

SPECIAL CIRCULAR 77

FEBRUARY 1948

THE OHIO CORN PERFORMANCE TESTS 1945 and 1946

G. H. Stringfield and H. L. Pfaff



Department of Agronomy
Ohio Agricultural Experiment Station

Cooperating with

Ohio seed growers and county seed improvement associations,
the Division of Cereal Crops and Diseases, Bureau of Plant
Industry, Soils, and Agricultural Engineering, Agricul-
tural Research Administration, United States Depart-
ment of Agriculture, and the Agricultural Ex-
tension Service, The Ohio State University



OHIO AGRICULTURAL EXPERIMENT STATION
WOOSTER, OHIO

This page intentionally blank.

THE OHIO CORN PERFORMANCE TESTS: 1945 and 1946

G. H. STRINGFIELD and H. L. PFAFF * †

This publication presents the seventh report of the Ohio Corn Performance Tests, the last report† being for the years 1943 and 1944.

Experimental Procedures

Typically an individual test contained 30 entries which were compared in 2- by 10-hill plots replicated 5 times and laid out in a modified Latin square of 5 ranges (30 plots side by side) and 5 columns (7 plots wide by 5 plots long) at right angles to the ranges. The sequence of entries was random with the restrictions that each entry fall once in each range and once in each column. Exceptions to this field design were that the two tests in Adaptation Area 7 were in a simple lattice design of four replications and two of the tests in Adaptation Area 5 were in threefold replication of single-row plots in randomized blocks and were harvested mechanically without gleaning. All other tests were harvested by hand and thoroughly gleaned. Four seeds were planted per hill without subsequent thinning.

Field weights were adjusted to stand by the following procedures: All plots in a given test were classified according to stand (the number of plants) and without regard to entries. Stands were thrown into groups having class values of five with the modal stand at the center of one of the groups. Thus, if the modal stand were 63, all plots with stands of 61 to 65, inclusive, would fall in one group. Adjacent groups would be 56 to 60, and 66 to 70. The groups were extended in each direction so long as there were 15 or more plots in a group. Mean group plot yields were plotted against mean group stands on graph paper with stand on the horizontal axis and plot weights on the vertical axis. The intersecting points were approximately connected with a free-hand curve to indicate the relation of plot yield to stand. For a given stand this curve might indicate a plot weight of 2 pounds less than was indicated at the modal stand. In that case 2 pounds would be added as an adjustment for stand. A subtraction would be made for a stand at which the curve indicated a yield higher than for the modal stand.

Exceptions to the above method for adjusting for stand were that the two tests in Adaptation Area 7 were adjusted for missing hills only, using the conventional formula based upon the assumption that a missing hill results in a yield reduction of seven-tenths the weight of the corn from an average hill. No stand adjustments were attempted in the single-row plots in the two tests in Adaptation Area 5.

Where the silking periods were measured, counts of the number of plants in

* G. H. Stringfield, Senior Agronomist, Division of Cereal Crops and Diseases, Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, U. S. Department of Agriculture, and Associate in Agronomy, Ohio Agricultural Experiment Station; H. L. Pfaff, Agent, Division of Cereal Crops and Diseases, U. S. Department of Agriculture, and Crop Breeding Foreman, Ohio Agricultural Experiment Station.

† The writers are much indebted to the personnel of the Ohio Seed Improvement Association for providing composites of inspection seed samples of all hybrids inspected by them; to the Marsh Foundation Farms, Van Wert, for providing facilities for conducting the two tests that were harvested mechanically; to the George Foster Farm, Chillicothe, for land and assistance needed to conduct the tests in Area 7; to the Ohio Hybrid Seed Corn Producers for financial assistance; and to the assisting personnel at The Ohio State University and the District and County Experiment Farms for necessary help in planting, field culture, harvesting, record taking, typing, and other details.

‡ Stringfield, G. H., R. D. Lewis, and H. L. Pfaff. 1946. The Ohio Corn Performance Tests: 1943 and 1944. Ohio Agricultural Experiment Station Special Circular 71.

silk were made on alternate days during the silking period. By interpolation, the day when half the plants were in silk was calculated for each plot.

A plant was counted as root-lodged if at harvest time it leaned to the extent that the ear was half way or more across a row space. Stalks broken below the point of ear attachment were counted as broken.

Samples for the determination of moisture content of grain were taken by removing two kernel rows from each ear of usually four systematically chosen hills. Moisture contents were found electrically.

All acre-grain yields were adjusted to bushels of shelled grain carrying 15½ percent of moisture.

Tables 1 to 14

Tables 1 and 2 give the results for Ohio Adaptation Area 1, which is in the northeast corner of the state, and which requires earlier corn than any other area.

Tables 3 to 8, inclusive, give the results for Adaptation Areas 2 to 5, inclusive. These combined areas occupy roughly the northern half of the state not included in Area 1.

Tables 9 to 12, inclusive, give the results for Adaptation Area 6, which occupies roughly the southern half of the state, excepting certain river bottom lands.

Tables 13 and 14 give the results from Adaptation Area 7, which includes the better river bottom soils along the Ohio, lower Scioto, and some tributaries.

Significant Differences

Assuming the error in these tests to be comparable to that found in 100 similar tests previously conducted, the least significant differences in grain yields would be as follows:

Between two entries in one test, 9.0 bushels

Between two entries in two tests, 6.4 bushels

Between two entries in three tests, 5.2 bushels

The difficulty of measuring differences in yielding capacity between hybrids becomes obvious after a study of table 15. Ohio K24 and Ohio W36 were in the same 50 tests covering the period 1943 to 1946, inclusive. The grain yield of Ohio K24 was subtracted from that of Ohio W36 for each test. The two hybrids are closely related and differ only slightly in seasonal requirement. The table shows that in 34 (68 percent) of the tests the two hybrids gave close to the same yields. We may safely conclude that there is very little difference between them on the average, but in three of the tests they were as much as 15 bushels apart. That is why so little confidence can be placed in the results of only a few tests.

Combination Tables

A total of 27 tests were conducted in the 2 years. After deleting a few experimental hybrids which were obviously of no further interest, all the remaining data were gathered into 4 tables. Combining several experiments into one table, where the experiments do not have exactly the same entries in common, has the disadvantage that the variation in relative performance of entries from location to location cannot be shown. In consequence, the unimportance of small and often inconsistent differences is poorly evident. There is also the objection that the results of those entries not in all of the tests must be expressed as relative instead of actual values. Obviously the actual yields of an entry tested in fields of low productivity would be of no value for direct comparison of that entry with one which was tested in fields of high productivity.

The method used here to provide a more or less common basis for the comparison

of all entries within a table was as follows: Three hybrids were designated as controls and were entered uniformly in each test. The average grain yield, moisture in grain at harvest, and number of days from planting to mid-silking was found for these three controls in each test. The performance of each entry in the test was then compared with the average of the controls. For instance, if a given hybrid averaged 2 bushels more than the controls, its yield as given in the table would be the average of the controls in all tests plus 2 bushels. That would be true regardless of how many of the tests the hybrid was in. The formula for the computation is:

Adjusted yield = $C + (H - C_1)$ where:

C = the average of all controls in all tests

H = the average of the hybrid

C₁ = the average of the controls in the tests containing the hybrid

Data on root lodging and stalk breaking are more difficult to summarize, since the incidence of either might be zero in some tests and anywhere from a trace to very high in other tests. The actual averages for these two measures are presented in the tables, and, along with them, averages of the controls in comparable tests are presented for comparison.

The entries in the combination tables are arranged in decreasing moisture content of the grain at harvest. The hybrid of lowest moisture in the grain at harvest is first and the hybrid of highest moisture is last. This arrangement places the hybrids roughly in order of increasing lateness, and it makes it possible quickly to compare the performance of any hybrid with others of approximately the same seasonal requirements. (Tables 16 to 19.)

INDEX OF ENTRIES

HYBRID NUMBER

TABLES

INDIANA HYBRIDS

210B	1, 7, 16, 17
416B	5, 17
418A	3, 5, 17
610	6, 17
620A	5, 7, 17
703B (white)	14, 19
750 (white)	13, 14, 19
901 (white)	14, 19
2906 (white)	13, 14, 19

IOWA HYBRIDS

306	5, 6, 7, 10 to 12 ; inc., 17, 18
4059	3, 5 to 12, inc., 17, 18
4316	1 to 4, inc., 6, 8, 16, 17

KANSAS HYBRIDS

1585	13
1639	14, 19
1784	14, 19
2234 (white)	13, 14, 19

KENTUCKY HYBRIDS

102	7, 11, 12, 17, 18
203 (white)	13, 14, 19

OHIO CERTIFIED HYBRIDS

W10	6, 7, 8, 10, 11, 12, 17, 18
C12	1 to 12 inc., 16, 17, 18
M15	1, 2, 4, 16, 17
M20	1 to 5, inc., 7 to 12 inc., 16, 17, 18
K23	1, 16
K24	1 to 12, inc., 15 to 18, inc.
W30	3, 7, 8, 11, 12, 17, 18
M34	1 to 5, inc., 7, 9 to 12, inc., 16, 17, 18
K35	1, 16
W36	1 to 12, inc., 15 to 18, inc.
C38	1 to 12, inc., 16, 17, 18
L86	10
U. S. 13	1 to 14, inc., 17, 18, 19
U. S. 379	1 to 5, inc., 7, 9 to 14, inc., 17, 18, 19
Iowa 4059	3, 5 to 12, inc., 17, 18
Kentucky 203 (white)	13, 14, 19

