.5	87	85	13.7	86.3	167	72	8.8	3.6	2
103	Funk G-97	70.8	86	87	14.4	80.5	154	70	9.2	3.7	3
104	McCurdy 350M	70.7	99	96	13.6	82.4	152	71	7.8	2.5	0
105	Reid Yellow Dent	69.7	77	87	16.1	80.9	141	70	9.4	3.9	5
106	Steckley 730	69.6	98	83	13.9	80.7	154	71	8.6	3.3	1
107	Carlson 115W	68.3	87	88	14.6	80.6	149	73	8.7	3.9	5
108	Funk 4407 (Expt.)	67.3	98	92	14.0	83.6	156	71	8.7	3.3	1
109	Carlson 989A	67.2	98	91	13.2	82.4	172	71	8.7	2.9	3
110	Maygold 99A	64.6	98	84	13.0	76.2	141	70	8.6	3.2	0
111	Pfister 630	64.5	100	88	16.6	62.4	149	73	8.9	3.8	0
112	Maygold 49	63.5	93	84	13.7	82.0	161	71	8.6	3.2	2
113	Embro 1020	62.0	97	86	14.0	79.1	145	71	8.4	3.1	1
114	Kansas 9011	61.4	89	69	14.6	83.0	167	71	8.8	3.5	1
115	Funk G-535W	58.8	85	92	15.6	78.5	203	78	9.2	4.3	5
116	Hays Golden	55.4	68	96	14.8	80.5	185	69	8.1	3.2	1
	Av. of 116 entries	77.6	90	91	14.6	81.6	150	73	9.2	3.8	3
	Av. of 5 open-pollinated varieties	73.3	78	95	16.3	79.3	154	73	9.5	4.1	3
	Av. of 111 hybrids	77.8	91	91	14.5	81.7	150	73	9.2	3.8	3

KANSAS CORN TESTS, 1945

TABLE 11. RESULTS, COOPERATIVE TESTS, DISTRICT 4, NORTHCENTRAL KANSAS.

Hybrid or variety	1945 8 tests		1943-1945 22 tests		1941-1945 32 tests	
	Yield	Rank	Yield	Rank	Yield	Rank
	Bu.		Bu.		Bu.	
Kansas 2234	60.7	1	63.1	1	.....	....
Funk G-80	58.5	2	58.7	2	.....	....
Kansas 2275	54.8	3	.....	.....	.....	....
Iowearth 29A	53.5	4	.....	.....	.....	....
Pioneer 382	53.2	5	.....	.....	.....	....
Illinois 200	52.7	6	56.2	4	52.7	1
Pride of Saline	52.4	7	55.8	5	52.0	2
U. S. 13	52.1	8	54.9	7	51.9	3
Cornhusker 50	52.0	9	.....	.....	.....	....
Pfister 164	51.8	10	.....	.....	.....	....
U. S. 85	50.8	11	52.1	8	48.2	4
Kansas 1585	50.4	12	56.4	3	.....	....
Jewett 421	49.9	13	.....	.....	.....	....
Kansas 1583	49.5	14	55.4	6	.....	....
Hendriks L2	48.9	15	.....	.....	.....	....
Midland	47.4	16	48.7	9	.....	....
Hays Golden	44.7	17	45.7	10	41.7	5

DISTRICT 5, SOUTHCENTRAL KANSAS

The Corn Performance Test in District 5 was located in Harvey County. It was estimated that 75 percent of the plants in the test were infested with the Southwestern Corn Stalk borer. In the corn test on the Wichita Experiment Field a wind and rain storm in August caused severe lodging. In both these tests the later maturing strains were generally superior in yield. In this area, however, one cannot predict whether an early, midseason, or late strain will yield highest. Over a ten year period, early and late open-pollinated varieties at the Wichita Field have averaged the same in yield.

STRAINS HIGH IN YIELD AND ERECT PLANTS, DISTRICT 5,

SOUTHCENTRAL KANSAS

Corn Performance Test

1945: Funk G-711, Kansas 2234, Kansas 1585, Illinois 200, Funk G-80, U. S. 13, Kansas 1583, Pioneer 505W, Kansas 2275, and Funk G-135.

