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ILLINOIS CORN PERFORMANCE TESTS . . . *Results for 1935*

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Illinois Corn Performance Tests

Results for 1935

By G. H. Dungan, J. R. Holbert, W. J. Mumm, J. H. Bigger, and A. L. Lang[1]

BETTER STRAINS of corn are needed in all sections of Illinois—strains that not only are more resistant to lodging and capable of higher yields, but are of better quality, more resistant to disease, drouth, cold, and insect pests, and are capable of using most advantageously the available supplies of plant nutrients in the soil. Workers interested in these different phases of corn improvement are cooperating in the development and testing of many hybrids and in the distribution of seed of these hybrids and their parent strains that are best adapted to the varying conditions obtaining in the different sections of the state.

The performance tests reported herein are part of a coordinated corn-improvement program conducted by the Illinois Agricultural Experiment Station in cooperation with the Division of Cereal Crops and Diseases, Bureau of Plant Industry, U. S. Department of Agriculture, and the Illinois State Natural History Survey. The present report is the second to be published, the results of the 1934 tests having been reported in Bulletin 411 of this Station.

SCOPE OF THE TESTS

Two hundred seventy-four different kinds of corn were tested on fifteen fields in 1935. Of these, 46 were open-pollinated varieties, 26 were composite samples made by mixing equal quantities of seed collected from several farmers in the immediate neighborhood of the testing field, and 202 were hybrids. The hybrid entries were predominantly double crosses but a few three-way crosses and top crosses were also included.

In the accompanying tables these entries are grouped into two general classes designated as "Regular" and "Experimental." The

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regular entries comprize those that may be considered as being in commercial production, 100 bushels or more of seed being available for planting in 1936 or having been available in that amount in previous years. The composite samples also were placed in the regular group, since the varieties represented in these seed mixtures were being grown commercially.

In the experimental group are included those hybrids of which only small amounts of seed are available and which, for this reason, are not available for commercial planting.

The composite samples of open-pollinated corn were considered representative of the general level of the corn ordinarily grown in the community. For the most part these samples were furnished by the agricultural department of the local high school, 24 half-pint samples of untreated shelled corn being taken from different lots of seed in the neighborhood.

At least five of the best locally adapted open-pollinated varieties were included in each field except at Dundee, where there were only four open-pollinated entries. The performance of these entries furnishes a standard for evaluating that of the hybrids.

A list of the various entries and the names of those who contributed seed for them is given on pages 339 and 340.

LOCATION OF FIELDS AND SELECTION OF SOIL TYPES

Illinois extends so far north and south that it cuts across corn-growing areas having many varying characteristics. In selecting the locations for the testing fields the aim was therefore to include areas representing in a broad way the different conditions of soil and climate existing in the various sections of the state. No conscious effort was made to choose especially productive fields for these tests, but in selecting readily accessible places and good, cooperatively-minded farmers, some fields having a high productivity level were obtained.

The accompanying map (Fig. 1) shows the location of the testing fields. Some general information about these fields is given in Table 1.

In locating the test fields for 1935 an attempt was made to select soil types that occur extensively in the regions in which the tests were being made.[1] Furthermore care was used in selecting the testing area within each field to obtain as much uniformity as possible with regard

[1]Herman Wascher, Assistant Chief, Soil Survey, helped to locate the fields with respect to character of soil.

to soil type and drainage conditions. A relatively smooth portion of the field, nearly level or at most only gently sloping, was chosen in order to avoid poorly drained or eroded spots.

Twelve of the fifteen grain testing fields were on soils having a dark-colored surface horizon. Of the other three fields, two (Edgewood and Alhambra) were on claypan soils having a surface that is considered relatively dark colored for the particular region in which

FIG. 1.—LOCATION OF 1935 TESTING FIELDS

each occurs, but the results obtained should hold true for the other claypan soils in these regions. At Alhambra the tests were located on the permanent University crop experiment field, which is mapped as Putnam silt loam. "Slick spots" are numerous on this field.

General information on the soil type, drainage characteristics, and soil treatments for each testing field are given in Table 2. Drainage is described as "rapid," "moderate," and "slow." "Moderate" is used to characterize conditions of optimum drainage, that is, when the

TABLE 1.—GENERAL INFORMATION: ILLINOIS COOPERATIVE CORN PERFORMANCE TESTS, 1935

Location of field	County	Cooperator	Number of entries in test	Date planted	Date harvested	Average yield, all entries	
						Total	Sound
Grain tests						*bu.*	*bu.*
Dundee	Kane	M. G. Clark	24	June 1	Nov. 12	44.1	43.1
Stockton	Jo Daviess	Homer Curtiss	55	May 14	Nov. 19	87.1	80.9
Rochelle	Ogle	G. A. Lazier and Son	49	May 11	Nov. 20	80.4	78.4
Plainfield	Will	William Webb and Son	52	May 21	Nov. 21	86.1	84.0
Cambridge	Henry	L. L. Angevine	60	May 23	Nov. 13	102.2	98.9
Granville	Putnam	Benard Moews	59	May 17	Nov. 14	83.9	82.1
Dwight	Livingston	John Hahn	60	May 20	Nov. 5	104.0	100.8
Adair	McDonough	Harvey Herndon	76	June 4	Nov. 25	83.9	82.3
Bellflower	McLean	Chris Warsaw and Sons	74	May 30	Nov. 27	73.8	72.1
Armstrong	Vermilion	James Dewey	75	June 3	Nov. 29	96.4	93.9
Winchester	Scott	Ed. Wilson	43	June 3	Nov. 15	71.6	70.5
Sullivan	Moultrie	Charles Shuman	43	May 31	Nov. 22	52.7	49.7
Alhambra	Madison	Illinois Station, Agronomy	42	June 7	Dec. 3	52.8	49.5
Edgewood	Effingham	F. V. Wilson and Son	27	June 4	Nov. 6	48.2	47.6
Albion	Edwards	Lorin Jack and Son	31	June 6	Nov. 21	51.1	49.0
Silage tests						*tons*	*tons*
Algonquin	McHenry	Anton and Harold Suchy	24	June 1	Sept. 24	2.83	....
Urbana	Champaign	Illinois Station, Dairy	17	May 8-15	Sept. 17-24	4.43	....
Soil-adaptation tests						*bu.*	*bu.*
Sibley	Ford	Sibley Estate, Farm 45	20	May 21	Nov. 5	81.3	79.6
Sibley	Ford	Sibley Estate, Farm 92	20	May 31	Nov. 6	48.2	46.0
Urbana	Champaign	Illinois Station, S.W. rotation	18	May 26	Nov. 26	94.5	93.4
Urbana	Champaign	Illinois Station, S.C. rotation	18	May 30	Nov. 27	81.1	80.1

TABLE 2.—SOIL CHARACTERISTICS OF GRAIN TESTING FIELDS, ILLINOIS CORN PERFORMANCE TESTS

Surface drainage / Underdrainage	Surface characteristics / Subsoil characteristics	Acidity / Phosphorus	Previous crop and treatment
Northeastern			
Dundee—Miami silt loam (24)			
Moderate	Yellowish gray silt loam	Medium	Barley, manured
Moderate	Medium-plastic silty clay loam	Low	
Northern			
Stockton—Tama silt loam (36)			
Rapid	Light brown silt loam	None	Alfalfa limed,
Moderate	Slightly plastic clayey silt loam	Medium+	good rotation
Rochelle—Muscatine silt loam (41)			
Moderate	Brown silt loam	Strong	Soybeans,
Moderate	Medium-plastic silty clay loam	Low	manured
Plainfield—Brenton silt loam (149)			
Moderate to slow	Brown silt loam	Medium	Small grain,
Moderate	Medium-plastic silty clay loam	Low	good rotation
North-central			
Cambridge—Muscatine silt loam (41)			
Moderate	Brown silt loam	Medium	Clover, timothy
Moderate	Medium-plastic silty clay loam	Low	pasture
Granville—Muscatine silt loam (41)			
Moderate	Dark brown silt loam	Slight	Good rotation
Moderate	Medium-plastic silty clay loam	Low	
Dwight—Brenton silt loam (149)			
Moderate to slow	Brown silt loam	None	Soybeans,
Moderate	Medium-plastic silty clay loam	Low	heavily manured
Central			
Adair—Muscatine silt loam (41)			
Moderate to rapid	Brown to light brown silt loam	Slight	Alfalfa sod
Moderate	Slightly plastic silty clay loam	Low	
Bellflower—Drummer clay loam (152)			
Moderate to slow	Brown to black silty clay loam	Medium	Corn, soybeans
Moderate	Medium-plastic silty clay loam	Low	
Armstrong—Elliott silt loam (146)			
Moderate	Brown silt loam	None	Small grain
Slow	Medium-plastic clay loam	High	

(Table is concluded on next page)

TABLE 2.—SOIL CHARACTERISTICS OF GRAIN TESTING FIELDS, *concluded*

Surface drainage / Underdrainage	Surface characteristics / Subsoil characteristics	Acidity / Phosphorus	Previous crop and treatment
	South-central		
Winchester—Littleton silt loam, terrace (81)			
Moderate to slow	Brown silt loam	.....	Corn
Moderate	Medium-plastic silty clay loam	.....	
Sullivan—Floyd silt loam (154)			
Moderate	Brown silt loam	.....	Soybeans
Moderate	Medium-plastic silty clay loam	.....	
	Southern		
Alhambra—Putnam silt loam, slick spots (112)			
Slow	Brownish gray silt loam, numerous gray spots	None	Good rotation, limestone,
Very slow	Plastic clay loam	High	phosphate
Edgewood—Cisne silt loam, deep phase (166)			
Moderate to slow	Gray silt loam	None	Manure
Slow	Medium-plastic clay loam	Low	
	Southeastern		
Albion—Bonpas silty clay loam, terrace (126)			
Moderate to slow	Black silty clay loam	None	Sweet clover
Moderate	Medium-plastic silty clay loam	.....	

slope of the land is such as to furnish satisfactory run-off with a minimum of erosion. Moderate underdrainage indicates relatively free movement of excess ground water to tile but retention of sufficient moisture for normal plant growth. "Rapid" surface drainage indicates a tendency to erode, while "slow" indicates slow surface movement, which condition, however, may not necessarily be harmful if underdrainage is good and tile have been provided. Rapid underdrainage would indicate the existence of a drouthy condition, while slow underdrainage indicates that the subsoil is sufficiently impervious to the movement of moisture to be harmful.

SEASONAL CONDITIONS

The growing season of 1935 was characterized by extremely unfavorable weather conditions in both spring and fall. Thruout most of the state corn planting was very much delayed by a cold, wet period lasting from the middle of April until almost the first of June, altho in the northern and northeastern sections of the state this difficulty was

not serious. The planting dates recorded in Table 1 reflect the influence of the late spring.

After planting, growing conditions were generally favorable. A period of scant rainfall occurred during July and August, but there was apparently enough soil moisture for vigorous development of the plants. On September 28 the minimum temperature in central Illinois was 32° F. Another cool period occurred during the first week in October. On October 4 the minimum was 25° F. On October 6 it was 24° F. This freezing stopped the development of most of the varieties and hybrids and materially shortened the growing season.

Seasonable weather followed the cold period, but November and December were wet and cold. Harvesting was seriously interfered with, and a poor quality of grain resulted wherever corn was lodged.

Altho the moisture content of the corn was high during the autumn, and many of the ears in the central and southern sections of the state were on the ground as a result of severe lodging, the amount of corn damaged by ear rots was much below normal. The most injury occurred in the northern section.

INSECT PROBLEMS

The chinch bug, which so reduced corn yields in 1934, was checked by the unusual seasonal conditions of April, May, and June, 1935, and did not become a serious handicap to corn production. The same seasonal conditions were, however, favorable to the development of another insect pest, the southern corn rootworm, *Diabrotica duodecimpunctata* Fab. This insect is usually abundant during wet seasons and the years following wet seasons. It was abundant at Cambridge and in the entire central, south-central, and southern sections of the state. In these fields the lodging which occurred was largely caused by rootworm injury, altho some of it was due to stalk breaking.

The southern corn rootworm hibernates as an adult and emerges during April and May to deposit its eggs in fields where a crop is growing. The crop may be grass, clover, alfalfa, sweet clover, a weed patch, or early corn. Wet fields or wet spots in fields are preferred. When fields where eggs have been deposited are plowed up and corn planted within a week or two, the larvae attack the small corn plants, eating on the roots and base of the stalk and often burrowing into the heart and killing the growing point. At this stage the rootworm larva is commonly known as the "budworm" and may be responsible for killing much corn in a field. Feeding on the corn roots continues until

the middle of July. This later feeding cuts off much of the root system and opens the way for the entrance of root rot organisms which complete the killing of the root in disease-susceptible varieties or hybrids. During August affected plants will lodge badly.

The southern corn rootworm is not controlled by crop rotation nor by generally accepted soil-improvement practices. It may be partially controlled by fall or early spring plowing, followed by frequent cultivation and delayed planting. In 1935 many hybrids proved resistant to the attack of this insect.

Many hybrids were also both resistant to rootworm and high yielding. Illinois Hybrids 360 and 960, for example, were resistant to lodging and produced large yields of sound corn both in the central and in the north-central sections of the state. Furthermore, the 1935 results taken in conjunction with the 1934 records[1] reveal that certain hybrids, such as Illinois Hybrid 172, not only were high yielding and resistant to rootworms but also resistant to chinch bugs. Certain others, such as Illinois Hybrid 391, were high yielding and resistant to chinch bugs but were susceptible to lodging following rootworm attack.

Thus these corn performance tests are demonstrating, among other things, the most desirable strains of corn to use where certain insects must be coped with.

EXPERIMENTAL METHODS

The methods of conducting the 1935 tests were similar to those used in 1934, but the method of expressing the relative performance rating differs somewhat from that of the previous year, being somewhat simpler. The planting and rating methods are described below.

Method of Planting

In order that the trials might be carried on under actual farm conditions, the test plots were located within a larger cornfield. The test corn was planted by hand on the day the rest of the field was planted. The rows were joined with those of the surrounding corn so that the test plots could be cultivated along with the rest of the field.

On most fields each entry (variety or hybrid) occupied 10 plots, each plot being 12 hills long and 2 rows wide. The planting arrangement shown in Fig. 2 is typical of that used in the tests where there were 10 series of plots. Each entry occurred once in each series, with the exception of a few that were planted for a preliminary test and

[1]Reported in Bulletin 411 of this Station.

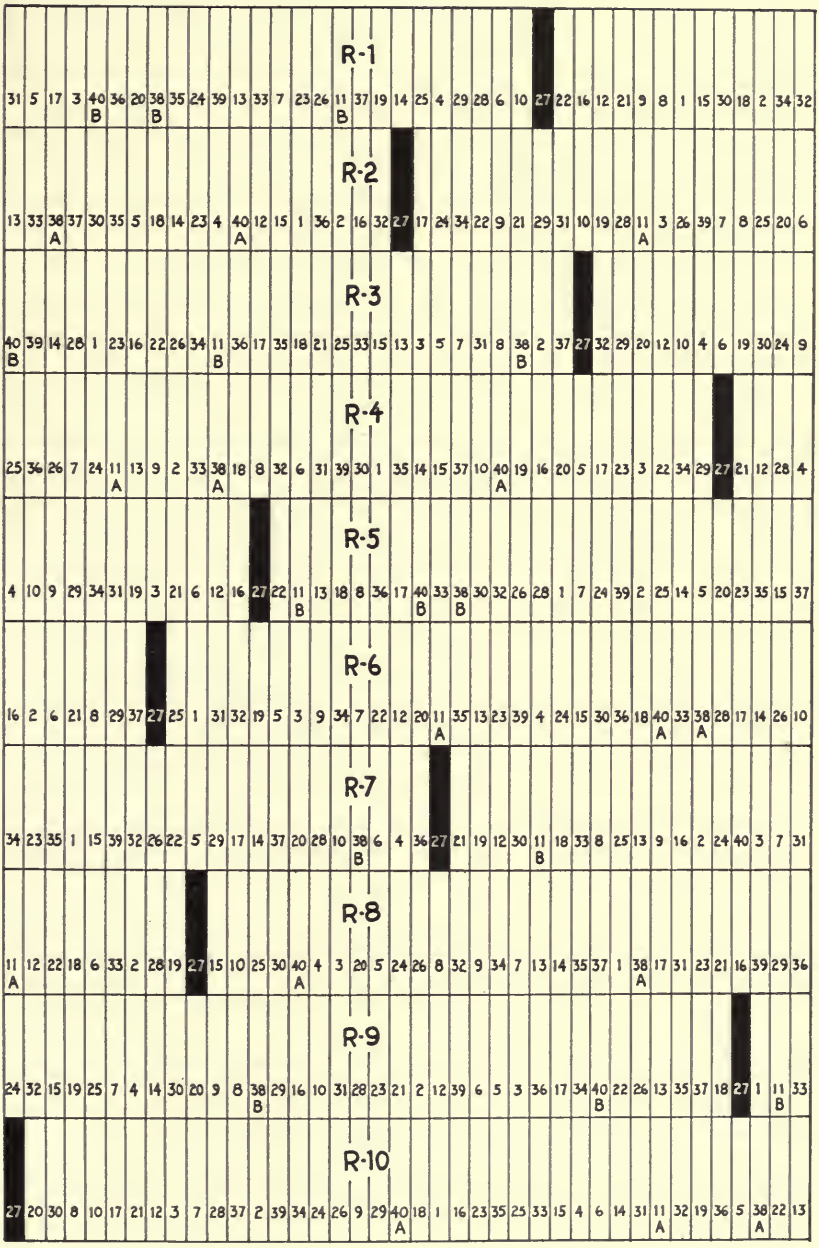

FIG. 2.—DISTRIBUTION OF ENTRIES IN A PERFORMANCE TEST

appeared only once in each alternate series. In order to prevent the possibility of all the replications of an entry falling toward one side of the test field, the field was divided crosswise into 10 equal divisions, not shown in the diagram, and each entry appeared once in each of these divisions. Plot 27 has been blackened to show how, by this plan, the 10 replications of a single entry were distributed over the field and occurred also between different entries in the different replications.

Measuring Performance of Entries

Departing somewhat from the method followed in 1934, the entries were rated in 1935 according to two measures of performance—lodging resistance (ability to stand up) and yield of sound corn.

Lodging Resistance.—Lodging resistance was measured in the following way. Just before harvest each plot on the field was examined and the percentage of erect plants estimated. This method did not separate lodging due to broken stalks from that due to weak roots. Stalks broken above the ears but otherwise erect were considered as erect. The percentage of erect plants for a given entry was then computed from the estimates of all the replications of that entry. The rating on relative lodging resistance is the ratio, expressed as percentage, of the percentage of erect plants for that entry to the average percentage of erect plants for all the entries on the field.

Sound Yield.—In order to get as good a measure as possible of the resistance of the entries to ear rot, the corn in the grain tests was harvested late in the season. The entire yield from one replication, and in some cases from two replications, of each entry was shelled to determine shelling percentage. The corn was usually shelled on the day it was husked. In some cases, however, the ears were too moist to shell at harvest time, and these were dried with forced heated air and shelled later. All the shelled corn from a plot was poured thru a divider and a representative sample amounting to one-eighth of the original quantity obtained. This sample was divided into two equal lots, one of which was used for a moisture test, and the other dried and reserved for a determination of damaged corn.

Most of the moisture determinations were made with a Tag-Heppenstall moisture meter within a few days after the samples were taken. The corn from a few fields was too high in moisture to be tested by this apparatus. When this occurred the moisture was determined by drying in an electric oven at 100° C. for 48 hours.

The samples taken for determination of damaged corn were stored for a time in a heated dryer. The percentage of damaged kernels,

by weight, was determined in a 200-gram sample of the grain, using the methods accepted for the determination of the Federal Grain Grades.[1]

Data obtained over a period of years indicate that this method of determining the percentage of rotted grain and commercially sound grain gives more accurate and dependable results than ear counts. These data and a fuller description of the method have been published in a paper by Hoppe and Holbert.[2]

The acre-yield of sound corn was computed from the total acre-yield and the percentage of sound corn.

The rating on sound yield is the ratio, expressed as percentage, of the yield of sound corn for that entry to the average yield of sound corn for all the entries on the field.

General Performance Rating.—In computing the general performance rating of an entry, the ratings for lodging resistance and sound corn were averaged, but the sound-corn rating was given three times the weight of the rating on lodging resistance, since differences in yield are more important than differences in lodging resistance.

RESULTS OF PERFORMANCE TESTS

In interpreting the results of tests such as these, one must keep in mind that a difference of one or two bushels in one year's yield of a given entry is not enough to insure that the entry will give consistently higher yields than another. This is indicated by the varying results from the different fields in a given section—a given entry will usually shift its rank to some extent, altho if high in one test it will probably be high in the other tests also, and the same holds true for the low-yielding entries. The statistical method used in analyzing the data for these tests (analysis of variance) indicates, however, that an entry which yields 5 bushels more than another is almost certainly superior to the other.

However, no matter how carefully a performance test is conducted, the results should be regarded as relative and not absolute. Just because an entry is not at the top in performance every year is no indication that it is not worth growing. The entries most likely to be satisfactory for commercial production are those that give consistently

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[1]Most of these separations were made under the supervision of P. E. Hoppe, Plant Pathologist, U. S. Department of Agriculture, Madison, Wisconsin.

[2]HOPPE, P. E., and HOLBERT, J. R. Methods used in the determination of relative amounts of ear rot in dent corn. Jour. Amer. Soc. Agron. **28**, 810-819. 1936.

good performance with respect to yield and grain and stalk quality over a period of years. Many of the 1935 entries were enough higher than the average to make them worth growing even tho they were not at the top in performance rating.

RESULTS OF GRAIN TESTS

(Tables 3 to 10, pages 296-309)

Data on total yield of grain, sound corn, damaged corn, moisture in corn at harvest, and percentage of erect plants, together with performance ratings, are summarized in Tables 3 to 9, starting with the tests made in northeastern Illinois and moving south. More detailed data by individual fields, where more than one field was included in an area, are given in the Appendix, Tables 19 to 31.

A good standard with which to measure the performance of hybrid corn is the performance of adapted open-pollinated varieties commonly grown in the community. Data of this kind are summarized in Table 10, where the five highest hybrids on the fifteen fields are shown in comparison with the five best open-pollinated varieties.

In average yield of sound corn the five best hybrids exceeded the five best open-pollinated varieties by the following amounts per acre: 12.7 bushels in the northeast section; 17.6 in the northern section; 20.3 in the north-central section; 18.2 in the central section; 12.0 in the south-central section; 6.9 in the southern section; and 6.0 bushels in the southeastern section.

Thus while the best hybrids showed the greatest superiority in the north-central and central sections, in all sections they exceeded the yield of the adapted open-pollinated varieties sufficiently to indicate their possibilities. The best hybrids on the fifteen fields averaged 15 bushels of sound corn better than the adapted open-pollinated entries, and their general performance rating was greater by 24.3 points.

RESULTS OF SOIL-ADAPTATION TESTS

(Tables 11 and 12, pages 310-313)

Some of the better hybrids and open-pollinated varieties included in the regular performance tests in 1935 were tried out also on soils of different corn-producing capacities. The differences in the productivity of the plots was due either to characteristics inherent in the soil itself or to farming practices or to both.

Tests were made at Sibley on Elliott silt loam, a relatively poor corn soil, and at Urbana on Muscatine silt loam, a relatively good corn soil. At each location three fields were selected where previous

corn records indicated comparatively low, medium, and high productivity. The data from only the high and low fields at each location are reported here, however, because the intermediate level was very near the high level in performance.

