PERFORMANCE TESTS OF Corn VARIETIES AND HYBRIDS 1947

By
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and
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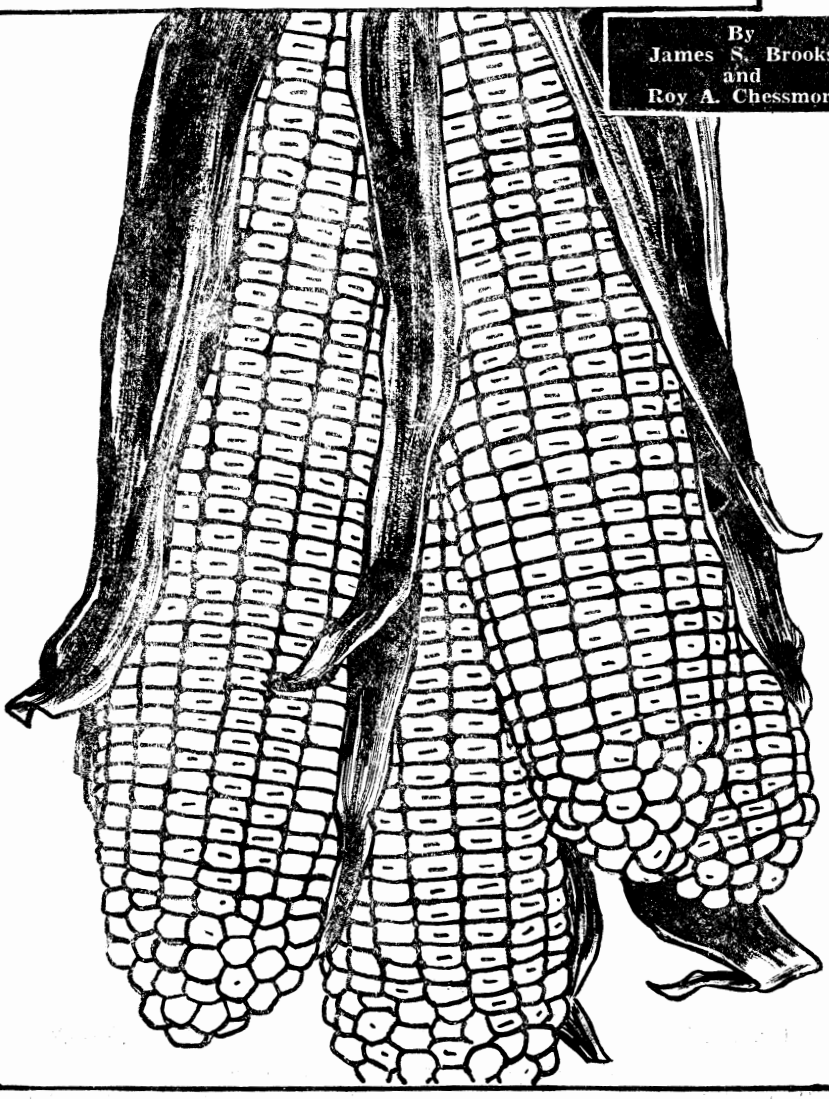

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Performance Tests of
CORN VARIETIES AND HYBRIDS, 1947

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The 1947 Oklahoma Agricultural Experiment Station Corn Performance Tests were conducted at 7 locations in the corn-growing sections of the State. Each location was chosen to represent as closely as possible the prevailing soil types of the area in which the test was conducted.

A total of 100 strains was tested. All strains tested were grown at each location, thus providing a basis for estimating the adaptation of each strain to Oklahoma conditions.

Results of the 1947 Tests

Certain hybrids continued to show superior yielding ability in the 1947 tests, the results of which are shown in Tables I to VII, pages 11 to 27. Each table shows the results of the 1947 tests, and also a summary of results for three years for those locations where tests have been conducted for that period.

The yields shown in all tables except the two Payne County locations are reported as bushels of ear corn containing 15.5 percent moisture in the grain. The yields were calculated using 70 pounds to the bushel, and moisture adjustments were based on moisture determinations made on a sample of grain of each variety taken at harvest. The yields shown in the tables for the two Payne County locations (Tables IV and V) are based on shelled corn containing 15.5 percent moisture.

An estimate of the variation in yield which might be expected to occur as a result of variation in soil and other factors is given for each of the 1947 tests. This "significant difference" should be kept in mind whenever two strains are compared.

The yields reported for 1947 do not prove which strain will do best in another season or at another location. However, a strain which has a good record at several locations and for several years should be expected to give generally good performance.

Previous years' results indicate that a particular maturity class may be favored at one location during one season and another maturity class favored at the same location in a different season. It seems desirable, therefore, to compare closely strains of similar maturity to determine which are the best strains within a maturity class. Over a period of years, information will be obtained as to which maturity class can be expected to give consistently highest yields.

The 100 strains tested during 1947 were divided into four maturity groups. Insofar as possible the 25 earliest maturing hybrids were placed in the early group, the next 25 in the medium early group, etc. There is, of course, no sharp line between the maturity groups. Some strains in the early group are actually little if any earlier in maturity than some in the medium early group, and the same is true for the other adjacent groups.

Hybrids which ranked above average in the 1947 tests are listed on page 8. Hybrids which have been outstanding performers during the past three years are listed on page 7, opposite.

High-performing Hybrids

Sixteen of the hybrids which have been tested during the past three years have exceptionally good yield records. They have produced above average yields in their maturity group more than 75 percent of the time. These 16 hybrids are listed at the right, by maturity groups. Arrangement within groups is alphabetical.

Five open-pollinated varieties have been tested during this same three-year period at the same test locations. Three of these varieties have never yielded above the test average. The other two varieties yielded above average at one test location once during the three-year period.

The general features of adaptation and performance discussed on pages 8 and 9 will also apply to the 16 high-performing hybrids listed here.

Early Maturing

Funk G-94
Merit Keystone 38
Ohio C-12
Ohio C-38
U. S. 13

Medium Early Maturing

Crost-Rite Mo. 313
Illinois 200
Pioneer 332

Medium Late Maturing

Texas 18
Kansas 2234 (white)

Late Maturing

Funk G-711
Kansas 1583
Kansas 1585
Tennessee 10 (white)
Texas 12
Texas 20

Which Hybrid to Plant

A list of high-performing hybrids is given on page 7. These hybrids have exceptionally good yield records during the past three years.

The hybrids listed below produced above average yields in the maturity class in which they were tested at a majority of the 1947 test locations. Those hybrids marked with a dagger (†) have above average yields at a majority of the test locations for a three-year period. The hybrids are listed alphabetically within each maturity group.

Early Maturing

Embro 36
†Funk G-53
†Funk G-94
†Indiana 610B
†Indiana 818
McCurdy 987M
†Merit Keystone 38
†Merit Keystone 39
†Ohio C-12
†Ohio C-38
†Pfister 170
Pfister 173
Pioneer 335
Razorback U. S. 13
†Shannon 1300
United U-50
†U. S. 13
†U. S. 35
†Ward 120A

Medium Early Maturing

†Crost-Rite Mo. 148
†Crost-Rite Mo. 313
Embro 49
Funk G-135
†Illinois 200
Iowealth 29A
Kansas 1639
Kansas 1784
McCurdy 130M
†Merit Keystone 40
†Pioneer 332
Razorback 111

Late Maturing

†Funk G-711
Iowealth TXN
†Kansas 1583
†Kansas 1585
Merit Keystone 222
†Texas 12
†Texas 20

Medium Late Maturing

†Illinois 448
McCurdy 135M
†Texas 18
United U-68

White Hybrids

†Kansas 2234 (w)
Kansas 2275 (w)
McCurdy 1005W (w)
†Tennessee 10 (w)
Texas 9W (w)
Ward 135W (w)

In general, hybrids in the early and medium-early maturity groups have a better performance record on upland soils and soils of medium fertility than do the hybrids listed in the medium late and late groups. On the more fertile bottomland soils the late and medium-late groups have a somewhat better performance record than the early and medium-early groups. The late and medium-late hybrids gain additional favor near the southern edge of the State.

The later hybrids usually produce ears of better size and quality, but the earlier hybrids generally stand up better. The difference in number of down plants is particularly noticeable if harvesting is delayed until late in the season.

Soil type and seasonal conditions play an important part in determining which hybrid will give the best yield. In view of the variable seasonal conditions in this State, it seems advisable to plant two or more hybrids of different maturity. If unfavorable weather catches one hybrid at a critical period, the other may escape.