Wichita Experiment Field

1945: Kansas 2234.

1944-1945, two-year average: Funk G-711, Kansas 2234, Kansas 1585, Hendriks L2, Hendriks L, Kansas 1583, and Iowearth TX1.

1943-1945, three-year average: Kansas 2234, Hendriks L, and Kansas 1585.

1942-1945, four-year average: Kansas 2234, and Kansas 1585.

1941-1945, five-year average: None

Cooperative Corn Tests

1945: None

1943-1945, three-year average: Kansas 2234, Kansas 1585, and Kansas 1583.

1941-1945, five-year average: None

TABLE 12. RESULTS, CORN PERFORMANCE TEST, DISTRICT 5, SOUTH CENTRAL KANSAS, 1945.

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand	Moisture	Shelling	Ears per cwt.
		Actual	Relative*	Actual	Relative*				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
ONE YEAR RESULTS, 1945									
1	Funk G-711	80.0	180	86	104	96	27.2	78.8	164
2	Funk 2516 (Expt.)	75.5	123	91	110	97	26.8	78.6	147
3	Kansas 1517	75.5	123	82	99	97	29.2	77.5	143
4	Kansas 2299	74.5	121	93	112	98	27.3	79.4	159
5	Hendriks L	73.7	120	81	98	96	27.7	78.7	145
6	Local Blue & White	72.2	118	80	96	99	29.3	75.3	137
7	Kansas 2234	72.1	117	89	107	97	27.5	72.3	149
Difference in yield of less than 8.1 bushels an acre are not significant in this test.									
8	Kansas 2290	71.5	116	93	112	98	27.5	79.1	152
9	Kansas 1585	71.4	116	88	106	91	26.9	77.6	156
10	Embro 133-W	70.2	114	81	98	98	23.1	79.2	156
11	Illinois 200	69.4	113	88	106	98	23.0	78.8	179
12	Funk G-80	69.2	113	93	112	99	26.4	75.6	161
13	Kansas 1784	69.1	113	84	101	96	22.6	79.2	152
14	Iowealth L25	68.8	112	89	107	93	27.3	79.8	182
15	U. S. 13	68.5	112	87	105	96	22.5	78.4	159
16	Kansas 1583	68.4	111	88	106	97	27.1	77.6	169
17	Pioneer 505W	68.1	111	90	108	95	26.4	78.2	169
18	Kansas 9016	68.1	111	82	99	94	28.8	77.0	172
19	Kansas 2275	68.0	111	92	111	97	26.9	78.1	164
20	Funk G-135	67.8	110	88	106	97	26.2	78.8	182
21	Iowealth TX 1	67.2	109	90	108	94	28.8	78.4	172
22	Funk 4439 (Expt.)	67.0	109	88	106	99	27.0	77.9	167
23	Embro 1325	65.8	107	85	102	95	26.2	78.4	185
24	Funk 4523 (Expt.)	65.8	107	93	112	98	28.1	77.7	179
25	Kansas 1777	65.2	106	92	111	98	27.1	75.9	149
26	Funk G-94	64.5	105	79	95	94	23.9	79.2	169
27	Maygold 39	64.2	105	87	105	95	24.7	77.9	169
28	Kansas 9017	62.9	102	75	90	85	26.1	78.2	182
29	U. S. 35	61.0	99	88	106	97	20.4	79.8	167
30	Embro 1001	60.9	99	83	100	95	24.7	83.5	164
31	Kansas 1646	60.8	99	86	104	96	23.8	76.1	145
32	Kansas 1731	60.7	99	94	113	98	21.7	80.9	179
33	Pride of Saline	60.6	99	88	106	94	27.3	74.9	175
34	Funk G-97	60.3	98	76	92	97	24.2	78.2	182
35	Pioneer 332	59.9	98	82	99	98	24.3	80.6	172
36	Maygold 49	59.8	97	84	101	92	21.4	80.7	161
37	Pride of Saline	59.7	97	80	96	96	25.3	74.1	192
38	Pioneer 339	59.0	96	92	111	99	21.4	79.6	172
39	Pioneer 300	58.2	95	90	108	98	24.5	80.2	169
40	Midland	57.6	94	90	108	94	28.4	77.0	167
41	Reid Nat'l. 134th	57.3	93	81	98	94	23.9	78.2	204
42	Hays Golden	57.0	93	79	95	97	25.1	77.3	169
43	McCurdy 937M	56.2	92	86	104	97	22.8	78.8	208
44	Kansas 1733	55.8	91	90	108	87	22.7	78.6	161
45	Funk G-53	55.5	90	81	98	93	20.6	79.8	192
46	McCurdy 112M	54.1	88	90	108	96	22.0	79.1	204
47	Funk G-789W	53.4	87	86	104	93	27.4	77.9	169
48	Maygold 59	50.1	82	82	99	90	22.7	80.3	200
49	Maygold 99A	48.0	78	86	104	91	21.7	81.2	263
Av. of 49 entries		64.3		86		95	25.4	78.3	171
Av. of 5 open pollinated varieties		61.4	100	83	100	98	26.3	75.7	169
Av. of 44 hybrids		64.6	105	87	105	95	25.2	78.6	171