In the Sibley test (Table 11) the high level of productivity is represented by Farm 45 and the lower level by Farm 92. The area selected for the test on Farm 92 was higher, more eroded, and a much poorer grade of Elliott silt loam than that selected on Farm 45. The open-pollinated corn on Farm 92 yielded an average of 45.7 bushels of sound corn an acre. The average yield of all entries, including 17 hybrids and 3 open-pollinated varieties, was only 46 bushels. In rating, as well as in yield of sound corn, the open-pollinated varieties ranked well among the hybrids. The highest yielding hybrid was only 6.2 bushels higher than a composite of open-pollinated corn produced by farmers on the Sibley Estate. Because of a favorable season the average yield of this area was much higher than would normally be expected.

On Farm 45 the total average yield for all the entries was 7.4 bushels more sound corn to the acre than the average yield of the open-pollinated entries. The best hybrid yielded 16.1 bushels more than the best open-pollinated variety.

The two areas selected for the Urbana tests (Table 12) are different in productivity because of the long-continued use of rotations which differ in their influence on production. Corn, oats, clover, and wheat, with a clover catch crop in the wheat, make up the Southwest rotation. Corn, corn, corn, and soybeans constitute the South-Central rotation. More limestone has been applied to the Southwest rotation; otherwise the supplementary treatments on these two areas have been very similar.

In the South-Central rotation the performances of the entries were very similar to those on Farm 45 at Sibley. The open-pollinated varieties averaged 68 bushels of sound corn, or 12.1 bushels less than the average of all entries.

In the Southwest rotation the open-pollinated varieties yielded an average of 76 bushels, or 17.4 bushels less than the average of all entries; the best hybrid yielded 28 bushels more than the best open-pollinated entry. On the highly fertile land of this rotation area the lowest hybrid yield of sound corn was 6.0 bushels more than the best open-pollinated yield; whereas on the poorer soil of Farm 92 at Sibley the lowest hybrid yield was 13.7 bushels an acre less than the best open-pollinated yield.

(Further discussion of silage tests will be found on page 314)

TABLE 3.—NORTHEASTERN ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS AT DUNDEE, 1935

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating[c]
		Total	Sound				Lodging resistance[a]	Sound yield[b]	
	Regular division—entries in commercial production								
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
1	DeKalb Hybrid 3A	57.5	56.8	1.22	34.1	85.0	109.4	131.5	126.0
2	Webb Will County Favorite	52.3	51.1	2.29	36.7	45.0	57.9	118.3	103.2
3	Illinois Hybrid 368	43.3	40.5	6.47	33.8	80.0	103.0	93.7	96.0
4	Gunn Western Plowman	41.7	41.2	1.20	32.0	66.7	85.9	95.4	93.0
●	Average of 4 best open-pollinated var.	41.6	40.9	1.68	31.2	63.0	81.1	94.6	91.3
5	Eckhardt Golden King	37.0	36.3	1.89	25.1	68.3	87.9	84.0	85.0
6	Greenlee Yellow Dent	35.4	34.9	1.41	30.9	72.0	92.7	80.8	83.8
	Average of division	44.5	43.5	2.25	32.1	69.5	89.5	100.6	97.8

TABLE 3.—*Concluded*

	Experimental division—entries *not* in commercial production								
1	Wisconsin Hybrid 11	54.7	54.4	.55	29.1	93.3	120.1	125.9	124.5
2	Wisconsin Hybrid 570	56.9	56.3	1.05	29.2	75.0	96.5	130.3	121.9
3	Wisconsin Hybrid 9	51.7	51.0	1.35	28.3	83.3	107.2	118.0	115.3
4	Illinois Hybrid 746	50.7	49.5	2.37	31.3	87.5	112.6	114.6	114.1
5	Wisconsin Hybrid 10	51.9	50.9	1.93	27.7	75.0	96.5	117.8	112.5
6	Wisconsin Hybrid 525	46.0	45.7	.65	23.2	90.0	115.8	105.9	108.4
7	DeKalb Hybrid 84	46.9	46.3	1.28	24.0	80.0	103.0	107.2	106.2
8	DeKalb Hybrid 93	49.5	47.5	4.04	32.5	70.0	90.1	109.9	105.0
9	DeKalb Hybrid 113	42.9	42.5	.93	21.2	92.5	119.1	98.4	103.6
10	Illinois Hybrid 766	43.2	41.5	3.94	36.6	92.5	119.1	96.1	101.9
11	Wisconsin Hybrid 12	44.0	43.6	.91	28.5	76.7	98.7	100.9	100.4
12	DeKalb Hybrid 38	39.3	39.0	.76	38.3	90.0	115.8	90.3	96.7
13	DeKalb Hybrid 81	45.1	44.0	2.44	31.0	60.0	77.2	101.8	95.7
14	Wisconsin Hybrid 531	40.2	40.1	.25	26.0	70.0	90.1	92.8	92.1
15	Illinois Hybrid 44	37.5	35.5	5.33	36.6	85.0	109.4	82.2	89.0
16	DeKalb Hybrid 210	35.3	33.9	3.97	31.8	85.0	109.4	78.5	86.2
17	Illinois Hybrid 29	35.1	33.2	5.41	36.6	81.7	105.2	76.8	83.9
18	DeKalb Hybrid 372	20.4	20.1	1.47	36.6	60.0	77.2	46.5	54.2
	Average of division	44.0	43.0	2.27	30.5	80.4	103.5	99.7	100.6
	Average of all entries	44.1	43.1	2.27	30.9	77.7	....	....	....

[a]The performance rating for lodging resistance is expressed as the ratio of the percentage of erect plants in the entry to the average percentage of erect plants in all entries of the division.

[b]The performance rating for sound-corn yield is expressed as the ratio of the sound-corn yield of the entry to the average sound-corn yield of all entries.

[c]General performance rating is an average of lodging resistance (percentage) and sound-corn yield (percentage), with sound-corn yield given three times the weight of lodging resistance.

TABLE 4.—NORTHERN ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS AT STOCKTON, ROCHELLE, AND PLAINFIELD, 1935
(Average of triplicated entries—for data for individual fields see pages 324 to 326)

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
	Regular division—entries in commercial production								
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
1	Illinois Hybrid 366	95.2	93.1	2.21	22.5	84.2	102.2	113.4	110.6
2	Illinois Hybrid 368	95.6	93.6	2.09	21.7	80.2	97.3	114.0	109.8
3	Illinois Hybrid 172	97.0	92.1	5.05	22.6	84.0	101.9	112.2	109.6
4	Pioneer Hi-Bred 323	95.6	91.3	4.50	21.2	78.3	95.0	111.2	107.2
5	DeKalb Hybrid 3A	87.8	85.9	2.16	21.0	86.3	104.7	104.6	104.6
6	Pioneer Hi-Bred 311	92.3	85.1	7.80	21.0	86.5	105.0	103.7	104.0
7	Iowa Hybrid 931	89.0	86.8	2.47	20.5	78.4	95.1	105.7	103.1
8	Funk Hybrid 215	88.4	83.0	6.11	23.7	84.2	102.2	101.1	101.4
9	Funk Hybrid 214	83.2	79.7	4.21	24.0	85.2	103.4	97.1	98.7
10	Simmons Will County Favorite	84.2	82.6	1.90	21.5	71.9	87.3	100.6	97.3
11	Pioneer Hi-Bred 351	79.7	76.0	4.64	21.2	91.2	110.7	92.6	97.1
12	Webb Will County Favorite	81.8	79.3	3.06	21.8	70.4	85.4	96.6	93.8
13	Eckhardt Western Plowman	80.2	77.2	3.74	21.5	76.0	92.2	94.0	93.6
•	Average of 5 best open-pollinated var.	79.2	76.9	2.90	21.7	73.2	88.8	93.7	92.5
14	Evans Will County Favorite	75.0	72.6	3.20	21.6	74.6	90.5	88.4	88.9
15	Gunn Western Plowman	74.8	72.9	2.54	22.2	72.9	88.5	88.8	88.7
16	Community composite (Semesan Jr.)	75.7	72.5	4.23	22.0	68.9	83.6	88.3	87.1
17	Community composite (Barbak)	73.3	71.2	2.86	21.9	71.3	86.5	86.7	86.7
18	Community composite (untreated)	71.6	68.5	4.33	21.9	68.2	82.8	83.4	83.3
	Average of division	84.5	81.3	3.79	21.9	78.5	95.2	99.0	98.1

TABLE 4.—*Concluded*

	Experimental division—entries *not* in commercial production								
1	*DeKalb Hybrid 93	100.6	98.1	2.49	21.4	75.2	91.3	119.5	112.5
2	*Illinois Hybrid 586	93.9	91.0	3.09	21.7	91.4	110.9	110.8	110.8
3	*Illinois Hybrid 751	93.5	90.4	3.32	23.5	92.3	112.0	110.1	110.6
4	*National Hybrid 9	94.0	90.9	3.30	22.5	83.1	100.8	110.7	108.2
5	*DeKalb Hybrid 97	92.3	89.5	3.03	22.4	86.2	104.6	109.0	107.9
6	Illinois Hybrid 570	92.2	89.2	3.25	23.5	86.7	105.2	108.6	107.8
7	*DeKalb Hybrid 104	92.1	89.0	3.37	21.7	84.6	102.7	108.4	107.0
8	*Wisconsin Hybrid 4	88.3	86.5	2.04	22.3	89.4	108.5	105.4	106.2
9	*DeKalb Hybrid 119	90.9	88.1	3.08	22.4	82.5	100.1	107.3	105.5
10	*Wisconsin Hybrid 7	89.9	87.0	3.23	22.4	81.7	99.2	106.0	104.3
11	*Pioneer Hi-Bred 439	87.1	84.0	3.56	20.7	88.9	107.9	102.3	103.7
12	*Wisconsin Hybrid 2	85.9	83.2	3.14	21.1	85.2	103.4	101.3	101.8
13	*Pioneer Hi-Bred 2086A	86.5	82.4	4.74	20.6	86.5	105.0	100.4	101.6
14	*Pioneer Hi-Bred 2123	85.5	80.8	5.50	22.0	90.5	109.8	98.4	101.3
15	*DeKalb Hybrid 118	87.2	83.8	3.90	22.6	80.0	97.1	102.1	100.9
16	*Wisconsin Hybrid 5	80.3	79.3	1.25	21.1	93.5	113.5	96.6	100.8
17	*Wisconsin Hybrid 8	84.6	77.9	5.56	23.3	89.3	108.4	94.9	98.3
18	*Ohio Hybrid 4	84.6	81.4	3.78	21.7	77.3	93.8	99.1	97.8
19	*Iowealth Hybrid B. J	83.9	78.9	5.96	21.9	83.4	101.2	96.1	97.4
20	*Wisconsin Hybrid 3	78.8	77.2	2.03	20.7	87.2	105.8	94.0	97.0
21	*Ohio Hybrid 5	85.5	79.7	6.78	23.0	70.6	85.7	97.1	94.3
21	*Pioneer Hi-Bred 2113	80.0	74.8	6.50	21.5	85.5	103.8	91.1	94.3
22	*Iowealth Hybrid B. C	84.2	74.1	12.00	23.2	86.8	105.3	90.3	94.1
23	*Ohio Hybrid 3	68.9	64.3	6.68	21.6	86.3	104.7	78.3	84.9
24	*DeKalb Hybrid 410	64.7	63.3	2.16	23.3	84.8	102.9	77.1	83.6
	Average of division	86.2	82.6	4.18	22.1	85.2	103.3	100.6	101.3
	Average of all entries	85.5	82.1	3.98	22.0	82.4	....	....	....

*Average of 13 plots instead of 26.

TABLE 5.—NORTH-CENTRAL ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS AT CAMBRIDGE, GRANVILLE, AND DWIGHT, 1935

(Average of triplicated entries—for data for individual fields see pages 327 to 329)

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
	Regular division—entries in commercial production								
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
1	Illinois Hybrid 360	109.8	107.9	1.73	21.1	89.3	105.0	114.9	112.4
2	Illinois Hybrid 366	106.5	104.1	2.25	20.2	98.7	116.1	110.8	112.1
3	Illinois Hybrid 364	108.5	106.0	2.30	20.3	84.0	99.2	112.8	109.4
4	Illinois Hybrid 360A	106.0	103.7	2.17	20.7	89.6	105.3	110.4	109.1
5	Pfister Hybrid 4857	105.7	103.4	2.18	19.8	85.4	100.4	110.1	107.7
6	Illinois Hybrid 384	100.0	99.1	.90	20.0	92.2	108.4	105.5	106.2
7	Pfister Hybrid 584	102.7	100.4	2.24	20.0	82.4	96.8	106.9	104.4
7	Illinois Hybrid 172	99.6	97.5	2.11	19.9	90.3	106.1	103.8	104.4
8	Funk Hybrid 220	94.9	93.6	1.37	21.1	97.4	114.5	99.6	103.3
9	Iowa Hybrid 939	98.0	92.8	5.31	20.6	90.0	105.8	98.8	100.6
10	Morgan-Wallace Hybrid 111	95.7	92.1	3.76	19.2	87.9	103.3	98.0	99.4
11	Funk Hybrid 214	92.8	91.6	1.29	20.8	89.0	104.6	97.5	99.3
12	Morgan-Wallace Hybrid 105	96.2	92.1	4.26	19.1	87.3	102.6	98.0	99.2
13	Funk Hybrid 215	92.5	91.0	1.62	20.9	86.4	101.6	96.9	98.1
14	Pioneer Hi-Bred 306	99.7	93.9	5.82	20.0	78.1	91.8	100.0	98.0
15	Iowa Hybrid 942	98.1	93.0	5.20	19.6	80.3	94.4	99.0	97.9
16	Morgan-Wallace Hybrid 106	94.8	90.9	4.11	20.0	84.8	99.7	96.8	97.5
17	Iowa Hybrid 13	100.1	92.8	7.29	20.5	79.1	93.0	98.8	97.4
18	Morgan-Wallace Hybrid 104	93.3	90.2	3.32	19.5	85.3	100.3	96.0	97.1
18	Funk Hybrid 206	91.1	89.2	2.09	21.6	87.8	103.2	95.0	97.1
19	Pioneer Hi-Bred 311A	96.5	87.0	9.84	19.4	90.6	106.5	92.6	96.1
20	Hulting Yellow Dent	94.7	92.1	2.75	20.5	75.0	88.2	98.0	95.6
21	Funk Hybrid 208	91.5	89.8	1.86	21.0	80.9	95.1	95.6	95.5
22	Iowealth Hybrid B	94.6	85.6	9.51	21.5	88.5	104.0	91.1	94.3
23	Pioneer Hi-Bred 311	90.6	84.3	6.95	19.3	89.9	105.7	89.7	93.7
24	Morgan-Wallace Hybrid 138	87.6	83.2	5.02	19.9	87.5	102.8	88.6	92.2
25	Iowealth Hybrid C	90.9	83.2	8.47	21.9	85.8	100.8	88.6	91.7
26	McKeighan Yellow Dent	89.5	85.3	4.69	22.6	76.7	90.1	90.8	90.6

TABLE 5.—*Concluded*

•	Average of 5 best open-pollinated var.	89.7	86.9	3.12	21.2	67.3	79.1	92.5	89.2
27	Original Krug	90.7	88.4	2.54	22.1	60.1	70.6	94.1	88.2
28	Roeschley Yellow Dent	90.9	87.7	3.52	20.9	58.4	68.6	93.4	87.2
29	Community composite (Semesan Jr.)	88.1	85.2	3.29	20.8	64.5	75.8	90.7	87.0
30	Queen of the Field	82.8	81.1	2.05	20.1	66.1	77.7	86.3	84.2
31	Community composite (untreated)	84.4	81.6	3.32	21.8	64.5	75.8	86.9	84.1
32	Community composite (Barbak)	84.5	81.6	3.43	21.4	60.7	71.3	86.9	83.0
	Average of division	95.4	91.8	3.77	20.5	82.2	96.6	97.7	97.5
	Experimental division—entries *not* in commercial production								
1	*Illinois Hybrid 960	113.7	107.5	5.45	21.5	89.3	105.0	114.4	112.1
2	*Moews Hybrid 32	109.6	106.9	2.46	22.0	84.1	98.8	113.8	110.1
2	*Iowa Hybrid 3110	107.8	105.4	2.23	20.7	88.3	103.8	112.2	110.1
3	*Illinois Hybrid 936	103.1	101.4	1.65	21.4	94.3	110.8	107.9	108.6
4	*Illinois Hybrid 751	102.6	101.1	1.46	20.8	94.7	111.3	107.6	108.5
5	*U. S. Hybrid 38	104.2	101.9	2.21	21.0	91.8	107.9	108.5	108.4
6	*Moews Hybrid 22	105.9	102.6	3.12	21.7	89.1	104.7	109.2	108.1
7	Illinois Hybrid 371	105.8	102.6	3.02	20.4	88.8	104.4	109.2	108.0
7	Illinois Hybrid 570	103.3	101.7	1.55	20.2	91.0	107.0	108.3	108.0
8	Illinois Hybrid 754	99.9	97.8	2.10	21.0	90.7	106.6	104.1	104.7
9	*U. S. Hybrid 44	100.9	96.2	4.66	21.9	94.5	111.1	102.4	104.3
9	*Illinois Hybrid 571	98.6	97.2	1.42	21.3	90.9	106.8	103.5	104.3
10	*Moews Hybrid 30	99.9	98.0	1.90	21.1	86.5	101.7	104.3	103.7
11	*Indiana Hybrid 642	98.1	96.0	2.14	19.2	91.5	107.6	102.2	103.6
12	Illinois Hybrid 372	97.5	95.7	1.85	20.2	90.1	105.9	101.9	102.9
13	*Pioneer Hi-Bred 3010	98.7	94.0	4.76	21.8	92.3	108.5	100.1	102.2
14	*Moews Hybrid 24	97.2	95.0	2.26	21.2	87.8	103.2	101.1	101.6
15	*Illinois Hybrid 574	101.9	94.7	7.07	21.6	86.7	101.9	100.8	101.1
16	*Indiana Hybrid 620	95.5	92.0	3.66	20.4	91.9	108.0	97.9	100.4
17	*DeKalb Hybrid 97	91.3	89.9	1.53	20.4	91.4	107.4	95.7	98.6
18	Funk Hybrid 225	93.4	90.7	2.89	22.6	80.2	94.3	96.6	96.0
19	Pfister Hybrid 4857 (2d generation)	86.9	85.1	2.07	20.1	78.1	91.8	90.6	90.9
20	*Pioneer Hi-Bred 2218A	88.0	80.2	8.86	21.2	91.1	107.1	85.4	90.8
	Average of division	100.2	97.1	3.09	21.0	89.4	105.0	103.4	103.8
	Average of all entries	97.3	93.9	3.49	20.7	85.1	....	....	....

*Average of 15 plots instead of 30.

TABLE 6.—CENTRAL ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS AT ADAIR, BELLFLOWER, AND ARMSTRONG, 1935
(Average of triplicated entries—for data for individual fields see pages 330 to 334)

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
	Regular division—entries in commercial production								
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
1	Illinois Hybrid 360	93.1	91.9	1.29	20.6	72.8	108.0	110.3	109.7
2	Illinois Hybrid 360A	94.4	93.0	1.48	20.7	66.8	99.1	111.6	108.5
3	Illinois Hybrid 384	85.1	84.4	.82	20.2	87.5	129.8	101.3	108.4
4	Pfister Hybrid 4857	89.6	88.7	1.00	20.3	64.7	96.0	106.4	103.8
5	Illinois Hybrid 172	85.4	84.1	1.52	19.6	72.8	108.0	100.9	102.7
6	Pfister Hybrid 584	89.2	87.7	1.68	20.3	61.3	90.9	105.2	101.6
7	Pioneer Hi-Bred 311	82.8	81.0	2.17	18.5	75.8	112.5	97.2	101.0
8	Illinois Hybrid 543	85.0	84.0	1.18	22.4	66.5	98.7	100.8	100.3
9	Funk Hybrid 220L	82.0	80.6	1.71	21.2	73.1	108.5	96.7	99.7
10	Pioneer Hi-Bred 307A	84.1	82.3	2.14	20.6	65.1	96.6	98.8	98.3
11	Funk Hybrid 220	80.7	79.6	1.36	21.8	68.8	102.1	95.5	97.2
12	Pioneer Hi-Bred 306	86.3	83.8	2.90	19.9	57.5	85.3	100.6	96.8
13	Iowa Hybrid 13	87.2	83.1	4.70	21.0	56.6	84.0	99.8	95.9
14	Pioneer Hi-Bred 311A	81.5	78.3	3.93	19.0	67.6	100.3	94.0	95.6
15	Funk Hybrid 206	76.6	75.3	1.70	22.7	67.8	100.6	90.4	93.0
16	Funk Hybrid 208	75.9	74.5	1.84	21.8	60.5	89.8	89.4	89.5
17	McKeighan Yellow Dent	76.1	74.2	2.50	24.2	57.0	84.6	89.0	88.0
18	Original Krug	79.4	78.1	1.64	21.8	42.7	63.4	93.7	86.1
19	Station Yellow Dent	76.0	74.3	2.24	23.0	46.8	69.4	89.2	84.3
•	Average of 5 best open-pollinated var.	75.4	73.4	2.65	23.6	45.1	66.9	88.1	82.8
20	Mountjoy Yellow Dent	75.5	74.1	1.85	23.5	41.8	62.0	88.9	82.2
21	Stiegelmeier Yellow Dent	69.9	66.5	4.86	25.4	37.2	55.2	79.8	73.7
	Average of division	82.7	81.0	2.06	21.5	62.4	92.0	97.1	96.0
	Experimental division—entries *not* in commercial production								
1	*U. S. Hybrid 44	96.0	94.9	1.15	21.6	76.0	112.8	113.9	113.6
2	*Illinois Hybrid 729	92.3	91.1	1.30	20.2	83.6	124.0	109.3	113.0
3	*Illinois Hybrid 960	98.2	95.7	2.55	21.7	71.1	105.5	114.8	112.5
4	*Illinois Hybrid 793	92.6	90.4	2.38	22.7	75.8	112.5	108.5	109.5
5	*U. S. Hybrid 57	91.2	89.3	2.08	21.9	73.9	109.6	107.2	107.8
6	*Illinois Hybrid 934	86.7	85.0	1.96	22.1	84.1	124.8	102.0	107.7
7	*Illinois Hybrid 775	84.1	83.1	1.19	20.9	88.2	130.9	99.7	107.5
8	*Pioneer Hi-Bred 2088	88.8	87.3	1.69	19.6	77.3	114.7	104.8	107.3
9	*U. S. Hybrid 38	87.2	85.9	1.49	21.9	80.5	119.4	103.1	107.2
10	Illinois Hybrid 546	88.1	86.1	2.27	22.8	79.4	117.8		

TABLE 6.—*Concluded*

11	*Illinois Hybrid 371	87.9	86.8	1.25	20.8	77.0	114.2	104.2	106.7
12	*Iowa Hybrid 3110	93.1	92.3	.86	21.6	63.4	94.1	110.8	106.6
13	*Pioneer Hi-Bred 2111	89.5	86.8	3.02	20.9	75.1	111.4	104.2	106.0
14	*Illinois Hybrid 372	82.4	81.6	.97	19.9	84.9	126.0	97.9	104.9
15	*U. S. Hybrid 33	87.0	85.2	2.07	21.9	75.6	112.2	102.2	104.7
16	*Illinois Hybrid 46	83.5	81.4	2.51	19.6	83.8	124.3	97.7	104.4
17	*Indiana Hybrid 634	87.0	85.4	1.84	21.6	73.3	108.8	102.5	104.1
18	Illinois Hybrid 710	91.1	88.7	2.63	24.7	65.3	96.9	106.4	104.0
19	Indiana Hybrid 632	83.8	81.4	2.86	22.0	82.5	122.4	97.7	103.9
20	*Pioneer Hi-Bred 2011	86.8	84.4	2.76	21.4	74.6	110.7	101.3	103.7
20	*Indiana Hybrid 631	86.1	83.9	2.56	22.0	75.8	112.5	100.7	103.7
21	Illinois Hybrid 936	85.2	83.9	1.53	21.6	75.0	111.3	100.7	103.4
22	*Illinois Hybrid 737	82.8	81.5	1.57	21.9	79.6	118.1	97.8	102.9
23	Illinois Hybrid 754	83.8	82.8	1.19	21.7	76.2	113.1	99.4	102.8
24	Funk Hybrid 207	90.0	87.6	2.67	21.8	62.8	93.2	105.2	102.2
25	Indiana Hybrid 643	88.6	86.8	2.03	21.2	62.6	92.9	104.2	101.4
26	*Iowa Hybrid 3065	88.0	86.0	2.27	20.4	61.9	91.8	103.2	100.4
27	Illinois Hybrid 760	86.9	84.6	2.65	22.2	65.1	96.6	101.5	100.3
28	*Pfister Hybrid 3258	91.4	89.5	2.08	22.4	53.0	78.6	107.4	100.2
29	*Illinois Hybrid 753	88.7	87.2	1.69	25.1	58.1	86.2	104.6	100.0
30	*Illinois Hybrid 574	88.2	85.4	3.17	22.7	61.7	91.5	102.5	99.8
31	*Iowa Hybrid 3045	89.2	86.3	3.25	23.3	59.1	87.7	103.6	99.6
32	*Pioneer Hi-Bred 2215A	83.5	79.2	5.15	21.0	76.0	112.8	95.0	99.5
33	*Illinois Hybrid 508	81.1	79.1	2.47	23.0	72.6	107.7	94.9	98.1
33	*Illinois Hybrid 765	81.3	80.3	1.23	21.9	69.6	103.3	96.4	98.1
34	*Illinois Hybrid 39	79.3	78.2	1.39	23.0	74.4	110.4	93.8	98.0
35	*Indiana Hybrid 819	84.0	81.4	3.10	23.5	65.1	96.6	97.7	97.4
36	*Indiana Hybrid 666	84.0	80.4	4.29	22.6	66.0	97.9	96.5	96.9
37	*Ohio Hybrid 8	86.2	84.6	1.86	21.4	55.2	81.9	101.5	96.6
38	*Illinois Hybrid 764	85.1	82.8	2.70	22.7	58.8	87.2	99.4	96.4
39	*Illinois Hybrid 54	80.2	77.8	2.99	22.9	69.6	103.3	93.4	95.9
40	*Ohio Hybrid 6	79.3	77.3	2.52	19.9	69.7	103.4	92.8	95.5
41	Illinois Hybrid 391	85.7	82.4	3.85	24.3	53.4	79.2	98.9	94.0
42	*Illinois Hybrid 579	88.3	84.5	4.30	25.0	47.5	70.5	101.4	93.7
43	*Indiana Hybrid 820	80.8	78.8	2.48	24.2	59.5	88.3	94.6	93.0
44	Funk Hybrid 225	84.4	82.7	2.01	22.2	48.5	72.0	99.2	92.4
45	*Ohio Hybrid 7	82.2	78.5	4.50	22.9	58.2	86.4	94.2	92.3
46	*Illinois Hybrid 539	76.8	74.7	2.73	23.2	59.5	88.3	89.6	89.3
	Average of division	86.4	84.4	2.31	22.0	69.6	103.8	101.3	101.8
	Average of all entries	85.3	83.3	2.34	21.8	67.4	....	....	....