Hybrids vary not only in maturity but also in ear and grain type and in plant and ear height, etc. The hybrids listed on pages 7 and 8 were chosen mainly on yield, and a particular hybrid in this list may be preferred because of its ear size and type and/or grain type. An individual grower selecting from this list might well choose two or more hybrids for trial and thus become familiar with the strains as grown on his farm.

1947 Testing Procedure and Conditions

Plot Location and Arrangement.—Twenty-five varieties and hybrids were planted at each test location in each of four maturity groups.* Insofar as possible, entries of similar maturity were included in the same group. However, it was not always possible to place an entry in its proper maturity group and there is some overlapping of maturity dates between the different maturity groups.

Seasonal Conditions at Test Locations.—The 1947 corn planting season was somewhat variable in the different parts of the State; however, all tests were planted near the usual planting date. The early part of the growing season was generally cool and wet, retarding early growth and development. Rainfall was limited or lacking at all locations from the first week in July until harvest.

Sources of Seed.—Two general sources of hybrid seed entries, each including two classes, were planted in the 1947 tests—

* A 5 x 5 lattice square was used in all tests. All plots were 1 x 20 hills. This plot shape was used to facilitate planting with a modified 2-row check-row corn planter. This planting technique greatly increased the ease and speed of planting with no evidence of a decrease in the accuracy of the experiment.

A. Entries supplied by the Oklahoma Agricultural Experiment Station:

1. Certified seed of hybrids developed by other experiment stations.*

2. New hybrids developed at the Oklahoma Agricultural Experiment Station, not yet in production, and listed as Oklahoma Experimental Hybrids.

B. Entries supplied by companies producing or distributing seed:

1. Hybrids now on the market and available to farmers through these companies or their representatives.

2. Experimental hybrids entered by these companies to test their adaptation to this region and not yet produced in sufficient quantity to be generally available.

Seed sources for 1947 are listed on pages 28 to 30.

Plant Spacing.—The test plots were prepared for planting by the cooperating farmer in the same way he prepared his own field for corn, which in all cases was the usual seedbed preparation for corn. The plots were planted in hills 40 inches apart in the row. Row widths varied from 38 to 42 inches at different locations, depending upon that used by the particular cooperator. The number of grains dropped per hill varied with the maturity class at each location and with the fertility of the soil at the different locations.

Lodged Plants.—Percent of lodged plants is shown in most tables. Where lodging was not recorded it was considered that the lodging was due more to local conditions within the test area than to varietal differences. Plants were considered lodged if they were leaning more than 45 degrees from the vertical or if the stalks were broken below the ear.

* The Station does not maintain a supply of seed of these hybrids. However, information concerning sources of this seed will be supplied upon request.

INDIVIDUAL TESTS

(Yields in Bushels per Acre)

SIGNS USED IN TABLES

(w) — White corn.
(ex) — An experimental hybrid; not for sale commercially.
* — Open-pollinated variety (all others are hybrid strains).

Table I.—Carter County (Upland)

Southern Oklahoma Soil Improvement Station,
Lone Grove, ½ mile west

Planted March 25; harvested September 8

Early Maturity
3 grains planted per hill

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.	Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
1	Razorback U. S. 13	28.1	59	1	14	Funk G-53	24.8	63	3
2	Merit Keystone 39	28.1	49	6	15	Pioneer 335	24.3	54	9
3	Pfister 170	27.2	62	4	16	Illinois 751	23.8	50	2
4	Merit Keystone 38	27.2	62	6	17	Miller 13	23.7	54	2
5	U. S. 13	27.0	63	3	18	Hoosier Crost F. 138	23.7	54	7
6	McCurdy 987M	26.8	63	0	19	Embro 36	23.5	64	4
7	Ward 120A	26.5	54	6	20	Pfister 173	23.4	55	8
8	Shannon 1100 (ex)	26.4	56	3	21	Indiana 610B	23.2	63	10
9	Embro 95	26.1	57	5	22	Indiana 818	23.1	54	3
10	Ohio C-12	25.8	62	3	23	Hoosier Crost 616	23.0	53	7
11	McCurdy 112M	25.7	64	4	24	United U-50	22.2	63	5
12	Shannon 1300	25.7	62	9	25	Ohio C-38	21.9	67	1
13	Funk G-94	25.0	56	7		Average	25.0	59	5

Significant Difference: A difference of less than 6.7 bushels per acre between any two strains should not be considered significant in this test.

Medium Early Maturity
3 grains planted per hill

1	Miller 247	27.5	55	3	15	Razorback 111	20.3	65	7
2	Oklahoma 7602 (ex)	25.5	62	20	16	Kansas 1639	20.0	61	3
3	Oklahoma 7601 (ex)	25.1	58	22	17	U. S. 35	20.0	60	5
4	Funk G-135	24.6	59	18	18	Oklahoma 7201 (ex)	19.9	61	3
5	Pioneer 332	23.4	61	11	19	Crost-Rite Mo. 313	19.7	63	4
6	Embro 49	23.1	62	3	20	Oklahoma T61 (ex)	18.4	63	18
7	Shannon 1500	23.0	53	5	21	Kansas 1784	18.2	60	5
8	Shannon 1700	22.8	58	6	22	Oklahoma 7603 (ex)	18.2	59	7
9	Ward 125	22.6	54	4	23	McCurdy 130M	17.3	60	2
10	Merit Keystone 40	22.6	51	8	24	*Hays Golden	14.8	55	9
11	Crost-Rite Mo. 148	22.3	62	5	25	*St. Charles White (w)	11.6	62	11
12	Illinois 200	22.0	63	6					
13	Iowealth 29A	21.7	56	2					
14	Oklahoma 7604 (ex)	21.7	53	19		Average	21.1	59	8

Significant Difference: A difference of less than 5.5 bushels per acre between any two strains should not be considered significant in this test.

(Table continued on next page.)

Table I, Carter County, continued.

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
	Medium Late Maturity			
	2 grains planted per hill			
1	Oklahoma 7806 (ex)	45.6	86	8
2	Oklahoma 7802 (ex)	44.8	89	13
3	Oklahoma 7809 (ex)	43.8	79	14
4	Illinois 448	41.8	73	21
5	United U-68	41.6	82	17
6	Oklahoma 7803 (ex)	40.8	74	11
7	Pioneer X 5973 (ex)	40.6	87	4
8	McCurdy 135M	40.6	75	12
9	Texas 18	40.2	85	32
10	Pioneer X 3005 (ex)	39.6	85	10
11	Oklahoma 7804 (ex)	39.6	78	15
12	Embro 155W (w)	39.5	80	12
13	Oklahoma 7810 (ex)	39.5	85	13
14	Oklahoma 7811 (ex)	39.5	86	20
15	Oklahoma 7808 (ex)	39.4	87	14
16	Oklahoma 7807 (ex)	39.2	85	9
17	Oklahoma 7805 (ex)	39.0	73	12
18	Pfister 612W (w)	38.0	79	13
19	Kansas 2234 (w)	37.5	82	13
20	Oklahoma 7801 (ex)	37.3	58	21
21	Merit Keystone 106W (w)	36.4	83	8
22	Kansas 2275 (w)	35.2	91	4
23	Miller 1050W (w)	34.3	57	6
24	*Midland Yellow Dent	32.2	85	10
25	*Yellow Surcropper	31.9	73	8
	Average	39.1	80	13

Significant Difference: A difference of less than 7.7 bushels per acre between any two strains should not be considered significant in this test.

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
	Late Maturity			
	2 grains planted per hill			
1	Merit Keystone 222	45.1	88	18
2	Texas 9W (w)	44.0	88	17
3	Ward 130	42.6	82	12
4	Texas 12	42.0	87	28
5	Texas 20	40.2	68	20
6	Oklahoma T87 (ex)	39.5	79	14
7	Kansas 1583	39.5	81	17
8	Oklahoma T84 (ex)	39.4	71	19
9	Tennessee 10 (w)	39.0	78	15
10	Iowealth TXN	38.6	71	21
11	McCurdy 1005W (w)	38.4	80	15
12	Oklahoma T81 (ex)	37.9	81	14
13	United U-75	37.7	73	20
14	Kansas 1585	37.3	71	10
15	Funk G-716	37.1	82	21
16	Ward 135W (w)	36.6	78	26
17	Oklahoma T83 (ex)	36.5	79	11
18	Oklahoma T85 (ex)	35.9	84	17
19	Oklahoma T82 (ex)	34.2	83	17
20	Funk G-711	33.8	89	26
21	Oklahoma T86 (ex)	32.2	73	10
22	*Reid Yellow Dent (Station)	31.2	77	8
23	*Reid Yellow Dent	27.4	77	14
24	*Ferguson Yellow Dent	26.9	20	28
25	*Oklahoma Silvermine (w)	23.6	79	8
	Average	36.7	77	17

Significant Difference: A difference of less than 7.8 bushels per acre between any two strains should not be considered significant in this test.