*Performance of entry relative to the average of open-pollinated varieties.

KANSAS CORN TESTS, 1945

TABLE 13. RESULTS, WICHITA EXPERIMENT FIELD, DISTRICT 5, SOUTH-CENTRAL KANSAS

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand
		Actual	Relative*	Actual	Relative*	
		Bu.	Pct.	Pct.	Pct.	
ONE YEAR RESULTS, 1945						
1	Funk G-711	53.0	131	18	88	97
2	Kansas 2234	49.0	121	37	180	98
3	Jewett 453	49.0	121	13	63	97
4	Kansas 1646	48.8	120	46	224	97
Differences in yield of less than 4.6 bushels an acre are not significant in this test						
5	Kansas 9311	47.7	117	33	161	97
6	Iowealth L25	47.2	116	29	141	97
7	Kansas 1784	46.8	115	41	200	95
8	Hendriks L	46.4	114	25	122	97
9	Kansas 1585	46.2	114	50	244	99
10	Jewett 12	46.2	114	13	63	97
11	Kansas 2299	45.6	112	35	171	99
12	Keystone 38	44.2	109	30	146	100
13	Kansas 1517	44.0	108	32	156	95
14	Illinois 200	43.9	108	19	93	97
15	Kansas 1777	43.8	108	54	263	97
16	Maygold 49	43.6	107	28	137	97
17	Hendriks L2	43.2	106	20	98	97
18	Kansas 2298	43.0	106	32	156	97
19	Hays Golden	43.0	106	10	49	98
20	Keystone 40	42.6	105	32	156	94
21	Reid Midland	42.2	104	38	185	97
22	Pride of Saline	42.2	104	28	137	96
23	Kansas 2290	42.1	104	25	122	95
24	Kansas 1783	42.0	103	42	205	97
25	Pioneer 300	41.9	103	12	59	97
26	U. S. 13	41.2	101	26	127	92
27	Kansas 9017	41.9	101	7	34	90
28	Kansas 1583	40.7	100	36	176	99
29	Funk G-135	40.7	100	28	137	96
30	Kansas 2275	40.5	100	17	83	97
31	Kansas 9016	40.1	99	22	107	96
22	McCurdy 987M	39.9	98	24	117	97
33	Richard's White	39.8	98	18	88	95
34	Reid Nat'l. 134TH	39.6	98	16	78	95
35	Iowealth TX 1	39.6	98	12	59	97
36	Kansas 1781	37.5	92	13	63	94
37	Midland	37.4	92	26	127	95
38	U. S. 35	37.1	91	27	132	94
39	Kansas 2305	35.0	86	23	112	91
40	Pioneer 505W	34.6	85	11	54	96
41	Embro 133W	34.2	84	16	78	93
42	Funk G-789W	31.1	77	21	100	82
43	Embro 1001	30.3	75	12	59	86
Av. of 43 entries		42.0		26		96
Av. of 4 open-pollinated varieties		40.6	100	21	100	96
Av. of 39 hybrids		42.2	104	26	127	96
TWO-YEAR AVERAGE, 1944-1945						
1	Funk G-711	54.7	132	56	117	98
2	Kansas 2234	49.8	121	63	131	98
3	Kansas 1585	49.3	119	69	144	98
4	Jewett 12	49.3	119	42	88	98
5	Kansas 1777	47.4	115	73	152	96