*Average of 14 plots instead of 28.

TABLE 7.—SOUTH-CENTRAL ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS AT WINCHESTER AND SULLIVAN, 1935
(Average of duplicated entries—for data for individual fields see pages 335 to 336)

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
	Regular division—entries in commercial production								
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
1	Funk Hybrid 220L	68.9	68.4	.68	20.9	64.0	128.5	113.3	117.1
2	Station Yellow Dent	61.3	61.0	.49	21.5	44.0	88.4	101.0	97.9
3	Wilson Yellow Dent	61.3	60.0	2.12	22.2	42.3	84.9	99.3	95.7
	● Average of 5 best open-pollinated var.	60.6	59.4	1.98	22.5	41.2	82.7	98.0	94.5
4	Canterbury Yellow Dent	61.8	60.2	2.59	23.2	37.6	75.5	99.7	93.7
5	Rice Yellow Dent	58.6	57.1	2.56	23.3	43.3	86.9	94.5	92.6
5	Waddell Utility Yellow Dent	59.8	58.9	1.51	22.5	38.7	77.7	97.5	92.6
6	Waddell Golden Dent	56.1	54.9	2.14	23.8	45.0	90.4	90.9	90.8
7	Shuman Golden Beauty	56.2	54.9	2.31	21.4	44.6	89.6	90.9	90.6
8	Moore Yellow Dent	55.5	53.2	4.14	22.8	48.6	97.6	88.1	90.5
9	Eversole White Dent	57.8	56.2	2.77	22.8	33.7	67.7	93.0	86.7
10	Waddell Utility White Dent	49.7	45.6	8.25	24.6	31.9	64.1	75.5	72.4
	Average of division	58.8	57.3	2.55	22.6	43.1	86.5	94.9	92.8

TABLE 7.—*Concluded*

	Experimental division—entries *not* in commercial production								
1	Illinois Hybrid 960	80.1	79.7	.50	19.9	73.1	146.8	132.0	135.7
2	Illinois Hybrid 947	73.8	72.1	2.30	22.6	62.3	125.1	119.4	120.8
3	Illinois Hybrid 710	72.4	71.3	1.52	22.2	63.8	128.1	118.0	120.5
4	Illinois Hybrid 966	67.5	65.7	2.67	23.3	77.0	154.6	108.8	120.3
5	Illinois Hybrid 39	69.3	67.9	2.02	21.0	71.4	143.4	112.4	120.2
6	Illinois Hybrid 546	68.8	67.7	1.60	21.0	68.8	138.2	112.1	118.6
7	Illinois Hybrid 945	71.6	70.7	1.26	20.4	56.8	114.1	117.1	116.4
8	Funk Hybrid 207	71.1	68.6	3.52	21.8	60.8	122.1	113.6	115.7
9	Illinois Hybrid 559	68.0	66.9	1.62	21.1	60.3	121.1	110.8	113.4
10	*Iowealth Hybrid CC	68.3	67.6	1.02	21.1	57.2	114.9	111.9	112.7
11	Illinois Hybrid 538	69.4	68.2	1.73	21.5	54.2	108.8	112.9	111.9
12	Funk Hybrid 225	67.6	66.6	1.48	20.8	57.8	116.1	110.3	111.8
13	Illinois Hybrid 54	67.1	65.8	1.94	21.4	56.1	112.7	108.9	109.9
14	Illinois Hybrid 508	62.8	60.6	3.50	22.5	67.5	135.5	100.3	109.1
15	Illinois Hybrid 51	67.8	66.8	1.47	21.4	51.5	103.4	110.6	108.8
16	Funk Hybrid 231	66.2	65.7	.76	20.6	49.5	99.4	108.8	106.5
17	Illinois Hybrid 1074	61.4	60.3	1.79	21.9	60.3	121.1	99.8	105.1
18	Golden Beauty × 4211	67.5	64.8	4.00	22.9	48.7	97.8	107.3	104.9
19	Stiegelmeier Hybrid 3	69.0	57.2	2.61	23.8	58.0	116.5	94.7	100.2
20	Missouri Hybrid 51	66.0	63.3	4.09	25.2	39.6	79.5	104.8	98.5
21	Kansas Hybrid 3	59.9	57.3	4.34	25.2	49.0	98.4	94.9	95.8
22	Kansas Hybrid 5	63.0	61.0	3.17	25.4	39.3	78.9	101.0	95.5
23	Missouri Hybrid 11	60.9	57.0	6.40	24.4	40.2	80.7	94.4	91.0
24	Missouri Hybrid 19	57.2	54.4	4.90	24.5	41.0	82.3	90.1	88.2
25	Kansas Hybrid 6	59.3	52.9	10.79	25.4	38.8	77.9	87.6	85.2
26	Kansas Hybrid 4	56.0	54.1	3.39	22.9	34.8	69.9	89.6	84.7
27	*Wood Hybrid Medium Yellow Dent	52.7	51.6	2.09	22.4	40.8	81.9	85.4	84.5
28	*Waddell Utility White Dent × Indiana 33	55.6	52.7	5.22	24.0	36.7	73.7	87.3	83.9
29	*Wood Hybrid Early White Dent	53.5	46.6	12.90	28.0	32.8	65.9	77.2	74.4
30	*Missouri Hybrid 8	51.3	46.8	8.77	26.8	28.4	57.0	77.5	72.4
31	*Wood Hybrid Medium White Dent	37.9	32.3	4.78	29.3	39.5	79.3	53.5	60.0
	Average of division	64.0	61.4	4.06	23.1	52.1	104.7	101.7	102.5
	Average of all entries	62.6	60.4	3.51	22.9	49.8	....	....	....

*Average of 5 plots instead of 10 at Winchester, and 4 instead of 8 at Sullivan.

TABLE 8.—SOUTHERN ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS AT ALHAMBRA AND EDGEWOOD, 1935
(Average of duplicated entries—for data for individual fields see pages 337 to 338)

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
	Regular division—entries in commercial production								
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
1	Moore Yellow Dent	54.4	52.2	4.04	23.5	47.8	101.7	106.6	105.4
2	Community composite (Semesan Jr.)	51.5	50.5	1.94	24.5	46.3	98.6	103.1	102.0
3	Waddell Golden Beauty	49.5	49.4	.81	25.0	43.8	93.2	100.9	99.0
●	Average of 5 best open-pollinated varieties	49.8	48.0	3.61	25.6	41.7	88.7	98.0	95.7
4	Pride of Saline	50.3	48.4	3.78	28.3	35.8	76.2	98.9	93.2
5	Community composite (Barbak)	45.2	43.8	3.10	22.5	45.5	96.8	89.4	91.3
6	Waddell Utility White Dent	45.4	44.0	3.08	24.9	43.0	91.5	89.9	90.3
6	Blackhawk	47.6	45.8	3.78	26.5	38.0	80.9	93.5	90.3
7	Champion White Pearl	48.1	41.6	13.51	25.8	46.5	99.0	84.9	88.4
8	Community composite (untreated)	45.8	41.0	10.48	24.9	40.8	86.8	83.7	84.5
	Average of division	48.6	46.3	4.73	25.1	43.1	91.6	94.5	93.8
	Experimental division—entries *not* in commercial production								
1	Illinois Hybrid 508	53.8	52.7	2.04	21.7	64.8	137.9	107.6	115.2
2	*Champion White Pearl × Indiana 33	58.0	53.3	8.10	23.5	57.0	121.3	108.8	111.9
3	*Indiana Hybrid 835	54.0	52.4	2.96	20.0	58.0	123.5	107.0	111.1
4	*Champion White Pearl × B 103	61.4	58.4	4.89	24.3	39.0	83.0	119.3	110.2
5	*Indiana Hybrid 815	53.7	53.1	1.12	28.0	54.0	114.9	108.4	110.0
6	*Missouri Hybrid 19	58.3	57.1	2.06	27.1	40.5	86.2	116.6	109.0
7	Indiana Hybrid 880	53.0	52.5	.94	19.3	45.0	95.8	107.2	104.4
8	Indiana Hybrid 823	47.9	47.2	1.46	23.0	60.0	127.7	96.4	104.2
9	*Champion White Pearl × Pride of Saline 47	47.1	45.8	2.76	20.9	56.0	119.2	93.5	99.9
10	Illinois Hybrid 54	46.2	45.9	.65	22.7	54.8	116.6	93.7	99.4
11	*Champion White Pearl × Pride of Saline 29	55.0	49.5	10.00	26.1	34.0	72.4	101.1	93.9
12	*Golden Beauty × 5677	46.2	43.7	5.41	23.7	36.0	76.6	89.2	86.1
	Average of division	52.9	51.0	3.59	23.4	49.9	106.3	104.1	104.6
	Average of all entries	51.1	49.0	4.11	24.1	47.0	....	....	....

*Average of 10 plots instead of 20.

TABLE 9.—SOUTHEASTERN ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS AT ALBION, 1935

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
	Regular division—entries in commercial production								
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
1	Wilson Yellow Dent	58.0	57.4	1.03	17.8	77.0	91.7	104.0	100.9
2	Pride of Saline	59.0	58.1	1.53	18.5	70.0	83.5	105.3	99.9
●	Average of 5 best open-pollinated var.	55.4	54.6	1.44	17.8	75.4	89.9	98.9	96.5
3	Waddell Golden Beauty	53.5	52.7	1.50	17.2	80.0	95.4	95.5	95.5
4	Waddell Utility White Dent	55.2	53.5	3.08	17.6	71.0	84.7	96.9	93.4
5	Station Yellow Dent	51.1	51.1	0	17.8	79.0	94.2	92.6	93.0
6	Eversole White Dent	52.8	52.3	.95	17.4	73.0	85.9	94.8	92.5
7	St. Charles White	51.8	47.1	9.07	19.5	79.5	94.7	85.3	87.7
8	Kiefer Leaming	51.8	45.5	12.16	21.2	81.0	96.6	82.4	85.9
9	*Long John	51.8	48.2	6.95	16.7	62.0	73.9	87.3	83.7
10	Moore Yellow Dent	46.2	43.5	5.84	19.0	78.5	93.7	78.8	82.5
	Average of division	53.1	50.9	4.14	18.3	75.1	89.4	92.3	91.5

(Table is concluded on next page)

TABLE 9.—*Concluded*

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
	Experimental division—entries *not* in commercial production								
1	*Pride of Saline × Indiana 33	69.0	68.5	.72	17.4	92.0	109.8	124.1	120.5
2	Illinois Hybrid 940	65.9	64.6	1.97	18.4	92.5	110.4	117.1	115.4
3	*Missouri Hybrid 51	66.2	65.7	.76	19.6	85.0	100.1	119.0	114.3
4	Illinois Hybrid 508	63.5	63.3	.31	17.1	91.0	108.6	114.7	113.2
4	Indiana Hybrid 835	64.9	64.4	.77	17.4	86.0	102.6	116.7	113.2
5	Illinois Hybrid 947	65.2	63.4	2.76	17.6	83.5	100.0	114.9	111.2
6	Indiana Hybrid 880	63.1	60.9	3.49	17.1	90.5	107.1	110.4	109.6
7	*Long John × 4211	60.0	59.4	1.00	17.1	92.0	109.8	107.6	108.2
8	*Missouri Hybrid 19	62.9	59.1	6.04	20.7	89.0	106.2	107.1	106.9
9	*Missouri Hybrid 11	61.8	57.3	7.28	18.5	88.0	105.0	103.8	104.1
10	*Missouri Hybrid 8	59.7	57.5	3.69	18.6	85.0	101.4	104.2	103.5
11	Indiana Hybrid 823	55.2	54.2	1.81	16.7	96.5	115.2	98.2	102.5
12	Illinois Hybrid 54	62.8	55.3	11.94	17.3	91.0	108.6	100.2	102.3
13	*Wood Hybrid Early White Dent	58.7	57.3	2.39	19.4	79.0	94.1	103.8	101.4
14	Golden Beauty × 4211	58.3	56.8	2.57	17.2	78.5	93.7	102.9	100.6
15	Illinois Hybrid 51	56.9	53.6	5.80	18.2	88.0	105.0	97.1	99.0
15	*Moore Yellow Dent × Indiana B2	53.8	51.4	4.46	18.4	98.0	116.9	93.1	99.0
16	*Wood Hybrid Medium Yellow Dent	52.1	51.2	1.73	17.6	85.0	101.4	92.8	94.9
17	Indiana Hybrid 815	47.3	46.7	1.27	17.3	90.0	107.4	84.6	90.3
18	*Golden Beauty × 5677	48.6	47.4	2.47	17.6	80.0	95.5	85.9	88.3
19	*Wood Hybrid Medium White Dent	47.6	43.5	8.61	21.2	85.0	101.4	78.8	84.4
	Average of division	59.2	57.2	3.38	18.1	87.9	104.8	103.7	103.9
	Average of all entries	57.2	55.2	3.50	18.2	83.8	....	....	....

*Average of 5 plots instead of 10.

TABLE 10.—HYBRIDS AND OPEN-POLLINATED VARIETIES COMPARED: GENERAL PERFORMANCE RATING AND SOUND YIELD OF FIVE BEST HYBRIDS AND FIVE BEST OPEN-POLLINATED VARIETIES ON THE FIFTEEN ILLINOIS GRAIN TESTING FIELDS, 1935

Field	Sound yield per acre			General performance rating		
	Open-pollinated varieties	Hybrids	Difference in favor of hybrids	Open-pollinated varieties	Hybrids	Difference in favor of hybrids
	bu.	*bu.*	*bu.*			
Northeastern						
Dundee	40.9[a]	53.6	12.7	91.3	120.4	29.1
Northern						
Stockton	80.8	93.4	12.6	94.8	115.7	20.9
Rochelle	68.8	92.2	23.4	88.4	113.9	25.5
Plainfield	81.9	98.7	16.8	96.6	113.0	16.4
Average	77.2	94.8	17.6	93.3	114.2	20.9
North-Central						
Cambridge	91.0	114.8	23.8	86.7	114.6	27.9
Granville	76.7	94.3	17.6	91.5	111.7	20.2
Dwight	95.1	114.5	19.4	90.3	111.8	21.5
Average	87.6	107.9	20.3	89.5	112.7	23.2
Central						
Adair	75.0	90.2	15.2	87.8	112.4	24.6
Bellflower	73.4	92.8	19.4	82.8	111.7	28.9
Armstrong	85.6	105.6	20.0	84.0	116.9	32.9
Average	78.0	96.2	18.2	84.9	113.7	28.8
South-Central						
Winchester	68.6	82.3	13.7	94.8	119.4	24.6
Sullivan	51.1	61.4	10.3	97.8	136.9	39.1
Average	59.9	71.9	12.0	96.3	128.2	31.9
Southern						
Alhambra	54.8	60.4	5.6	107.2	121.9	14.7
Edgewood	45.9	54.1	8.2	94.4	117.4	23.0
Average	50.4	57.3	6.9	100.8	119.7	18.9
Southeastern						
Albion	48.0	54.0	6.0	95.7	111.7	16.0
Average of 15 fields	69.2	84.2	15.0	92.3	116.6	24.3

[a]Only 4 open-pollinated varieties were tested at Dundee.

TABLE 11.—SOIL-ADAPTATION TEST: SIBLEY, CENTRAL ILLINOIS, PERFORMANCE OF CORN VARIETIES AND HYBRIDS ON ELLIOTT SILT LOAM, A RELATIVELY POOR CORN SOIL

Rank	Entry	Acre-yield		Erect plants	Performance rating for—		General performance rating
		Total	Sound		Lodging resistance	Sound yield	
	Farm 45—soil of higher productivity						
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	
1	Illinois Hybrid 360	89.8	89.4	95	106.3	112.3	110.8
2	Illinois Hybrid 588	92.5	90.4	90	100.7	113.5	110.3
3	Illinois Hybrid 573	88.2	87.4	95	106.3	109.8	108.0
4	Illinois Hybrid 369	85.3	84.2	95	106.3	105.8	105.9
5	Illinois Hybrid 762	87.1	86.4	86	96.2	108.5	105.4
6	Illinois Hybrid 172	83.1	81.5	94	105.1	102.4	103.1
7	Illinois Hybrid 391	84.6	83.7	84	94.0	105.1	102.3
8	Illinois Hybrid 384	81.4	79.6	96	107.4	100.0	101.9
9	Illinois Hybrid 737	82.0	79.4	96	107.4	99.7	101.6
10	Illinois Hybrid 546	79.9	77.2	98	109.6	97.0	100.1
11	Illinois Hybrid 533	81.9	80.7	85	95.1	101.3	99.8
12	Illinois Hybrid 925	79.1	77.8	94	105.1	97.7	99.6
13	Illinois Hybrid 710	81.4	79.1	87	97.3	99.3	98.8
14	Illinois Hybrid 392	78.2	76.3	92	102.9	95.8	97.6
15	Illinois Hybrid 29	77.3	75.9	90	100.7	95.3	96.7
16	Illinois Hybrid 538	77.8	76.6	81	90.6	96.2	94.8
17	Illinois Hybrid 543	75.9	74.4	87	97.3	93.4	94.4
18	Original Krug	76.2	74.3	79	88.4	93.3	92.1
19	Station Yellow Dent	73.1	70.1	85	95.1	88.0	89.8
20	Sibley composite	70.5	67.8	80	89.5	85.1	86.2
	Average of all entries	81.3	79.6	89.4	....	....	....
	Average of open-pollinated varieties	....	72.2[a]	..	....	....	....

TABLE 11.—*Concluded*

	Farm 92—soil of lower productivity						
1	Illinois Hybrid 538	58.4	56.4	79	106.6	122.6	118.6
2	Illinois Hybrid 543	53.5	52.3	79	106.6	113.7	111.9
3	Illinois Hybrid 172	50.9	49.9	78	105.2	108.5	107.7
4	Illinois Hybrid 533	51.0	48.6	82	110.7	105.7	107.0
5	Illinois Hybrid 29	51.4	49.9	75	101.2	108.5	106.7
6	Illinois Hybrid 360	51.6	48.7	78	105.3	105.9	105.8
7	Sibley composite	51.3	50.2	68	91.8	109.1	104.8
8	Illinois Hybrid 369	48.0	47.2	81	109.3	102.6	104.3
9	Illinois Hybrid 392	51.0	47.9	71	95.8	104.1	102.0
10	Illinois Hybrid 546	49.1	46.9	73	98.5	102.0	101.1
11	Illinois Hybrid 588	48.6	47.1	71	95.8	102.4	100.8
12	Station Yellow Dent	48.0	46.8	68	91.8	101.7	99.2
13	Illinois Hybrid 384	46.9	45.5	71	95.8	98.9	98.1
14	Original Krug	46.3	44.6	71	95.8	97.0	96.7
15	Illinois Hybrid 925	46.7	41.5	78	105.3	90.2	94.0
16	Illinois Hybrid 710	44.2	42.9	71	95.8	93.2	93.9
17	Illinois Hybrid 391	42.5	39.8	71	95.8	86.5	88.8
18	Illinois Hybrid 762	41.3	38.0	78	105.3	82.6	88.3
19	Illinois Hybrid 737	41.3	39.2	71	95.8	85.2	87.9
20	Illinois Hybrid 573	41.2	36.5	68	91.8	79.3	82.4
	Average of all entries	48.2	46.0	74.1	....	....	....
	Average of open-pollinated varieties	....	45.7[a]	..	....	....	....

[a]Station Yellow Dent and Original Krug.