(Table continued on next page.)

Table I, Carter County, continued.

Rank	Strain	Yield	Pct Ldgd.	Rank	Strain	Yield	Pct. Ldgd.
	3-year Average: 1945, 1946, 1947						
1	Texas 12	33.7	24	16	Pioneer 332	27.4	12
2	Texas 18	31.3	32	17	Crost-Rite Mo. 313	26.6	5
3	Illinois 448	30.5	16	18	Crost-Rite Mo. 148	25.1	6
4	Merit Keystone 39	30.0	7	19	Funk G-94	24.9	6
5	Tennessee 10 (w)	30.0	24	20	Illinois 751	24.7	2
6	Kansas 2234 (w)	29.9	10	21	Ward 125	24.2	8
7	U. S. 13	29.6	7	22	Shannon 1500	23.7	4
8	Funk G-716	29.3	15	23	Merit Keystone 40	23.6	8
9	Ward 120A	29.1	7	24	U. S. 35	23.5	4
10	Merit Keystone 38	28.9	5	25	*Ferguson Yellow Dent	20.3	21
11	Kansas 1583	28.6	15	26	*Reid Yellow Dent	20.0	23
12	Ohio C-38	28.4	1	27	*Oklahoma Silvermine (w)	18.6	13
13	Kansas 1585	28.3	10	28	*Hays Golden	18.3	14
14	Shannon 1300	28.1	9		Average	26.6	12
15	Funk G-711	27.6	25				

Table II.—Garvin County (Bottom Land)

D. J. Butler farm, Pauls Valley, 1 mile west

Planted March 26; harvested September 9 and 10.

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.	Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
	Early Maturity 4 grains planted per hill								
1	McCurdy 987M	105.2	85	1	14	Illinois 751	91.5	92	1
2	U. S. 13	102.1	84	0	15	Pfister 173	90.5	79	0
3	United U-50	102.0	83	0	16	Ohio C-38	89.2	83	7
4	Pioneer 335	101.2	83	2	17	Hoosier Crost F. 138	87.9	81	7
5	Hoosier Crost 616	100.0	90	1	18	Embro 36	87.8	63	4
6	Ohio C-12	98.6	86	2	19	McCurdy 112M	87.5	76	1
7	Indiana 818	97.7	91	1	20	Indiana 610B	86.3	73	6
8	Funk G-94	96.2	75	3	21	Shannon 1100 (ex)	85.7	73	3
9	Funk G-53	96.1	82	2	22	Merit Keystone 39	84.9	64	2
10	Razorback U. S. 13	94.2	62	2	23	Embro 95	84.8	70	2
11	Pfister 170	92.8	72	1	24	Miller 13	82.7	75	3
11	Shannon 1300	92.8	89	1	25	Ward 120A	81.4	75	1
13	Merit Keystone 38	92.4	84	2		Average	92.5	79	2

Significant Difference: A difference of less than 18.8 bushels per acre between any two strains should not be considered significant in this test.

(Table continued on next page.)

Table II, Garvin County, continued.

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
	Medium Early Maturity			
	4 grains planted per hill			
1	Oklahoma 7602 (ex)	98.1	92	1
2	McCurdy 130M	97.3	88	3
3	Oklahoma 7601 (ex)	95.7	86	8
4	Illinois 200	94.8	84	3
5	Funk G-135	93.7	80	3
6	*St. Charles White (w)	91.0	83	3
7	Merit Keystone 40	91.0	88	4
8	Pioneer 332	90.8	86	1
9	Crost-Rite Mo. 148	90.6	86	1
10	Kansas 1639	90.5	90	1
11	Iowealth 29A	89.7	92	1
12	Crost-Rite Mo. 313	89.6	88	3
13	Oklahoma 7604 (ex)	89.2	71	5
14	U. S. 35	88.0	89	3
15	Oklahoma 7603 (ex)	87.4	83	4
16	Shannon 1500	87.0	88	2
17	Kansas 1784	85.4	89	0
18	Ward 125	82.6	81	2
19	Razorback 111	82.2	92	1
20	Oklahoma 7201 (ex)	81.7	86	2
21	Shannon 1700	80.8	83	3
22	Miller 247	79.7	72	1
23	Oklahoma T61 (ex)	79.0	92	22
24	Embro 49	76.7	68	1
25	*Hays Golden	65.0	83	16
	Average	87.1	85	4

Significant Difference: A difference of less than 10.5 bushels per acre between any two strains should not be considered significant in this test.

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
	Medium Late Maturity			
	3 grains planted per hill			
1	Oklahoma 7801 (ex)	98.5	87	3
2	Oklahoma 7807 (ex)	95.6	88	1
3	McCurdy 135M	94.5	88	0
4	Oklahoma 7802 (ex)	93.8	84	6
5	Kansas 2275 (w)	93.6	92	1
6	Oklahoma 7803 (ex)	93.0	89	3
7	Oklahoma 7810 (ex)	90.3	92	3
8	Oklahoma 7811 (ex)	89.8	91	3
9	Texas 18	89.4	82	11
10	Oklahoma 7808 (ex)	87.4	85	4
11	Pioneer X 5973 (ex)	85.3	88	1
12	Oklahoma 7804 (ex)	85.1	81	9
13	Merit Keystone 106W (w)	84.9	87	1
14	Kansas 2234 (w)	84.7	82	2
15	United U-68	84.4	90	1
16	Oklahoma 7805 (ex)	84.3	86	4
17	Pfister 612W (w)	83.4	85	5
18	Oklahoma 7806 (ex)	83.3	90	5
19	*Midland Yellow Dent	83.1	86	10
20	Oklahoma 7809 (ex)	82.0	89	3
21	Pioneer X 3905 (ex)	79.7	81	0
22	Embro 155W (w)	76.6	81	3
23	Illinois 448	69.0	62	4
24	*Yellow Surcropper	54.7	64	0
25	Miller 1050W (w)	52.1	39	0
	Average	83.9	83	3

Significant Difference: A difference of less than 12.7 bushels per acre between any two strains should not be considered significant in this test.

(Table continued on next page.)

Table II, Garvin County, continued.

Rank	Strain	Yield	Pct. Ldgd.	Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
	Late Maturity							
	3 grains planted per hill							
1	Funk G-711	121.1	92	1	15 *Oklahoma Silvermine (w)	101.1	86	1
2	McCurdy 1005W (w)	116.7	88	1	16 United U-75	97.0	80	2
3	Ward 135W (w)	115.2	85	1	17 Ward 130	96.8	93	2
4	Tennessee 10 (w)	114.9	93	4	18 Texas 9W (w)	94.7	81	2
5	Oklahoma T84 (ex)	111.7	83	5	19 Oklahoma T83 (ex)	93.8	80	3
6	Merit Keystone 222	110.3	82	3	20 Oklahoma T87 (ex)	93.6	81	2
7	Texas 20	106.2	85	4	21 *Reid Yellow Dent	93.1	83	4
8	Oklahoma T81 (ex)	105.8	94	8	22 *Reid Yellow Dent (Station)	92.8	78	8
9	Texas 12	105.0	84	8	23 Funk G-716	91.6	66	1
10	Kansas 1583	104.0	87	2	24 Oklahoma T82 (ex)	84.9	83	3
11	Oklahoma T86 (ex)	103.1	84	2	25 *Ferguson Yellow Dent	60.2	27	9
12	Iowealth TXN	102.6	74	2				
13	Oklahoma T85 (ex)	102.3	77	6				
14	Kansas 1585	102.2	90	1	Average	100.8	81	3

Significant Difference: A difference of less than 18.3 bushels per acre between any two strains should not be considered significant in this test.

Rank	Strain	Yield	Pct. Ldgd.	Rank	Strain	Yield	Pct. Ldgd.
	3-year Average: 1944, 1946, 1947						
1	Funk G-711	115.2	2	11	Illinois 751	88.1	1
2	Tennessee 10 (w)	110.5	10	12	Kansas 2234 (w)	87.5	1
3	Texas 12	107.5	9	13	Indiana 610B	85.6	2
4	Kansas 1585	99.4	1	14	*Reid Yellow Dent	85.4	7
5	Pioneer 332	98.6	0	15	U. S. 35	80.8	1
6	Kansas 1583	98.3	1	16	*Ferguson Yellow Dent	76.5	9
7	Indiana 818	94.5	0	17	*Hays Golden	65.3	11
8	Merit Keystone 39	92.9	1	18	*Yellow Surcropper	60.9	2
9	U. S. 13	89.8	1				
10	Illinois 200	88.5	2		Average	90.3	3

Table III.—McClain County (Upland)

Clifton Brown Farm; Purcell, 5 miles north, 5 west.