*Performance of entry relative to the average of open-pollinated varieties.

TABLE 13. RESULTS, WICHITA EXPERIMENT FIELD, DISTRICT 5, SOUTH-CENTRAL KANSAS (Continued).

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand
		Actual	Relative*	Actual	Relative*	
		Bu.	Pct.	Pct.	Pct.	Pct.
6	Kansas 1517	47.4	115	57	119	96
7	Hendriks L2	47.1	114	49	102	97
8	Hendriks L	47.1	114	48	100	97
9	Kansas 2298	46.7	113	61	127	97
10	Kansas 1588	45.8	111	63	131	98
11	Kansas 2290	45.8	111	61	127	97
12	Kansas 2299	45.6	110	63	131	98
13	Iowearth TX 1	45.6	110	49	132	98
14	Kansas 9011	45.5	110	60	125	97
15	Kansas 9016	45.4	110	48	100	98
16	Pride of Saline	45.2	109	52	108	97
17	Kansas 1784	44.9	109	66	138	97
18	Kansas 1783	43.9	106	64	138	98
19	Reid-Midland	43.9	106	60	125	98
20	Kansas 2275	43.4	105	54	113	98
21	Illinois 200	43.2	105	55	115	98
22	Pioneer 300	42.8	102	54	113	98
23	Kansas 9017	42.2	102	48	100	95
24	U. S. 13	41.4	100	59	123	94
25	Kansas 1781	40.7	99	55	115	96
26	Kansas 2805	40.6	98	56	117	94
27	Midland	39.8	96	48	100	93
28	Hays Golden	38.3	94	43	90	96
29	U. S. 85	38.6	93	59	123	92
	Av. of 29 entries	44.8		56		97
	Av. of 8 open-pollinated varieties	41.3	100	48	100	95
	Av. of 26 hybrids	45.7	111	57	119	97
THREE-YEAR AVERAGE, 1943-1944-1945						
1	Kansas 2284	42.4	121	64	139	
2	Jewett 12	41.6	119	44	96	
3	Kansas 9011	39.9	114	61	133	
4	Hendriks L	39.6	113	48	104	
5	Kansas 1585	39.3	112	55	120	
6	Kansas 9017	39.3	112	51	111	
7	Kansas 9016	39.3	112	44	96	
8	Kansas 2275	37.6	107	53	115	
9	Illinois 200	37.5	107	61	133	
10	Pride of Saline	37.4	106	52	113	
11	U. S. 13	37.1	106	66	143	
12	Kansas 1588	36.6	104	48	104	
13	U. S. 85	35.6	101	65	141	
14	Hays Golden	35.0	100	43	93	
15	Midland	32.8	93	42	91	
	Av. of 15 entries	38.1		53		
	Av. of 8 open-pollinated varieties	35.1	100	46	100	
	Av. of 13 hybrids	38.8	111	55	120	
FOUR-YEAR AVERAGE, 1942-1943-1944-1945						
1	Kansas 2284	39.4	121	72	136	†96
2	Kansas 9016	37.3	114	53	100	96
3	Kansas 9011	36.8	113	67	126	95
4	Kansas 1585	36.4	112	65	123	94
5	Kansas 9017	36.5	112	61	115	94

*Performance of entry relative to the average of open-pollinated varieties.
†This column average of three years 1942-1944-1945.