OHIO EXPERIMENTAL HYBRIDS

L89	11, 12, 18
1273	1, 3
3020	11
3048	7, 8, 11, 12, 17, 18
3049	5, 7, 8, 9, 11, 12, 17, 18
3060	3, 5, 7, 11, 12, 17, 18
3061	5, 7, 8, 9, 11, 12, 17, 18
3085	1, 3
3086	1, 6, 7, 9 to 12, inc., 17, 18
3096	1, 3
3097	2, 4, 8; 16, 17
3105	1, 3, 5, 6, 10
3117	9, 10, 18
3122	6 to 12, inc., 17, 18
3132	3, 5, 7 to 14, inc., 17, 18, 19
3143	12, 18
3147	5, 7, 8, 11, 12, 17, 18
3152	3, 5, 6, 10
3157	1, 3, 9, 16, 17, 18
3163	1, 8 to 11, inc., 16, 17, 18
3164	7 to 12, inc., 17, 18
3166	5, 7, 9, 11, 12, 14, 17, 18, 19
3168	5, 9, 12, 17, 18
3169	3, 5, 17
3171	5, 6, 7, 9, 10, 17, 18
3173	7, 9 to 12, inc., 17, 18
3177	10, 14, 18
3179	7, 11, 12, 14, 17, 18, 19
3182	7, 11, 12, 14, 17, 18, 19
3184	2 to 5, inc., 16, 17
3190	13, 14, 19
3191	9, 10, 13, 18
3192	9, 10, 13, 18, 19
3193	9, 10, 13, 18

3194	9, 10, 13, 18
3195	9, 10, 13
3196	1, 3
3197	1, 2, 4, 16, 17
3198	1, 2, 4, 16, 17
3199	1 to 4, inc., 16, 17
3200	1, 2, 4, 8, 16, 17
3201 (white)	13
3202 (white)	13
3203 (white)	13
3204 (white)	13
3205 (white)	13, 14, 19
3206	13
3207	13
3208	13, 14, 19
3209	13
3210	13
3211	13
3218	2, 4, 16, 17
3219	14
3220	14
3221	14, 19
3222	14
3223	14, 19
3225 (white)	14, 19
3226 (white)	14
3227 (white)	14, 19
3228 (white)	14
4018	1
4020	1, 3, 5
4025	1, 3, 5, 6, 10
4026	1, 3, 6
4029	3, 5, 6, 9
4030	3, 5, 6, 9
(Oh51A × Ind. Wf9) × Lines	8

TENNESSEE HYBRID

Dixie 44	14, 19
----------	--------

U. S. HYBRIDS

13	1 to 14, inc., 17, 18, 19
197 (white)	13, 14, 19
379	1 to 5, inc., 7, 9 to 14, inc., 17, 18, 19
404 (white)	13, 14, 19
418	13, 14, 19
419	13
438	13
472 (white)	13
474	13
496 (white)	13
498 (white)	13
505	13, 14, 19
506	14, 19

507	14, 19
565	14, 19

WEST VIRGINIA HYBRID

B25	2, 4, 16, 17
-----------	--------------

DeKALB AGRICULTURAL ASS'N, INC.

404A	2, 4, 8, 16, 17
410	2, 6, 16, 17
422	2, 4, 8, 16, 17
609	2, 4, 8, 16, 17

EASTERN PIONEER HYBRID CORN COMPANY

324A	2, 4, 8, 16, 17
338	4, 8, 17
342	2, 4, 8, 16, 17
373	2, 4, 16, 17

PFISTER ASSOCIATED GROWERS

266	2, 4, 16, 17
270	2, 4, 16, 17
274	2, 4, 16, 17
366A	2, 4, 16, 17

OPEN-POLLINATED VARIETIES

Cash (W. N. Scarff's Sons)	2, 4, 16, 17
Clarage (W. N. Scarff's Sons)	7, 11, 12, 17, 18
U. S. Sel. 77 (Foster) (white)	13, 14, 19
Woodburn (W. N. Scarff's Sons)	1, 3, 5, 6, 9, 10, 17, 18

TABLE 1 — Adaptation Area 1. 1945

Experiment Number: 601A, Trumbull County. The Trumbull County Experiment Farm cooperating
602A, Mahoning County. The Mahoning County Experiment Farm cooperating

Entry	Acre grain yield			Moisture in grain at harvest	Plant- ing to silking	Root- lodged plants	Broken plants	Smutted plants
	Aver- age	Exp. No. 601A	Exp. No. 602A					
U. S. 13	Bu. 82.3	Bu. 96.7	Bu. 67.9	Pct. 28.2	Days 85.3	Pct. 7.7	Pct. 4.5	Pct. 0.2
Ohio 3157	81.7	91.7	71.6	23.9	81.2	5.1	5.0	1.4
Ohio 4020	81.1	83.7*	73.5	26.3	82.2	5.8	2.9	.9
Ohio 3200	80.3	87.9	72.7	24.1	80.4	4.1	10.2	1.2
Ohio 3105	80.3	93.6	66.9	26.3	83.2	10.3	1.4	1.5
Ohio 3163	80.2	91.4*	69.0	27.1	82.5	7.5	7.8	1.2
Ohio C12	80.2	91.9	68.5	28.1	85.3	17.1	2.3	.5
Ohio 3085	80.1	86.1*	74.1	25.8	82.9	4.2	6.6	2.0
Ohio W36	80.0	92.1	67.8	24.4	81.3	6.8	8.1	1.1
Ohio 3086	79.3	87.3	71.2	26.2	81.6	1.9	3.7	.9
Ohio K24	79.1	90.1†	68.0	23.2	80.2	3.4	3.8	.5
Ohio 3096	78.2	87.8*	68.6	22.7	80.3	5.6	10.9	1.7
Ohio 3197	77.3	85.2	69.4	23.6	80.0	3.8	3.6	2.2
Ohio K35	75.6	85.7	65.4	24.1	80.6	5.9	5.5	1.3
Ohio 3198	75.4	82.7*	68.1	23.9	80.8	2.6	4.1	.5
Ohio 4018	75.3	82.6	67.9	25.2	81.8	5.6	8.0	2.7
Ohio 3196	75.1	86.7*	63.5	24.3	82.2	7.7	4.6	2.5
Ohio 1273	74.6	79.9*	69.2	24.2	80.6	.7	3.8	2.3
Ohio C38	74.4	84.5*	64.3	27.3	82.9	7.6	3.8	2.3
Ohio 4026	74.0	80.1*	67.8	25.5	80.6	2.8	2.1	2.0
Ohio M34	73.2	79.6*	66.8	22.5	79.8	9.5	7.7	.4
Ohio 4025	72.9	80.5*	65.3	23.5	80.6	3.3	6.2	4.2
Indiana 210B	72.9	85.7*	60.0	24.5	80.3	20.1	4.0	.7
Ohio 3199	72.8	77.1†	68.5	23.0	81.7	1.8	2.8	.8
Iowa 4316	72.6	82.0*	63.2	23.9	81.8	15.6	9.8	1.1
Ohio K23	72.4	79.6	65.1	23.6	80.7	4.3	4.7	.7
Ohio M15	72.4	79.2*	65.6	23.8	79.8	8.1	10.8	.3
Ohio M20	72.1	82.5*	61.7*	23.0	80.3	5.4	6.4	1.3
U. S. 379	71.1	82.6†	59.6	29.4	86.3	29.8	4.8	3.0
Woodburn	59.7	68.2	51.1	26.2	82.9	31.1	8.6	4.8

* Four replications only.
† Three replications only.

TABLE 2 — Adaptation Area 1. 1946

Experiment Number 602A, Mahoning County. The Mahoning County Experiment Farm cooperating

Entry	Acre gram yield	Moisture in gram at harvest	Root- lodged plants	Broken plants
	Bu.	Pct.	Pct.	Pct.
Ohio 3184	78.6	33.7	3.4	1.2
U. S. 13	76.7	36.6	.3	.3
West Virginia B25	75.8*	33.4	2.9	2.1
DeKalb 422	74.7	34.5	5.2	1.5
Ohio C38	73.9	34.7	2.4	.7
Ohio W36	71.8†	33.1	2.1	.5
Ohio 3197	71.8	33.5	.0	.0
U. S. 379	71.5*	37.7	4.6	1.2
Pioneer 342	71.3	33.4	15.1	.6
DeKalb 609	71.0	35.2	6.4	2.6
Ohio C12	70.9	36.0	2.0	.7
Ohio 3199	70.7	33.6	3.0	3.0
Pfister 366A	70.2	34.5	6.8	3.7
Ohio 3097	69.1	33.8	.0	1.3
Ohio 3200	68.8*	33.5	.0	.4
Iowa 4316	68.8†	34.3	3.1	5.8
DeKalb 410	68.7*	34.5	3.7	4.1
Pfister 270	68.0†	36.2	8.0	.6
Ohio 3218	67.4†	34.8	1.0	1.4
Ohio 3198	66.8*	32.3	.8	.8
Pioneer 373	66.4*	32.4	2.6	3.9
Pioneer 324A	66.2	34.4	4.2	.3
DeKalb 404A	66.1*	34.3	.0	.4
Ohio M15	63.0*	32.0	2.3	1.8
Pfister 266	63.0	35.5	4.0	1.5
Cash	62.6*	34.9	5.1	.4
Ohio M34	62.5†	31.2	7.2	.0
Pfister 274	60.0*	34.6	2.7	1.1
Ohio M20	59.1	34.0	4.6	1.7
Ohio K24	56.5*	34.6	1.1	.0

* Four replications only.
 † Three replications only.