Planted March 27; harvested September 12.

Early Maturity

3 grains planted per hill

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.	Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
1	Shannon 1300	38.9	89	16	13	McCurdy 112M	33.3	78	3
2	Merit Keystone 38	37.1	88	13	14	United U-50	33.0	85	10
3	Funk G-94	36.5	79	13	15	U. S. 13	32.8	78	13
4	Pfister 173	35.8	86	17	16	Embro 95	32.7	77	3
5	Ward 120A	35.6	73	5	17	Embro 36	32.4	79	11
6	Ohio C-12	35.3	77	2	18	Indiana 818	32.2	81	11
7	Razorback U. S. 13	34.8	86	13	19	Pioneer 335	31.9	86	17
8	Shannon 1100 (ex)	34.8	83	16	20	Pfister 170	30.9	79	9
9	Indiana 610B	34.4	88	19	21	Funk G-53	30.9	84	10
10	Merit Keystone 39	34.0	63	14	22	McCurdy 987M	30.9	86	15
11	Miller 13	33.7	68	9	23	Hoosier Crost 616	30.8	85	12
12	Hoosier Crost F. 138	33.5	80	14	24	Illinois 751	29.0	82	10
					25	Ohio C-38	28.5	87	9
						Average	33.4	81	11

Significant Difference: A difference of less than 6.2 bushels per acre between any two strains should not be considered significant in this test.

Medium Early Maturity

3 grains planted per hill

1	Oklahoma 7604 (ex)	43.6	57	20	13	McCurdy 130M	34.3	79	7
2	Oklahoma 7603 (ex)	43.4	76	12	14	Shannon 1500	34.1	76	6
3	Kansas 1639	42.7	89	6	15	Iowealth 29A	34.1	77	11
4	Crost-Rite Mo. 313	39.6	88	10	16	Oklahoma 7601 (ex)	34.0	70	29
5	Crost-Rite Mo. 148	38.1	78	13	17	Miller 247	33.8	58	8
6	Oklahoma 7201 (ex)	37.7	57	6	18	Merit Keystone 40	33.8	88	10
7	Razorback 111	37.4	76	4	19	Shannon 1700	32.1	83	6
8	U. S. 35	36.7	85	7	20	Pioneer 332	31.7	77	6
9	Illinois 200	36.4	73	11	21	Ward 125	31.6	78	9
10	Embro 49	35.1	76	6	22	Funk G-135	30.1	83	11
11	Oklahoma T61 (ex)	35.0	67	28	23	*St. Charles White (w)	27.0	88	22
12	Oklahoma 7602 (ex)	35.0	87	29	24	Kansas 1784	24.9	89	6
					25	*Hays Golden	23.2	62	14
						Average	34.6	77	12

Significant Difference: A difference of less than 8.8 bushels per acre between any two strains should not be considered significant in this test.

(Table continued on next page.)

Table III, McClain County, continued.

Medium Late Maturity

2 grains planted per hill

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
1	Kansas 2275 (w)	54.1	99	5
2	Texas 18	53.3	75	36
3	Oklahoma 7803 (ex)	49.7	87	9
4	Oklahoma 7806 (ex)	47.5	90	16
5	Kansas 2234 (w)	47.2	92	9
6	Oklahoma 7807 (ex)	46.6	88	19
7	Oklahoma 7801 (ex)	46.4	70	20
8	Pioneer X 5973 (ex)	46.2	99	4
9	Oklahoma 7810 (ex)	46.2	90	9
10	Illinois 448	46.0	85	9
11	Oklahoma 7811 (ex)	45.1	88	16
12	Oklahoma 7805 (ex)	44.1	80	20
13	Merit Keystone 106W (w)	44.0	88	5
14	Oklahoma 7802 (ex)	43.5	84	14
15	Pfister 612W (w)	40.3	81	10
16	Oklahoma 7809 (ex)	40.2	88	10
17	Pioneer X 3005 (ex)	40.1	84	3
18	Oklahoma 7804 (ex)	39.5	75	15
19	United U-68	39.2	83	9
20	Embro 155W (w)	39.1	85	6
21	Oklahoma 7808 (ex)	37.8	78	19
22	*Midland Yellow Dent	37.3	86	10
23	McCurdy 135M	35.4	83	9
24	Miller 1050W (w)	32.4	36	4
25	*Yellow Surcropper	31.2	70	1
	Average	42.9	83	11

Significant Difference: A difference of less than 9.7 bushels per acre between any two strains should not be considered significant in this test.

Late Maturity

2 grains planted per hill

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
1	Merit Keystone 222	46.4	93	15
2	Texas 12	46.2	72	12
3	Texas 9W (w)	45.0	90	13
4	Ward 135W (w)	44.2	90	16
5	Tennessee 10 (w)	44.0	93	17
6	Ward 130	44.0	84	19
7	Oklahoma T85 (ex)	43.3	86	18
8	Iowealth TXN	42.6	88	11
9	Funk G-716	42.3	88	22
10	Oklahoma T84 (ex)	42.2	82	33
11	Texas 20	42.0	84	26
12	Oklahoma T87 (ex)	41.3	88	24
13	Funk G-711	40.7	93	16
14	McCurdy 1005W (w)	40.3	92	27
15	Oklahoma T86 (ex)	39.6	81	14
15	United U-75	39.6	88	14
17	Kansas 1585	39.3	88	9
18	Kansas 1583	38.8	88	10
19	Oklahoma T83 (ex)	36.2	75	13
20	Oklahoma T81 (ex)	35.7	88	18
21	*Reid Yellow Dent	35.6	77	24
22	Oklahoma T82 (ex)	34.4	73	18
23	*Reid Yellow Dent (Station)	31.9	83	26
24	*Oklahoma Silvermine (w)	30.1	89	26
25	*Ferguson Yellow Dent	29.9	44	23
	Average	39.8	84	19

Significant Difference: A difference of less than 10.2 bushels per acre between any two strains should not be considered significant in this test.

Table IV.—Payne County (Bottom Land)

Elmer Minnix Farm; Stillwater, 3 miles east, 2 south.

Planted April 23; harvested October 15.

Early Maturity

4 grains planted per hill

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.	Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
1	United U-50	48.1	68	13	15	Illinois 751	38.5	62	27
2	U. S. 13	47.4	60	24	16	Shannon 1100 (ex)	36.8	58	22
3	Shannon 1300	46.1	70	13	17	Hoosier Crost F. 138	36.4	63	16
4	Embro 36	45.7	67	18	18	Razorback U. S. 13	36.2	80	15
5	Pfister 173	43.5	77	9	19	Funk G-94	36.2	70	16
6	McCurdy 987M	43.5	65	15	20	Miller 13	35.7	63	14
7	Indiana 610B	43.4	73	15	21	Hoosier Crost 616	35.5	65	14
8	Pioneer 335	42.4	78	8	22	Embro 95	34.9	62	13
9	Merit Keystone 38	42.1	72	24	23	Indiana 818	34.3	69	9
10	McCurdy 112M	41.6	70	16	24	Ward 120A	34.0	58	20
11	Ohio C-38	40.3	62	11	25	Merit Keystone 39	29.1	40	23
12	Funk G-53	39.0	83	18					
13	Ohio C-12	38.6	65	7					
14	Pfister 170	38.5	73	10		Average	39.8	67	16

Significant Difference: A difference of less than 9.0 bushels per acre between any two strains should not be considered significant in this test.

Medium Early Maturity

4 grains planted per hill

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.	Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
1	Iowealth 29A	51.5	72	7	15	Oklahoma 7604 (ex)	34.6	50	28
2	Kansas 1784	46.9	73	12	16	Oklahoma 7601 (ex)	33.5	66	22
3	Kansas 1639	46.6	68	9	17	Ward 125	32.7	55	19
4	Oklahoma T61 (ex)	44.9	70	26	18	Illinois 200	32.6	71	16
5	Crost-Rite Mo. 313	44.4	71	9	19	Oklahoma 7603 (ex)	31.8	60	28
6	Embro 49	44.3	73	18	20	Miller 247	30.5	53	11
7	McCurdy 130M	42.3	67	13	21	U. S. 35	30.0	70	8
8	Shannon 1700	40.8	72	8	22	Funk G-135	29.3	75	21
9	Merit Keystone 40	40.1	67	7	23	*Hays Golden	29.2	60	21
10	Razorback 111	39.7	74	16	24	Oklahoma 7602 (ex)	28.9	54	21
11	Oklahoma 7201 (ex)	39.1	76	12	25	*St. Charles White (w)	23.8	67	28
12	Crost-Rite Mo. 148	38.2	60	12					
13	Pioneer 332	37.7	72	11					
14	Shannon 1500	36.0	49	8		Average	37.0	66	16

Significant Difference: A difference of less than 11.9 bushels per acre between any two strains should not be considered significant in this test.