TABLE 12.—SOIL-ADAPTATION TEST: URBANA, CENTRAL ILLINOIS, PERFORMANCE OF CORN VARIETIES AND HYBRIDS ON MUSCATINE SILT LOAM, A RELATIVELY GOOD CORN SOIL

Rank	Entry	Acre-yield		Erect plants	Performance rating for—		General performance rating
		Total	Sound		Lodging resistance	Sound yield	
		Southwest rotation					
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	
1	Illinois Hybrid 360	106.3	105.8	82	119.9	113.3	115.0
2	Illinois Hybrid 546	104.0	102.8	82	119.9	110.1	112.5
3	Illinois Hybrid 369	99.5	99.7	79	115.5	106.7	108.9
4	Illinois Hybrid 588	103.4	102.6	71	103.8	109.8	108.4
5	Illinois Hybrid 384	94.6	93.9	87	127.2	100.5	107.2
6	Illinois Hybrid 762	98.0	97.0	76	111.1	103.9	105.7
7	Illinois Hybrid 573	100.2	99.0	70	102.3	106.0	105.1
8	Illinois Hybrid 172	92.9	92.0	82	119.9	98.5	103.9
9	Illinois Hybrid 754	97.8	96.5	70	102.3	103.3	103.3
10	Illinois Hybrid 391	94.1	92.9	77	112.6	99.5	102.8
11	Illinois Hybrid 29	93.0	91.6	73	106.7	98.1	100.2
12	Illinois Hybrid 533	101.6	100.2	52	76.0	107.2	99.4
13	Illinois Hybrid 538	96.4	95.6	60	87.7	102.3	98.7
14	Illinois Hybrid 543	92.2	91.5	62	90.6	98.0	96.1
15	Illinois Hybrid 392	85.9	84.8	75	109.6	90.8	95.5
16	Illinois Hybrid 710	85.8	83.8	67	98.0	89.7	91.8
17	Station Yellow Dent	78.9	77.8	37	54.1	83.3	76.0
18	Original Krug	76.3	74.1	30	43.9	79.3	70.4
	Average of all entries	94.5	93.4	68.4	....	....	....
	Average of open-pollinated varieties	....	76.0[a]	..	....	....	....

TABLE 12.—*Concluded*

	South-Central rotation						
1	Illinois Hybrid 360	87.5	86.9	90	128.9	108.5	113.6
2	Illinois Hybrid 384	87.0	86.4	90	128.9	107.9	113.1
3	Illinois Hybrid 754	87.9	86.7	82	117.5	108.2	110.5
4	Illinois Hybrid 369	84.0	83.3	90	128.9	104.0	110.2
5	Illinois Hybrid 29	84.8	83.8	88	126.1	104.6	110.0
6	Illinois Hybrid 573	87.3	87.0	70	100.3	108.6	106.5
7	Illinois Hybrid 172	80.7	80.1	85	121.8	100.0	105.4
8	Illinois Hybrid 546	83.3	82.2	78	111.7	102.6	104.9
9	Illinois Hybrid 588	89.1	88.7	60	86.0	110.7	104.5
10	Illinois Hybrid 543	83.3	81.4	75	107.4	101.6	103.0
11	Illinois Hybrid 710	79.6	78.8	78	111.7	98.4	101.7
12	Illinois Hybrid 392	74.8	73.6	85	121.8	91.9	99.4
12	Illinois Hybrid 391	82.1	81.3	65	93.1	101.5	99.4
13	Illinois Hybrid 538	82.2	81.3	55	78.8	101.5	95.8
14	Illinois Hybrid 533	85.6	84.3	25	35.8	105.2	87.9
15	Station Yellow Dent	73.0	71.0	40	57.3	88.6	80.8
16	Original Krug	66.6	64.9	50	71.6	81.0	78.7
17	Golden Beauty	62.0	59.8	50	71.6	74.7	73.9
	Average of all entries	81.1	80.1	69.8	....	....	....
	Average of open-pollinated varieties	....	68.0[a]	..	....	....	....

[a]Station Yellow Dent and Original Krug.

RESULTS OF SILAGE TESTS

(Tables 13 and 14, pages 315 and 316)

Three silage tests of corn varieties and hybrids were conducted in 1935. The fields were located near Algonquin in McHenry county, Maple Park in DeKalb county, and at Urbana[1] in Champaign county. The DeKalb field was destroyed by hail a few days before harvest, so no records were obtained from it. The other two fields were harvested.

In the Algonquin test the corn was planted in small, replicated plots the same size as in the other performance tests, but the plants were spaced 10 inches apart instead of in hills, simulating drilling conditions. The results are reported in Table 13.

On the Urbana field the corn was drilled with a corn planter in the regular way, in strips of approximately 80 rods running the length of the field. Every third strip was planted with an open-pollinated variety, Station Yellow Dent, which served as a check. Illinois Hybrid 912 and Funk Hybrids 206, 207, and 220L, were planted in strips 40 rows wide. The remainder of the entries were grown in strips 10 rows wide.

The general performance rating of the various entries was based on total yield of dry matter and lodging resistance. Total yield of dry matter was given three times the weight of lodging resistance.

In the Urbana and Algonquin tests additional records were made on the composition of the silage with respect to proportion of stalks, leaves, and ears. All the hybrids tested at Urbana, with one exception, had a higher proportion of their weight in the ears than had the open-pollinated variety (Table 14). The open-pollinated variety was taller than any of the hybrids, except Illinois Hybrid 13. The hybrids all stood more erect than the open-pollinated variety, altho all the entries tested were satisfactory in this respect.

At Algonquin the differences in production between the hybrids and open-pollinated varieties were not so marked as at Urbana, with the exception of several of the experimental hybrids. The outstanding feature of this test was the high lodging resistance shown by practically all the hybrids compared with the resistance of the open-pollinated varieties.

(For further discussion of hybrid seed, see page 317)

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[1]The field at Urbana was grown in cooperation with the Department of Dairy Husbandry.

TABLE 13.—SILAGE TEST: ALGONQUIN, NORTHEASTERN ILLINOIS, PERFORMANCE OF CORN VARIETIES AND HYBRIDS, 1935

Rank	Entry	Acre-yield of dry matter			Moisture in plants at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Blades	Ears			Lodging resistance	Total yield	
	Regular division—entries in commercial production								
		tons	*tons*	*tons*	*perct.*	*perct.*	*perct.*	*perct.*	
1	Illinois Hybrid 368	2.77	.50	1.43	66.0	87	132.2	97.9	106.5
2	DeKalb Hybrid 3A	2.97	.50	1.64	61.3	66	100.3	104.9	103.8
3	Webb Will Co. Favorite	3.04	.55	1.49	65.5	35	53.2	107.4	93.9
4	Suchy Yellow Dent	2.65	.42	1.44	59.7	36	54.7	93.2	83.6
●	Average of 4 best open-pollinated varieties	2.61	.47	1.34	62.9	31	47.1	92.1	80.9
5	Gunn Western Plowman	2.52	.44	1.37	62.9	35	53.2	89.0	80.1
6	Greenlee Yellow Dent	2.23	.46	1.06	63.5	18	27.3	78.8	65.9
	Average of division	2.70	.48	1.41	63.2	46.2	70.2	95.2	89.0
	Experimental division—entries *not* in commercial production								
1	Illinois Hybrid 766	3.66	.82	1.68	64.6	91	138.2	129.3	131.5
2	DeKalb Hybrid 84	3.30	.52	1.86	63.9	92	139.7	116.6	122.4
3	DeKalb Hybrid 93	3.42	.52	1.79	63.0	68	103.3	120.8	116.4
4	Illinois Hybrid 44	3.29	.64	1.57	67.6	72	109.4	116.3	114.6
5	Illinois Hybrid 746	3.04	.60	1.46	63.9	89	135.2	107.4	114.4
6	Wisconsin Hybrid 10	3.06	.47	1.78	61.0	71	107.8	108.1	108.0
7	Illinois Hybrid 29	2.92	.57	1.43	66.4	78	118.5	103.2	107.0
8	Wisconsin Hybrid 525	2.89	.43	1.68	57.3	70	106.3	102.1	103.2
9	Wisconsin Hybrid 9	2.79	.47	1.54	63.2	73	110.9	98.6	101.7
10	DeKalb Hybrid 113	2.60	.44	1.42	63.1	86	130.6	91.9	101.6
11	Wisconsin Hybrid 570	2.82	.47	1.50	64.8	65	98.7	99.6	99.4
12	Wisconsin Hybrid 11	2.71	.46	1.43	65.0	72	109.4	95.8	99.2
13	DeKalb Hybrid 210	2.61	.44	1.52	61.7	68	103.3	92.2	95.0
14	DeKalb Hybrid 38	2.52	.40	1.33	65.1	74	112.4	89.0	94.9
15	DeKalb Hybrid 81	2.80	.54	1.41	65.9	46	69.9	98.9	91.7
16	Wisconsin Hybrid 531	2.27	.38	1.27	61.3	67	101.8	80.2	85.6
17	DeKalb Hybrid 372	2.32	.40	1.19	64.6	43	65.3	82.0	77.8
	Average of division	2.87	.50	1.52	63.7	72.4	110.0	101.6	104.0
	Average of all entries	2.83	.49	1.49	63.5	65.8	....	....	....

TABLE 14.—SILAGE TEST: URBANA, CENTRAL ILLINOIS, PERFORMANCE OF CORN VARIETIES AND HYBRIDS, 1935

Rank	Entry	Acre-yield of dry matter			Moisture in plants at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Blades	Ears			Lodging resistance	Total yield	
	Regular division—entries in commercial production								
		tons	*tons*	*tons*	*perct.*	*perct.*	*perct.*	*perct.*	
1	Funk Hybrid 220L	4.94	.65	2.79	67.9	93.8	102.3	111.4	109.1
2	Illinois Hybrid 543	4.70	.69	2.51	64.1	88.6	96.6	106.0	103.7
3	Funk Hybrid 206	4.51	.71	2.12	69.2	96.0	104.7	101.7	102.4
4	Station Yellow Dent	4.08	.60	1.93	68.2	83.4	90.9	92.0	91.7
5	Illinois Hybrid 384	3.84	.53	2.16	65.5	94.4	102.9	86.6	90.7
	Average of division	4.41	.64	2.30	67.0	91.2	99.5	99.5	99.5
	Experimental division—entries *not* in commercial production								
1	Illinois Hybrid 560	5.12	.75	2.86	64.7	95.1	103.7	115.4	112.5
2	Illinois Hybrid 912	5.12	.75	2.54	69.9	93.5	102.0	115.4	112.1
3	Illinois Hybrid 39	4.94	.84	2.33	67.3	92.1	100.4	111.4	108.7
4	Funk Hybrid 207	4.79	.71	2.25	67.4	92.4	100.8	108.0	106.2
5	Illinois Hybrid 562	4.72	.66	2.57	63.4	94.3	102.8	106.4	105.5
6	Illinois Hybrid 54	4.47	.66	2.19	67.3	90.1	98.2	100.8	100.1
7	Illinois Hybrid 51	4.18	.63	2.17	66.1	89.1	97.5	94.2	95.0
8	Illinois Hybrid 571	4.19	.67	2.15	63.7	86.4	94.4	94.5	94.5
9	Illinois Hybrid 13	4.04	.59	2.13	67.3	95.8	104.5	91.1	94.4
10	Illinois Hybrid 392	4.05	.49	2.25	62.8	85.7	93.5	91.3	91.8
11	Illinois Hybrid 710	3.83	.53	2.11	65.9	96.1	104.8	86.3	90.9
12	Illinois Hybrid 546	3.89	.51	1.75	66.6	91.9	100.2	87.7	90.8
	Average of division	4.45	.65	2.28	66.0	91.9	100.2	100.2	100.2
	Average of all entries	44.4	.65	2.28	66.3	91.7	....	....	....

HYBRIDS TESTED FOR TWO YEARS

(Tables 15 to 17, pages 318 to 320)

Of the many hybrids tested in 1934 and 1935, twenty-five have been included in the tests both years.

In the northern section every hybrid exceeded the average of the five best open-pollinated varieties by a substantial margin (Table 15). In the north-central section nine of the sixteen hybrids surpassed the average of the five best open-pollinated entries in general performance rating for the two years (Table 16). In the central section every hybrid exceeded the average of the five best open-pollinated varieties for the two years (Table 17).

PERFORMANCE OF SECOND-GENERATION HYBRID SEED

(Table 18, page 321)

Corn growers are asking what will happen if they select seed from a field of first-generation hybrid corn for planting the next year. An entry of such seed from a double cross was included in the performance tests on four of the Illinois fields in 1935.

In resistance to lodging the second-generation hybrid was better by 11.7 percent than the average of the five best open-pollinated varieties but was inferior to the first-generation hybrid by 8.2 percent. Second-generation seed yielded 3 bushels less of sound corn than the open-pollinated varieties and 18 bushels less than first-generation seed.

In a yield test of first- and second-generation seed of double crosses conducted in 1932 in Ohio,[1] the first-generation hybrid seed averaged 78.5 bushels an acre and the second-generation 66.4 bushels, a reduction of 15.4 percent. In the ten individual comparisons the reductions ranged from 5 to 24 percent. At the Wisconsin Agricultural Experiment Station[2] ten first-generation double-cross hybrids averaged 64.1 bushels an acre; second-generation hybrids, 54.0 bushels; a reduction of 15.8 percent. The open-pollinated check yielded 53.1 bushels. In every comparison second-generation hybrid seed yielded less than first-generation, the reductions ranging from 11.0 to 27.9 percent.

Thus while the Illinois test was made with only one hybrid and in only one year, the results agree very well with those from Ohio and Wisconsin in showing the reductions in yield from second-generation hybrid seed as compared with first-generation seed.

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[1] RICHEY, F. D., STRINGFIELD, G. H., and SPRAGUE, G. F. The loss in yield that may be expected from planting second generation double-crossed seed corn. Jour. Amer. Soc. Agron. **26**, 196-199. 1934.

[2] NEAL, N. P. The decrease in yielding capacity in advanced generations of hybrid corn. Jour. Amer. Soc. Agron. **27**, 666-670. 1935.

TABLE 15.—TWO-YEAR SUMMARY, NORTHERN ILLINOIS: PERFORMANCE OF HYBRID ENTRIES GROWN IN BOTH 1934 AND 1935

Entry	Performance in 1934			Performance in 1935			Average of general performance rating
	Erect plants	Sound yield	General performance rating	Erect plants	Sound yield	General performance rating	
	(Stockton and Rochelle)			(Stockton, Rochelle, Plainfield)			
	perct.	*bu.*		*perct.*	*bu.*		
Illinois Hybrid 172	66.4	71.6	126.1	84.0	92.1	109.6	117.8
Illinois Hybrid 368	60.8	70.9	122.7	80.2	93.6	109.8	116.3
Funk Hybrid 214	65.5	66.5	116.0	85.2	79.7	98.7	107.4
DeKalb Hybrid 3A	61.0	60.0	103.5	86.3	85.9	104.6	104.1
Average of 5 best open-pollinated varieties	57.5[a]	47.0[a]	81.4	73.2	76.9	92.5	86.9
	(Rochelle and DeKalb)			(Stockton, Rochelle, Plainfield)			
Pioneer Hi-Bred 351	67.9	26.4	98.6	91.2	76.0	97.1	97.9
Average of 5 best open-pollinated varieties	27.9[b]	17.7[b]	78.2	73.2	76.9	92.5	85.4
	(DeKalb)			(Stockton, Rochelle, Plainfield)			
Illinois Hybrid 366	55.0	27.4	140.3	84.2	93.1	110.6	125.5
Pioneer Hi-Bred 323	67.5	14.9	92.4	78.3	91.3	107.2	99.8
Average of 5 best open-pollinated varieties	53.3[c]	13.9[c]	81.8	73.2	76.9	92.5	87.2

[a]Average of 4 varieties at Stockton and 3 at Rochelle.
[b]Average of 4 varieties at DeKalb and 3 at Rochelle.
[c]Average of 4 varieties.

TABLE 16.—TWO-YEAR SUMMARY, NORTH-CENTRAL ILLINOIS: PERFORMANCE OF HYBRID ENTRIES GROWN IN BOTH 1934 AND 1935

Entry	Performance in 1934			Performance in 1935			Average of general performance rating
	Erect plants	Sound yield	General performance rating	Erect plants	Sound yield	General performance rating	
	(Granville and Galesburg)			(Cambridge, Granville, Dwight)			
	perct.	*bu.*		*perct.*	*bu.*		
Illinois Hybrid 172	63.7	32.5	126.9	90.3	97.5	107.3	117.1
Funk Hybrid 206	71.9	31.2	125.4	87.8	89.2	99.8	112.6
Pfister Hybrid 4857	57.9	27.0	104.0	85.4	103.4	110.6	107.3
Funk Hybrid 214	74.4	27.2	108.3	89.0	91.6	102.1	105.2
Iowa Hybrid 13	62.5	28.0	103.5	79.1	92.8	100.1	101.8
Morgan Hybrid M.W.106	58.4	17.9	68.3	84.8	90.9	100.2	84.3
Morgan Hybrid M.W.104	55.4	13.7	61.9	85.3	90.2	99.9	80.9
Average of 5 best open-pollinated varieties	48.0	25.1	94.7	67.3	86.9	91.7	93.2
	(Galesburg)			(Cambridge, Granville, Dwight)			
Illinois Hybrid 360	73.8	50.0	130.1	89.3	107.9	115.5	122.8
Illinois Hybrid 372	61.3	43.4	111.7	90.1	95.7	99.2	105.5
Morgan Hybrid M.W.105	48.3	27.7	75.3	87.3	92.1	102.0	88.7
Pioneer Hi-Bred 306	55.3	26.5	76.1	78.1	93.9	100.7	88.4
Morgan Hybrid M.W.138	59.0	24.8	74.4	87.5	83.2	94.8	84.6
Average of 5 best open-pollinated varieties	50.0	39.9	100.9	67.3	86.9	91.7	96.3
	(Granville)			(Cambridge, Granville, Dwight)			
Pfister Hybrid 584	63.1	13.9	96.7	82.4	100.4	107.3	102.0
Funk Hybrid 220	61.3	12.9	90.9	97.4	93.6	103.3	97.1
Iowa Hybrid 942	46.9	10.9	74.8	80.3	93.0	100.6	87.7
Pioneer Hi-Bred 311	76.9	6.4	64.8	89.9	84.3	96.4	80.6
Average of 5 best open-pollinated varieties	53.2	13.1	88.4	67.3	86.9	91.7	90.1

TABLE 17.—TWO-YEAR SUMMARY, CENTRAL ILLINOIS: PERFORMANCE OF HYBRID ENTRIES GROWN IN BOTH 1934 AND 1935

Entry	Performance in 1934			Performance in 1935			Average of general performance rating
	Erect plants	Sound yield	General performance rating	Erect plants	Sound yield	General performance rating	
	(Minier and Tolono)			(Adair, Bellflower, Armstrong)			
	perct.	*bu.*		*perct.*	*bu.*		
Illinois Hybrid 508	82.3	68.7	123.2	72.6	79.1	98.2	110.7
Illinois Hybrid 360	75.0	61.6	111.1	72.8	91.9	109.7	110.4
Illinois Hybrid 391	72.3	68.2	121.8	53.4	82.4	94.0	107.9
Illinois Hybrid 172	67.4	61.0	108.3	72.8	84.1	102.8	105.6
Funk Hybrid 220	67.7	59.0	109.0	68.8	79.6	97.2	103.1
Funk Hybrid 206	71.3	61.1	111.8	67.8	75.3	93.0	102.4
Funk Hybrid 208	73.7	60.9	111.2	60.5	74.5	89.5	100.4
Pfister Hybrid 4857	73.1	50.0	94.2	64.7	88.7	103.8	99.1
Pioneer Hi-Bred 306	67.6	51.6	94.5	57.5	83.8	96.8	95.7
Iowa Hybrid 13	71.2	45.2	85.4	56.6	83.1	95.9	90.7
Average of 5 best open-pollinated varieties	61.2	51.4	92.6	45.1	73.4	84.6	88.6
	(Tolono)			(Adair, Bellflower, Armstrong)			
Pfister Hybrid 584	67.5	23.3	72.1	61.3	87.7	101.7	86.9
Average of 5 best open-pollinated varieties	49.9	40.1	95.4	45.1	73.4	84.6	90.0
	(Southwest and South-Central rotations, Urbana)			(Adair, Bellflower, Armstrong)			
Illinois Hybrid 384	51.5	58.4	120.1	87.5	84.4	108.4	114.3
Illinois Hybrid 172	43.3	61.7	122.5	72.8	84.1	102.8	112.7
Illinois Hybrid 360	46.5	53.8	111.0	72.8	91.9	109.7	110.4
Illinois Hybrid 391	39.8	53.4	105.6	53.4	82.4	94.0	99.8
Average of 5 best open-pollinated varieties	44.1[a]	38.3[a]	83.7	45.1	73.4	84.6	84.2

[a]Average of 3 varieties on the South-Central rotation.

TABLE 18.—SECOND-GENERATION HYBRID SEED: PERFORMANCE COMPARED WITH FIRST-GENERATION SEED AND WITH FIVE BEST OPEN-POLLINATED VARIETIES, FOUR ILLINOIS FIELDS, 1935

(The hybrid seed was from a double cross)

Seed	Acre-yield		Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
	Total	Sound			Lodging resistance	Sound yield	
Cambridge	*bu.*	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	
First-generation hybrid	115.7	112.2	20.9	73.0	97.5	113.5	109.5
Second-generation hybrid	95.0	93.0	21.6	69.0	92.1	94.1	93.6
Average of 5 best open-pollinated varieties	94.7	91.0	22.1	52.9	70.6	92.1	86.7
Granville							
First-generation hybrid	89.0	88.1	19.8	93.8	101.3	107.3	105.8
Second-generation hybrid	75.6	74.8	19.6	91.2	98.5	91.1	93.0
Average of 5 best open-pollinated varieties	78.2	76.7	21.6	79.1	85.4	93.5	91.5
Dwight							
First-generation hybrid	112.5	110.0	18.6	89.1	103.0	109.1	107.6
Second-generation hybrid	90.0	87.6	19.1	74.0	85.2	86.9	86.5
Average of 5 best open-pollinated varieties	98.7	95.1	20.5	68.2	78.4	94.3	90.3
DeKalb							
First-generation hybrid	73.7	73.7	23.7	84.5	94.0	109.2	105.4
Second-generation hybrid	56.2	56.2	23.6	78.5	87.3	83.3	84.3
Average of 5 best open-pollinated varieties	60.6	60.6	21.9	79.9	88.8	89.9	89.6
Average							
First-generation hybrid	97.7	96.0	20.8	85.2	99.0	109.8	107.1
Second-generation hybrid	79.2	77.9	21.0	78.2	90.8	88.9	89.4
Average of 5 best open-pollinated varieties	83.1	80.9	21.5	70.0	80.8	92.5	89.6

SUMMARY

Corn performance tests in 1935 were conducted in seven different geographical sections of Illinois. Two hundred seventy-four kinds of corn were included, of which 46 were open-pollinated varieties, 26 composite samples of open-pollinated corn, and 202 hybrids.

In all sections of the state the hybrids demonstrated their superiority over the best open-pollinated varieties. In the central and north-central sections the yield of the five best hybrids exceeded that of the five best open-pollinated varieties by 18.2 and 20.3 bushels, respectively, of sound corn an acre; and in the southeastern section, by 6.0 bushels. The greatest differences occurred on land of high productivity.

In the silage tests the hybrid entries did not greatly surpass the open-pollinated entries in total yield of silage, but they did surpass them in the grain fraction, which means in feeding value. The good hybrids were also superior to the open-pollinated varieties in standing ability.

Yields from second-generation hybrid seed were no greater than from adapted open-pollinated varieties and were much below the yields of first-generation hybrids.

For these performance tests, major soil types were selected and care was taken to see that each field was uniform as to soil type. While seasonal conditions caused late planting on most fields, favorable growing conditions followed. Frosts in late September and early October stopped the growth of all cold-susceptible entries, and fall weather was generally unfavorable for the curing of corn. At Cambridge, in the north-central section, and at all fields in the central, south-central, and southern sections, yields were affected by lodging caused by southern corn rootworm infestation.

Farmers are cautioned that tests such as these will yield varying results from season to season, and that more than one or two years are necessary to establish the superiority of specific hybrids or varieties for different sections of the state. The broad differences demonstrated during the past two years between the best hybrids and the best open-pollinated varieties appear, however, to be decisive in indicating the probable place of hybrid seed in the state's future corn economy.