TABLE 3 — Adaptation Areas 2 and 4, 1945

Experiment Number: 603B, Wayne County. The Ohio Agricultural Experiment Station cooperating
604B, Belmont County. The Belmont County Experiment Farm cooperating
605B, Franklin County. The Ohio State University cooperating

Entry	Acre grain yield				Moisture in grain at harvest	Plant- ing to silking	Root- lodged plants	Broken plants	Smutted plants†	Bare tipped ears‡	Corn borer leaf injury§
	Average	Exp. No. 603B	Exp. No. 604B	Exp. No. 605B							
	Bu.	Bu.	Bu.	Bu.	Pct.	Days	Pct.	Pct.	Pct.	Pct.	Score
Ohio 8060	87.8	105.0	77.7	80.8	22.9	73.6	13.7	12.4	4.7	11.0	2.9
Ohio 3105	85.4	99.8	71.8	84.5	23.3	74.5	19.6	10.3	6.9	10.6	2.2
Ohio C12	83.4	100.2	69.0	81.1	24.8	76.7	18.5	14.8	2.0	4.7	2.5
Ohio 3184	83.1	109.2	59.1	81.0	23.4	72.3	14.6	24.2	2.7	13.2	2.3
U. S. 13	81.0	97.7	67.8	77.6	25.4	76.7	14.2	22.2	4.7	6.7	2.8
Ohio 3132	80.6	104.5	62.3	75.1	24.5	75.5	8.6	23.5	3.7	7.6	2.5
Ohio 4020	80.4	100.9	64.6	75.6	23.1	73.1	9.2	20.4	8.9	10.8	3.0
Ohio 4029	80.0	97.5	64.4	78.2	22.8	74.9	24.4	22.1	10.7	6.8	2.4
Ohio W36	79.9	92.5	69.9	77.4	22.1	72.7	10.2	19.3	2.7	7.9	3.6
Ohio 3169	79.6	104.9	63.5	70.5*	24.3	74.2	13.9	22.7	5.8	7.5	3.3
Ohio K24	78.0	93.3	60.0	80.8	21.9	72.0	4.0	28.4	4.9	12.5	2.8
Ohio 3085	77.7	98.9	62.3	71.3	23.3	74.4	12.3	25.9	8.4	5.4	3.0
Ohio 3152	77.2	97.3	61.4	73.0	24.0	76.1	34.8	18.2	8.7	6.3	3.0
Ohio 4030	76.3	96.1	56.4	76.3	22.4	73.1	16.3	23.3	14.3	6.0	2.4
Ohio 3157	76.1	91.6	53.0	78.7*	21.8	72.0	3.9	23.6	5.1	4.9	3.6
Ohio 1273	75.8	91.0	61.9	74.5	22.6	71.5	8.8	14.3	2.7	8.4	3.2
Ohio W30	75.2	92.8	58.1	74.8	22.8	74.1	12.8	23.2	2.6	22.0	2.3
Ohio C38	74.8	92.1	62.2	70.1	24.3	74.7	15.5	15.5	4.3	11.8	3.0
Ohio 4026	73.9	96.7	51.8	73.1	22.4	71.0	9.2	18.0	9.4	7.1	2.8
Indiana 418A	72.7	89.3	62.9	65.9	22.4	71.1	16.2	22.1	4.0	2.6	4.6
Ohio 4025	72.6	93.3	55.3	69.2	21.6	71.9	9.1	21.5	9.4	18.5	2.3
Ohio 3196	71.7	86.5	58.0	70.7	22.6	72.3	13.5	20.8	5.4	15.6	3.0
Iowa 4059	71.3	84.1	54.0	75.8	23.9	74.1	13.4	22.3	3.4	4.1	3.2
Ohio 3199	70.9	90.1	62.2	60.3	21.9	71.1	7.0	18.5	8.6	21.9	3.1
Ohio 3096	69.9	87.3	51.9	70.5	20.0	71.1	4.2	31.9	8.0	3.9	3.3
Iowa 4316	69.4	82.4	54.9	70.9	22.0	71.9	11.1	33.9	4.1	8.2	4.0
Ohio M20	68.5	84.8	51.9	68.8	21.2	70.8	7.0	29.9	6.8	7.1	2.7
Ohio M34	67.8	86.8	54.6	62.1	20.8	70.5	25.5	27.3	5.8	9.9	3.2
U. S. 379	66.7	86.1	31.8	82.2	28.8	79.7	35.1	13.7	12.6	7.1	1.4
Woodburn	55.2	70.7	42.7	52.3	23.9	74.1	37.7	28.0	12.7	.3	4.0

* Four replications only.

† Smut data taken on Experiments 603B and 605B only.

‡ Data on bare tipped ears taken on Experiment 603B only.

§ Corn borer injury to leaves: 1=least, 5=most. An observational rating. The injury was by first generation borers.
Taken on Experiment 605B only.

TABLE 4 — Adaptation Areas 2 and 4, 1946

Experiment Number: 603B, Wayne County. The Ohio Agricultural Experiment Station cooperating
604B, Belmont County. The Belmont County Experiment Farm cooperating
605B, Franklin County. The Ohio State University cooperating

Entry	Acre grain yield				Moisture in grain at harvest	Planting to silking	Root- lodged plants	Broken plants
	Average	Exp. No. 603B	Exp. No. 604B	Exp. No. 605B				
	Bu.	Bu.	Bu.	Bu.	Pct.	Days	Pct.	Pct.
DeKalb 422	73.9	69.5	72.6†	79.5	23.6	72.1	0.5	5.7
Pfister 270	73.4	74.6	66.3*	79.2*	25.3	74.5	1.8	5.9
DeKalb 609	72.6	71.9	67.7†	78.3	24.6	72.0	3.5	7.4
Ohio C12	72.4	76.3	68.2	72.6	23.0	75.9	2.4	3.2
West Virginia B25.....	70.7	75.7	61.0†	75.5	22.9	71.4	4.1	11.9
Ohio 3184	70.7	73.5	64.7	74.0	25.1	70.9	1.2	7.1
Ohio 3200	70.6	74.2	62.1	75.5	22.8	69.7	.8	14.6
Ohio K24	70.4	75.0	66.2†	69.9	24.2	70.4	1.4	6.4
Ohio 3199	70.0	76.5	54.4*	79.0	21.7	69.9	1.2	11.6
Ohio C38	69.6	76.2	56.8	75.7	27.4	74.2	1.4	8.8
Iowa 4316	69.2	73.6	62.6	71.3	24.4	71.5	1.4	5.0
Pioneer 338	68.5	72.9	66.6*	66.0	27.2	74.2	2.6	5.2
U. S. 379	67.6	62.9	65.7	74.1*	32.2	78.9	1.1	3.2
Ohio W36	67.5	71.6	58.9	72.0	24.6	72.2	3.3	6.2
Ohio 3198	67.2	75.3	54.8	71.6	23.4	70.9	.1	13.1
Pioneer 373	66.6	70.2	60.5	69.2	22.1	71.3	2.2	13.9
Ohio 3218	66.2	59.7†	65.9*	73.1	27.4	73.8	2.3	6.5
Pfister 274	66.0	69.3*	60.5†	68.3*	24.6	73.7	2.1	12.5
Ohio 3097	64.8	69.1	56.1	69.3	23.8	71.5	1.5	13.3
U. S. 13	64.8	71.7	56.8	66.0	29.2	77.7	.0	4.5
Ohio 3197	63.9	71.0	51.1	69.6	23.9	71.4	.7	2.9
Pioneer 342	63.7	72.3	47.8	71.1	24.4	73.6	5.0	3.4
Ohio M15	63.3	68.6	53.8	67.6*	22.1	70.8	1.4	13.4
Pfister 266	63.3	61.7	61.5†	66.7	25.8	75.1	.6	7.2
Ohio M34	61.8	69.6	54.7*	61.2	22.3	69.9	6.2	8.2
Pioneer 324A	60.8	63.8	47.8	70.8	25.5	75.0	.3	10.8
Cash	60.3	61.7	54.9*	64.2	24.4	72.1	4.6	11.4
Ohio M20	59.9	70.6	49.9*	59.2*	23.0	71.3	2.2	7.3
Pfister 366A	59.5	67.7	55.5*	55.3	26.2	77.6	.7	11.2
DeKalb 404A	53.8	55.0	47.5*	59.0*	25.4	73.4	.7	4.3

* Four replications only.
† Three replications only.

TABLE 5 — Adaptation Area 5. 1945

Experiment Number 606C, Henry County. The Northwestern Experiment Farm cooperating

Entry	Acre grain yield	Moisture in grain at harvest	Planting to silking	Root-lodged plants	Broken plants
	Bu.	Pct.	Days	Pct.	Pct.
Ohio 3147	71.5	24.3	69.2	0.0	2.6
Ohio 3061	70.5	25.4	69.4	1.4	.6
Ohio K24	70.1	19.7	66.8	.0	1.7
Ohio 3168	69.4	24.9	69.2	.5	2.7
Ohio C12	68.7	27.6	69.8	1.2	3.0
Ohio 3166	68.2	24.6	68.8	.0	2.6
Ohio 3171	67.5*	25.1	68.8	.0	4.1
Ohio 3049	66.4	23.3	68.8	1.8	1.2
Ohio 3184	65.7	22.3	68.2	.9	1.7
Ohio C38	65.7	22.9	68.8	.0	1.2
Ohio 3132	65.6	24.1	69.4	2.8	4.5
Ohio 3060	64.7*	23.8	68.6	.0	.3
Ohio M34	62.2	18.3	64.6	.0	1.2
Indiana 620A	61.5	23.3	68.2	.0	7.4
Ohio 3152	61.5	23.7	70.2	8.7	2.7
Ohio 3169	60.5*	25.0	69.2	.0	2.2
Ohio W36	60.4	22.1	67.2	.0	.3
Iowa 306	59.6	23.1	68.4	.9	3.2
U. S. 13	58.9	23.9	70.4	.9	4.6
Ohio 4029	58.8*	22.4	68.8	4.0	1.3
Iowa 4059	57.3	22.7	69.0	.9	7.0
Indiana 416B	56.9	22.5	68.6	.0	4.0
Ohio 3105	56.9	23.7	69.0	.0	1.5
Ohio 4025	54.8	19.6	67.8	.0	2.1
Ohio 4020	54.6	24.9	69.4	.0	1.1
Indiana 418A	53.5	22.4	67.6	.5	1.1
Ohio M20	52.0	18.5	66.0	.0	1.7
U. S. 379	50.2	26.6	72.6	19.9	4.7
Ohio 4030	44.0	22.0	69.0	.0	2.8
Woodburn	36.7	23.4	69.0	1.2	9.2

* Four replications only.