(Table continued on next page.)

Table IV. Payne County (bottom land), continued.

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.	Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
	Medium Late Maturity 3 grains planted per hill								
1	United U-68	53.3	98	26	14	Merit Keystone 106W (w)	36.7	83	16
2	Kansas 2275 (w)	51.7	87	13	15	Oklahoma 7811 (ex)	36.4	74	16
3	Pioneer X 3005 (ex)	49.4	81	9	16	Pioneer X 5973 (ex)	36.0	80	14
4	Pfister 612W (w)	46.2	68	16	17	Oklahoma 7801 (ex)	35.5	76	27
5	Kansas 2234 (w)	45.5	76	17	18	Illinois 448	35.5	84	27
6	Embro 155W (w)	45.0	87	13	19	*Midland Yellow Dent	35.2	77	24
7	Oklahoma 7810 (ex)	43.4	87	25	20	McCurdy 135M	34.6	80	25
8	Oklahoma 7803 (ex)	40.8	92	22	21	Texas 18	34.6	77	37
9	Oklahoma 7809 (ex)	40.6	78	28	22	Oklahoma 7804 (ex)	34.5	86	21
10	Oklahoma 7806 (ex)	39.6	84	24	23	Oklahoma 7802 (ex)	32.3	84	24
11	Oklahoma 7808 (ex)	37.6	74	25	24	*Yellow Surcropper	26.7	51	20
12	Oklahoma 7805 (ex)	37.5	88	25	25	Miller 1050W (w)	18.0	39	16
13	Oklahoma 7807 (ex)	37.0	85	28		Average	38.6	79	22

Significant Difference: A difference of less than 12.7 bushels per acre between any two strains should not be considered significant in this test.

	Late Maturity 3 grains planted per hill								
1	Iowealth TXN	43.2	68	35	15	Oklahoma T81 (ex)	31.6	78	24
2	Merit Keystone 222	42.1	72	47	16	Texas 12	31.4	72	57
3	Kansas 1583	39.9	86	29	17	Oklahoma T86 (ex)	30.8	74	17
4	Tennessee 10 (w)	39.9	92	30	18	Oklahoma T87 (ex)	30.2	73	10
5	Kansas 1585	39.5	82	25	19	*Reid Yellow Dent	29.7	77	19
6	McCurdy 1005W (w)	38.3	79	31	20	United U-75	27.2	79	40
7	Oklahoma T85 (ex)	35.6	66	28	21	Funk G-711	25.7	74	30
8	Oklahoma T83 (ex)	35.4	77	23	22	Funk G-716	25.7	71	42
9	Texas 20	34.5	78	46	23	*Oklahoma Silvermine (w)	24.9	66	12
10	Texas 9W (w)	34.3	86	37	24	*Reid Yellow Dent (Station)	24.9	72	13
11	Ward 135W (w)	33.9	78	31	25	*Ferguson Yellow Dent	12.9	23	54
12	Ward 130	33.5	82	29		Average	33.0	74	31
13	Oklahoma T84 (ex)	33.2	73	34					
14	Oklahoma T82 (ex)	31.9	83	22					

Significant Difference: A difference of less than 10.2 bushels per acre between any two strains should not be considered significant in this test.

(Table continued on next page.)

Table IV. Payne County (bottom land), continued.

Rank	Strain	Yield	Pct. Ldgd.	Rank	Strain	Yield	Pct. Ldgd.
	3-year Average: 1945, 1946, 1947						
1	Merit Keystone 38	55.7	32	21	Kansas 1583	43.5	39
2	Indiana 818	54.9	24	22	Kansas 1585	42.0	36
3	Crost-Rite Mo. 313	54.8	31	23	Merit Keystone 106W (w)	41.9	29
4	Funk G-94	54.7	28	24	Illinois 200	41.7	32
5	U. S. 13	54.0	31	25	Ward 125	41.5	36
6	Pfister 170	53.5	31	26	Shannon 1500	40.8	31
7	Shannon 1300	52.8	26	27	Texas 20	40.4	48
8	Pioneer 332	52.5	29	28	Funk G-711	39.9	46
9	Kansas 2234 (w)	51.1	43	29	Tennessee 10 (w)	39.6	42
10	Ohio C-12	50.8	20	30	Texas 12	38.7	59
11	Ohio C-38	50.8	23	31	Texas 18	38.5	49
12	Indiana 610B	50.0	28	32	*Hays Golden	35.3	47
13	Merit Keystone 39	49.3	30	33	Funk G-716	34.2	53
14	Crost-Rite Mo. 148	47.9	30	34	*Yellow Surcropper	33.0	37
15	Ward 120A	47.3	31	35	*Reid Yellow Dent	31.5	42
16	Merit Keystone 40	47.0	22	36	*Oklahoma Silvermine (w)	27.5	44
17	Funk G-53	45.7	32	37	*Ferguson Yellow Dent	24.9	56
18	Illinois 751	45.6	32		Average	44.4	36
19	U. S. 35	44.9	21				
20	Illinois 448	44.8	41				

Table V.—Payne County (Upland)

Oklahoma Agricultural Experiment Station Farm;
Perkins, 1 mile north, 1 mile west.

Planted April 7

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.	Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
	Early Maturity								
	3 grains planted per hill; harvested August 31								
1	Ohio C-38	49.6	86	0	15	Funk G-94	35.4	55	0
2	Pioneer 335	48.1	92	0	16	McCurdy 987M	35.2	55	0
3	Embro 36	46.8	77	0	17	Shannon 1300	35.2	62	3
4	Merit Keystone 38	46.5	81	1	18	Shannon 1100 (ex)	31.7	56	0
5	U. S. 13	45.4	81	0	19	Miller 13	31.3	41	1
6	Indiana 818	43.8	83	0	20	Hoosier Crost 616	31.1	66	1
7	United U-50	43.1	92	2	21	McCurdy 112M	31.0	55	0
8	Pfister 170	42.4	66	0	22	Hoosier Crost F. 138	30.9	48	1
9	Razorback U. S. 13	41.8	78	0	23	Pfister 173	29.0	53	0
10	Illinois 751	40.5	86	1	24	Merit Keystone 39	28.2	36	0
11	Embro 95	38.8	64	0	25	Ward 120A	27.6	63	1
12	Ohio C-12	36.8	63	0		Average	37.7	67	1
13	Funk G-53	36.2	69	2					
14	Indiana 610B	35.8	66	1					

Significant Difference: A difference of less than 7.5 bushels per acre between any two strains should not be considered significant in this test.

(Table continued on next page.)

Table V. Payne County (upland), continued.

Medium Early Maturity

3 grains planted per hill; harvested August 31

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
1	Pioneer 332	49.4	95	0
2	Kansas 1639	43.8	91	0
3	Illinois 200	43.3	83	2
4	Oklahoma 7201 (ex)	42.9	94	1
5	Kansas 1784	42.8	88	0
6	Miller 247	42.7	70	0
7	Oklahoma T61 (ex)	41.6	85	3
8	Crost-Rite Mo. 313	40.6	83	1
9	Embro 49	40.5	86	0
10	Iowealth 29A	39.6	88	1
11	Shannon 1700	37.8	68	0
12	Oklahoma 7601 (ex)	37.8	96	9
13	U. S. 35	37.1	91	0
14	Merit Keystone 40	36.4	82	1
15	Razorback 111	35.8	75	1
16	Oklahoma 7603 (ex)	35.3	93	4
17	Oklahoma 7602 (ex)	31.7	87	2
18	Crost-Rite Mo. 148	31.5	83	1
19	Oklahoma 7604 (ex)	30.6	78	12
20	McCurdy 130M	30.2	72	4
21	Funk G-135	28.9	71	4
22	*Hays Golden	28.7	77	4
23	Ward 125	25.6	60	0
24	Shannon 1500	25.3	35	0
25	*St. Charles White (w)	17.6	62	10
	Average	35.9	80	2

Significant Difference: A difference of less than 7.6 bushels per acre between any two strains should not be considered significant in this test.