APPENDIX

TABLE 19.—STOCKTON, NORTHERN ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS, 1935

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
	Regular division—entries in commercial production								
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
1	Illinois Hybrid 172	100.7	93.9	6.75	24.7	72.5	106.8	116.1	113.8
2	Illinois Hybrid 368	100.2	96.9	3.29	23.2	62.5	92.1	119.8	112.9
2	Illinois Hybrid 366	97.5	94.3	3.28	24.0	69.2	101.9	116.6	112.9
3	DeKalb Hybrid 3A	90.4	87.1	3.65	22.7	79.2	116.7	107.7	110.0
4	Funk Hybrid 215	93.4	87.4	6.42	25.2	75.0	110.5	108.0	108.6
5	Pioneer Hi-Bred 323	95.7	90.1	5.85	22.3	60.8	89.6	111.4	106.0
6	Pioneer Hi-Bred 351	83.3	78.0	6.36	22.3	81.7	120.3	96.4	102.4
7	Simmons Will County Favorite	93.6	90.2	3.63	22.9	50.8	74.8	111.5	102.3
8	Iowa Hybrid 931	88.8	84.6	4.73	22.3	64.2	83.5	104.6	99.3
9	Funk Hybrid 214	85.1	77.4	9.05	24.9	69.2	101.9	95.7	97.3
●	Average of 5 best open-pollinated var.	84.5	80.8	4.38	22.8	54.0	79.5	99.8	94.8
10	Pioneer Hi-Bred 311	94.6	81.3	14.06	21.5	76.7	73.6	100.5	93.8
11	Evans Will County Favorite	80.8	76.8	4.95	22.1	60.0	88.4	94.9	93.3
12	Eckhardt Western Plowman	83.4	78.4	6.00	22.9	55.8	82.2	96.9	93 2
13	Curtiss Western Plowman	82.9	79.8	3.74	22.9	51.7	76.2	98.6	93.0
14	Gunn Western Plowman	81.6	78.7	3.55	23.2	51.7	76.2	97.3	92.0
15	Webb Will County Favorite	81.3	76.3	6.15	22.9	50.0	73.6	94.3	89.1
16	Community composite (Barbak)[1]	71.9	68.8	4.31	23.0	53.3	78.5	85.0	83.4
17	Community composite (Semesan Jr.)	72.4	67.2	7.18	23.0	50.8	74.8	83.1	81.0
18	Community composite (untreated)	66.9	62.0	7.32	22.7	47.5	70.0	76.6	75.0
	Average of division	86.6	81.5	5.89	23.1	62.2	89.0	100.8	97.9
	Experimental division—entries *not* in commercial production								
1	*Illinois Hybrid 586	96.7	93.0	3.83	23.0	86.7	127.7	115.0	118.2
2	*Illinois Hybrid 751	100.4	93.0	7.37	24.2	85.0	125.2	115.0	117.6
3	*DeKalb Hybrid 93	102.9	97.1	5.64	23.3	70.0	103.1	120.0	115.8
4	*Wisconsin Hybrid 14	93.9	90.1	4.05	23.0	80.0	117.8	111.4	113.0
5	Illinois Hybrid 570	96.4	91.8	4.77	23.7	74 2	109.3	113.5	112.5
6	*Wisconsin Hybrid 15	93.6	86.5	7.59	23.2	83.3	122.7	106.9	110.9
7	*DeKalb Hybrid 119	98.1	93.0	5.20	23.2	66.7	98.2	115.0	110.8
8	*Wisconsin Hybrid 4	91.5	87.9	3.93	24.0	76.7	113.0	108.7	109.8
9	*Wisconsin Hybrid 5	84.6	83.4	1.42	21.0	85.0	125.2	103.1	108.6
10	*DeKalb Hybrid 104	93.9	88.6	5.64	22.9	71.7	105.5	109.5	108.5
11	*Wisconsin Hybrid 2	91.7	86.8	5.34	22.5	75.0	110.5	107.3	108.1
12	*National Hybrid 9	94.9	89.0	6.22	24.2	68.3	100.6	110.0	107.7
13	*Pioneer Hi-Bred 439	89.6	84.7	5.47	23.2	75.0	110 5	104.7	106.2
14	*Wisconsin Hybrid 7	94.5	88.1	6.77	24.0	65.0	95.7	108.9	105.6
15	*Pioneer Hi-Bred 2086A	89.1	81.3	8.75	21.3	78.0	115.3	100.5	104.2
16	*Wisconsin Hybrid 6	93.4	88.4	5.35	24.0	60.0	88.4	109.3	104.1
17	*Wisconsin Hybrid 17	89.9	84.3	6.23	23.7	70.0	103.1	104.2	103.9
18	*Pioneer Hi-Bred 2123	89.7	80.7	10.03	22.7	78.3	115.3	99.8	103.7
19	*Pioneer Hi-Bred 3377	85.2	80.3	5.75	23.0	78.3	113.0	99.3	102.7
20	*Pioneer Hi-Bred 3500	94.8	85.3	10.02	23.5	63.3	93.2	105.4	102.4
21	Iowa Hybrid 3294	85.9	78.1	9.08	22.1	80.8	119.0	96.5	102.1
22	*DeKalb Hybrid 97	88.5	81.3	8.14	24.3	71.6	105.6	100.5	101.8
23	*Wisconsin Hybrid 8	90.2	74.6	16.85	24.0	80.0	117.8	92.2	98.6
24	*Wisconsin Hybrid 3	79.3	75.5	4.79	21.7	73.3	108.0	93.3	97.0
25	*Ohio Hybrid 4	80.9	76.1	5.93	22.3	61.6	99.7	93.9	95.4
26	*Pioneer Hi-Bred 2113	81.3	71.8	11.69	22.5	75.0	110.5	88.8	94.2
27	Wisconsin Hybrid 13	88.3	78.0	11.66	25.0	58.3	85.9	96.4	93.8
28	*Wisconsin Hybrid 16	88.9	83.6	5.96	23.9	43.3	63.8	103.3	93.4
29	*Ohio Hybrid 5	89.0	79.8	10.34	23.7	51.7	76.1	98.6	93.0
30	*DeKalb Hybrid 118	88.4	79.6	9.95	24.0	51.7	76.1	98.4	92.8
31	*Iowealth Hybrid B. C.	88.0	66.2	24.77	24.3	73.3	108.0	81.8	88.4
32	*Ohio Hybrid 3	74.5	64.3	13.69	22.3	75.0	110.5	79.5	87.3
33	*Iowealth Hybrid B. J.	76.9	66.9	13.00	23.3	66.7	98.1	82.7	86.6
34	*DeKalb Hybrid 410	67.4	64.8	3.86	24.3	68.3	100.6	80.1	85.2
35	*DeKalb Hybrid 151	62.0	56.5	8.87	23.9	76.7	113.0	69.8	80.6
36	DeKalb Hybrid 495	52.3	49.6	5.16	23.3	83.3	122.7	61.3	76.7
	Average of division	87.4	80.6	7.78	23.3	71.1	105.8	99.6	101.1
	Average of all entries	87.1	80.9	7.12	23.2	68.0	....	....	....

*Average of 3 plots instead of 6.

[1]The community composite entry was used in some of the tests to study the influence of seed treatment.

TABLE 20.—ROCHELLE, NORTHERN ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS, 1935

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
	Regular division—entries in commercial production								
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
1	Illinois Hybrid 366	96.0	94.4	1.67	21.1	93.5	103.4	120.4	116.2
2	Illinois Hybrid 172	94.3	90.4	4.14	21.4	91.0	100.7	115.3	111.7
3	Illinois Hybrid 368	90.8	89.1	1.87	21.0	91.0	100.7	113.6	110.4
4	Pioneer Hi-Bred 323	91.6	88.5	3.38	20.1	90.0	99.6	112.9	109.6
5	DeKalb Hybrid 3A	85.7	84.2	1.75	20.5	89.0	98.5	107.4	105.2
6	Pioneer Hi-Bred 311	87.2	82.4	5.50	19.9	91.8	101.6	105.1	104.2
7	Iowa Hybrid 931	82.6	81.4	1.45	20.2	86.5	95.7	103.8	101.8
8	Funk Hybrid 215	82.6	77.2	6.54	23.0	90.5	100.1	98.5	98.9
9	Funk Hybrid 214	76.9	74.9	2.60	23.5	92.0	101.8	95.5	97.1
10	Eckhardt Western Plowman	75.3	74.0	1.73	20.7	85.5	94.6	94.4	94.5
11	Pioneer Hi-Bred 351	72.1	69.5	3.61	20.6	98.1	108.5	88.6	93.6
12	Webb Will County Favorite	75.1	74.5	.80	21.0	79.2	87.6	95.0	93.2
13	Community composite (Semesan Jr.)	72.3	70.7	2.21	20.7	76.5	84.6	90.2	88.8
14	Simmons Will County Favorite	70.1	69.0	1.57	21.0	81.0	89.6	88.0	88.4
●	Average of 5 best open-pollinated var.	70.0	68.8	1.71	20.8	81.7	90.4	87.7	88.4
15	Community composite (Barbak)	66.6	65.7	1.35	21.1	75.5	83.5	83.8	83.7
15	Evans Will County Favorite	65.9	64.6	1.97	20.4	79.2	87.6	82.4	83.7
16	Community composite (untreated)	67.9	66.2	2.50	21.4	73.5	81.3	84.4	83.6
17	Gunn Western Plowman	63.7	61.8	2.98	21.0	83.5	92.4	78.8	82.2
	Average of division	78.7	76.6	2.67	21.0	86.0	95.1	97.7	97.0
	Experimental division—entries *not* in commercial production								
1	*Illinois Hybrid 751	92.1	91.0	1.19	22.1	98.0	108.4	116.1	114.2
2	*DeKalb Hybrid 93	95.2	94.0	1.26	21.0	87.0	96.2	119.9	114.0
3	Illinois Hybrid 570	92.2	91.0	1.30	22.9	94.4	104.4	116.1	113.2
4	*Wisconsin Hybrid 6	92.4	90.5	2.06	22.3	91.0	100.7	115.4	111.7
5	*Illinois Hybrid 586	90.6	89.2	1.55	21.4	95.0	105.1	113.8	111.6
6	*DeKalb Hybrid 119	90.8	89.7	1.21	21.4	92.6	102.4	114.4	111.4
7	*DeKalb Hybrid 104	90.4	87.7	2.99	21.9	94.0	104.4	111.9	110.0
8	*DeKalb Hybrid 118	87.3	86.8	.57	21.2	95.1	105.2	110.7	109.3
9	*National Hybrid 9	89.2	87.8	1.57	20.8	91.0	100.7	112.0	109.2
10	*DeKalb Hybrid 97	84.4	83.9	.59	21.4	94.0	104.4	107.0	106.4
11	*Iowealth Hybrid B. J.	86.5	84.3	2.54	22.3	91.6	101.3	107.5	106.0
12	*Pioneer Hi-Bred 2086A	85.0	83.7	1.53	19.7	92.6	102.4	106.8	105.7
13	*Wisconsin Hybrid 4	83.4	82.2	1.44	21.1	97.6	108.0	104.8	105.6
14	DeKalb Hybrid 108	87.6	83.7	4.45	21.0	91.8	101.6	106.8	105.5
15	Wisconsin Hybrid 13	85.3	83.5	2.11	21.9	90.7	100.3	106.5	105.0
16	*DeKalb Hybrid 102	81.5	80.5	1.23	21.4	96.6	106.9	102.7	103.8
17	*Pioneer Hi-Bred 439	78.9	77.9	1.27	19.6	96.0	106.2	99.4	101.1
18	*DeKalb Hybrid 477	81.7	79.7	2.45	21.9	88.0	97.4	101.7	100.6
18	*Wisconsin Hybrid 2	79.5	78.6	1.13	20.7	91.6	101.3	100.3	100.6
19	*Ohio Hybrid 4	83.1	80.2	3.49	21.0	84.0	92.9	102.3	100.0
20	*Wisconsin Hybrid 7	76.9	76.2	.91	21.9	96.0	106.2	97.2	99.5
21	*Wisconsin Hybrid 5	75.3	74.0	1.73	20.1	98.6	109.1	94.4	98.1
22	*Pioneer Hi-Bred 2123	77.5	73.7	4.90	21.4	97.0	107.3	94.0	97.3
23	*Wisconsin Hybrid 3	73.7	73.4	.41	19.7	94.6	104.7	93.6	96.4
24	*Ohio Hybrid 5	81.7	77.1	5.63	22.1	81.0	89.6	98.3	96.1
25	*Wisconsin Hybrid 8	74.4	71.7	3.63	22.9	96.0	106.2	91.5	95.2
26	*Iowealth Hybrid B. C.	75.7	70.9	6.34	22.3	92.6	102.4	90.4	93.4
27	*Pioneer Hi-Bred 2113	69.5	66.4	4.46	20.7	93.6	103.5	84.7	89.4
28	*DeKalb Hybrid 416	65.6	64.3	1.98	21.7	95.0	105.1	82.0	87.8
29	*DeKalb Hybrid 410	58.1	57.0	1.89	23.2	92.0	101.8	72.7	80.0
30	*Ohio Hybrid 3	56.7	54.1	4.59	21.2	93.0	102.9	69.0	77.5
	Average of division	81.4	79.5	2.33	21.4	93.0	102.9	101.4	101.8
	Average of all entries	80.4	78.4	2.49	21.3	90.4	....	....	....

*Average of 5 plots instead of 10.

TABLE 21.—PLAINFIELD, NORTHERN ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS, 1935

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
	Regular division—entries in commercial production								
1	Illinois Hybrid 368	95.8	94.8	1.04	20.9	87.2	97.1	112.9	109.0
2	Pioneer Hi-Bred 323	99.6	95.4	4.22	21.1	84.0	93.5	113.6	108.6
3	Iowa Hybrid 931	95.5	94.4	1.15	18.9	84.5	94.1	112.4	107.8
4	Pioneer Hi-Bred 311	95.1	91.5	3.79	21.3	91.0	101.3	108.9	107.0
5	Illinois Hybrid 172	95.9	91.7	4.38	21.9	88.5	98.5	109.2	106.5
6	Illinois Hybrid 366	92.2	90.6	1.74	22.4	90.0	100.2	107.9	106.0
7	DeKalb Hybrid 3A	87.8	86.9	1.03	19.9	90.6	100.9	103.5	102.9
8	Simmons Will County Favorite	89.0	88.4	.67	20.5	84.0	93.5	105.2	102.3
9	Webb Will County Favorite	88.9	86.9	2.25	21.5	82.0	91.3	103.5	100.5
10	Funk Hybrid 214	87.7	86.1	1.82	23.5	94.5	94.1	102.5	100.4
11	Funk Hybrid 215	89.2	84.6	5.16	22.9	87.0	96.8	100.7	99.7
12	Pioneer Hi-Bred 351	83.6	80.3	3.95	20.6	93.8	104.4	95.6	97.8
●	Average of 5 best open-pollinated var.	83.5	81.9	1.91	21.5	84.1	93.7	97.5	96.6
13	Eckhardt Western Plowman	82.2	79.4	3.41	20.9	86.7	96.5	94.5	95.0
14	Community composite (Barbak)	81.4	79.0	2.95	21.7	85.0	94.6	94.0	94.2
15	Community composite (Semesan Jr.)	82.4	79.9	3.03	21.7	79.5	88.5	95.0	93.4
16	Gunn Western Plowman	79.2	78.3	1.14	22.5	83.5	93.0	93.2	93.1
17	Community composite (untreated)	79.9	77.5	3.00	21.7	83.5	93.0	92.3	92.5
18	Evans Will County Favorite	78.3	76.5	2.30	22.3	84.5	94.1	91.1	91.9
	Average of division	88.0	85.7	2.61	21.5	86.7	95.8	102.0	100.5
	Experimental division—entries *not* in commercial production								
1	*DeKalb Hybrid 97	103.9	103.4	.48	21.4	93.0	103.5	123.1	118.2
2	*DeKalb Hybrid 93	103.6	103.2	.39	19.9	92.0	102.4	122.9	117.8
3	*National Hybrid 9	97.9	95.8	2.45	22.5	90.0	100.2	114.0	110.6
4	*Wisconsin Hybrid 6	98.2	96.4	1.83	21.4	84.0	93.5	114.8	109.5
5	*Illinois Hybrid 586	94.5	90.9	3.81	20.7	92.6	103.1	108.2	106.9
6	*Pioneer Hi-Bred 439	92.8	89.1	3.99	19.3	95.6	106.4	106.1	106.2
7	*Wisconsin Hybrid 4	90.0	89.4	.67	21.7	94.0	104.6	106.4	106.0
8	*DeKalb Hybrid 102	89.2	88.5	.78	18.6	96.0	106.9	105.4	105.8
9	*DeKalb Hybrid 104	92.0	90.8	1.30	20.2	88.0	98.0	108.1	105.6
10	*Pioneer Hi-Bred 2123	89.3	87.9	1.57	21.9	96.2	107.1	104.6	105.2
11	*Illinois Hybrid 751	88.0	86.9	1.25	24.3	94.0	104.6	103.5	103.8
12	*Wisconsin Hybrid 8	89.2	86.6	2.91	22.9	92.0	102.4	103.1	102.9
13	*Ohio Hybrid 4	89.9	88.2	1.89	21.7	86.2	96.0	105.0	102.8
14	*Iowealth Hybrid B. J.	88.2	86.3	2.15	20.2	92.0	102.4	102.7	102.6
15	*DeKalb Hybrid 118	85.9	85.1	.93	22.5	93.3	103.9	101.3	102.0
16	*Iowealth Hybrid B. C.	88.9	84.6	4.84	22.9	94.6	105.3	100.7	101.9
17	*Pioneer Hi-Bred 2113	89.1	86.2	3.25	21.3	88.0	98.0	102.6	101.5
18	Illinois Hybrid 570	87.9	84.7	3.64	23.9	91.5	101.9	100.8	101.1
19	*Wisconsin Hybrid 3	83.5	82.7	.96	20.8	93.7	104.3	98.5	100.0
20	*Wisconsin Hybrid 2	86.5	83.7	3.24	20.0	89.0	99.1	99.6	99.5
21	*Wisconsin Hybrid 5	81.1	80.5	.74	22.1	97.0	108.0	95.8	98.9
22	*Pioneer Hi-Bred 2086A	85.3	82.1	3.75	20.8	89.0	99.1	97.7	98 1
23	Wisconsin Hybrid 1	83.9	81.0	3.46	24.5	90.5	100.7	96.4	97.5
24	*DeKalb Hybrid 119	83.7	81.5	2.63	22.7	88.2	98.2	97.0	97.3
25	*DeKalb Hybrid 477	80.8	80.4	.50	23.2	91.0	101.3	87.0	97.1
26	*Ohio Hybrid 5	85.9	82.2	4.31	23.2	79.0	87.9	97.9	95.4
27	*Wisconsin Hybrid 7	83.7	79.6	4.90	23.2	86.6	96.4	94.8	95.2
28	*DeKalb Hybrid 416	74.5	73.3	1.61	22.5	95.6	106.4	87.3	92.1
29	*Ohio Hybrid 3	75.4	74.2	1.59	21.3	91.0	101.3	88.3	91.6
30	Iowa Hybrid 3294	77.8	73.2	5.91	21.9	92.5	103.0	87.1	91.1
31	*DeKalb Hybrid 410	68.6	68.1	.73	22.5	94.0	104.6	81.1	87.0
32	*DeKalb Hybrid 151	66.2	65.1	1.66	22.1	96.0	106.9	77.5	84.9
33	DeKalb Hybrid 159	61.9	60.4	2.42	22.1	93.3	103.9	71.9	79.9
34	*DeKalb Hybrid 373	55.7	54.8	1.62	23.4	92.0	102.4	65.2	74.5
	Average of division	85.1	83.1	2.35	21.9	91.5	101.9	98.7	99.7
	Average of all entries	86.1	84.0	2.44	21.7	89.8	....	....	....

*Average of 5 plots instead of 10.

TABLE 22.—CAMBRIDGE, NORTH-CENTRAL ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS, 1935

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
	Regular division—entries in commercial production								
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
1	Illinois Hybrid 360	120.7	118.6	1.74	21.4	80 0	107.9	120.0	117.0
2	Illinois Hybrid 360A	118.5	114.7	3.21	22.0	80.5	107.5	116.0	113.9
3	Illinois Hybrid 366	115.5	111.5	3.46	21.4	82.0	109.5	112.8	112.0
4	Pfister Hybrid 4857	115.7	112.2	6.05	20.9	73.0	97.5	113.5	109.5
5	Illinois Hybrid 384	106.7	105.5	1.12	20.8	87.5	116.8	106.7	109.2
6	Illinois Hybrid 364	116.4	112.6	3.26	21.1	69.0	92.1	113.9	108.5
7	Pfister Hybrid 584	114.4	111.4	2.62	20.8	67.5	90.1	112.7	107.1
8	Illinois Hybrid 172	105.4	101.7	3.51	20.9	85.0	113.5	102.9	105.6
9	Funk Hybrid 214	100.7	99.0	1.69	21.6	86.0	114.8	100.1	103.8
10	Iowa Hybrid 939	107.3	99.1	7.64	21.2	79.5	106.1	100.2	101.7
11	M. W. Hybrid 111	104.2	97.9	6.05	19.7	82.0	109.5	99.0	101.6
12	Pioneer Hi-Bred 306	108.2	100.6	7.02	20.1	73.5	98.1	101.7	100.8
12	Funk Hybrid 220	100.4	98.1	2.29	22.8	79.0	105.5	99.2	100.8
13	M. W. Hybrid 105	103.5	97.7	5.60	19.9	78.8	105.2	98.8	100.4
14	Pioneer Hi-Bred 311	102.0	94.1	7.75	20.0	82.5	110.1	95.2	98.9
15	Iowa Hybrid 942	108.4	103.4	4.61	20.3	60.5	80.8	104.6	98.7
16	M. W. Hybrid 104	100.9	96.1	4.76	19.8	76.0	101.5	97.2	98.3
17	Funk Hybrid 206	97.4	93.9	3.59	22.6	80.5	107.5	95.0	98.1
18	Funk Hybrid 215	98.7	96.4	2.33	21.5	74.0	98.8	97.5	97.8
19	Pioneer Hi-Bred 311A	104.9	92.8	11.53	20.3	81.5	108.8	93.9	97.6
20	M. W. Hybrid 106	103.7	97.3	6.17	21.6	70.5	94.1	98.4	97.3
21	Hulting Yellow Dent	102.8	100.4	2.33	20.3	60.5	80.8	101.5	96.3
22	Iowa Hybrid 13	104.4	93.1	10.82	21.4	64.0	85.4	94.2	92.0
23	M. W. Hybrid 138	91.9	84.5	8.05	20.7	78.0	104.1	85.5	90.2
24	Funk Hybrid 208	95.4	92.3	3.25	22.2	59.5	79.4	93.4	89.9
25	McKeighan Yellow Dent	93.4	85.8	8.14	24.0	67.5	90.1	86.8	87.6
26	Iowealth Hybrid B	100.6	81.4	19.09	22.7	76.5	102.1	82.3	87.3
●	Average of 5 best open-pollinated var.	94.7	91.0	3.91	22.1	52.9	70.6	92.1	86.7
27	Original Krug	95.1	92.1	3.15	22.9	47.5	63.4	93.2	85.8
28	Iowealth Hybrid C	95.0	79.9	15.89	23.2	74.0	98.8	80.8	85.3
29	Roeschley Yellow Dent	95.7	92.3	3.55	22.5	41.0	54.7	93.4	83.7
30	Community composite (Semesan Jr.)	92.8	89.2	3.88	21.8	47.5	63.4	90.2	83.5
31	Community composite (Barbak)	88.5	85.0	3.95	22.8	49.6	66.2	86.0	81.1
32	Community composite (untreated)	88.4	85.0	3.85	23.7	47.5	63.4	86.0	80.4
33	Angevine Yellow Dent	86.3	84.6	1.97	20.9	48.0	64.1	85.6	80.2
34	Queen of the Field	86.6	84.0	3.00	21.0	45.0	60.1	85.0	78.8
	Average of division	102.0	96.7	5.20	21.4	69.6	92.9	97.8	93.7
	Experimental division—entries *not* in commercial production								
1	*Illinois Hybrid 751	117.3	115.8	1.28	20.8	89.6	119.6	117.1	117.7
2	*Iowa Hybrid 3110	116.2	113.6	2.24	21.1	79.0	105.5	114.9	112.6
3	*Illinois Hybrid 960	120.6	107.6	10.78	22.6	87.0	116.2	108.8	110.7
4	Illinois Hybrid 546	109.0	105.3	3.39	22.6	90.0	120.2	106.5	109.9
5	*Illinois Hybrid 571	107.4	105.0	2.23	21.6	90.2	120.4	106.2	109.8
6	Illinois Hybrid 371	114.2	109.0	4.55	21.3	79.5	106.1	110.2	109.2
7	*Moews Hybrid 22	111.1	106.6	4.05	22.2	83.0	110.8	107.8	108.6
7	Illinois Hybrid 570	108.0	106.1	1.76	21.1	83.5	112.6	107.3	108.6
7	Illinois Hybrid 754	107.6	105.1	2.32	21.7	86.5	115.5	106.3	108.6
8	*Illinois Hybrid 936	106.0	103.9	1.98	22.7	89.0	118.8	105.1	108.5
9	*Pioneer Hi-Bred 3010	106.1	101.8	4.05	22.4	87.0	116.2	103.0	106.3
10	*Moews Hybrid 32	114.1	108.7	4.73	23.9	71.0	94.8	109.9	106.1
11	Illinois Hybrid 372	107.0	104.5	2.34	20.5	79.0	105.5	105.7	105.7
12	*Moews Hybrid 30	109.5	106.7	2.56	22.6	74.0	98.8	107.9	105.6
12	*Moews Hybrid 24	107.8	105.3	2.32	22.4	77.0	102.8	106.5	105.6
13	*Iowealth Hybrid C. I.	103.8	98.4	5.20	21.4	88.0	117.5	99.5	104.0
14	*U. S. Hybrid 38	101.2	98.1	3.06	22.6	87.0	116.2	99.2	103.5
15	*U. S. Hybrid 44	107.0	95.4	10.84	23.7	88.0	117.5	96.5	101.8
16	*Indiana Hybrid 642	100.0	96.4	3.60	19.4	83.0	110.8	97.5	100.8
17	*Indiana Hybrid 620	101.1	95.1	5.93	20.5	85.0	113.5	96.2	100.5
18	*DeKalb Hybrid 97	97.7	96.4	1.33	21.1	81.0	108.1	97.5	100.2
19	*Pioneer Hi-Bred 2218A	95.3	86.1	9.65	21.4	90.0	120.2	87.1	95.4
20	*Illinois Hybrid 574	107.7	89.9	16.53	22.9	80.0	106.8	90.9	94.9
21	Pfister Hybrid 4857 (2d generation)	95.0	93.0	2.11	21.6	69.0	92.1	94.1	93.6
22	Funk Hybrid 225	99.0	94.2	4.85	24.1	65.5	87.4	95.3	93.3
	Average of division	106.8	101.9	4.59	21.9	82.3	110.2	103.1	105.0
	Average of all entries	104.0	98.9	4.90	21.6	74.9	....	....	....