TABLE 6 — Adaptation Area 5. 1945

Van Wert County. The Marsh Foundation Farms cooperating
1- by 88-hill plots harvested mechanically

Entry	Acre grain yield	Moisture in grain at harvest	Snapped ears*	Shellage†
	Bu.	Pct.	Pct.	Score
Ohio 3171	86.1	22.5	25.9	1.8
Ohio C12	85.3	21.7	25.1	1.7
Ohio W10	84.2	20.2	27.6	1.9
Ohio C38	82.9	20.3	26.2	2.4
U. S. 13	82.0	22.4	15.3	1.7
Indiana 610	78.5	23.6	29.9	1.3
Ohio 4030	76.4	18.5	27.1	2.9
Ohio K24	76.2	18.0	38.9	2.6
Ohio 3122	76.0	20.7	25.3	3.0
Iowa 4316	75.3	19.3	30.0	1.9
Ohio 4029	74.0	18.6	18.7	4.4
Ohio 3152	73.6	19.6	21.3	3.3
Ohio 3105	73.2	19.2	27.0	2.3
Ohio W36	72.8	19.6	40.2	3.1
DeKalb 410	71.8	18.3	19.0	3.0
Ohio 3086	71.7	20.2	24.2	2.1
Ohio 4025	68.9	17.6	33.2	3.0
Iowa 4059	67.9	21.0	26.6	1.6
Iowa 306	59.9	20.6	22.2	2.0
Woodburn	48.3	21.0	48.3	1.2

* The percentage by weight of ears completely surrounded by husk after going through the snapping and husking rolls.

† Average of independent estimates by three observers. 1=least shelled corn on ground, 5=most.

TABLE 7 — Adaptation Area 5. 1946

Experiment Number: 606C, Henry County. The Northwestern Experiment Farm cooperating.
607C, Paulding County. The Paulding County Experiment Farm cooperating

Entry	Acre grain yield			Moisture in grain at harvest	Planting to silking	Root- lodged plants	Broken plants
	Average	Exp. No. 606C	Exp. No. 607C				
	Bu.	Bu.	Bu.	Pct.	Days	Pct.	Pct.
Ohio C38	63.1	80.5	45.7	31.5	77.3	0.0	0.7
Ohio 3147	62.1	72.7	51.4	32.7	79.4	.0	.0
Ohio C12	61.5	75.4	47.6	32.7	82.4	.4	.0
Ohio 3166	60.1	73.1	47.0	32.2	78.6	.0	.0
Ohio W30	59.7	71.2	48.2	31.1	77.8	2.3	.4
Ohio K24	59.2	70.5	47.8	27.5	75.9	.0	.0
Ohio 3171	58.6	67.2	50.0	32.9	79.3	.0	.0
Ohio 3132	58.4	73.4	43.4	32.5	81.4	.0	.0
Ohio M34	58.2	73.0*	48.3	26.2	76.4	.4	.4
Ohio 3049	57.6	68.5	46.7	32.2	81.5	.4	.4
Ohio W36	57.5	69.6	45.4	29.6	76.2	.0	.4
Ohio 3061	57.2	66.5	47.9	34.1	81.1	.8	.4
Ohio 3179	56.9	67.2	46.5	33.7	80.8	.4	.4
Ohio W10	56.6	68.2	44.9	31.4	78.5	.0	.4
Iowa 4059	55.8	67.0	44.6	31.2	78.5	.0	.0
Ohio 3048	55.7	68.4	43.0	29.3	77.7	.0	.0
Iowa 306	55.7	67.6	43.7	30.6	78.3	.5	.5
Indiana 620A	55.3	65.3	45.3	30.3	77.7	.0	.0
U. S. 13	54.9	63.9	45.9	33.7	81.5	.0	.4
Ohio 3173	54.5	66.5	42.5	34.3	82.1	.0	.0
Ohio 3060	54.1	64.7	43.5	31.3	79.3	.0	.0
Ohio 3164	53.8	63.2	44.4	31.9	79.8	.0	.0
Ohio 3182	53.0	62.2	43.8	32.1	82.9	.3	.0
Ohio 3086	51.3	62.4	40.1	29.6	78.1	.7	.4
Indiana 210B	51.0	60.1	41.9	27.9	78.3	.0	.4
Ohio M20	49.1	57.4	40.8	26.9	76.3	.4	.4
U. S. 379	48.8	55.5	42.0	36.0	83.8	.4	.4
Kentucky 102	48.5	57.6	39.4	37.5	83.6	.0	1.2
Clarage	46.2	55.6†	36.7	30.7	81.9	.4	.4
Ohio 3122	45.9	50.5	41.3	33.1	80.5	.0	.0

* Four replications only.

† Three replications only.

TABLE 8. — Adaptation Area 5. 1946

Van Wert County. The Marsh Foundation Farms cooperating
1- by 50-hill plots harvested mechanically

Entry	Acre grain yield	Moisture in grain at harvest	Snapped ears	Root lodging*
	Bu.	Pct.	Pct.	Score
(Oh51A x Ind. Wf9) x 1031.....	61.5	19.7	14.3	L
(Oh51A x Ind. Wf9) x 1021.....	58.7	20.7	22.7	L
(Oh51A x Ind. Wf9) x Oh41.....	58.0	21.1	19.0	M
(Oh51A x Ind. Wf9) x 1091.....	57.4	19.2	34.0	ML
(Oh51A x Ind. Wf9) x 1051.....	56.3	22.4	13.0	L
Ohio 3132.....	51.3	20.6	8.0	M
(Oh51A x Ind. Wf9) x 1023.....	50.4	19.2	18.3	L
Ohio 3200.....	49.0	18.6	18.3	L
(Oh51A x Ind. Wf9) x 1039.....	48.7	21.7	15.7	Tr
Ohio 3049.....	48.6	20.1	6.7	H
Ohio W30.....	48.3	19.3	19.3	MH
(Oh51A x Ind. Wf9) x 1019.....	46.3	20.2	15.7	Tr
Ohio 3048.....	45.9	19.5	9.7	ML
Ohio C38.....	45.8	20.8	18.0	H
Ohio 3163.....	45.5	21.0	15.0	MH
Ohio W36.....	45.3	19.5	19.0	ML
Iowa 4059.....	45.3	20.9	13.7	M
Ohio W10.....	45.2	20.8	10.3	L
Ohio 3164.....	44.8	19.9	11.3	MH
(Oh51A x Ind. Wf9) x Oh40B.....	43.9	19.9	4.0	ML
Ohio K24.....	43.7	19.0	18.7	L
Ohio C12.....	43.5	21.2	11.0	H
U. S. 13.....	43.1	21.7	3.3	M
(Oh51A x Ind. Wf9) x 1061.....	42.6	21.0	14.0	H
Pioneer 324A.....	40.4	18.5	15.3	ML
(Oh51A x Ind. Wf9) x 1063.....	40.4	20.3	5.7	ML
Iowa 4316.....	40.3	20.9	11.0	M
(Oh51A x Ind. Wf9) x 1075.....	39.3	20.4	9.0	Tr
Pioneer 342.....	38.8	20.0	10.0	MH
Ohio 3061.....	38.5	22.6	7.7	H
(Oh51A x Ind. Wf9) x 1011.....	38.3	21.7	6.3	MH
Ohio 3147.....	37.8	22.5	7.3	MH
Ohio M20.....	36.2	17.4	9.7	ML
(Oh51A x Ind. Wf9) x 1093.....	36.0	21.3	13.0	ML
DeKalb 422.....	35.6	18.6	5.0	M
Ohio 3122.....	34.9	21.8	4.3	H
DeKalb 609.....	34.7	19.4	2.3	ML
Ohio 3097.....	34.0	18.9	17.0	L
DeKalb 404A.....	27.7	18.9	7.0	ML
Pioneer 338.....	27.5	21.0	7.0	H

* Root-lodging score: Tr=trace; L=light; M=medium; H=heavy.

TABLE 9 — Adaptation Area 6, 1945

Experiment Number: 608D, Miami County. The Miami County Experiment Farm cooperating
609D, Madison County. The Madison County Experiment Farm cooperating
610D, Montgomery County. The Southwestern Experiment Farm cooperating

Entry	Acre grain yield				Moisture in grain at harvest	Planting to silking	Root- lodged plants	Broken plants	Smutted plants†
	Average	Exp. No. 608D	Exp. No. 609D	Exp. No. 610D					
	Bu.	Bu.	Bu.	Bu.	Pct.	Days	Pct.	Pct.	Pct.
Ohio 3166...	108.5	114.0	94.8	116.6	24.5	72.8	8.8	3.1	1.3
Ohio 3194...	107.4	114.6	88.6	118.9	28.0	75.0	28.6	3.9	1.6
Ohio 3163...	105.4	115.9	90.8	110.0*	24.1	71.1	6.5	1.8	.9
Ohio 3192...	102.9	108.7	92.4	107.5	26.3	73.0	19.0	1.8	1.6
Ohio 3132...	102.1	113.6	81.9	110.9	24.4	74.1	4.5	4.5	1.0
Ohio 3171...	101.8	118.7	77.4	109.4	25.4	73.1	3.6	3.6	1.5
U. S. 13.....	101.6	115.0	80.4*	109.4	25.0	74.3	2.3	4.4	1.6
Ohio 3173...	101.0	109.7*	84.7	108.7	26.5	74.9	22.4	2.2	1.3
Ohio 3168...	100.7	114.8	74.4	112.8	26.0	74.1	6.4	2.7	1.3
Ohio 3061...	100.2	112.6	80.0	107.9	24.5	73.1	15.1	1.6	.5
Ohio C12....	98.6	103.4	82.5	109.8	24.2	74.8	12.9	5.2	.3
Ohio 3191...	98.3	105.1	82.0	107.9	26.4	74.8	33.3	4.6	4.0
Ohio C38....	98.1	105.5	88.9	100.0	22.5	71.9	16.6	2.1	1.1
Ohio 3049...	97.9	105.7	74.4	113.5	23.9	73.7	14.2	3.5	.2
Ohio 3117...	97.8	109.2	73.0	111.2	24.3	75.0	5.8	5.7	.8
Ohio 3157...	97.4	105.1*	84.4	102.7	21.5	70.3	4.5	2.4	2.0
Ohio 3164...	97.2	108.3	82.2	101.0	22.8	71.3	10.5	5.4	1.0
Ohio 3193...	95.7	102.1	76.7	108.2	27.5	75.2	19.8	3.3	4.1
Iowa 4059...	95.2	105.6	76.8	103.2	23.9	72.5	8.5	4.1	1.5
Ohio 3122...	94.7	112.4	75.6	96.1	23.6	74.0	13.4	3.5	1.6
Ohio 4030...	94.6	109.2	77.5	97.2	22.9	70.3	23.6	2.0	3.6
Ohio 3086...	93.6	105.1	73.9	101.8	23.0	71.5	3.4	4.3	1.9
Ohio K24....	92.9	105.7	70.7	102.2	20.7	69.1	5.5	2.5	1.4
U. S. 379....	92.5	99.3	77.5	100.6	28.1	76.4	27.6	3.8	1.1
Ohio 4029...	92.3	101.4	78.5	97.1	23.0	72.1	22.7	2.2	3.3
Ohio 3195...	92.1	101.0	77.2	98.0	23.6	76.9	20.8	4.8	3.7
Ohio W36...	91.8	103.0	77.5	94.8	21.2	70.5	15.4	2.6	2.8
Ohio M20...	83.6	90.8*	75.3	84.7	19.9	67.7	13.2	4.6	1.0
Ohio M34...	81.1	89.1*	74.1	80.2	19.5	68.8	31.2	4.9	.7
Woodburn...	69.5	79.3	61.3	67.9	22.9	72.1	31.8	9.5	2.4