Medium Late Maturity

2 grains planted per hill; harvested October 1

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
1	Kansas 2275 (w)	44.4	98	22
2	Oklahoma 7806 (ex)	38.9	99	57
3	Oklahoma 7802 (ex)	36.7	95	61
4	Kansas 2234 (w)	36.6	79	36
5	Oklahoma 7808 (ex)	36.2	97	45
6	Oklahoma 7809 (ex)	35.2	96	68
7	United U-68	34.6	88	34
8	Oklahoma 7810 (ex)	34.2	96	46
9	Oklahoma 7811 (ex)	33.5	93	54
10	Pioneer X 3005 (ex)	33.1	75	14
11	McCurdy 135M	31.7	79	38
12	Embro 155W (w)	31.3	81	22
13	Oklahoma 7801 (ex)	30.9	92	74
14	Oklahoma 7807 (ex)	30.2	96	61
15	Oklahoma 7805 (ex)	30.0	98	52
16	Oklahoma 7803 (ex)	30.0	96	53
17	Oklahoma 7804 (ex)	29.3	93	44
18	Illinois 448	28.3	81	42
19	Texas 18	28.1	36	64
20	Pioneer X 5973 (ex)	27.9	52	15
21	*Midland Yellow Dent	26.8	81	42
22	Pfister 612W (w)	24.0	45	21
23	*Yellow Surcropper	23.8	55	16
24	Merit Keystone 106W (w)	21.3	44	22
25	Miller 1050W (w)	20.6	23	15
	Average	31.1	79	41

Significant Difference: A difference of less than 8.6 bushels per acre between any two strains should not be considered significant in this test.

(Table continued on next page.)

Table V. Payne County (upland), continued.

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.	Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
	Late Maturity								
	2 grains planted per hill; harvested October 1								
1	Kansas 1585	40.3	72	47	15	Oklahoma T83 (ex)	27.7	97	44
2	Iowealth TXN	36.4	82	46	16	United U-75	27.3	88	55
3	Tennessee 10 (w)	34.7	65	42	17	Oklahoma T87 (ex)	27.1	88	46
4	Funk G-711	34.3	77	76	18	Texas 12	26.9	57	76
5	McCurdy 1005W (w)	33.8	87	33	19	Funk G-716	25.3	41	57
6	Oklahoma T85 (ex)	33.5	83	59	20	Oklahoma T84 (ex)	25.5	84	40
7	Merit Keystone 222	33.4	66	68	21	*Reid Yellow Dent	25.3	83	24
8	Kansas 1583	33.3	76	53	22	Texas 20	23.6	35	65
9	Oklahoma T82 (ex)	31.9	96	18	23	*Reid Yellow Dent (Station)	22.3	81	31
10	Oklahoma T81 (ex)	31.8	97	57	24	*Oklahoma Silvermine (w)	16.8	76	48
11	Ward 135W (w)	29.9	78	53	25	*Ferguson Yellow Dent	16.3	32	60
12	Ward 130	28.6	78	48					
13	Oklahoma T86 (ex)	28.2	92	25					
14	Texas 9W (w)	28.0	61	61		Average	28.9	75	49

Significant Difference: A difference of less than 9.6 bushels per acre between any two strains should not be considered significant in this test.

Rank	Strain	Yield	Pct. Ldgd.	Rank	Strain	Yield	Pct. Ldgd.
	3-year Average: 1945, 1946, 1947						
1	Ohio C-38	41.7	18	21	Funk G-53	33.0	21
2	Pioneer 332	40.9	12	22	Ward 120A	32.0	22
3	U. S. 13	40.9	18	23	Tennessee 10 (w)	30.5	51
4	Merit Keystone 38	38.4	19	24	Texas 20	30.4	60
5	Indiana 818	37.7	13	25	Illinois 448	29.9	46
6	Illinois 200	37.3	15	26	Kansas 1583	29.9	58
7	Pfister 170	37.3	18	27	Shannon 1500	28.7	16
8	Crost-Rite Mo. 313	36.1	22	28	Ward 125	28.6	30
9	Kansas 1585	36.1	50	29	Texas 18	28.5	60
10	Illinois 751	35.5	18	30	Texas 12	28.1	58
11	Ohio C-12	35.2	15	31	Merit Keystone 106W (w)	26.4	19
12	Indiana 610B	34.7	22	32	Funk G-716	25.7	57
13	Merit Keystone 39	34.4	21	33	*Hays Golden	25.3	34
14	Funk G-94	34.3	20	34	*Yellow Surcropper	23.8	32
15	U. S. 35	34.1	15	35	*Reid Yellow Dent	22.9	40
16	Shannon 1300	33.7	16	36	*Ferguson Yellow Dent	21.7	57
17	Kansas 2234 (w)	33.7	46	37	*Oklahoma Silvermine (w)	18.2	81
18	Crost-Rite Mo. 148	33.6	20		Average	32.0	32
19	Funk G-711	33.3	61				
20	Merit Keystone 40	33.2	20				

Table VI.—Seminole County (North Canadian Bottom)

Ambrose Crain Farm; Prague, 8 miles south and 3 miles west.

Planted March 28; harvested September 2 and 3.

Early Maturity

4 grains planted per hill

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.	Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
1	Shannon 1300	80.7	86	2	15	Embro 36	69.4	81	1
2	McCurdy 987M	79.7	79	1	16	Indiana 610B	69.1	80	1
3	Ohio C-12	76.1	79	1	17	Funk G-53	68.6	78	1
4	U. S. 13	74.9	76	0	18	Pfister 170	67.2	75	2
5	Merit Keystone 38	74.1	75	1	19	Merit Keystone 39	64.1	67	2
6	Pfister 173	74.1	80	2	20	Illinois 751	62.2	85	1
7	Pioneer 335	73.4	83	0	21	Shannon 1100 (ex)	59.3	68	1
8	Hoosier Crost 616	73.2	81	1	22	Miller 13	58.7	63	2
9	Ohio C-38	72.5	93	2	23	Ward 120A	58.3	63	1
10	Razorback U. S. 13	70.4	70	1	24	Hoosier Crost F. 138	56.4	68	5
11	Funk G-94	70.0	76	2	25	McCurdy 112M	55.3	60	1
12	United U-50	69.8	82	1					
13	Embro 95	69.6	73	0					
14	Indiana 818	69.5	79	4		Average	68.7	76	1

Significant Difference: A difference of less than 13.3 bushels per acre between any two strains should not be considered significant in this test.

Medium Early Maturity

4 grains planted per hill

1	Oklahoma 7603 (ex)	81.6	90	1	12	Crost-Rite Mo. 313	73.9	86	0
2	Oklahoma 7604 (ex)	80.8	85	3	13	Iowealth 29A	73.3	85	2
3	Pioneer 332	77.0	88	1	14	Kansas 1639	72.4	81	0
4	Oklahoma 7201 (ex)	76.7	90	0	15	McCurdy 130M	72.3	83	0
5	*St. Charles White (w)	76.7	88	2	16	Ward 125	71.3	78	0
6	Crost-Rite Mo. 148	76.7	90	4	17	Illinois 200	70.0	74	1
7	Merit Keystone 40	76.4	79	1	18	U. S. 35	67.5	80	0
8	Kansas 1784	76.0	85	1	19	Razorback 111	66.5	80	2
9	Oklahoma 7602 (ex)	75.8	81	2	20	Embro 49	64.9	80	3
10	Oklahoma 7601 (ex)	75.3	76	2	21	Shannon 1700	64.4	75	1
11	Funk G-135	74.8	86	3	22	Oklahoma T61 (ex)	62.9	80	1
					23	Shannon 1500	62.1	76	1
					24	*Hays Golden	61.9	82	3
					25	Miller 247	56.6	70	1
						Average	71.5	82	1

Significant Difference: A difference of less than 11.5 bushels per acre between any two strains should not be considered significant in this test.

(Table continued on next page.)

Table VI, Seminole County, continued.