KANSAS CORN TESTS, 1945

TABLE 13. RESULTS, WICHITA EXPERIMENT FIELD, DISTRICT 5, SOUTH-CENTRAL KANSAS (Concluded).

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand
		Actual	Rela- tive*	Actual	Rela- tive*	
		Bu.	Pct.	Pct.	Pct.	Pct.
6	U. S. 13	33.7	103	70	132	194
7	Illinois 200	33.5	103	69	130	98
8	Pride of Saline	33.4	102	58	109	96
9	Hays Golden	32.6	100	49	92	95
10	U. S. 35	32.5	100	63	123	92
11	Midland	31.9	98	53	100	92
	Av. of 11 entries	34.9		62		95
	Av. of 3 open-pollinated varieties	32.6	100	53	100	94
	Av. of 8 hybrids	35.8	110	66	125	96
FIVE-YEAR AVERAGE, 1941, 1942, 1943, 1944, 1945						
1	Kansas 9017	36.5	113	60	109	196
2	Kansas 9011	36.0	111	66	120	96
3	U. S. 13	33.7	104	69	125	96
4	Illinois 200	33.7	104	66	120	98
5	Pride of Saline	33.1	102	57	104	97
6	U. S. 35	32.9	102	69	125	94
7	Midland	32.0	99	57	104	93
8	Hays Golden	32.0	99	50	91	96
	Av. of 8 entries	33.7		62		96
	Av. of 3 open-pollinated varieties	32.4	100	55	100	95
	Av. of 5 hybrids	34.6	107	66	120	96

*Performance of entry relative to the average of open-pollinated varieties.

†This column—average 4-years, 1941, 1942, 1944, 1945.

TABLE 14. RESULTS, COOPERATIVE TESTS, DISTRICT 5, SOUTHCENTRAL KANSAS.

Hybrid or variety	1945 4 tests		1943-1945 14 tests		1941-1945 21 tests	
	Yield	Rank	Yield	Rank	Yield	Rank
	Bu.		Bu.		Bu.	
Kansas 2275	55.6	1	.....	.....	.....	.....
Illinois 200	55.3	2	42.4	5	43.5	2
Kansas 1585	54.7	3	46.2	2	.....	.....
Kansas 2234	54.3	4	47.7	1	.....	.....
Midland	53.6	5	41.8	6	43.9	1
Funk G-711	53.0	6	.....	.....	.....	.....
U. S. 13	52.5	7	41.7	7	43.2	4
Pride of Saline	50.5	8	41.5	8	43.3	3
Kansas 1583	49.8	9	45.9	3	.....	.....
Iowealth 25A	49.7	10	.....	.....	.....	.....
Pioneer 300	49.5	11	.....	.....	.....	.....
Jewett 453	47.9	12	.....	.....	.....	.....
Hendriks L	46.7	13	43.2	4	.....	.....
Pfister 164	45.3	14	.....	.....	.....	.....

DISTRICT 6, NORTHWESTERN KANSAS

This is the first report on a corn performance test in this district. The test was located in Decatur County. Generally, early entries yielded the highest. There are not as good hybrids available for this area as other sections farther east in the State according to information secured in this test. Although there are 20 hybrids that yielded 10 percent more grain than the average of the 6 open-pollinated varieties in the test the local open-pollinated variety adapted to this area was third in yield. Most of the entries in this test dried prematurely which may account for the low shelling percentages obtained. A test was planted at the Smith Center Field but due to irregular stands no significant data were secured.

**STRAINS HIGH IN YIELD AND ERECT PLANTS, DISTRICT 6,
NORTHWEST KANSAS**

Corn Performance Test

1945: Iowearth 29A, Maygold 99A, Pioneer 339, Pioneer 300, Steckley 100A, Maygold 49, Pioneer 332, Maygold 59, Kansas 2275, Pioneer 334, U. S. 35, Reid Nat'l. 129, Maygold 39, Hays Golden, Steckley 780, Steckley 884W, Reid Nat'l. 134, Iowearth D25, U. S. 13, Steckley 790, and Illinois 200.