* Four replications only.

† Smut data taken on Experiments 608D and 610D only.

TABLE 10. — Adaptation Area 6. 1945

Experiment Number: 612E, Clermont County. The Clermont County Experiment Farm cooperating
618E, Hamilton County. The Hamilton County Experiment Farm cooperating

Entry	Acre grain yield			Moisture in gram at harvest	Planting to silking	Root- lodged plants	Broken plants	Smutted plants†
	Average	Exp. No. 612E	Exp. No. 618E					
	Bu.	Bu.	Bu.	Pct.	Days	Pct.	Pct.	Pct.
Ohio 3194.....	110.5	114.0	106.9	24.0	72.1	7.3	2.5	1.3
Ohio 3192.....	107.9	107.5	108.3	21.4	72.0	.3	.9	.6
Ohio 3191.....	107.6	111.4	103.7	21.2	71.4	4.8	3.8	1.9
U. S. 379.....	105.0	106.0	103.9	23.4	74.3	6.4	3.6	1.5
Ohio 3193.....	104.3	105.1	103.4	22.7	72.3	3.2	2.0	1.4
Ohio 3177.....	103.7	113.3	94.1	21.8	72.2	3.5	5.5	.8
Ohio 3173.....	103.3	107.5	99.1	21.2	71.8	8.2	1.0	.5
Ohio L86.....	102.9	99.8	105.9	20.9	73.0	4.2	5.4	.3
Ohio W10.....	102.8	103.3	102.2*	19.6	70.4	4.7	2.0	1.2
Ohio C38.....	101.6	105.5	97.6	18.9	70.1	5.8	1.7	.6
Ohio C12.....	100.8	101.7	99.9	19.9	72.6	4.6	2.0	.9
Ohio 3163.....	100.4	109.2	91.6	19.8	69.4	6.6	1.2	.3
Ohio 3132.....	100.4	110.5	90.2	20.7	71.7	4.9	2.7	.5
Ohio 3117.....	100.1	113.0	87.1*	18.9	72.8	9.1	2.0	.5
Ohio 3195.....	98.8	96.8	100.8*	23.1	74.0	13.7	2.0	1.2
Ohio W36.....	98.5	106.0	90.9*	17.6	69.0	6.3	.8	.6
Ohio 3171.....	97.7	104.9	90.5	21.1	70.5	2.4	1.7	1.3
Ohio 3105.....	97.4	100.3	94.4*	18.5	70.6	7.3	.6	2.2
Ohio 3086.....	95.2	100.5	89.9	18.8	69.5	2.1	2.3	.8
U. S. 13.....	94.8	102.6	86.9	20.0	72.2	1.0	3.4	.3
Ohio 3122.....	92.9	105.7	80.0	19.3	71.0	9.0	5.8	.3
Ohio K24.....	90.2	96.7	83.6*	17.7	68.4	10.4	2.0	.6
Ohio 3164.....	89.8	98.3	81.3	19.4	70.6	11.4	1.4	.5
Ohio 3152.....	89.6	95.0	84.2*	19.1	72.5	10.1	2.2	1.4
Iowa 4059.....	86.9	88.4	85.4*	19.2	70.1	13.3	4.6	1.8
Ohio 4025.....	85.9	95.3	76.4*	17.3	68.7	16.8	.9	2.3
Ohio M34.....	84.6	89.8	79.3	16.8	68.5	15.1	1.6	.6
Ohio M20.....	82.4	88.0	76.8*	16.9	67.6	9.5	2.5	.9
Iowa 306.....	78.5	78.2	78.7	18.4	70.3	8.6	3.6	2.1
Woodburn.....	69.3	70.1	68.4†	18.7	71.3	27.8	5.4	1.3

* Four replications only.

† Two replications only.

‡ Smut data taken on Experiment 612E only.

TABLE 11 — Adaptation Area 6. 1946

Experiment Number: 608D, Miami County. The Miami County Experiment Farm cooperating
609D, Madison County. The Madison County Experiment Farm cooperating
610D, Montgomery County. The Southwestern Experiment Farm cooperating

Entry	Acre grain yield				Moisture in grain at harvest	Planting to silking	Root- lodged plants	Broken plants
	Average	Exp. No. 608D	Exp. No. 609D	Exp. No. 610D				
	Bu.	Bu.	Bu.	Bu.	Pct.	Days	Pct.	Pct.
Ohio L89.....	90.3	80.9	97.2	92.9	25.2	75.5	0.3	1.0
Ohio 3147.....	89.4	83.3	96.5	88.3*	25.8	71.0	.3	1.0
Ohio C12.....	89.2	86.4	93.0	88.2	27.0	73.7	1.0	.7
Ohio C38.....	87.4	84.4	92.2	85.5	24.8	69.9	1.2	1.2
Ohio 3163.....	87.2	.....	88.2	86.1	26.7	70.7	.2	1.8
Ohio W30.....	86.7	82.0*	94.6	83.6	24.3	70.0	1.5	1.3
Ohio 3061.....	86.6	85.8	87.7	86.2	26.1	73.1	1.1	.7
Ohio 3060.....	86.5	81.3*	87.1	91.1	24.4	69.9	2.3	.3
U. S. 13.....	86.3	80.9	92.5	85.6	26.5	74.1	.5	1.8
Ohio K24.....	84.9	79.6*	85.1*	90.0*	23.3	68.2	.6	1.5
Ohio 3182.....	84.5	76.7	92.5	84.3*	24.9	73.4	.2	.6
Ohio 3166.....	84.3	79.8*	88.0	85.1	25.4	70.8	1.4	2.4
Iowa 4059.....	84.2	80.8	91.8	80.0	24.1	69.9	.0	2.1
U. S. 379.....	84.1	74.0	87.8	90.4	30.4	77.1	2.6	1.1
Ohio W10.....	83.9	80.9	94.3	76.5*	24.6	70.4	.8	.7
Iowa 306.....	83.5	75.4	89.5	85.6	23.5	70.3	.9	2.2
Ohio 3049.....	82.3	79.6	80.8	86.5	25.9	72.4	.6	1.8
Ohio 3182.....	81.4	72.0	84.5	87.7	24.8	72.4	.6	1.9
Ohio 3164.....	80.9	73.5	91.9	77.2	23.5	70.2	2.1	2.0
Ohio 3020.....	80.5	79.0*	85.3	77.3	25.0	70.8	1.5	1.2
Ohio 3173.....	80.5	68.9	89.8	82.8	27.8	74.3	4.5	1.9
Ohio 3179.....	79.7	72.5	78.1	88.4	26.5	72.1	.5	3.2
Ohio W36.....	78.4	78.0	81.1	76.2	22.9	68.6	3.2	1.4
Ohio 3086.....	78.4	69.9*	77.9	87.4	24.7	70.1	.4	1.7
Ohio 3122.....	77.0	71.1	77.4*	82.5	25.0	71.5	1.0	3.7
Clarage.....	75.5	69.5*	76.0*	81.1*	25.7	73.0	5.3	3.8
Ohio M34.....	75.4	69.8	80.1	76.4	21.2	67.7	2.6	2.6
Kentucky 102.....	74.8	60.9	77.2	86.2*	30.2	81.3	1.2	4.3
Ohio M20.....	74.3	70.4†	72.4	80.2	20.7	67.8	1.6	3.9
Ohio 3048.....	73.9	64.7	76.6	80.5	24.0	70.7	1.0	3.1

* Four replications only.

† Three replications only.