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
	Medium Late Maturity			
	3 grains planted per hill			
1	Oklahoma 7809 (ex)	89.5	96	2
2	Oklahoma 7803 (ex)	86.0	95	2
3	Oklahoma 7810 (ex)	84.6	94	5
4	Kansas 2234 (w)	83.1	91	1
5	Oklahoma 7802 (ex)	82.5	92	2
6	Texas 18	81.9	66	1
7	Kansas 2275 (w)	81.6	94	1
8	Oklahoma 7806 (ex)	80.8	94	0
9	Oklahoma 7807 (ex)	80.2	77	5
10	*Midland Yellow Dent	78.5	96	0
11	Oklahoma 7805 (ex)	78.1	86	3
12	Pioneer X 5973 (ex)	77.2	94	2
13	United U-68	76.9	91	1
14	Merit Keystone 106W (w)	76.2	86	2
15	Oklahoma 7808 (ex)	76.0	88	4
16	Oklahoma 7804 (ex)	74.9	87	0
17	Illinois 448	74.8	94	5
18	McCurdy 135M	74.6	89	3
19	Oklahoma 7811 (ex)	72.9	79	2
20	Oklahoma 7801 (ex)	72.7	79	4
21	Pfister 612W (w)	71.4	86	1
22	Embro 155W (w)	70.1	85	0
23	Pioneer X 3005 (ex)	62.9	69	1
24	*Yellow Surcropper	58.8	67	1
25	Miller 1050W (w)	46.0	45	1
	Average	75.7	85	2

Significant Difference: A difference of less than 15.6 bushels per acre between any two strains should not be considered significant in this test.

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
	Late Maturity			
	3 grains planted per hill			
1	Ward 135W (w)	87.4	96	3
2	Merit Keystone 222	82.5	84	1
3	Funk G-716	79.5	96	2
4	Texas 20	78.5	86	3
5	Oklahoma T84 (ex)	78.3	83	6
6	Tennessee 10 (w)	78.2	91	2
7	Iowealth TXN	78.0	82	3
8	Funk G-711	77.2	89	3
9	Kansas 1585	76.7	87	2
10	Kansas 1583	76.6	93	2
11	Texas 12	76.5	79	7
12	Oklahoma T81 (ex)	76.5	94	8
13	Oklahoma T87 (ex)	76.2	88	3
14	McCurdy 1005W (w)	76.1	88	2
15	*Reid Yellow Dent (Station)	75.8	93	2
16	Oklahoma T83 (ex)	73.4	84	8
17	Oklahoma T85 (ex)	73.4	86	9
18	Texas 9W (w)	73.0	94	4
19	*Oklahoma Silvermine (w)	72.8	88	16
20	Ward 130	71.3	88	1
21	United U-75	70.9	80	6
22	Oklahoma T82 (ex)	68.1	89	4
23	Oklahoma T86 (ex)	66.7	87	3
24	*Reid Yellow Dent	64.2	91	8
25	*Ferguson Yellow Dent	42.2	33	7
	Average	74.0	86	5

Significant Difference: A difference of less than 13.6 bushels per acre between any two strains should not be considered significant in this test.

(Table continued on next page.)

Table VI, Seminole County, continued.

Rank	Strain	Yield	Pct. Ldgd.	Rank	Strain	Yield	Pct. Ldgd.
	3-year Average: 1945, 1946, 1947						
1	Funk G-711	69.3	12	16	U. S. 35	60.6	2
2	Kansas 1585	69.0	7	17	Ohio C-38	60.2	2
3	Tennessee 10 (w)	65.4	8	18	Pioneer 332	59.3	3
4	Texas 18	64.8	14	19	Shannon 1300	59.1	8
5	Texas 12	64.7	16	20	Ward 125	58.2	2
6	Funk G-716	64.1	11	21	Illinois 751	55.2	3
7	Kansas 2234 (w)	64.0	6	22	Shannon 1500	55.0	5
8	Kansas 1583	63.6	8	23	Ward 120A	54.2	2
9	Merit Keystone 39	63.4	3	24	*Reid Yellow Dent	52.8	14
10	Merit Keystone 40	63.4	8	25	*Oklahoma Silver-mine (w)	51.0	24
11	Crost-Rite Mo. 313	63.1	4	26	*Hays Golden	46.5	15
12	Illinois 448	62.2	9	27	*Ferguson Yellow Dent	40.7	18
13	U. S. 13	62.0	5				
14	Merit Keystone 38	61.8	5				
15	Crost-Rite Mo. 148	61.1	7		Average	59.8	9

Table VII.—Tulsa County (Bottom Land)

Oklahoma Vegetable Research Station, Bixby, 1½miles northeast (across river)

Planted April 2; harvested September 4 and 5

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.	Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
	Early Maturity								
	4 grains planted per hill								
1	McCurdy 987M	102.6	85	2	14	Funk G-53	86.7	78	3
2	United U-50	99.9	88	6	15	Shannon 1100 (ex)	85.9	75	9
3	Shannon 1300	98.6	85	6	16	Hoosier Crost 616	81.5	76	3
4	Embro 36	94.9	82	1	17	Ward 120A	81.4	76	1
5	Pfister 173	94.6	88	1	18	Pfister 170	81.4	73	4
6	Ohio C-38	94.6	86	9	19	Ohio C-12	80.9	66	3
7	Merit Keystone 38	93.4	85	1	20	Indiana 818	83.0	73	4
8	Funk G-94	91.5	79	3	21	Embro 95	81.4	80	5
9	Razorback U. S. 13	91.0	80	1	22	Merit Keystone 39	81.1	64	4
10	Pioneer 335	90.3	85	6	23	McCurdy 112M	78.0	76	4
11	U. S. 13	89.6	82	3	24	Illinois 751	77.4	67	1
12	Indiana 610B	89.0	81	3	25	Miller 13	71.5	68	3
13	Hoosier Crost F. 138	88.2	80	9		Average	87.5	78	4

Significant Difference: A difference of less than 15.1 bushels per acre between any two strains should not be considered significant in this test.

(Table continued on next page.)

Table VIII, Tulsa County, continued.

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.	Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
	Medium Early Maturity								
	4 grains planted per hill								
1	Kansas 1639	102.2	88	1	13	Funk G-135	94.7	88	2
2	Oklahoma 7602 (ex)	100.5	81	3	14	Kansas 1784	93.8	83	1
3	Oklahoma 7604 (ex)	99.4	81	15	15	Oklahoma T61 (ex)	93.1	87	13
4	Oklahoma 7603 (ex)	99.1	82	3	16	Razorback 111	92.5	81	3
5	Pioneer 332	97.9	88	3	17	Merit Keystone 40	90.4	76	3
6	Illinois 200	97.4	82	5	18	Iowealth 29A	89.8	83	2
7	Crost-Rite Mo. 313	96.9	87	2	19	Shannon 1700	89.7	84	2
8	McCurdy 130M	96.6	83	4	20	Embro 49	86.5	75	2
9	Oklahoma 7601 (ex)	95.6	83	12	21	Ward 125	81.7	67	5
10	U. S. 35	95.5	83	5	22	*St. Charles White (w)	81.4	80	17
11	Oklahoma 7201 (ex)	95.2	90	15	23	Miller 247	74.0	63	4
12	Crost-Rite Mo. 148	95.1	84	1	24	Shannon 1500	70.9	79	3
					25	*Hays Golden	68.3	71	13
						Average	91.1	81	6

Significant Difference: A difference of less than 14.8 bushels per acre between any two strains should not be considered significant in this test.

	Medium Late Maturity								
	3 grains planted per hill								
1	Razorback Kas. 2234 (w)	99.4	94	7	12	McCurdy 135M	90.1	91	6
1	Oklahoma 7802 (ex)	99.4	90	7	13	Texas 18	87.2	73	28
3	Oklahoma 7810 (ex)	99.1	95	5	14	United U-68	87.1	87	5
4	Oklahoma 7803 (ex)	99.0	98	3	15	Oklahoma 7806 (ex)	86.0	95	5
5	Pioneer X 5973 (ex)	97.6	100	2	16	Kansas 2275 (w)	82.9	94	4
6	Oklahoma 7809 (ex)	97.5	89	16	17	Oklahoma 7804 (ex)	81.1	82	10
7	Oklahoma 7807 (ex)	96.9	99	1	18	Embro 155W (w)	77.8	84	16
8	Oklahoma 7801 (ex)	96.1	95	7	19	Pioneer X 3005 (ex)	76.2	82	4
9	Oklahoma 7808 (ex)	93.2	93	5	20	Illinois 448	76.1	71	7
10	Oklahoma 7811 (ex)	91.8	96	8	21	Pfister 612W (w)	75.1	76	9
11	Oklahoma 7805 (ex)	90.3	85	9	22	*Midland Yellow Dent	79.6	87	18
					23	Keystone 106W (w)	66.9	66	8
					24	*Yellow Surcropper	51.7	45	5
					25	Miller 1050W (w)	44.4	26	6
						Average	84.9	84	8

Significant Difference: A difference of less than 11.8 bushels per acre between any two strains should not be considered significant in this test.