Cooperative Corn Tests

1945: Pioneer 300

1943-1945, three-year average: Kansas 2234, Kansas 1583, U. S. 13, Illinois 200, and Pride of Saline.

1941-1945, five-year average: None.

KANSAS CORN TESTS, 1945

TABLE 15. RESULTS, CORN PERFORMANCE TEST, DISTRICT 6, NORTHWESTERN KANSAS, 1945.

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand	Moisture	Shelling	Ears per cwt.
		Actual	Relative ^a	Actual	Relative ^a				
		Bu.	Pct.	Pct.	Pct.				
ONE YEAR RESULTS, 1945									
1	Kansas 1801	56.5	142	99	112	99	12.8	75.7	192
2	Iowalth 29A	52.6	132	98	111	99	12.9	76.2	185
3	Local Yellow	52.6	132	82	93	96	12.4	76.7	185
4	Maygold 99A	52.9	131	100	114	96	11.1	80.0	200
Differences in yield of less than 4.5 bushels an acre are not significant in this test									
5	Kansas 1788	51.6	130	93	106	98	11.4	76.5	200
6	Kansas 1784	51.5	130	98	111	99	12.6	77.8	185
7	Kansas 9004	50.5	127	98	111	95	15.5	77.9	213
8	Kansas 1104	50.2	126	99	112	97	16.8	75.5	208
9	Kansas 1810	49.9	126	97	110	98	13.0	74.9	208
10	Pioneer 339	49.8	125	98	111	99	10.7	75.7	208
11	Pioneer 309	49.4	124	97	110	99	14.6	78.2	204
12	Steckley 100A	49.4	124	96	109	99	12.5	76.1	204
13	Maygold 49	49.0	123	97	110	99	11.3	77.3	200
14	Kansas 1806	48.7	123	100	114	99	11.7	74.9	204
15	Kansas 1740	48.4	122	98	111	95	12.5	77.7	227
16	Kansas 1624	48.1	121	92	104	98	15.6	73.2	192
17	Pioneer 332	47.9	121	97	110	97	13.9	77.9	217
18	Maygold 59	47.4	119	99	112	97	12.0	76.2	213
19	Kansas 1782	47.3	119	93	106	97	12.1	76.0	204
20	Kansas 2275	47.2	119	98	111	99	16.0	74.6	250
21	Kansas 1781	47.1	119	100	114	94	11.8	79.7	208
22	Pioneer 334	46.9	118	98	111	94	12.0	76.8	227
23	U. S. 35	46.5	117	95	108	97	12.8	77.2	217
24	Reid Nat'l. 129	46.4	117	98	111	86	13.5	74.2	204
25	Maygold 39	46.2	116	93	106	98	11.3	72.0	192
26	Kansas 1812	46.1	116	99	112	99	14.2	77.9	250
27	Kansas 2299	46.1	116	97	110	98	18.7	72.3	244
28	Kansas 1646	46.0	116	97	110	99	14.5	75.5	213
29	Kansas 9011	45.9	116	93	106	97	17.1	76.1	196
30	Hays Golden	45.9	116	89	101	96	14.6	74.7	208
31	Steckley 780	45.8	115	93	106	96	12.1	76.7	196
32	Steckley 884W	45.7	115	99	112	96	13.8	75.0	213
33	Reid Nat'l. 134	45.2	114	93	106	96	15.5	74.0	244
34	Kansas 1762A	44.8	113	99	112	96	12.3	72.2	196
35	Iowalth D25	44.8	113	98	111	92	11.6	76.3	208
36	U. S. 13	44.7	112	97	110	97	12.9	76.3	227
37	Kansas 1634	44.7	113	94	107	95	18.2	74.4	200
38	Steckley 790	44.6	112	96	109	96	13.4	72.2	208
39	Kansas 1817	44.6	112	96	109	95	13.2	76.0	208
40	Kansas 1739	44.5	112	89	101	98	14.8	72.0	200
41	Kansas 2240	44.1	111	99	112	99	15.9	66.7	238
42	Illinois 200	43.9	111	97	110	96	12.6	72.2	222
43	Kansas 9003	43.5	110	98	111	95	14.7	72.0	227
44	Kansas 9017	43.3	109	92	104	91	15.9	74.1	263
45	Kansas 1585	42.9	108	97	110	98	18.5	73.8	222
46	Kansas 9022	42.4	107	95	108	96	14.2	72.5	227
47	Kansas 2305	42.4	107	94	107	99	14.6	69.4	263
48	Steckley 888W	42.2	106	98	111	97	16.3	66.5	222
49	Kansas 2306	42.1	106	97	110	87	13.3	74.7	196
50	Kansas 9015	41.7	105	88	100	95	18.6	72.5	238
51	Kansas 2290	41.5	104	94	107	94	14.1	72.5	238
52	Kansas 2189	41.3	104	98	111	93	17.1	71.8	227
53	Kansas 2234	40.5	102	93	106	93	13.4	67.5	233
54	Pride of Saline	37.5	94	93	106	99	18.2	65.9	263
55	Reid Yellow Dent	37.0	93	90	102	98	18.2	73.0	238