TABLE 12 — Adaptation Area 6. 1946

Experiment Number: 611E, Meigs County. The Southeastern Experiment Farm cooperating
 612E, Clermont County. The Clermont County Experiment Farm cooperating
 613E, Hamilton County. The Hamilton County Experiment Farm cooperating

Entry	Acre grain yield				Moisture in grain atharvest	Planting to silking	Root- lodged plants	Broken plants
	Average	Exp. No. 611E	Exp. No. 612E	Exp. No. 613E				
	Bu.	Bu.	Bu.	Bu.	Pct.	Days	Pct.	Pct.
Ohio 3143.....	107.8	90.3	103.1	130.0	25.8	69.0	6.2	1.9
Ohio W10.....	101.8	92.6*	93.6*	119.3	22.8	67.9	2.1	1.4
Ohio 3061.....	101.7	85.2	95.3*	124.5	25.2	69.5	5.5	2.0
Ohio 3132.....	101.3	89.7	94.6*	119.7	24.8	69.0	1.1	1.9
Ohio C12.....	100.5	81.6	98.5*	121.5	24.0	70.4	2.3	1.0
Ohio 3122.....	100.2	84.3	101.3*	115.1	24.6	69.3	9.3	3.6
Ohio 3049.....	99.3	78.9	99.1*	119.8	23.3	68.9	3.8	1.6
Ohio 3164.....	98.7	90.5	90.5*	115.2	23.0	67.5	1.0	3.8
Ohio C38.....	98.6	80.2	98.8*	116.8	23.1	67.4	2.2	3.4
Ohio 3147.....	98.5	75.5	100.4*	119.6	24.9	68.6	3.3	1.2
U. S. 13.....	98.5	75.8	93.8*	125.9	25.3	70.2	.6	3.8
Ohio K24.....	97.4	76.7	104.1†	111.3	21.4	65.9	.8	2.4
Ohio 3060.....	96.9	78.9	89.9	122.0	21.7	67.1	.8	.9
Iowa 4059.....	96.9	79.0	96.5†	115.4	22.7	66.2	1.3	1.9
Ohio 3048.....	96.4	76.0	100.1*	113.2	23.8	67.3	1.6	2.6
Ohio 3166.....	96.2	78.2	90.2	120.2	23.7	66.9	1.9	1.3
Ohio 3173.....	96.1	78.6	87.9	121.9	26.2	69.7	7.2	1.7
Ohio 3179.....	95.8	75.9	92.7	118.7	25.7	69.3	.7	1.5
Ohio W30.....	95.2	70.0	100.3	115.4	22.6	67.8	2.9	.7
Ohio L89.....	94.8	71.5	89.4	123.5	24.4	72.1	3.5	2.3
Ohio 3168.....	94.7	78.3	86.0	119.8	25.0	68.6	1.6	4.7
Ohio W36.....	92.6	76.8	91.1*	110.0	21.2	66.4	1.0	1.6
U. S. 379.....	92.2	68.1*	87.9*	120.7*	29.1	71.7	10.6	3.0
Iowa 306.....	92.0	80.3	92.7†	103.1	22.3	65.9	1.9	2.8
Ohio 3086.....	91.8	75.4	88.8*	111.1	23.4	66.9	.1	1.3
Kentucky 102.....	89.6	58.7	95.3*	114.7	27.3	77.8	3.8	8.1
Ohio M34.....	89.3	81.0	83.0	103.8	19.2	64.8	6.4	2.9
Ohio 3182.....	88.7	76.9	73.0	116.3	23.1	69.6	.8	.8
Ohio M20.....	87.1	72.3*	85.1†	103.8	19.3	64.4	1.3	3.4
Clarage.....	85.3	65.3†	83.3	106.7	22.9	70.2	26.6	3.6

* Four replications only.
 † Three replications only.
 ‡ Two replications only.

TABLE 13 — Adaptation Area 7. 1945

Experiment Number: 427, Ross County. The George C. Foster Farm cooperating

Entry	Acre grain yield	Moisture in grain at harvest	Planting to silking	Root-lodged plants	Broken plants	Husk length
	Bu.	Pct.	Days	Pct.	Pct.	Score
U. S. 379	112.8	22.1	71.0	43.0	34.0	2.8
Ohio 3205 (W)*	109.6	21.0	70.5	21.0	15.0	1.2
Indiana 2906 (W)	107.7	21.2	71.0	15.0	13.0	1.2
Indiana 750 (W)	107.0	20.9	70.2	8.0	19.0	1.5
Ohio 3208	105.6	23.3	71.8	32.0	23.0	3.0
U. S. 498 (W).....	104.7	20.9	73.8	24.0	39.0	.8
U. S. 418	104.3	21.4	72.0	4.0	34.0	3.5
U. S. 505	104.1	18.4	70.8	10.0	15.0	1.0
Ohio 3191	104.1	19.9	68.8	16.0	25.0	3.8
Ohio 3192	103.2	19.1	69.0	18.0	9.0	3.2
Ohio 3209	103.0	23.1	72.5	13.0	58.0	3.8
Ohio 3194	102.5	22.3	69.0	23.0	34.0	3.8
Kentucky 203 (W)	102.3	20.2	72.5	4.0	50.0	.8
U. S. 404 (W)	102.0	21.0	74.0	12.0	43.0	1.2
Kansas 2234 (W)	101.7	22.4	71.8	18.0	19.0	1.0
Ohio 3211	100.7	22.8	73.0	20.0	68.0	2.2
Ohio 3193	100.6	20.3	69.0	7.0	25.0	2.8
U. S. 419	100.2	22.7	73.2	12.0	39.0	2.2
U. S. 438	99.7	20.6	72.5	14.0	38.0	1.5
Ohio 3195	99.7	20.7	71.0	40.0	18.0	3.2
Ohio 3207	99.6	22.6	75.3	26.0	30.0	3.5
U. S. 197 (W)	98.8	19.5	72.8	4.0	38.0	.8
Ohio 3201 (W)	98.8	22.4	76.0	14.0	60.0	1.8
U. S. 472 (W)	98.4	18.4	73.5	17.0	20.0	.2
Ohio 3202 (W)	97.9	21.3	72.8	6.0	70.0	.5
Kansas 1585	97.5	21.8	74.8	20.0	38.0	.8
U. S. 13	97.1	19.5	70.5	2.0	29.0	.2
U. S. 496 (W)	95.8	21.4	73.0	13.0	34.0	1.2
Ohio 3132	94.1	18.5	68.5	1.0	22.0	1.5
U. S. 474	93.6	17.0	70.2	7.0	19.0	1.0
Ohio 3204 (W)	93.5	20.8	75.2	13.0	44.0	1.5
Ohio 3203 (W)	92.5	21.8	75.8	7.0	58.0	1.5
Ohio 3206	91.8	23.2	75.0	9.0	59.0	3.2
Ohio 3210	89.2	23.2	73.2	16.0	62.0	3.2
Ohio 3190	87.9	18.0	71.0	2.0	24.0	1.0
White Dent (Foster)	79.3	21.2	74.5	23.0	29.0	1.0

* White entries are indicated by the letter (W) following the entry designations.

TABLE 14 — Adaptation Area 7. 1946

Ross County. The George C. Foster Farm cooperating

Entry	Acre grain yield	Moisture in grain at harvest	Planting to silking	Root-lodged plants	Broken plants	Bacterial blight†	Husk length‡	Ear height
	Bu.	Pct.	Days	Pct.	Pct.	Score	Score	In.
Indiana 750 (W)*.....	94.7	22.0	64.2	5.2	2.6	2.8	3.0	52.5
U. S. 505.....	91.4	19.2	65.0	2.2	9.0	2.8	3.0	51.5
Ohio 3205 (W).....	88.7	21.8	65.8	5.5	5.0	2.8	2.5	49.5
U. S. 507.....	88.6	20.4	65.2	1.0	16.7	3.0	3.0	48.0
Ohio 3166.....	88.4	20.2	62.2	.0	6.2	2.2	3.5	40.0
Ohio 3182.....	88.3	20.6	64.0	.0	20.0	2.2	3.0	51.0
U. S. 197 (W).....	86.7	22.4	67.8	1.8	26.8	1.8	2.0	57.5
Ohio 3227 (W).....	86.7	22.8	72.0	3.3	16.4	1.5	3.0	57.0
Indiana 901 (W).....	85.5	20.6	65.8	4.0	10.5	2.0	3.0	50.0
Indiana 2906 (W).....	85.2	23.7	65.2	.0	6.8	3.0	3.0	50.0
U. S. 418.....	84.8	22.5	66.8	4.3	22.9	3.0	3.0	56.0
U. S. 506.....	84.5	19.5	64.5	2.6	11.5	3.0	3.0	43.5
Ohio 3179.....	84.3	21.8	63.0	.4	13.6	2.5	3.5	45.0
Ohio 3221.....	84.2	22.5	67.2	8.4	17.7	2.0	3.5	55.0
Ohio 3223.....	83.9	21.0	68.2	4.2	16.7	1.8	3.5	54.0
Kansas 1784.....	83.7	21.2	65.2	2.6	13.3	2.8	3.0	49.5
U. S. Sel. 77 (W).....	82.6	22.4	68.5	19.5	15.4	3.2	2.0	58.5
Ohio 3182.....	82.3	20.4	63.5	.5	4.6	2.5	3.0	49.5
U. S. 565.....	82.0	25.9	71.5	9.6	7.0	2.2	2.5	57.5
Ohio 3225 (W).....	81.5	25.4	69.5	.5	28.9	2.0	3.0	54.9
Kansas 1639.....	80.8	20.6	64.2	6.9	17.4	3.5	3.0	44.0
Kentucky 203 (W).....	80.8	23.7	69.0	2.8	16.5	3.2	2.0	56.5
Ohio 3208.....	78.5	26.2	68.5	21.6	4.8	2.2	3.0	49.5
Dixie 44.....	78.5	26.5	71.2	14.0	21.0	1.8	3.0	59.0
Kansas 2234 (W).....	78.2	23.4	66.5	9.8	6.7	3.5	2.5	49.0
U. S. 13.....	77.4	20.0	65.5	3.4	31.2	3.0	3.0	44.0
U. S. 379.....	77.3	24.1	67.0	34.1	7.9	2.0	3.0	51.5
Ohio 3222.....	77.0	25.0	69.5	1.3	11.6	1.5	3.0	60.0
Indiana 703B (W).....	76.8	20.8	66.2	2.4	18.0	2.2	3.0	53.0
Ohio 3220.....	75.6	23.0	69.2	17.2	12.7	2.5	2.5	55.5
Ohio 3219.....	75.4	23.8	70.0	5.8	19.7	2.5	2.5	59.0
U. S. 404 (W).....	75.3	24.8	70.0	1.0	15.6	3.0	3.0	58.0
Ohio 3226 (W).....	75.2	24.8	73.0	2.0	8.8	1.5	3.0	54.5
Ohio 3177.....	73.0	24.0	66.5	.0	31.4	2.0	3.0	52.0
Ohio 3190.....	70.2	22.0	66.0	4.2	29.5	2.8	3.0	43.5
Ohio 3228 (W).....	69.8	25.8	73.8	5.4	11.3	1.8	2.5	54.5

* White entries are indicated by the letter (W) following the entry designations.