*Average of 5 plots instead of 10.

TABLE 23.—GRANVILLE, NORTH-CENTRAL ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS, 1935

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
	Regular division—entries in commercial production								
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
1	Illinois Hybrid 360	94.9	93.4	1.58	21.5	96.6	104.3	113.8	111.4
2	Illinois Hybrid 364	94.1	93.6	.53	20.3	93.2	100.6	114.0	110.7
3	Illinois Hybrid 360A	92.0	91.2	.87	20.6	97.1	104.9	111.1	109.6
4	Illinois Hybrid 366	91.1	90.6	.55	19.9	94.5	102.1	110.4	108.3
5	Pfister Hybrid 4857	89.0	88.1	1.01	19.8	93.8	101.3	107.3	105.8
6	Pfister Hybrid 584	87.0	86.2	.92	19.6	91.4	98.7	105.0	103.4
7	Illinois Hybrid 172	85.0	84.3	82	20.3	96.9	104.6	102.7	103.2
8	Funk Hybrid 220	83.3	82.3	1.20	20.6	94.1	101.6	100.2	100.6
9	Illinois Hybrid 384	82.2	81.4	.97	19.9	97.0	104.8	99.1	100.5
10	Iowa Hybrid 13	86.2	83.4	3.25	20.6	87.6	94.6	101.6	99.9
11	Iowa Hybrid 939	83.2	80.6	3.13	20.9	96.0	103.7	98.2	99.6
12	Iowa Hybrid 942	82.6	81.8	.97	19.8	90.3	97.5	99.6	99.1
13	Iowealth Hybrid B	83.8	79.6	5.01	21.4	96.2	103.9	97.0	98.7
14	Funk Hybrid 214	79.8	79.1	.88	20.7	97.1	104.9	96.3	98.5
15	M. W. Hybrid 111	81.6	79.8	2.21	20.0	94.5	102.1	97.2	98.4
16	Funk Hybrid 208	79.2	78.4	1.01	21.1	94.9	102.5	95.5	97.3
16	Funk Hybrid 206	79.0	78.2	1.01	21.4	94.9	103.5	95.2	97.3
17	Pioneer Hi-Bred 306	83.6	80.4	3.83	21.1	86.7	93.6	97.9	96.8
18	Funk Hybrid 215	78.3	77.4	1.15	22.0	94.3	101.8	94.3	96.2
19	M. W. Hybrid 105	79.9	76.2	4.63	19.5	93.6	101.1	92.8	94.9
20	M. W. Hybrid 106	78.8	76.2	3.30	19.8	93.4	100.9	92.8	94.8
21	Iowealth Hybrid C	81.1	76.4	5.80	22.7	92.1	99.5	93.1	94.7
22	Hulting Yellow Dent	80.7	78.9	2.23	21.3	82.6	89.2	96.1	94.4
23	Pioneer Hi-Bred 311A	78.9	74.6	5.45	19.8	96.4	104.1	90.9	94.2
24	M. W. Hybrid 104	77.9	76.4	1.93	19.9	89.6	96 8	93.1	94.0
25	M. W. Hybrid 138	76.6	73.3	4.31	20.3	94.2	101.7	89.3	92.4
26	Pioneer Hi-Bred 311	77.9	72.6	6.80	20.0	95.9	103.6	88.4	92.2
27	McKeighan Yellow Dent	76.5	74.9	2.09	22.6	87.0	94.0	91.2	91.9
28	Queen of the Field	77.3	76.3	1.29	20.7	81.0	87.5	92.9	91.6
●	Average of 5 best open-pollinated var...	78.2	76.7	1.92	21.6	79.1	85.4	93.5	91.5
29	Original Krug	79.1	77.6	1.90	22.1	73.8	79.7	94.5	90.8
30	Community composite (Semesan Jr.)	75.7	74.2	1.98	20.7	80.5	86.9	90.4	89.5
31	Roeschley Yellow Dent	77.4	76.0	1.81	20.1	71.1	76.8	92.6	88.7
32	Community composite (untreated)	74.8	73.3	2.01	21.8	79.8	86.2	89.3	88.5
33	Community composite (Barbak)	74.9	73.4	2.00	21.4	78.7	85.0	89.4	88.3
	Average of division	81.9	80.0	2.32	20.7	90.8	97.8	87.4	97.5
	Experimental division—entries *not* in commercial production								
1	*U. S. Hybrid 38	95.2	94.5	.74	20.8	94.8	102.4	115.1	111 9
2	*Illinois Hybrid 960	96.5	95.1	1.45	22.0	92.2	99.6	115.8	111.8
3	*Iowa Hybrid 3110	95.8	94.2	1.67	21.4	95.2	102.8	114.7	111.7
4	*Illinois Hybrid 936	93.9	93.3	.64	21.6	97.8	105.6	113.6	111.6
5	*Moews Hybrid 32	95.0	94.4	.63	22.0	93.0	100.4	115.0	111.4
6	Illinois Hybrid 371	91.0	90.5	.55	20.3	96.7	104.4	110.2	108.8
6	*Iowealth Hybrid C. I	93.1	90.3	3.01	21.6	97.2	105.0	110.0	108.8
7	*U. S. Hybrid 44	91.2	89.7	1.64	21.6	97.6	105.4	109.3	108.3
8	*Indiana Hybrid 642	89.9	89.1	.89	19.6	96.4	104.1	108.5	107.4
9	*Moews Hybrid 22	93.0	89.2	4.09	21.4	95.4	103.0	108.6	107.2
10	Illinois Hybrid 570	87.9	87.5	.46	19.9	97.4	105.2	106.6	106.3
11	*Illinois Hybrid 571	86.7	86.2	.58	22.0	97.4	105.2	105.0	105.1
12	*Moews Hybrid 30	85.1	83.8	1.53	20.7	94.4	101.9	102.1	102.1
13	*Illinois Hybrid 574	86.7	84.4	2.65	21.8	92.2	99.6	102.8	102.0
14	Illinois Hybrid 754	83.9	82.8	1.31	22.2	97.0	104.8	100.9	101.9
15	Illinois Hybrid 39	82.6	81.9	.85	22.0	98.3	106.2	99.8	101.4
16	*Illinois Hybrid 751	81.1	80.1	1.23	21.6	99.2	107.1	97.6	100.0
17	*DeKalb Hybrid 97	81.9	81.2	.85	20.5	95.4	103.0	98.9	99.9
18	*Indiana Hybrid 620	81.1	80.2	1.11	21.5	95.8	103.5	97.7	99.2
19	*Pioneer Hi-Bred 3010	87.2	81.1	6.70	22.2	92.0	99.4	98.8	99.0
19	Illinois Hybrid 372	80.4	79.6	1.00	21.0	97.2	105.0	97.0	99.0
20	*Moews Hybrid 24	76.6	74.9	2.22	22.2	97.2	105.0	91.2	94.7
21	Funk Hybrid 225	78.0	76.1	2.44	22.8	90.5	97.7	92.7	94.0
22	Pfister Hybrid 4857 (2d generation)	75.6	74.8	1.06	19.6	91.2	98.5	91.1	93.0
23	*Pioneer Hi-Bred 2218A	74.9	71.3	4.81	21.6	93.4	100.9	86.8	90.3
	Average of division	86.6	85.0	1.85	21.4	95.4	103.1	99.0	103.5
	Average of all entries	83.9	82.1	2.15	21.0	92.7	....	....	....

*Average of 5 plots instead of 10.

TABLE 24.—DWIGHT, NORTH-CENTRAL ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS, 1935

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
	Regular division—entries in commercial production								
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
1	Illinois Hybrid 360	113.8	111.8	1.76	20.2	91.2	104.9	110.9	109.4
2	Illinois Hybrid 364	114.9	111.8	2.70	19.6	89.8	103.3	110.9	109.0
3	Illinois Hybrid 384	111.1	110.5	.54	19.2	92.0	105.9	109.6	108.7
3	Illinois Hybrid 366	112.8	110.3	2.22	19.2	92.6	106.6	109.4	108.7
4	Pfister Hybrid 4857	112.5	110.0	2.22	18.6	89.5	103.0	109.1	107.6
5	Illinois Hybrid 172	108.3	106.5	1.66	18.6	88.9	102.3	105.7	104.9
6	Illinois Hybrid 360A	107.6	105.3	2.14	19.6	91.2	104.9	104.5	104.6
7	Pfister Hybrid 584	106.6	103.6	2.81	19.6	88.2	101.5	102.8	102.5
8	M. W. Hybrid 105	105.2	102.4	2.66	17.9	89.4	102.9	101.6	101.9
9	Iowa Hybrid 939	103.2	98.8	4.26	19.2	94.4	108.6	98.0	100.7
10	Iowa Hybrid 13	109.7	102.0	7.02	19.6	85.8	98.7	101.2	100.6
11	Funk Hybrid 220	101.1	100.4	.69	19.9	89.2	102.6	99.6	100.4
12	Funk Hybrid 215	100.4	99.2	1.20	19.1	91.0	104.7	98.4	100.0
13	M. W. Hybrid 106	101.9	99.1	2.75	18.6	90.5	104.1	98.3	99.8
14	M. W. Hybrid 104	101.1	98.0	3.07	18.7	90.4	104.0	97.2	98.9
15	Funk Hybrid 208	100.0	98.7	1.30	19.6	88.2	101.5	97.9	98.8
16	M. W. Hybrid 111	101.4	98.7	2.66	17.9	87.1	100.2	97.9	98.5
17	Iowealth Hybrid B	99.4	95.9	3.52	20.3	92.8	106.8	95.1	98.0
18	Pioneer Hi-Bred 311A	105.6	93.6	11.36	18.0	94.0	108.2	92.9	96.7
19	Funk Hybrid 206	96.9	95.6	1.34	20.9	88.1	101.4	94.8	96.5
20	Pioneer Hi-Bred 306	107.3	100.6	6.24	18.7	74.1	85.3	99.8	96.2
21	Funk Hybrid 214	98.0	96.7	1.33	20.0	83.8	96.4	95.9	96.0
22	Iowa Hybrid 942	103.2	93.9	9.01	18.6	90.0	103.6	93.2	95.8
22	Iowealth Hybrid C	96.6	93.3	3.42	20.3	91.4	105.2	92.6	95.8
23	Hulting Yellow Dent	100.7	96.9	3.77	19.6	81.9	94.2	96.1	95.6
24	M. W. Hybrid 138	94.2	91.7	2.65	18.6	90.4	104.0	91.0	94.3
25	McKeighan Yellow Dent	98.7	95.2	3.55	21.1	75.7	87.1	94.4	92.6
26	Pioneer Hi-Bred 311	91.8	86.3	5.99	17.9	91.4	105.2	85.6	90.5
●	Average of 5 best open-pollinated var...	98.7	95.1	3.65	20.5	68.2	78.4	94.3	90.3
27	Roeschley Yellow Dent	99.7	94.7	5.02	20.2	63.0	72.5	93.9	88.6
28	Original Krug	98.0	95.6	2.45	20.9	59.0	67.9	94.8	88.1
29	Community composite (Semesan Jr.)	95.9	92.2	3.86	20.0	65.6	75.5	91.5	87.5
30	Mummert-Hahn Dent	96.6	92.9	3.83	20.9	61.2	70.4	92.2	86.8
31	Community composite (untreated)	90.0	86.5	3.89	20.0	66.1	76.1	85.8	83.4
32	Queen of the Field	84.5	82.9	1.89	18.7	72.4	83.3	82.2	82.5
33	Community composite (Barbak)	90.0	86.5	3.89	20.0	53.9	68.2	85.8	81.4
	Average of division	101.7	98.2	3.44	18.9	83.5	93.2	97.4	97.2
	Experimental division—entries *not* in commercial production								
1	*Illinois Hybrid 960	123.9	119.8	3.31	20.0	88.6	102.0	118.8	114.6
2	*Moews Hybrid 32	119.7	117.6	1.75	20.2	88.4	101.7	116.7	113.0
3	*U. S. Hybrid 38	116.3	113.1	2.75	19.6	93.6	107.7	112.2	111.1
4	*Iowealth Hybrid C. I.$_1$	114.5	110.5	3.49	22.8	99.0	113.9	109.6	110.7
5	Illinois Hybrid 570	113.9	111.4	2.19	19.6	92.1	106.0	110.5	109.4
6	*Moews Hybrid 22	113.5	111.5	1.76	21.1	89.0	102.4	110.6	108.6
7	*Illinois Hybrid 751	109.4	107.4	1.83	19.9	95.4	109.8	106.5	107.3
7	*Illinois Hybrid 936	109.4	107.1	2.10	20.0	96.2	110.7	106.2	107.3
8	*Illinois Hybrid 574	111.4	109.9	1.35	20.0	88.0	101.3	109.0	107.1
9	*Iowa Hybrid 3110	111.4	108.3	2.78	19.6	90.6	104.3	107.4	106.6
10	Illinois Hybrid 371	112.1	108.3	3.39	19.6	90.2	103.8	107.4	106.5
11	*U. S. Hybrid 44	104.5	103.4	1.05	20.3	98.0	112.8	102.6	105.2
12	Illinois Hybrid 754	108.3	105.6	2.49	19.2	88.7	102.1	104.8	104.1
13	*Moews Hybrid 24	107.3	104.9	2.24	19.1	89.2	102.6	104.1	103.7
13	Illinois Hybrid 372	105.2	103.0	2.09	19.1	94.0	108.2	102.2	103.7
14	*Indiana Hybrid 642	104.5	102.4	2.01	18.7	95.0	109.3	101.6	103.5
15	*Moews Hybrid 30	105.2	103.6	1.52	20.0	91.0	104.7	102.8	103.3
16	*Indiana Hybrid 620	104.5	100.6	3.73	19.3	95.0	109.3	99.8	102.2
17	*Pioneer Hi-Bred 3010	102.8	99.1	3.60	20.9	98.0	112.8	98.3	101.9
18	*Iowealth Hybrid C. I.$_2$	100.4	96.9	3.49	20.9	100.0	115.1	96.1	100.9
19	Funk Hybrid 225	103.2	101.7	1.45	21.0	84.7	97.5	100.9	100.1
20	*Illinois Hybrid 571	101.8	100.5	1.28	20.2	85.0	97.8	99.7	99.2
21	*DeKalb Hybrid 97	94.2	92.2	2.12	19.5	97.8	112.5	91.5	96.8
22	*Pioneer Hi-Bred 2218A	93.8	83.1	11.41	20.5	90.0	103.6	82.4	87.7
23	Pfister Hybrid 4857 (2d generation)	90.0	87.6	2.67	19.1	74.0	85.2	86.9	86.5
	Average of division	107.2	104.4	2.61	20.0	91.7	105.4	103.5	99.9
	Average of all entries	104.0	100.8	3.08	19.3	86.9	....	....	....

*Average of 5 plots instead of 10.

TABLE 25.—ADAIR, CENTRAL ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS, 1935

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
	Regular division—entries in commercial production								
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
1	Illinois Hybrid 384	86.2	85.9	.35	20.7	87.9	133.3	104.4	111.6
2	Illinois Hybrid 360A	99.6	97.1	2.51	20.8	53.0	80.4	118.0	108.6
2	Funk Hybrid 220L	86.7	86.2	.58	21.2	79.3	120.3	104.7	108.6
3	Illinois Hybrid 360	94.3	91.5	2.97	20.8	58.8	89.2	111.2	105.7
4	Pfister Hybrid 4857	94.3	93.8	.53	19.8	48.0	72.8	114.0	103.7
5	Pioneer Hi-Bred 307A	82.7	80.5	2.66	20.5	79.3	120.3	97.8	103.4
6	Iowa Hybrid 13	88.6	85.8	3.16	20.8	60.7	92.0	104.3	101.2
6	Illinois Hybrid 172	87.8	87.0	.91	20.1	57.9	87.8	105.7	101.2
7	Pioneer Hi-Bred 311	81.0	78.3	3.33	18.4	77.9	118.1	95.1	100.9
8	Illinois Hybrid 543	86.1	85.8	.35	22.3	56.5	85.7	104.3	99.7
9	Pfister Hybrid 584	92.4	90.1	2.49	20.4	46.0	69.8	109.5	99.6
10	Funk Hybrid 220	79.6	78.2	1.76	22.5	72.9	110.6	95.0	98.9
11	Pioneer Hi-Bred 306	87.4	86.3	1.26	19.7	47.0	71.3	104.9	96.5
12	Pioneer Hi-Bred 311A	81.3	78.5	3.44	18.0	53.3	80.8	95.4	91.8
13	McKeighan Yellow Dent	75.1	73.9	1.60	23.8	61.4	93.1	89.8	90.6
14	Original Krug	81.8	80.2	1.96	22.3	45.7	69.3	97.4	90.4
15	Funk Hybrid 206	72.8	71.5	1.79	23.7	62.9	95.4	86.9	89.0
16	Doubet Yellow Dent	75.6	74 2	1.85	21.6	55.7	84.5	90.2	88.8
●	Average of 5 best open-pollinated var...	76.2	75.0	1.57	22.9	51.3	77.7	91.1	87.8
17	Funk Hybrid 208	76.0	75.2	1.05	22.1	50.5	76.6	91.4	87.7
18	Mountjoy Utility Dent	74.6	73.9	.94	23.5	50.0	75.8	89.8	86.3
19	Station Yellow Dent	73.7	72.7	1.36	23.1	43.5	66.0	88.3	82.7
20	Herndon Yellow Dent	74.8	73.3	2.01	22.8	34.0	51.6	89.1	79.7
21	Hoblit Golden Eagle	70.7	69.7	1.41	22.5	42.0	63.7	84.7	79.5
22	Stiegelmeier Improved Dent	65.8	64.2	2.43	24.5	43.6	66.1	78.0	75.0
23	Sommer Yellow Dent	69.9	66.5	4.86	26.5	36.0	54.6	80.8	74.3
	Average of division	81.6	80.0	1.96	21.7	56.2	85.2	97.2	94.2

TABLE 25.—*Concluded*

Experimental division—entries *not* in commercial production

1	*U. S. Hybrid 44	93.6	93.1	.53	21.9	75.0	113.7	113.1	113.3
2	Illinois Hybrid 546	90.4	89.4	1.11	22.8	82.6	125.3	108.6	112.8
3	*Illinois Hybrid 960	99.3	95.9	3.42	23.1	66.3	100.5	116.5	112.5
4	*Illinois Hybrid 729	88.1	86.8	1.48	20.3	86.7	131.5	105.5	112.0
5	*Illinois Hybrid 737	86.8	85.5	1.50	22.3	88.8	134.7	103.9	111.6
6	*U. S. Hybrid 38	87.9	87.2	.80	21.7	83.3	126.3	106.0	111.1
7	*U. S. Hybrid 33	89.6	88.4	1.34	21.7	78.8	119.5	107.4	110.4
8	*Iowa Hybrid 3110	90.7	90.1	.66	22.3	74.3	112.7	109.5	110.3
8	*Illinois Hybrid 371	91.4	89.9	1.64	21.0	75.0	113.7	109.2	110.3
9	Illinois Hybrid 710	93.3	91.3	2.14	24.8	70.0	106.2	110.9	109.7
10	*Illinois Hybrid 793	87.9	86.4	1.71	25.3	81.3	123.3	105.0	109.6
11	*Indiana Hybrid 634	85.1	84.9	.24	20.8	83.0	125.9	103.2	108.9
12	Illinois Hybrid 754	85.7	85.2	.58	22.5	82.1	124.5	103 5	108.8
13	*Pioneer Hi-Bred 2088	86.6	85.0	2.07	19.7	80.0	121.3	103.3	107.8
14	*U. S. Hybrid 57	86.8	85.9	1.04	22.8	76.7	116.3	104.4	107.4
14	*Illinois Hybrid 775	79.9	78.7	.25	20.4	91.7	139.1	96.8	107.4
15	Illinois Hybrid 760	90.4	88.9	1.66	21.4	69.3	105.1	108.0	107.3
16	*Pioneer Hi-Bred 2111	86.4	83.6	3.24	22.3	81.3	123.3	101.6	107.0
17	*Illinois Hybrid 372	81.4	80.1	1.60	21.7	88.8	134.7	97 3	106.7
18	*Illinois Hybrid 934	83.0	82.0	1.20	22.5	83.3	126.3	99.6	106.3
18	Illinois Hybrid 936	84.9	83.8	1.30	22.3	78.9	119.6	101.8	106.3
19	*Indiana Hybrid 631	81.9	81.1	.98	24.0	83.3	126.3	98.5	105.5
20	*Indiana Hybrid 666	89.8	86.4	3.79	21.9	71.0	106.6	105.0	105.4
21	Funk Hybrid 207	86.1	84.4	1.97	24.5	74.3	112.7	102.6	105.1
22	*Illinois Hybrid 39	79.7	79.3	.50	23.5	86.3	130.9	96.4	105.0
22	Indiana Hybrid 643	89.0	88.5	.56	20.8	64.3	97.5	107.5	105.0
23	*Illinois Hybrid 46	81.4	79.6	2.21	19.5	83.3	126.3	96.7	104.1
24	*Pioneer Hi-Bred 2011	87.2	86 3	1.03	21.1	65.7	99.6	104.9	103.6
24	Indiana Hybrid 632	79.3	77.7	2.02	24.3	86.4	131.0	94.4	103.6
25	*Illinois Hybrid 579	90.9	88.5	2.64	24.3	57.5	87.2	107.5	102.4
26	*Illinois Hybrid 764	85.3	84.0	1.52	22.5	67.5	102.4	102.1	102.2
27	*Illinois Hybrid 574	84.9	82.4	2.94	22.7	70.0	106.2	100.1	101.6
28	Illinois Hybrid 391	86.4	85.2	1.39	24.5	59.3	89.9	103.5	100.1
28	*Illinois Hybrid 765	80.8	80.0	.99	21.1	71.7	108.7	97.2	100.1
29	*Iowa Hybrid 3045	86.3	83.9	2.78	24.5	61.3	93.0	101.9	99.7
30	*Ohio Hybrid 6	80.6	77.7	3.60	20.7	75.0	113.7	94.4	99.2
31	*Iowa Hybrid 3065	91.2	89.3	2.08	21.4	46.7	70.8	108.5	99.1
32	*Illinois Hybrid 753	86.3	85.4	1.04	24.8	53.3	80.8	103.8	98.1
33	*Ohio Hybrid 7	87.0	83.7	3.79	23.5	56.7	86.0	101.7	97.8
34	*Pfister Hybrid 3258	88.7	86.4	2.59	23.0	50.0	75.8	105.0	97.7
35	*Illinois Hybrid 539	78.6	76.6	2.54	24.1	72.5	109.9	93.1	97.3
36	*Pioneer Hi-Bred 2215A	79.7	73.0	8.41	20.7	80.0	121.3	88.7	96.9
37	*Illinois Hybrid 54	76.3	75.0	1.70	24.3	73.8	111.9	91.1	96.3
38	*Indiana Hybrid 819	81.8	79.9	2.32	23.0	58.3	88.4	97.1	94.9
39	*Indiana Hybrid 651	80.0	79.3	.88	22.5	56.7	86.0	96.4	93.8
40	*Illinois Hybrid 508	71.5	70.3	1.68	21.9	76.7	116.3	85.4	93.1
41	*Indiana Hybrid 650	75.4	72.9	3.32	26.3	68.8	104.3	88.6	92.5
42	*Ohio Hybrid 8	84.6	83.6	1.18	22.3	37.5	56.9	101.6	90.4
43	Funk Hybrid 225	80.4	79.5	1.12	23.1	44.0	66.7	96.6	89.1
44	*Indiana Hybrid 820	74.1	71.6	3.37	26.9	62.5	94.8	87.0	89.0
	Average of division	85.1	83.5	1.88	22.6	71.8	108.9	101.5	103.4
	Average of all entries	83.9	82 3	1.91	22.3	66.6	....	....	....