^aPerformance of entry relative to the average of open-pollinated varieties.

TABLE 15. RESULTS, CORN PERFORMANCE TEST, DISTRICT 6, NORTHWESTERN KANSAS, 1945. (Concluded).

Rank in yield	Hybrid or variety	Acre yield		Erect plants		Stand	Moisture	Shelling	Ears per cwt.
		Actual	Relative*	Relative	tive* Actual				
		Bu.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	No.
56	Kansas 1583	36.0	91	92	104	98	21.2	67.0	256
57	Pride of Saline	33.8	85	95	108	99	18.1	67.6	250
58	Kansas Sunflower	31.7	80	82	93	94	24.8	64.7	256
59	Kansas 1643	30.4	77	99	112	58	15.3	71.8	213
	Av. of 59 entries	45.2		95		96	14.5	74.0	218
	Av. of 6 open pollinated varieties	39.7	100	88	100	97	17.7	73.4	233
	Av. of 53 hybrids	45.9	116	95	109	96	14.2	74.3	216

*Performance of entry relative to the average of open-pollinated varieties.

TABLE 16. RESULTS, COOPERATIVE TESTS, DISTRICT 6, NORTHWEST KANSAS

Hybrid or variety	1945 3 tests		1943-1945 17 tests		1941-1945 21 tests	
	Yield	Rank	Yield	Rank	Yield	Rank
	Bu.		Bu.		Bu.	
Pioneer 800	37.0	1	.....	.....	.....	.....
Colby Yellow Cap	31.8	2	33.1	8	.....	.....
Hays Golden	31.6	3	39.8	6	39.3	5
Kansas 2275	31.3	4	.....	.....	.....	.....
Kansas 1585	31.2	5	.....	.....	.....	.....
U. S. 13	39.5	6	43.3	3	42.8	3
Funk G-80	30.3	7	.....	.....	.....	.....
Kansas 1583	29.8	8	44.2	2	.....	.....
Kansas 2234	29.6	9	49.1	1	.....	.....
Illinois 200	29.1	10	42.8	4	48.1	2
lowealth 16	25.6	11	.....	.....	.....	.....
Pride of Saline	25.2	12	42.4	5	43.9	1
U. S. 35	24.9	13	39.1	7	39.8	4

OPEN-PEDIGREE HYBRIDS THAT ARE INCLUDED IN THE 1945 TESTS AND ARE RECOMMENDED FOR DISTRIBUTION IN KANSAS

U. S. 13	(WF9 x 38-11)	x	(Hy x L317)
U. S. 35	(WF9 x 38-11)	x	(Hy x R4)
K. I. H. 38	(R4 x Hy)	x	(L317 x 38-11)
K1583	(Kys x K201)	x	(K4 x 38-11)
K1585	(K155 x K201)	x	(K4 x 38-11)
K2234	(K41 x K55)	x	(K63 x K64)