† Bacterial blight score: 1=very light infection; 5=very heavy infection.

‡ Husk length score: 1=very long husk; 5=very short husk.

TABLE 15 — Frequency distribution of 50 grain-yield differences.
Ohio K24 minus Ohio W36, in classes of 3 bushels

-15	-12	-9	-6	Class Centers		+3	+6	+9	+12	+15
				-3	0					
				Frequencies						
2		3	6	9	17	8	2	1	1	1

TABLE 16 — Summary of all experiments in Area 1. 1945 and 1946

Entry	No. of tests	Rank in yield	Acre grain yield	Moisture in gram at harvest	Planting to silking	Root-lodged plants		Broken plants	
						Entry	Control	Entry	Control
						Pct. (7)	Pct. (8)	Pct. (9)	Pct. (10)
(1)	(2)	(3)	Bu. (4)	Pct. (5)	Days (6)	Pct. (7)	Pct. (8)	Pct. (9)	Pct. (10)
Ohio M34.....	3	28	69.6	25.4	79.8	8.7	4.7	5.1	5.3
Pioneer 373.....	1	17	75.1	26.1	.....	2.6	1.8	3.9	.8
Ohio M15.....	3	29	69.3	26.5	79.8	6.2	4.7	7.8	5.3
Ohio 3199.....	3	23	73.1	26.5	81.7	2.2	4.7	2.9	5.3
Ohio M20.....	3	33	67.8	26.7	80.3	5.1	4.7	4.8	5.3
Ohio K23.....	2	32	67.9	26.7	80.7	4.3	6.1	4.7	7.6
Ohio 3198.....	3	22	72.5	26.7	80.8	2.0	4.7	3.0	5.3
Ohio 3157.....	2	11	77.2	26.8	81.2	5.1	6.1	5.0	7.6
Ohio 3197.....	3	16	75.5	26.9	80.0	2.5	4.7	2.4	5.3
Ohio K24.....	3	25	71.6	27.0	80.2	2.6	4.7	2.5	5.3
Pioneer 342.....	1	4	80.2	27.1	.....	15.1	1.8	.6	.8
West Virginia B25	1	2	84.7	27.1	.....	2.9	1.8	2.1	.8
Ohio 3200.....	3	13	76.5	27.2	80.4	2.7	4.7	10.3	5.3
Ohio K35.....	2	27	71.1	27.2	80.6	5.9	6.1	5.5	7.6
Ohio W36.....	3	10	77.3	27.3	81.3	5.2	4.7	5.6	5.3
Ohio 3184.....	1	1	87.5	27.4	.....	3.4	1.8	1.2	.8
Iowa 4316.....	3	20	74.6	27.4	81.8	11.4	4.7	8.5	5.3
Ohio 3097.....	1	7	78.0	27.5	.....	.0	1.8	1.3	.8
Indiana 210B	2	31	68.4	27.6	80.3	20.1	6.1	4.0	7.6
DeKalb 404A.....	1	19	75.0	28.0	.....	.0	1.8	.4	.8
Pioneer 324A.....	1	17	75.1	28.1	.....	4.2	1.8	.3	.8
DeKalb 410.....	1	9	77.6	28.2	.....	3.7	1.8	4.1	.8
DeKalb 422.....	1	3	83.6	28.2	.....	5.2	1.8	1.5	.8
Pfister 366A.....	1	6	79.1	28.2	.....	6.8	1.8	3.7	.8
Pfister 274.....	1	30	68.9	28.3	.....	2.7	1.8	1.1	.8
Ohio 3218.....	1	14	76.3	28.5	.....	1.0	1.8	1.4	.8
Cash.....	1	26	71.5	28.6	.....	5.1	1.8	.4	.8
DeKalb 609.....	1	5	79.9	28.9	.....	6.4	1.8	2.6	.8
Pfister 266.....	1	24	71.9	29.2	.....	4.0	1.8	1.5	.8
Ohio C38.....	3	21	74.2	29.8	82.9	5.9	4.7	2.8	5.3
Pfister 270.....	1	8	77.9	29.9	.....	8.0	1.8	.6	.8
Ohio 3163.....	2	15	75.7	30.2	82.5	7.5	6.1	7.8	7.6
Ohio C12.....	3	12	77.1	30.7	85.3	5.7	4.7	2.4	5.3
Average of controls.....			72.7	26.9	80.4		4.7		5.3

TABLE 17 — Summary of all experiments in Areas 2 to 5 inclusive, 1945 and 1946

Entry	No. of tests	Rank in yield	Acre grain yield		Moisture in grain at harvest	Planting to silking	Root-lodged plants		Broken plants	
			Bu.	Pct.			Entry	Control	Entry	Control
(1)	(2)	(3)								
Pioneer 373.....	3	27	65.4	20.6	72.0	2.2	2.0	13.9	7.1	
Ohio M15.....	3	42	62.1	20.8	71.5	1.4	2.0	13.4	7.1	
Ohio M34.....	9	45	61.4	21.2	70.8	10.7	4.0	12.1	9.6	
West Virginia B25.....	3	10	69.5	21.4	72.1	4.1	2.0	11.9	7.1	
Ohio M20.....	10	57	58.1	21.7	71.7	3.2	4.0	12.7	9.6	
Ohio 3199.....	6	28	65.0	21.8	70.8	4.1	6.0	15.1	14.1	
Ohio 3200.....	4	7	70.1	21.9	70.4	.8	2.0	14.6	7.1	
Ohio 3198.....	3	25	66.0	21.9	71.6	.1	2.0	13.1	7.1	
DeKalb 422.....	4	11	69.2	22.2	72.8	.5	2.0	5.7	7.1	
Indiana 210B.....	2	53	59.1	22.3	74.8	.0	.0	.4	.4	
Ohio 3097.....	4	44	62.0	22.5	72.2	1.5	2.0	13.3	7.1	
Ohio K24.....	11	16	68.5	22.7	71.8	1.8	4.0	12.2	9.6	
DeKalb 410.....	1	40	62.5	22.9	72.8	4.6	2.0	11.4	7.1	
Cash.....	4	53	59.1	22.9	72.8	3.5	2.0	7.4	7.1	
DeKalb 609.....	4	20	68.0	23.1	72.7					
Pioneer 342.....	4	41	62.3	23.1	74.3	5.0	2.0	3.4	7.1	
Pfister 274.....	3	31	64.8	23.1	74.4	2.1	2.0	12.5	7.1	
Ohio 3157.....	3	23	66.5	23.3	71.9	3.9	9.9	23.6	21.1	
Iowa 4316.....	8	32	64.1	23.5	72.0	6.3	6.0	19.5	14.1	
Pioneer 324A.....	4	48	60.6	23.6	75.7	.3	2.0	10.8	7.1	
Ohio 3048.....	3	26	65.5	23.7	71.8	.0	.0	.0	.4	
Ohio W36.....	11	22	66.9	23.7	72.7	4.5	4.0	8.6	9.6	
DeKalb 404A.....	4	60	52.1	23.7	74.1	.7	2.0	4.3	7.1	
Ohio 3197.....	3	38	62.7	23.8	72.1	.7	2.0	2.9	7.1	
Pfister 270.....	3	2	72.2	23.8	75.2	1.8	2.0	5.9	7.1	
Ohio 3163.....	1	15	68.6	24.1	75.5	12.3	7.4	16.9	16.1	
Indiana 418A.....	4	46	61.3	24.1	71.5	6.9	5.1	13.7	12.2	
Ohio 3184.....	7	6	71.0	24.3	72.1	.7	.0	.4	.4	
Ohio 3086.....	3	49	60.4	24.3	74.6	.7	2.0	7.2	7.1	
Pfister 266.....	3	42	62.1	24.3	75.8	.6	2.0	7.2	7.1	
Ohio W10.....	4	18	68.2	24.4	75.0	.0	.0	.4	.4	
Ohio W30.....	6	21	67.3	24.6	74.1	8.6	5.9	14.1	12.8	
Pfister 366A.....	3	55	58.3	24.7	78.3	.7	2.0	11.2	7.1	
Indiana 416B.....	1	52	59.5	24.8	74.0	.0	.1	4.0	1.1	
Indiana 620A.....	3	34	63.6	25.0	74.0	.0	.0	2.5	.6	
Ohio 3060.....	6	5	71.1	25.1	74.4	6.9	5.0	6.3	10.9	
Clarage.....	2	59	54.3	25.1	78.4	.4	.0	.4	.4	
Iowa 4059.....	5	37	62.9	25.4	74.4	.3	.0	2.3	.6	
Woodburn.....	5	61	43.0	25.5	74.1	23.6	7.4	23.3	16.1	
Ohio 3164.....	3	33	63.9	25.5	76.3	.0	.0	.0	.4	
Ohio C38.....	11	16	68.5	25.6	74.5	5.6	4.0	8.4	9.6	
Pioneer 338.....	4	35	63.1	25.6	74.9	2.6	2.0	5.2	7.1	
Ohio 3049.....	4	18	68.2	25.8	76.7	.9	.0	.7	.6	
Ohio 3218.....	3	28	65.0	25.9	74.5	2.3	2.0	6.5	7.1	
Ohio 3132.....	7	9	69.8	26.1	76.1	4.8	5.0	12.5	10.9	
Ohio 3182.....	2	47	61.1	26.5	79.4	.3	.0	.0	.4	
Ohio 3166.....	3	13	69.1	26.7	74.8	.0	.0	.9	.6	
Ohio C12.....	11	4	71.6	26.8	76.9	7.2	3.9	6.3	9.6	
Ohio 3147.....	4	14	68.9	26.9	75.5	.0	.0	.9	.6	
Iowa 306.....	4	50	60.1	27.0	74.5	.6	.0	1.4	.6	
Ohio 3168.....	1	3	72.0	27.2	74.6	.5	.0	2.7	1.1	
U. S. 13.....	11	23	66.5	27.2	77.0	4.3	4.0	9.5	9.6	
Ohio 3122.....	4	56	58.2	27.2	77.0	.0	.0	.0	.4	
Ohio 3169.....	1	35	63.1	27.3	74.6	.0	.0	2.2	1.1	
Ohio 3171.....	4	7	70.1	27.3	75.3	.0	.0	1.4	.6	
Ohio 3061.....	4	1	73.3	27.9	76.7	1.0	.0	.5	.6	
Ohio 3179.....	2	28	65.0	28.1	77.3	.4	.0	.4	.4	
Indiana 610.....	1	11	69.2	28.2	78.6	.0	.0	.0	.4	
Ohio 3173.....	2	39	62.6	28.7	78.6	.0	.0	.0	.4	
U. S. 379.....	9	51	59.7	30.3	79.6	14.4	4.0	6.2	9.9	
Kentucky 102.....	2	58	56.6	31.9	80.1	.0	.0	1.2	.4	
Average of controls.....			68.0	23.9	73.0		4.0		9.6	