(Table continued on next page.)

Table VIII, Tulsa County, continued.

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.	Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.
				Late Maturity					
				3 grains planted per hill					
1	Ward 135W (w)	101.0	88	19	15	Iowealth TXN	88.1	75	5
2	Merit Keystone 222	98.2	91	11	16	Oklahoma T82 (ex)	86.8	98	13
3	McCurdy 1005W (w)	96.5	86	16	17	Oklahoma T81 (ex)	86.1	78	11
4	Kansas 1585	94.9	94	1	18	Oklahoma T87 (ex)	85.0	81	27
5	Oklahoma T84 (ex)	94.6	88	16	19	Ward 130	82.1	86	6
6	Kansas 1583	94.2	82	6	20	Oklahoma T83 (ex)	81.6	83	6
7	Oklahoma T85 (ex)	92.7	79	17	21	Funk G-716	79.9	79	7
8	Funk G-711	92.2	93	9	22	*Reid Yellow Dent (Station)	77.7	64	41
9	Tennessee 10 (w)	91.0	92	13	23	*Reid Yellow Dent	67.2	78	17
10	Texas 9W (w)	90.6	81	12	24	*Oklahoma Silvermine (w)	64.4	83	29
11	Texas 20	89.9	77	14	25	*Ferguson Yellow Dent	34.6	17	29
12	United U-75	89.7	80	7		Average	85.5	80	15
13	Texas 12	89.2	71	18					
14	Oklahoma T86 (ex)	88.9	86	18					

Significant Difference: A difference of less than 15.5 bushels per acre between any two strains should not be considered significant in this test.

Rank	Strain	Yield	Pct. Ldgd.	Rank	Strain	Yield	Pct. Ldgd.
			3-year Average: 1945, 1946, 1947				
1	Pioneer 332	91.0	2	18	Ward 120A	79.6	1
2	Merit Keystone 39	87.1	3	19	Merit Keystone 40	79.3	3
3	Kansas 2234 (w)	85.9	5	20	Funk G-711	78.4	6
4	Kansas 1583	85.8	4	21	Illinois 448	75.4	4
5	Pfister 170	85.0	2	22	Illinois 751	74.9	1
6	Ohio C-38	84.6	5	23	Texas 12	74.9	13
7	Kansas 1585	84.3	1	24	Funk G-716	74.7	6
8	Merit Keystone 38	84.2	1	25	Shannon 1500	73.3	6
9	Indiana 818	84.0	3	26	Merit Keystone 106W (w)	71.8	5
10	Crost-Rite Mo. 313	83.8	1	27	*Reid Yellow Dent	60.8	10
11	Funk G-53	83.6	2	28	*Oklahoma Silvermine (w)	57.8	18
12	Illinois 200	83.0	4	29	*Hays Golden	55.8	10
13	Funk G-94	82.6	2	30	*Ferguson Yellow Dent	42.9	18
14	U. S. 13	82.1	2				
15	U. S. 35	81.2	4		Average	77.6	5
16	Shannon 1300	80.6	4				
17	Crost-Rite Mo. 148	80.0	1				

SOURCES OF SEED

SOURCE	STRAIN	MATURITY GROUP
Ed. F. Mangelsdorf & Bro., Inc., Atchison, Kan.	Embro 36	Early
	Embro 49	Medium Early
	Embro 95	Early
	Embro 155W (w)	Medium Late
C. F. McMullin Estate, Sikeston, Mo.	Crost-Rite Mo. 148	Medium Early
	Crost-Rite Mo. 313	Medium Early
Peppard Seed Company, Kansas City, Mo.	Funk G-53	Early
	Funk G-94	Early
	Funk G-135	Medium Early
	Funk G-711	Late
	Funk G-716	Late
Oklahoma Experiment Station, Stillwater, Okla.	*Ferguson Yellow Dent	Late
	*Hays Golden	Medium Early
Edw. J. Funk and Sons, Kentland, Indiana	Hoosier Crost F. 138	Early
	Hoosier Crost 616	Early
Oklahoma Experiment Station, Stillwater, Okla.	Illinois 200	Medium Early
	Illinois 448	Medium Late
	Illinois 751	Early
	Indiana 610B	Early
	Indiana 818	Early
Iowealth Hybrid Corn Co., Lawson, Mo.	Iowealth 29A	Medium Early
	Iowealth TXN	Late
Oklahoma Experiment Station, Stillwater, Okla.	Kansas 1583	Late
	Kansas 1585	Late
	Kansas 1639	Medium Early
	Kansas 1784	Medium Early
	Kansas 2234 (w)	Medium Late
	Kansas 2275 (w)	Medium Late
W. O. McCurdy and Sons, Fremont, Iowa	McCurdy 112M	Early
	McCurdy 130M	Medium Early
	McCurdy 135M	Medium Late
	McCurdy 987M	Early
	McCurdy 1005W (w)	Late

SOURCE	STRAIN	MATURITY GROUP
Merit Mills, Oklahoma City, Oklahoma	Merit Keystone 38	Early
	Merit Keystone 39	Early
	Merit Keystone 40	Medium Early
	Merit Keystone 106W (w)	Medium Late
	Merit Keystone 222	Late
Oklahoma Experiment Station, Stillwater, Okla.	*Midland Yellow Dent	Medium Late
Ralph Kipper, Seedsman, Ordway, Colo.	Miller 13	Early
	Miller 247	Medium Early
	Miller 1050W (w)	Medium Late
Oklahoma Experiment Station, Stillwater, Okla.	Ohio C-12	Early
	Ohio C-38	Early
	Oklahoma 7201 (ex)	Medium Early
	Oklahoma 7601 (ex)	Medium Early
	Oklahoma 7602 (ex)	Medium Early
	Oklahoma 7603 (ex)	Medium Early
	Oklahoma 7604 (ex)	Medium Early
	Oklahoma 7801 (ex)	Medium Late
	Oklahoma 7802 (ex)	Medium Late
	Oklahoma 7803 (ex)	Medium Late
	Oklahoma 7804 (ex)	Medium Late
	Oklahoma 7805 (ex)	Medium Late
	Oklahoma 7806 (ex)	Medium Late
	Oklahoma 7807 (ex)	Medium Late
	Oklahoma 7808 (ex)	Medium Late
	Oklahoma 7809 (ex)	Medium Late
	Oklahoma 7810 (ex)	Medium Late
	Oklahoma 7811 (ex)	Medium Late
	Oklahoma T61 (ex)	Medium Early
	Oklahoma T81 (ex)	Late
	Oklahoma T82 (ex)	Late
	Oklahoma T83 (ex)	Late
	Oklahoma T84 (ex)	Late
	Oklahoma T85 (ex)	Late
	Oklahoma T86 (ex)	Late
	Oklahoma T87 (ex)	Late
	*Oklahoma Silvermine	Late

SOURCE	STRAIN	MATURITY GROUP
Pfister Associated Growers, Inc., El Paso, Ill.	Pfister 170	Early
	Pfister 173	Early
	Pfister 612W (w)	Medium Late
Garst and Thomas Hybrid Corn Co., Coon Rapids, Iowa	Pioneer 332	Medium Early
	Pioneer 335	Early
	Pioneer X 3005	Medium Late
	Pioneer X 5973	Medium Late
Jones Brothers Seed Co., Van Buren, Ark.	Razorback U. S. 13	Early
	Razorback 111	Medium Early
Oklahoma Experiment Station, Stillwater, Okla.	*Reid Yellow Dent	Late
	*Reid Yellow Dent (Station)	Late
Shannon Feed Co., Tulsa, Okla.	Shannon 1100 (ex)	Early
	Shannon 1300	Early
	Shannon 1500	Medium Early
	Shannon 1700	Medium Early
Oklahoma Experiment Station, Stillwater, Okla.	*St. Charles White (w)	Medium Early
	Tennessee 10 (w)	Late
	Texas 9W (w)	Late
	Texas 12	Late
	Texas 18	Medium Late
	Texas 20	Late
United Hybrid Growers Assn., Shenandoah, Iowa	United U-50	Early
	United U-68	Medium Late
	United U-75	Late
Oklahoma Experiment Station, Stillwater, Okla.	U. S. 13	Early
	U. S. 35	Medium Early
Montgomery Ward & Co., Chicago, Ill.	Ward 120A	Early
	Ward 125	Medium Early
	Ward 130	Late
	Ward 135W (w)	Late
Oklahoma Experiment Station, Stillwater, Okla.	*Yellow Surcropper	Medium Late

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