*Average of 4 plots instead of 8.

TABLE 26.—BELLFLOWER, CENTRAL ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS, 1935

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
	Regular division—entries in commercial production								
1	Illinois Hybrid 360	80.4	80.0	.50	21.1	83.0	111.3	111.0	111.1
2	Illinois Hybrid 360A	79.2	78.4	1.01	20.5	83.0	111.3	108.7	109.4
3	Pfister Hybrid 4857	77.7	77.3	.51	20.3	77.5	105.9	107.2	106.4
4	Pfister Hybrid 584	78.1	77.7	.51	20.2	74.5	100.0	107.8	105.9
5	Pioneer Hi-Bred 311	74.0	73.3	.95	18.0	84.5	113.3	101.7	104.6
6	Illinois Hybrid 543	75.3	74.1	1.59	21.9	81.0	108.6	102.8	104.3
7	Illinois Hybrid 384	71.1	70.5	.84	19.8	87.5	117.3	97.8	102.7
8	Illinois Hybrid 172	72.3	70.6	2.35	19.7	80.0	107.2	97.9	100.2
9	Funk Hybrid 214	70.0	69.2	1.14	21.9	80.5	107.9	96.0	99.0
10	Pioneer Hi-Bred 307A	73.4	72.5	1.23	20.5	70.0	93.8	100.6	98.9
11	Pioneer Hi-Bred 306	73.9	71.1	3.79	19.2	69.0	92.5	98.6	97.1
12	Funk Hybrid 220	68.6	68.4	.29	21.1	76.5	102.5	94.9	96.8
13	Pioneer Hi-Bred 311A	68.5	65.6	4.23	19.6	82.0	109.9	91.0	95.7
14	Funk Hybrid 220L	66.7	65.9	1.20	19.6	80.5	107.9	91.4	95.5
15	Funk Hybrid 206	67.3	66.4	1.34	22.3	77.5	103.9	92.1	95.1
16	Iowa Hybrid 13	76.9	72.2	6.11	21.1	54.5	73.1	100.1	93.4
17	Funk Hybrid 208	63.0	62.5	.79	20.6	74.0	99.2	86.7	89.8
18	McKeighan Yellow Dent	67.0	64.7	3.43	22.7	64.5	86.5	89.7	88.9
19	Station Yellow Dent	66.7	65.3	2.10	22.5	58.0	77.7	90.6	87.4
20	Original Krug	68.1	66.8	1.91	21.3	50.5	67.7	92.6	86.4
●	Average of 5 best open-pollinated var.	66.3	64.9	2.11	22.4	55.7	74.7	90.0	86.2
21	Warsaw Krug	66.1	65.6	.76	22.5	48.0	64.3	91.0	84.3
22	Tiemann Yellow Dent	63.7	62.0	2.67	23.1	57.5	77.1	86.0	83.8
23	Ropp Yellow Dent	67.6	64.2	5.03	22.7	47.0	63.0	89.0	82.5
24	Mountjoy Utility Dent	64.7	63.7	1.55	23.8	45.5	61.0	88.3	81.5
25	Stiegelmeier Improved Dent	61.4	57.1	7.00	24.7	39.5	52.9	79.2	72.6
	Average of division	70.5	69.0	2.13	21.2	69.0	92.6	95.7	94.9
	Experimental division—entries *not* in commercial production								
1	*U. S. Hybrid 44	87.7	86.3	1.60	22.0	85.0	113.9	119.7	118.3
2	*Illinois Hybrid 960	86.4	84.2	2.55	20.8	75.0	100.5	116.8	112.7
3	*Iowa Hybrid 3110	82.3	81.6	.85	20.3	82.0	110.0	113.2	112.4
4	*Illinois Hybrid 729	79.4	78.4	1.26	20.2	91.0	122.0	108.7	112.0
5	*Illinois Hybrid 793	84.8	82.6	2.59	20.3	76.0	101.9	114.6	111.4
6	*U. S. Hybrid 57	81.1	78.2	3.58	21.2	85.0	113.9	108.5	109.9
7	*Pioneer Hi-Bred 2088	78.0	76.8	1.54	19.9	89.0	119.3	106.5	109.7
8	*U. S. Hybrid 38	79.4	77.7	2.14	22.3	85.2	114.2	107.8	109.4
8	*Illinois Hybrid 775	78.5	76.5	2.55	21.6	89.0	119.3	106.1	109.4
9	*Illinois Hybrid 574	81.5	80.2	1.60	21.9	71.0	95.2	111.2	107.2
10	*Illinois Hybrid 934	76.3	74.9	1.83	22.1	87.0	116.6	103.9	107.1
11	*Indiana Hybrid 631	78.4	75.7	3.44	19.8	84.0	112.6	105.0	106.9
12	*Illinois Hybrid 753	81.1	79.8	1.60	24.3	71.0	95.2	110.7	106.8
13	*Illinois Hybrid 46	75.9	74.0	2.50	19.5	87.0	116.6	102.6	106.1
14	Illinois Hybrid 936	76.2	75.4	1.05	21.1	81.0	108.6	104.6	105.6
15	*Pioneer Hi-Bred 2111	76.2	75.4	1.05	20.1	78.0	104.6	104.6	104.6
16	*Illinois Hybrid 737	73.6	72.7	1.22	20.4	85.0	113.9	100.8	104.1
17	*Ohio Hybrid 8	75.2	73.6	2.12	20.8	80.0	107.2	102.1	103.4
18	Illinois Hybrid 546	72.7	70.7	2.75	22.7	88.5	118.6	98.1	103.2
19	*Pfister Hybrid 3258	79.3	78.5	1.01	21.7	64.0	85.8	108.9	103.1
19	*Indiana Hybrid 634	75.4	73.7	2.25	21.7	79.0	105.9	102.2	103.1
19	Indiana Hybrid 632	75.4	71.6	5.04	21.3	85.5	114.6	99.3	103.1
19	Funk Hybrid 207	76.9	75.3	2.08	21.9	74.0	99.2	104.4	103.1
19	*Pioneer Hi-Bred 2011	74.2	70.7	4.72	21.7	88.0	118.0	98.1	103.1
20	Indiana Hybrid 643	77.9	76.0	2.44	21.3	70.5	94.5	105.4	102.7
21	*Illinois Hybrid 371	72.7	71.8	1.24	20.8	83.0	111.3	99.6	102.5
22	Illinois Hybrid 754	72.2	71.4	1.11	21.7	83.5	111.9	99.0	102.2
23	Illinois Hybrid 710	76.5	74.4	2.75	24.8	73.5	98.5	103.2	102.0
24	*Iowa Hybrid 3045	79.7	75.4	5.40	22.3	68.0	91.2	104.6	101.3
25	*U. S. Hybrid 33	72.7	71.6	1.51	22.3	76.0	101.9	99.3	100.0
26	*Pioneer Hi-Bred 2215A	72.8	70.2	3.57	21.7	80.0	107.2	97.4	99.9
27	*Indiana Hybrid 819	71.5	68.4	4.34	24.0	84.0	112.6	94.9	99.3
28	*Illinois Hybrid 579	79.4	75.5	4.91	23.5	61.0	81.8	104.7	99.0
29	*Iowa Hybrid 3065	72.6	70.3	3.17	21.1	77.0	103.2	97.5	98.9
30	*Illinois Hybrid 372	68.8	68.5	.44	18.7	82.0	109.9	95.0	98.7

TABLE 26.—*Concluded*

	Experimental division—*concluded*								
31	Illinois Hybrid 760	75.2	71.4	5.05	22.5	72.0	96.5	99.0	98.4
32	*Illinois Hybrid 508	70.5	67.8	3.83	23.8	83.0	111.3	94.0	98.3
33	*Indiana Hybrid 820	76.6	74.4	2.87	24.0	62.0	83.1	103.2	98.2
34	Illinois Hybrid 391	76.6	74.1	3.26	22.5	62.5	83.8	102.8	98.1
34	*Illinois Hybrid 765	70.7	69.8	1.27	22.1	76.0	101.9	96.8	98.1
35	*Illinois Hybrid 764	76.3	73.8	3.28	22.8	63.0	84.5	102.4	97.9
36	*Illinois Hybrid 54	70.9	69.4	2.12	22.5	75.0	100.5	96.3	97.4
37	*Illinois Hybrid 39	67.6	67.0	.89	22.2	82.0	109.9	92.9	97.2
38	Funk Hybrid 225	74.7	72.8	2.54	23.0	62.5	83.8	101.0	96.7
38	Stiegelmeier Hybrid 2	70.5	69.8	.99	22.3	68.0	96.2	96.8	96.7
39	*Ohio Hybrid 7	71.5	68.9	3.64	22.1	70.0	93.8	95.6	95.2
40	*Indiana Hybrid 666	68.9	64.5	6.39	22.8	81.0	108.6	89.5	94.3
41	*Ohio Hybrid 6	64.4	63.0	2.17	19.2	75.0	100.5	87.4	90.7
42	*Illinois Hybrid 539	64.1	62.0	3.28	21.6	64.0	85.8	86.0	86.0
	Average of division	75.5	73.6	2.52	21.7	77.4	103.9	102.1	102.6
	Average of all entries	73.8	72.1	2.30	21.6	74.6	....	....	....

*Average of 5 plots instead of 10.

TABLE 27.—ARMSTRONG, CENTRAL ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS, 1935

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
	Regular division—entries in commercial production								
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
1	Illinois Hybrid 360	104.7	104.2	.48	19.8	76.5	133.0	111.0	116.5
2	Illinois Hybrid 384	97.9	96.7	1.23	20.2	87.0	151.3	103.0	115.1
3	Illinois Hybrid 360A	104.4	103.6	77	20.9	64.5	112.2	110.3	110.8
4	Illinois Hybrid 172	96.0	94.7	1.35	19.0	80.5	140.0	100.9	110.7
5	Pfister Hybrid 4857	96.8	95.1	1.76	20.8	68.5	119.1	101.3	105.8
6	Pfister Hybrid 584	97.2	95.2	2.06	20.2	63.5	110.4	101.4	103.7
7	Pioneer Hi-Bred 311A	94.7	91.1	3.80	19.5	67.5	117.4	97.0	102.1
8	Pioneer Hi-Bred 311	93.5	91.5	2.14	19.0	65.0	113.1	97.4	101.3
9	Illinois Hybrid 543	93.5	92.2	1.39	23.0	62.0	107.8	98.2	100.6
10	Pioneer Hi-Bred 306	97.7	94.2	3.58	20.8	56.5	98.3	100.3	99.8
11	Funk Hybrid 220	93.9	92.3	1.70	21.8	57.0	99.1	98.3	98.5
12	Funk Hybrid 206	89.7	88.0	1.90	22.0	63.0	109.6	93.7	97.7
13	Funk Hybrid 220L	92.5	89.4	3.35	22.9	59.5	103.5	95.2	97.3
14	Iowa Hybrid 13	96.1	91.4	4.89	21.0	54.5	94.8	97.3	96.7
15	Pioneer Hi-Bred 307A	96.3	93.8	2.60	20.9	46.0	80.0	99.9	94.9
16	Funk Hybrid 208	88.6	85.5	3.50	22.8	57.0	99.1	91.1	93.1
17	McKeighan Yellow Dent	86.3	84.0	2.67	26.2	45.0	78.3	89.5	86.7
17	Illinois Hybrid 391	94.2	87.6	7.01	26.0	38.5	67.0	93.3	86.7
18	Station Yellow Dent	88.4	85.6	3.17	23.4	39.0	67.8	91.2	85.4
●	Average of 5 best open-pollinated var...	87.6	85.6	2.28	23.7	35.9	62.5	91.2	84.0
19	Original Krug	88.3	87.4	1.02	21.8	32.0	55.7	93.1	83.8
19	Heckerson Yellow Dent	87.9	86.7	1.37	23.7	33.5	58.3	92.3	83.8
20	Community Composite	85.8	82.7	3.61	23.2	37.5	65.2	88.1	82.4
21	Mountjoy Utility Dent	87.1	84.4	3.10	23.2	30.0	52.2	89.9	80.5
22	Dewey Yellow Dent	79.4	77.8	2.02	23.0	38.0	66.1	82.9	78.7
23	Stiegelmeier Yellow Dent	82.6	78.2	5.33	27.0	28.5	49.6	83.3	74.9
24	Sommer Yellow Dent	82.6	77.3	6.42	25.2	20.0	34.8	82.3	70.4
	Average of division	92.2	89.6	2.82	22.2	52.7	91.7	95.5	94.5

(Table is concluded on next page)

TABLE 27.—ARMSTRONG, CENTRAL ILLINOIS—*Concluded*

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
	Experimental division—entries *not* in commercial production								
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
1	*Illinois Hybrid 729	109.3	108.0	1.19	20.2	73.0	127.0	115.0	118.0
2	*Indiana Hybrid 651	107.7	106.5	1.11	19.9	74.0	128.7	113.4	117.2
3	*Illinois Hybrid 960	108.9	107.2	1.56	21.1	72.0	125.2	114.2	117.0
4	*Indiana Hybrid 650	104.9	102.3	2.48	23.4	79.0	137.4	108.9	116.0
5	*Illinois Hybrid 934	100.7	97.8	2.88	21.6	82.0	142.6	104.2	113.8
6	*U. S. Hybrid 44	106.8	105.4	1.31	20.8	68.0	118.3	112.2	113.7
7	*Illinois Hybrid 372	97.0	96.2	.82	19.3	84.0	146.1	102.4	113.3
8	*Illinois Hybrid 793	105.0	102.0	2.86	22.6	70.0	121.8	108.6	111.9
9	*Illinois Hybrid 775	94.0	93.2	.85	20.8	84.0	146.1	99.3	111.0
10	*Illinois Hybrid 371	99.5	98.7	.80	20.7	73.0	127.0	105.1	110.6
11	*Pioneer Hi-Bred 2111	106.0	101.0	4.72	20.2	66.0	114.8	107.6	109.4
12	*U. S. Hybrid 57	105.7	104.1	1.51	21.8	60.0	104.3	110.9	109.3
13	Indiana Hybrid 632	96.6	95.1	1.55	20.5	75.5	131.3	101.3	108.8
14	*U. S. Hybrid 33	98.7	95.6	3.14	21.6	72.0	125.2	101.8	107.7
15	*Pioneer Hi-Bred 2088	101.7	100.3	1.38	19.1	63.0	109.6	106.8	107.5
15	*Illinois Hybrid 46	93.1	90.4	2.90	19.9	81.0	140.9	96.3	107.5
15	*Pioneer Hi-Bred 2011	98.9	96.4	2.53	21.5	70.0	121.7	102.7	107.5
15	Illinois Hybrid 546	101.1	98.1	2.97	22.8	67.0	116.5	104.5	107.5
16	*U. S. Hybrid 38	94.4	92.9	1.59	21.8	73.0	127.0	98.9	105.9
17	*Iowa Hybrid 3065	100.1	98.4	1.70	18.7	62.0	107.8	104.8	105.6
18	*Pioneer Hi-Bred 2215A	98.1	94.5	3.67	20.6	68.0	118.3	100.6	105.0
19	*Illinois Hybrid 508	101.3	99.1	2.17	23.2	58.0	100.9	105.5	104.4
20	*Indiana Hybrid 634	100.5	97.7	2.79	22.2	58.0	100.9	104.0	103.2
21	Illinois Hybrid 710	103.5	100.4	3.00	24.5	52.5	91.3	106.9	103.0
22	*Pfister Hybrid 3258	106.1	103.6	2.36	22.6	45.0	78.3	110.3	102.3
23	Illinois Hybrid 936	94.4	92.4	2.12	21.5	65.0	113.1	98.4	102.1
24	*Indiana Hybrid 631	98.0	95.0	3.06	22.2	60.0	104.3	101.2	102.0
25	*Iowa Hybrid 3045	101.6	100.1	.49	23.0	48.0	83.5	106.6	100.8
26	Illinois Hybrid 754	93.4	91.5	2.03	20.9	63.0	109.6	97.4	100.5
27	*Indiana Hybrid 819	98.6	96.0	2.64	23.4	53.0	92.2	102.2	99.7
27	Indiana Hybrid 643	98.9	96.0	2.93	21.5	53.0	92.2	102.2	99.7
28	Funk Hybrid 207	106.9	102.8	3.84	19.0	40.0	69.6	109.5	99.5
29	*Illinois Hybrid 765	92.5	91.2	1.41	22.6	61.0	106.1	97.1	99.4
30	*Iowa Hybrid 3110	106.3	105.2	1.03	22.2	34.0	59.1	112.0	98.8
31	*Illinois Hybrid 753	98.6	96.3	2.33	26.2	50.0	87.0	102.6	98.7
32	*Ohio Hybrid 6	92.9	91.3	1.72	19.9	59.0	102.6	97.2	98.6
33	Illinois Hybrid 760	95.2	93.9	1.37	22.6	54.0	93.9	100.0	98.5
34	*Ohio Hybrid 8	98.9	96.6	2.33	21.1	48.0	83.5	102.9	98.1
35	*Illinois Hybrid 737	87.9	86.2	1.93	23.0	65.0	113.0	91.8	97.1
36	*Illinois Hybrid 54	93.3	88.5	5.14	22.0	60.0	104.3	94.2	96.8
37	*Indiana Hybrid 820	91.6	90.7	.98	21.8	54.0	93.9	96.6	95.9
38	*Illinois Hybrid 39	90.6	88.0	2.87	23.2	55.0	95.7	93.7	94.2
39	*Illinois Hybrid 574	98.3	93.4	4.98	23.5	44.0	76.5	99.5	93.8
40	Funk Hybrid 225	98.1	95.8	2.34	20.4	39.0	67.8	102.0	93.5
41	*Indiana Hybrid 666	93.3	90.7	2.79	23.2	46.0	80.0	96.6	92.5
42	*Illinois Hybrid 764	93.7	90.6	3.31	22.9	46.0	80.0	96.5	92.4
43	*Ohio Hybrid 7	88.2	82.9	6.01	23.2	48.0	83.5	88.3	87.1
44	*Illinois Hybrid 539	87.6	85.5	2.40	23.9	42.0	73.0	91.1	86.6
45	*Illinois Hybrid 579	94.7	89.5	5.49	27.1	24.0	41.7	95.3	81.9
	Average of division	98.6	96.2	2.43	21.9	60.0	104.4	102.5	103.0
	Average of all entries	96.4	93.9	2.59	22.0	57.5	....	....	....

*Average of 5 plots instead of 10.