TABLE 18 — Summary of all experiments in Area 6. 1945 and 1946

Entry	No. of tests	Rank in yield	Acre grain yield		Moisture in grain at harvest	Planting to silking	Root-lodged plants		Broken plants	
			Bu. (4)	Pct. (5)			Days (6)	Entry	Control	Entry	Control
(1)	(2)	(3)								
Ohio M20.....	11	39	81.8	19.4	66.8	6.1	4.7	3.7	2.4	
Ohio M34.....	11	38	82.4	19.4	67.4	13.7	4.7	3.1	2.4	
Ohio K24.....	11	28	91.0	20.0	67.9	3.8	4.7	2.2	2.4	
Ohio W36.....	11	32	89.7	21.0	68.6	6.5	4.7	1.7	2.4	
Ohio 3157.....	3	23	93.8	21.3	68.5	4.5	11.4	2.4	3.0	
Ohio 3060.....	6	17	95.0	21.8	69.4	1.6	1.5	.6	2.2	
Iowa 306.....	8	35	86.7	21.8	69.5	3.2	2.2	2.8	2.2	
Ohio 3048.....	6	34	88.4	22.2	69.9	1.3	1.5	2.9	2.2	
Ohio W30.....	6	22	94.3	22.2	71.6	2.2	1.5	1.0	2.2	
Woodburn.....	5	40	65.4	22.3	70.7	30.2	8.6	7.9	2.6	
Clarage.....	6	37	83.7	22.3	72.6	16.0	1.5	3.7	2.2	
Iowa 4059.....	9	24	93.0	22.4	69.6	3.3	4.8	2.7	2.4	
Ohio 3164.....	11	27	91.3	22.4	69.8	5.8	4.7	3.3	2.4	
Ohio C38.....	11	12	96.0	22.6	69.8	6.5	4.7	2.1	2.4	
Ohio W10.....	8	10	96.3	22.7	70.2	2.3	2.2	1.3	2.2	
Ohio 3036.....	11	33	89.3	22.8	69.5	1.4	4.7	2.4	2.4	
Ohio 3132.....	6	31	89.9	23.2	72.5	.5	1.5	.7	2.2	
Ohio 3049.....	11	26	92.0	23.4	71.4	7.5	4.7	2.7	2.4	
Ohio 3122.....	11	28	91.0	23.5	71.5	8.1	4.7	4.0	2.4	
Ohio 3166.....	9	4	99.2	23.6	70.2	4.0	4.8	2.3	2.5	
Ohio 3117.....	5	18	94.7	23.6	73.0	7.1	8.6	4.2	2.6	
Ohio L89.....	6	14	95.7	23.6	74.8	1.9	1.4	1.7	2.2	
Ohio 3132.....	11	13	95.9	23.9	71.8	2.6	4.7	2.8	2.4	
Ohio 3163.....	7	1	105.9	24.1	69.6	4.7	6.6	1.6	2.3	
Ohio 3147.....	6	8	97.3	24.1	70.8	1.3	1.5	1.1	2.2	
Ohio C12.....	11	7	97.8	24.1	72.9	4.7	5.3	2.2	2.4	
Ohio 3061.....	9	9	97.2	24.4	71.9	7.2	4.8	1.4	2.5	
U. S. 13.....	11	15	95.3	24.6	72.7	1.1	4.7	3.3	2.4	
Ohio 3179.....	6	28	91.0	24.9	71.7	.5	1.5	.7	2.2	
Ohio 3171.....	5	11	96.1	25.1	71.0	3.1	8.6	2.8	2.6	
Ohio 3168.....	6	21	94.4	25.2	71.7	4.0	6.4	3.7	3.0	
Ohio 3143.....	3	2	104.8	25.3	71.4	6.2	1.3	1.9	2.9	
Ohio 3177.....	2	5	99.0	25.7	72.2	3.5	4.4	5.5	2.0	
Ohio 3192.....	5	18	94.7	25.8	71.5	11.5	8.6	1.4	2.6	
Ohio 3191.....	5	6	98.0	25.8	72.4	8.6	21.9	2.6	4.3	
Ohio 3173.....	11	20	94.5	25.8	72.8	10.8	4.7	1.8	2.4	
Ohio 3193.....	5	16	95.1	27.0	73.0	13.2	8.6	2.8	2.6	
Kentucky 102.....	6	36	85.5	27.5	80.5	2.5	1.5	6.2	2.2	
Ohio 3194.....	5	3	104.6	27.8	72.8	20.1	8.6	3.3	2.6	
U. S. 379.....	11	25	92.4	28.1	74.9	12.3	4.7	2.8	2.4	
Average of controls.....			93.6	22.7	70.4		4.7		2.4	

TABLE 19 — Summary of all experiments in Area 7. 1945 and 1946

Entry	No. of tests	Rank in yield	Acre grain yield	Moisture in grain at harvest	Planting to silking	Root-lodged plants		Broken plants	
						Entry	Control	Entry	Control
	(2)	(3)	Bu. (4)	Pct. (5)	Days (6)	Pct. (7)	Pct. (8)	Pct. (9)	Pct. (10)
U. S. 505.....	2	3	97.8	18.8	67.9	6.1	4.3	12.0	28.1
Ohio 3166.....	1	6	97.3	19.4	64.7	.0	3.8	6.2	23.4
Ohio 3182.....	1	21	91.2	19.6	66.0	.5	3.8	4.6	23.4
Ohio 3132.....	2	21	91.2	19.6	66.3	.5	4.3	21.0	28.1
U. S. 507.....	1	5	97.5	19.6	67.7	1.0	3.8	16.7	23.4
Kansas 1639.....	1	26	89.4	19.8	66.7	6.9	3.8	17.4	23.4
U. S. 13.....	2	28	87.2	19.8	68.0	2.7	4.3	30.1	28.1
Indiana 901 (W)*.....	1	11	94.4	19.8	68.3	4.0	3.8	10.5	23.4
U. S. 506.....	1	13	93.4	19.9	67.8	2.6	3.8	11.5	23.4
Ohio 3192.....	1	12	94.3	20.0	66.6	18.0	4.7	9.0	32.7
Ohio 3190.....	2	31	79.0	20.0	68.5	3.1	4.3	26.8	28.1
Indiana 703B (W).....	1	29	85.7	20.0	68.7	2.4	3.8	18.0	23.4
Ohio 3223.....	1	16	92.8	20.2	70.7	4.2	3.8	16.7	23.4
Kansas 1784.....	1	18	92.6	20.4	67.7	2.6	3.8	13.3	23.4
Ohio 3179.....	1	14	93.2	21.0	65.5	.4	3.8	13.6	23.4
U. S. 197 (W).....	2	17	92.7	21.0	70.4	2.9	4.3	32.4	28.1
Indiana 750 (W).....	2	1	100.9	21.5	67.2	6.6	4.3	10.3	28.1
Ohio 3205 (W).....	2	2	99.2	21.5	68.2	13.3	4.3	10.0	28.1
Ohio 3221.....	1	15	93.1	21.7	69.7	8.4	3.8	17.7	23.4
U. S. Sel. 77 (W).....	2	30	81.2	21.8	71.5	21.3	4.3	22.2	28.1
U. S. 418.....	2	10	94.6	22.0	69.5	4.2	4.3	28.5	28.1
Kentucky 203 (W).....	2	20	91.5	22.0	70.8	3.4	4.3	33.3	28.1
Ohio 3227 (W).....	1	8	95.6	22.0	74.5	3.3	3.8	16.4	23.4
U. S. 404 (W).....	2	3	97.8	23.0	72.1	6.5	4.3	29.3	28.1
U. S. 379.....	2	9	95.1	23.2	69.1	38.6	4.3	21.0	28.1
Kansas 2234 (W).....	2	25	89.9	23.5	69.2	13.9	4.3	12.9	28.1
Indiana 2906 (W).....	2	7	96.5	23.9	68.1	8.0	4.3	9.9	28.1
Ohio 3225 (W).....	1	24	90.4	24.6	72.0	.5	3.8	28.9	23.4
Ohio 3203.....	2	19	92.0	24.3	70.2	26.8	4.3	13.9	28.1
U. S. 565.....	1	23	90.9	25.1	74.0	9.6	3.8	7.0	23.4
Dixie 44.....	1	27	87.4	26.0	73.7	14.0	3.8	21.0	23.4
Average of controls.....			93.2	21.1	68.7		4.3		28.1

* White entries are indicated by the letter (W) following the entry designations.

This page intentionally blank.

This page intentionally blank.