TABLE 28.—WINCHESTER, SOUTH-CENTRAL ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS, 1935

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
	Regular division—entries in commercial production								
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
1	Funk Hybrid 220L	76.0	75.6	.53	19.8	75.5	114.5	107.2	109.0
2	Wilson Yellow Dent	70.1	68.9	1.71	21.2	64.0	97.0	97.7	97.5
3	Rice White Dent	69.7	69.3	.57	20.7	61.0	92.5	98.2	96.8
4	Station Yellow Dent	67.4	67.1	.45	21.0	63.0	95.5	95.1	95.2
●	Average of 5 best open-pollinated var...	69.7	68.6	1.58	21.3	57.6	87.3	97.3	94.8
5	Eversole White Dent	71.5	70.4	1.54	20.7	50.5	76.6	99.8	94.0
6	Canterbury Yellow Dent	69.6	67.5	3.02	22.7	49.5	75.0	95.7	90.5
7	Waddell Golden Dent	63.4	63.0	.63	21.6	60.5	91.7	89.3	89.9
8	Moore Yellow Dent	62.8	60.5	3.66	21.5	66.0	100.1	85.8	89.4
9	Shuman Golden Beauty	62.9	61.8	1.75	20.7	58.5	88.7	87.6	87.9
10	Waddell Utility Yellow Dent	63.9	63.7	.31	21.8	53.0	80.3	90.3	87.8
11	Waddell Big Democrat	60.6	59.9	1.16	22.7	55.5	84.1	84.9	84.7
12	Waddell Utility White Dent	60.5	59.7	1.32	21.8	35.0	53.1	84.6	76.7
	Average of division	66.5	65.6	1.35	21.3	57.7	87.4	93.0	91.6
	Experimental division—entries *not* in commercial production								
1	Illinois Hybrid 960	90.6	90.0	.66	20.6	85.0	128.9	127.6	127.9
2	Illinois Hybrid 710	86.4	85.2	1.39	20.6	82.0	124.3	120.8	121.7
3	Illinois Hybrid 947	81.8	80.5	1.59	21.2	82.0	124.3	114.1	116.7
4	Illinois Hybrid 945	79.7	79.0	.88	20.1	83.0	125.8	112.0	115.5
5	Illinois Hybrid 39	77.4	76.7	.90	20.0	89.0	134.9	108.8	115.3
6	*Iowealth Hybrid CC	78.3	77.8	.64	20.4	83.0	125.8	110.3	114.2
7	Funk Hybrid 225	79.2	77.4	2.27	20.9	83.0	125.8	109.7	113.7
8	Illinois Hybrid 966	74.8	73.8	1.34	21.8	92.0	139.5	104.6	113.3
9	Illinois Hybrid 559	77.7	76.6	1.42	20.4	82.5	125.1	108.6	112.7
10	Funk Hybrid 207	77.4	76.5	1.16	22.0	79.0	119.8	108.4	111.3
11	Illinois Hybrid 54	80.2	79.0	1.50	20.6	71.5	108.4	112.0	111.1
12	Funk Hybrid 231	77.7	77.1	.77	21.0	74.5	112.9	109.3	110.2
13	Illinois Hybrid 538	75.8	75.5	.40	21.3	76.5	116.0	107.0	109.3
14	Illinois Hybrid 508	72.8	70.3	3.43	20.2	90.0	136.4	99.7	108.9
15	Illinois Hybrid 546	75.9	75.3	.79	21.0	74.5	112.9	106.7	108.3
16	Illinois Hybrid 51	76.4	75.7	.92	21.6	71.0	107.6	107.3	107.4
17	Golden Beauty × 4211	75.7	75.1	.79	20.6	66.0	100.1	106.5	104.9
18	Missouri Hybrid 51	78.2	76.9	1.66	22.4	54.4	82.5	109.0	102.4
19	Stiegelmeier Hybrid 3	67.4	67.0	.59	21.8	79.0	119.8	95.0	101.2
20	Illinois Hybrid 1074	65.6	64.9	1.07	22.2	77.5	117.5	92.0	98.4
21	Kansas Hybrid 5	74.4	73.6	1.08	22.4	53.0	80.3	104.3	98.3
22	Kansas Hybrid 3	67.3	65.3	2.97	23.2	68.0	103.1	92.6	95.2
23	Missouri Hybrid 11	69.0	67.0	2.90	22.9	61.0	92.5	95.0	94.4
24	Missouri Hybrid 19	69.1	65.6	5.07	23.0	62.0	94.0	93.0	93.3
25	Kansas Hybrid 6	71.3	69.6	2.39	22.9	49.5	75.0	98.7	92.8
26	*Waddell Utility White Dent × Indiana 33	69.3	68.4	1.30	21.2	42.0	63.7	97.0	88.7
27	Kansas Hybrid 4	67.9	67.4	.74	21.3	44.5	67.5	95.5	88.5
28	*Wood Hybrid Medium Yellow Dent...	62.2	61.4	1.29	21.8	54.0	81.9	87.0	85.7
29	*Wood Hybrid Early White Dent...	67.1	65.0	3.13	23.7	43.0	65.2	92.1	85.4
30	*Missouri Hybrid 8	66.5	64.5	3.01	24.7	38.0	57.6	91.4	83.0
31	*Wood Hybrid Medium White Dent...	49.1	47.7	2.85	24.4	54.0	81.9	67.6	71.2
	Average of division	73.6	72.4	1.63	21.6	69.2	104.9	102.7	103.3
	Average of all entries	71.6	70.5	1.54	21.6	66.0	....	....	....

*Average of 5 plots instead of 10.

TABLE 29.—SULLIVAN, SOUTH-CENTRAL ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS, 1935

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
	Regular division—entries in commercial production								
1	Funk Hybrid 220L	61.7	61.2	.81	21.9	52.5	158.7	123.0	131.9
2	Station Yellow Dent	55.2	54.9	.54	22.0	25.0	75.6	110.3	101.6
3	Waddell Utility Yellow Dent	55.7	54.0	3.05	23.2	24.4	73.7	108.5	99.8
4	Canterbury Yellow Dent	53.9	52.9	1.86	23.6	25.6	77.4	106.3	99.1
●	Average of 5 best open-pollinated var.	52.5	51.1	2.67	23.0	27.4	82.8	102.8	97.8
5	Shuman Golden Beauty	49.5	48.0	3.03	22.0	30.6	92.5	96.5	95.5
6	Moore Yellow Dent	48.2	45.9	4.77	24.0	31.2	94.6	92.3	92.9
7	Waddell Golden Dent	48.7	46.8	3.90	26.0	29.4	88.8	94.1	92.8
8	Wilson Yellow Dent	52.4	51.0	2.67	23.2	20.6	62.3	102.7	92.6
9	Community composite	48.5	45.7	5.77	24.4	27.0	81.3	91.9	89.3
10	Rice White Dent	47.4	44.9	5.27	25.8	25.6	77.4	90.2	87.0
11	Eversole White Dent	44.0	41.9	4.77	24.8	16.9	51.1	84.2	75.9
12	Waddell Utility White Dent	38.9	31.4	19.28	27.4	28.7	87.0	63.1	69.1
	Average of division	50.3	48.2	4.17	24.0	28.1	85.0	96.9	94.0
	Experimental division—entries *not* in commercial production								
1	Illinois Hybrid 960	70.4	69.3	1.56	19.2	61.2	185.2	139.3	150.8
2	Illinois Hybrid 546	61.6	60.1	2.44	20.9	63.1	190.7	120.8	138.4
3	Illinois Hybrid 966	60.1	57.6	4.16	24.8	61.9	187.1	115.8	133.6
4	Illinois Hybrid 39	61.1	59.0	3.44	22.0	53.7	162.6	118.6	129.6
5	Illinois Hybrid 947	65.8	63.6	3.34	24.0	42.5	128.4	127.8	128.0
6	Funk Hybrid 207	64.7	60.7	6.18	21.6	42.5	128.4	122.0	123.6
7	Illinois Hybrid 710	58.3	57.4	1.54	23.8	45.6	137.8	115.4	121.0
8	Illinois Hybrid 945	63.5	62.3	1.89	20.7	30.6	92.5	125.2	117.0
9	Illinois Hybrid 1074	57.2	55.6	2.80	21.6	43.1	130.2	111.8	116.4
10	Illinois Hybrid 538	62.9	60.8	3.34	21.6	31.9	96.4	122.2	115.8
11	Illinois Hybrid 559	58.3	57.2	1.89	21.8	38.1	115.1	115.0	115.0
12	Illinois Hybrid 51	59.2	57.8	2.36	21.2	31.9	96.4	116.2	111.3
13	Illinois Hybrid 508	52.8	50.8	3.79	24.8	45.0	136.0	102.1	110.6
14	*Iowealth Hybrid CC	58.3	57.3	1.72	21.8	31.3	94.6	115.2	110.1
15	Illinois Hybrid 54	54.0	52.6	2.59	22.2	40.6	122.7	105.7	110.0
16	Funk Hybrid 225	56.0	55.7	.54	20.6	32.5	98.2	112.0	108.6
17	Golden Beauty × 4211	59.2	54.4	8.11	25.2	31.3	94.6	109.3	105.6
18	Funk Hybrid 231	54.7	54.3	.73	20.1	24.4	73.7	109.1	100.3
19	Stiegelmeier Hybrid 3	50.5	47.3	6.34	25.8	36.9	111.5	95.1	99.2
20	Kansas Hybrid 3	52.5	49.3	6.10	27.2	30.0	90.7	99.1	97.0
21	Missouri Hybrid 51	53.7	49.7	7.45	28.0	23.8	71.9	99.9	92.9
22	Kansas Hybrid 5	51.6	48.3	6.40	28.4	25.6	77.4	97.1	92.2
23	Missouri Hybrid 11	52.8	46.9	11.17	25.8	19.4	58.6	94.3	85.4
24	*Wood Hybrid Medium Yellow Dent	43.1	41.8	3.02	23.0	27.5	83.1	84.0	83.8
25	Kansas Hybrid 4	44.0	40.7	7.50	24.4	25.0	75.6	81.8	80.3
26	Missouri Hybrid 19	45.3	43.1	4.86	26.0	20.0	60.4	86.6	80.1
27	*Waddell Utility White Dent × Indiana 33	41.8	36.9	11.72	26.8	31.3	94.6	74.2	79.3
28	Kansas Hybrid 6	47.2	36.2	23.31	27.8	28.1	84.9	72.8	75.8
29	*Wood Hybrid Early White Dent	39.9	28.1	29.57	32.2	22.5	68.0	56.5	59.4
30	*Missouri Hybrid 8	36.1	29.0	19.67	28.8	18.8	56.8	58.3	57.9
31	*Wood Hybrid Medium White Dent	26.6	16.8	36.84	34.2	25.0	75.6	33.8	44.3
	Average of division	53.7	50.3	6.33	24.4	35.0	105.8	101.2	102.4
	Average of all entries	52.7	49.7	5.69	24.3	33.1	....	....	....

*Average of 4 plots instead of 8.

TABLE 30.—ALHAMBRA, SOUTHERN ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS, 1935

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
	Regular division—entries in commercial production								
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
1	St. Charles White	57.9	56.8	1.90	22.9	32.0	95.3	114.2	109.5
1	Community composite (Semesan Jr.)	58.7	56.8	3.23	26.2	32.0	95.3	114.2	109.5
2	Waddell Golden Beauty	55.8	55.5	.54	26.1	34.0	101.3	111.6	109.0
2	Moore Yellow Dent	58.7	55.0	6.30	22.0	35.0	104.2	110.6	109.0
●	Average of 5 best open-pollinated var.	56.5	54.8	3.01	23.6	33.1	98.6	110.1	107.2
3	Waddell Golden Dent	53.7	52.4	2.42	23.2	34.0	101.3	105.4	104.3
3	Waddell Big Democrat	56.4	54.1	4.08	23.8	30.5	90.8	108.8	104.3
4	Waddell Yellow Pearl	50.5	49.3	2.38	28.6	38.5	114.7	99.1	103.0
5	Waddell Utility Yellow Dent	52.5	51.5	1.90	25.8	30.5	90.8	103.6	100.4
6	Champion White Pearl	53.9	43.8	18.74	25.8	39.5	117.6	88.1	95.5
7	Community composite (Barbak)	47.3	44.6	5.71	22.2	34.0	101.3	89.7	92.6
7	Blackhawk	51.6	48.3	6.40	26.8	26.5	78.9	97.1	92.6
8	Pride of Saline	49.8	46.5	6.63	28.2	30.0	89.3	93.5	92.5
9	Waddell Utility White Dent	45.8	44.4	3.06	25.4	32.0	95.3	89.3	90.8
10	Station Yellow Dent	50.4	47.8	5.16	20.3	24.5	73.0	96.1	90.3
11	Community composite (untreated)	48.2	38.7	19.71	27.0	30.5	90.8	77.8	81.1
12	Leaming (Kiefer)	47.6	35.7	25.00	28.2	33.0	98.3	71.8	78.4
	Average of division	52.4	48.8	6.87	25.1	32.3	96.1	98.2	97.9
	Experimental division—entries *not* in commercial production								
1	*Indiana Hybrid 835	66.5	64.0	3.76	21.0	42.0	125.1	128.7	127.8
2	*Missouri Hybrid 19	70.0	67.6	3.43	24.2	31.0	92.3	135.9	125.0
3	Illinois Hybrid 508	58.6	57.7	1.54	21.4	46.5	138.5	116.0	121.6
4	Illinois Hybrid 46	56.2	53.6	4.63	19.0	51.5	153.4	107.8	119.2
5	*Champion White Pearl × B 103	63.7	59.1	7.22	23.2	36.0	107.2	118.8	115.9
6	*Champion White Pearl × Indiana 33	62.0	52.9	14.68	20.1	46.0	137.0	106.4	114.0
6	Indiana Hybrid 823	53.0	51.9	2.08	23.9	48.0	142.9	104.4	114.0
7	Illinois Hybrid 546	49.5	48.9	1.21	21.4	53.5	159.3	98.3	113.6
8	Illinois Hybrid 710	53.5	53.1	.75	23.4	33.5	99.8	106.8	105.0
9	Golden Beauty × 5680	58.5	56.3	3.76	27.5	25.5	75.9	113.2	103.9
10	*Illinois Hybrid 559	51.0	50.3	1.37	21.2	36.0	107.2	101.2	102.7
11	*Champion White Pearl × Pride of Saline 47	51.8	50.0	3.47	19.2	36.0	107.2	100.5	102.2
12	Golden Beauty × 4211	51.0	50.2	1.57	21.8	35.0	104.2	101.0	101.8
13	Illinois Hybrid 51	47.6	46.4	2.52	21.8	39.5	117.6	93.3	99.4
14	Indiana Hybrid 880	53.7	53.0	.56	21.4	25.0	74.5	106.6	98.6
15	Illinois Hybrid 54	47.2	46.8	.85	22.9	37.5	111.7	94.1	98.5
16	Golden Beauty × 5110	50.0	49.5	1.00	20.6	31.0	92.3	99.5	97.7
17	Missouri Hybrid 8	48.5	45.8	5.57	25.9	38.0	113.2	92.1	97.4
18	*Missouri Hybrid 11	55.3	52.0	5.97	23.6	24.0	71.5	104.6	96.3
19	*Golden Beauty × 5677	52.7	48.9	7.21	22.4	24.0	71.5	98.3	91.6
20	*Indiana Hybrid 815	43.9	43.0	2.05	23.4	35.0	104.2	86.5	90.9
21	*Champion White Pearl × Pride of Saline 29	56.5	45.9	18.76	26.8	26.0	77.4	92.3	88.6
22	Wood Hybrid Early White Dent	48.6	42.9	11.73	26.6	28.5	84.9	86.3	85.9
23	*Illinois Hybrid 538	46.7	46.0	1.50	26.2	20.0	59.6	92.5	84.3
24	Wood Hybrid Medium Yellow Dent	44.9	39.7	11.58	21.2	23.5	70.0	79.8	77.4
25	Wood Hybrid Medium White Dent	39.3	32.1	18.32	28.0	21.5	64.0	64.6	64.4
	Average of division	53.1	50.3	5.27	23.0	34.4	102.4	101.1	101.4
	Average of all entries	52.8	49.7	5.87	23.8	33.6	....	....	....

*Average of 5 plots instead of 10.

TABLE 31.—EDGEWOOD, SOUTHERN ILLINOIS: PERFORMANCE OF CORN VARIETIES AND HYBRIDS, 1935

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Performance rating for—		General performance rating
		Total	Sound				Lodging resistance	Sound yield	
	Regular division—entries in commercial production								
		bu.	*bu.*	*perct.*	*perct.*	*perct.*	*perct.*	*perct.*	
1	Moore Yellow Dent	50.1	49.4	1.40	24.9	60.5	102.6	103.8	103.5
2	Pride of Saline	50.8	50.2	1.18	28.3	41.5	70.4	105.5	96.7
3	Community composite (Semesan Jr.)	44.3	44.2	.23	22.7	60.5	102.6	92.9	95.3
●	Average of 5 best open-pollinated var.	46.5	45.9	1.29	25.5	51.8	87.9	96.5	94.4
4	Community composite (Barbak)	43.1	43.0	.23	22.7	57.0	96.7	90.4	92.0
5	Waddell Utility White Dent	45.0	43.6	3.11	24.3	54.0	91.6	91.6	91.6
6	Waddell Golden Beauty	43.2	43.2	0	23.9	53.5	90.8	90.8	90.8
7	Community composite (untreated)	43.3	43.2	.23	22.7	51.0	86.5	90.8	89.7
8	Blackhawk	43.5	43.3	.46	26.1	49.5	84.0	91.0	89.3
9	Champion White Pearl	42.2	39.4	6.64	25.8	53.5	90.8	82.8	84.8
	Average of division	45.1	44.4	1.55	24.6	53.4	90.7	93.3	92.6
	Experimental division—entries *not* in commercial production								
1	*Indiana Hybrid 815	63.4	63.1	.47	32.6	73.0	123.9	132.6	130.4
2	*Moore Yellow Dent × Indiana B_2	54.5	52.8	3.12	25.1	81.0	137.4	111.0	117.6
3	*Moore Yellow Dent × 4211	53.2	53.1	.19	22.0	74.0	125.5	111.6	115.1
4	*Champion White Pearl × Indiana 33	53.9	53.7	.37	26.9	68.0	115.4	112.9	113.5
5	*Illinois Hybrid 508	49.1	47.7	2.85	21.9	83.0	140.8	100.3	110.4
6	*Indiana Hybrid 880	52.2	52.0	.38	17.2	65.0	110.3	109.3	109.6
7	*Champion White Pearl × B 103	59.1	57.6	2.54	25.3	42.0	71.3	121.1	108.7
8	*Indiana 33 × Champion White Pearl	53.0	52.7	.57	25.2	57.4	97.4	110.8	107.5
9	*Missouri Hybrid 51	53.1	53.0	.19	35.9	50.0	84.8	111.4	104.8
10	*Illinois Hybrid 54	45.1	45.0	.22	22.4	72.0	122.2	94.6	101.5
11	*Champion White Pearl × Pride of Saline 29	53.4	53.0	.75	25.4	42.0	71.3	111.4	101.4
12	*Champion White Pearl × Pride of Saline 47	42.3	41.6	1.65	22.5	76.0	128.9	87.4	97.8
13	*Indiana Hybrid 823	42.7	42.5	.47	22.0	72.0	122.2	89.3	97.5
14	*Indiana Hybrid 835	41.4	40.8	1.45	18.9	74.0	125.5	85.8	95.7
15	*Champion White Pearl × Pride of Saline 6	49.7	49.5	.40	23.8	39.0	66.2	104.0	94.6
16	*Missouri Hybrid 19	46.5	46.5	0	29.9	50.0	84.8	97.7	94.5
17	*Indiana Hybrid 850	42.7	42.2	1.17	24.3	44.0	74.7	88.7	85.2
18	*Golden Beauty × 5677	39.7	38.4	3.27	24.9	48.0	81.4	80.7	80.9
	Average of division	49.7	49.2	1.01	24.8	61.7	104.7	103.4	103.7
	Average of all entries	48.2	47.6	1.24	24.7	58.9	....	....	....

*Average of 5 plots instead of 10.

CONTRIBUTORS OF SEED FOR THE 1935 CORN PERFORMANCE TESTS

Entry	*Contributor*	*Address*
Angevine Yellow Dent	L. L. Angevine	Osco
Armstrong community composite	High School Agr. Dept.	Armstrong
Blackhawk	Ernst Haller, Jr.	Highland
Canterbury Yellow Dent	C. E. Canterbury	Cantrall
Champion White Pearl	F. V. Wilson and Son	Edgewood
Champion White Pearl top crosses	Illinois Station	Urbana
Curtiss Western Plowman	Homer Curtiss	Stockton
DeKalb community composite	High School Agr. Dept.	DeKalb
DeKalb Hybrids 3A, 38-495	DeKalb Co. Agr. Assoc.	DeKalb
Dewey Yellow Dent	James Dewey	Armstrong
Doubet Yellow Dent	Ed. W. Doubet	Hanna City
Dwight community composite	High School Agr. Dept.	Dwight
Eckhardt Golden King Eckhardt Western Plowman	Corn Belt Seed Co.	DeKalb
Effingham community composite	High School Agr. Dept.	Effingham
Evans Will County Favorite	Evans Seed Co.	Rochelle
Eversole White Dent	J. H. Eversole	Champaign
Funk Hybrids 206-231	Funk Bros. Seed Co.	Bloomington
Golden Beauty top crosses	Illinois Station	Urbana
Greenlee Yellow Dent	Clark Greenlee	Winnebago
Gunn Western Plowman	DeKalb Co. Agr. Assoc.	DeKalb
Heckerson Yellow Dent	Heckerson and Son	Armstrong
Henry community composite	High School Agr. Dept.	Henry
Herndon Yellow Dent	Herndon Brothers	Adair
Highland community composite	High School Agr. Dept.	Highland
Hoblit Golden Eagle	Dean Hoblit	Atlanta
Hulting Yellow Dent	C. E. Hulting	Geneseo
Illinois Hybrids 29-1074	Ill. Sta. and U.S.D.A.	Urbana
Illinois Hybrid D118-477	DeKalb Co. Agr. Assoc.	DeKalb
Indiana Hybrids 425-880	Purdue Sta. and U.S.D.A.	LaFayette, Indiana
Iowa Hybrids 13-3294	Iowa Sta. and U.S.D.A.	Ames, Iowa
Iowealth Hybrids B, BC, *etc.*	Leonard Seed Co.	Chicago
Kansas Hybrids 3-6	Kans. Sta. and U.S.D.A.	Manhattan, Kansas
Knox county composite	High School Agr. Dept.	Galesburg
Leaming	Xavier Kiefer	Belle Rive
Long John	B. S. Griffith	Clinton
Long John top cross	Illinois Station	Urbana
McKeighan Yellow Dent	J. L. McKeighan	Yates City
Missouri Hybrid 8-51	Missouri Sta. and U.S.D.A.	Columbia, Missouri
Moews Hybrid 22-32	Ben Moews	Granville
Moore Yellow Dent	Illinois Station	Urbana
Moore Yellow Dent top crosses	Illinois Station	Urbana
Morgan Hybrid M.W.104-138	Morgan Brothers	Galva
Mountjoy Utility Dent	Oscar Mountjoy	Atlanta
Mummert-Hahn Dent	John Hahn	Dwight
National Hybrid 9	Leonard Seed Co.	Chicago
Ohio Hybrid 3-8	Ohio Sta. and U.S.D.A.	Wooster, Ohio
Original Krug	Woodford Co. Agr. Assoc.	Eureka
Pfister Hybrid 584, *etc.*	Lester Pfister	El Paso
Pioneer Hi-Bred 306-3500	Pioneer Hi-Bred Seed Co.	Des Moines, Iowa
Pride of Saline	Kans. Sta. and U.S.D.A.	Manhattan, Kansas
Pride of Saline top cross	Illinois Station	Urbana
Queen of the Field	W. F. Black	Walnut
Rice White Dent	J. R. Rice	Blue Mound
Rochelle community composite	High School Agr. Dept.	Rochelle
Roeschley Utility Dent	Leo Roeschley	Graymont
Ropp Yellow Dent	Ropp Brothers	Tremont

Entry	*Contributor*	*Address*
St. Charles White	E. H. Isenberg	Kaufman
Shuman Golden Beauty	Charles Shuman	Sullivan
Simmons Will Co. Favorite	C. J. Simmons	Stockton
Sommer Yellow Dent	Sommer Brothers	Pekin
Station Yellow Dent	Illinois Station	Urbana
Stiegelmeier Hybrid 2-3 Stiegelmeier Improved Dent	H. L. Stiegelmeier	Normal
Stockton community composite	High School Agr. Dept.	Stockton
Suchy Yellow Dent	Anton Suchy and Son	Algonquin
Sullivan Composite	High School Agr. Dept.	Sullivan
Tiemann Yellow Dent	O. P. Tiemann	Bloomington
U. S. Hybrid 33-57	U. S. Dept. Agr.	Washington, D. C.
Waddell Big Democrat Waddell Golden Beauty Waddell Golden Dent Waddell Utility White Dent Waddell Utility Yellow Dent Waddell Yellow Pearl	Elmer Waddell	Taylorville
Waddell Utility White Dent top cross	Illinois Station	Urbana
Webb Will Co. Favorite	William Webb	Plainfield
Wilson Yellow Dent	Ed. Wilson	Winchester
Wisconsin Hybrids 1-570	Wisc. Sta. and U.S.D.A.	Madison, Wisconsin
Wood Hybrid Early White Dent Wood Hybrid Med. White Dent Wood Hybrid Med. Yellow Dent	Wood Seed Co.	Richmond, Virginia

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