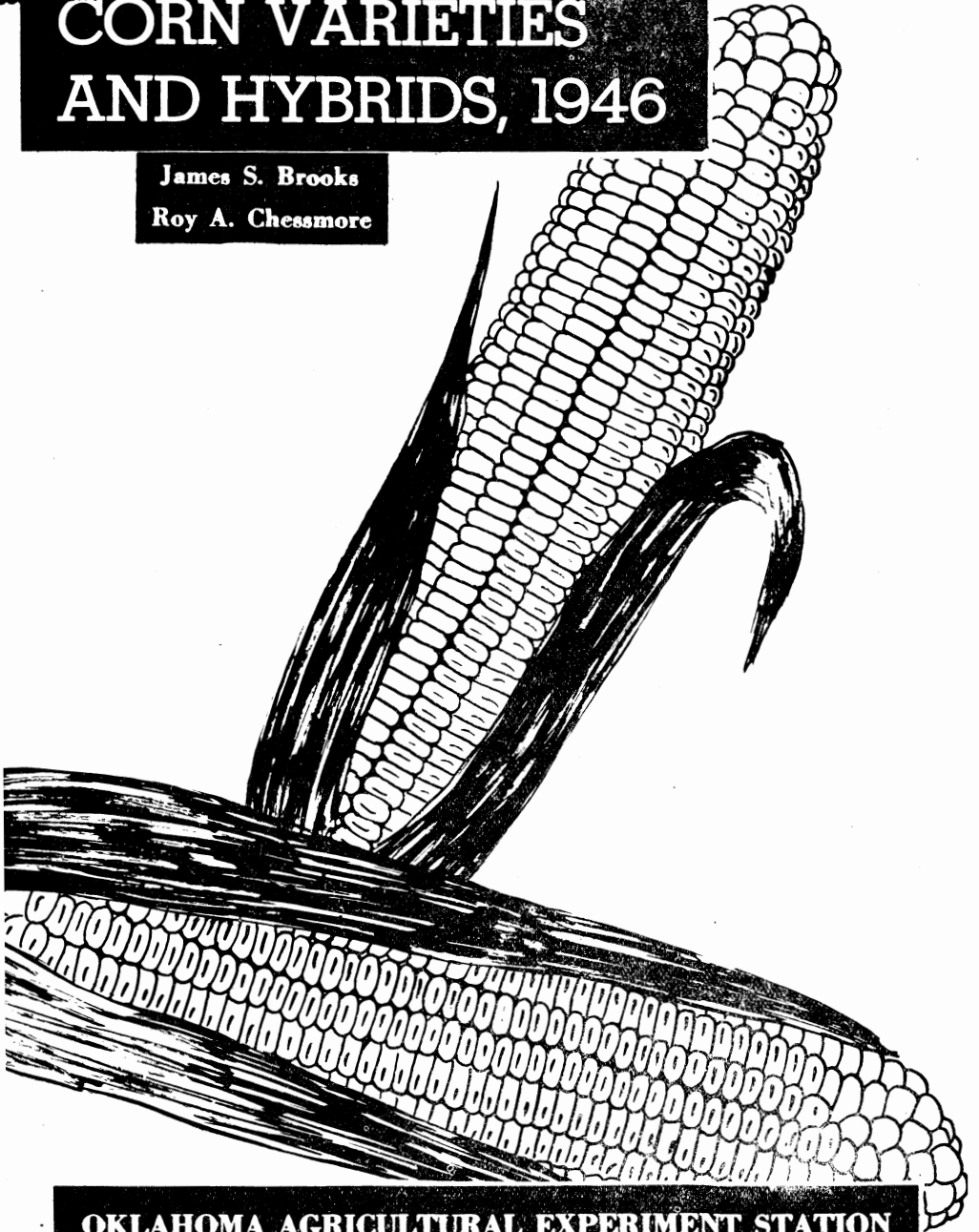


Performance Tests of
**CORN VARIETIES
AND HYBRIDS, 1946**

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Performance Tests of CORN VARIETIES AND HYBRIDS, 1946

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The 1946 Oklahoma Agricultural Experiment Station Corn Performance Tests were conducted at 11 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 98 strains was grown at all test locations. All strains tested were grown at each location, thus providing a better basis for estimating the adaptation of each strain to Oklahoma conditions.

Results of the Tests

Certain hybrids continued to show superior yielding ability in the 1946 tests, the results of which are shown in Tables I to XI, pages 11 to 35. Each table shows the results of the 1946 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 the tables are reported as bushels of shelled corn containing 15.5 percent moisture, the upper limit allowable for No. 2 corn. 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 1946 tests. This "significant difference" should be kept in mind whenever two strains are compared.

The yields reported for 1946 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 the highest yields.

Which Hybrid to Plant

A list of high performing hybrids is presented on page 7. This list includes those hybrids which produced above average yields at a majority of the locations during 1946. Those hybrids marked with a dagger (†) have also shown superior performance for 3 years at a majority of the locations at which they were tested.

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. The hybrids listed on page 7 vary widely in maturity. There is, of course, no sharp line between the maturity classes as here presented. The hybrids are grouped in accordance with observed maturity in the Oklahoma tests. In a few cases a hybrid is listed on page 7 in a maturity class different from that with which it was tested during 1946. In those cases, the listing on page 7 is more accurate, because 1946 observations indicate these hybrids were tested in the wrong class (see "Plot Location and Arrangement," page 9).

Hybrids vary not only in maturity but also in ear and grain type and in plant and ear height, etc. The hybrids listed on page 7 were selected mainly on production, 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.

High-performing Hybrids

The hybrids listed here produced above average yields in their maturity class at a majority of the 1946 test locations. In addition, those marked with a dagger (†) have above average yields for a three-year period at more than half of the locations at which they were tested during that period. The hybrids are listed according to maturity and the order is not intended to give any indication of relative performance. Where several hybrids are considered to be of very similar maturity they are listed alphabetically.

Hybrids from the early and medium early groups are probably best suited to upland and less fertile bottom lands. Any except the early maturity group may be considered suitable for the more fertile bottom lands and probably also for most soils in the extreme eastern part of the State. Even the early maturity group, if planted thick, will produce good yields on fertile soil and are a good source of an early feed crop.

The last three white hybrids have a distinct two-eared tendency and while they yield well on fertile soils are somewhat tedious to hand harvest. The first three white hybrids are generally single-eared and of earlier maturity than the last three.

Early Maturing

Embros 95
 †Indiana 610B
 †Ohio C-38
 †Indiana 818
 Funk G-53
 †Merit Keystone 39
 Pioneer 339
 Ohio C-12
 U. S. 35

Medium Early Maturity

Pfister 170
 Embros 36
 †Funk G-94
 Henry Field 135R
 †Merit Keystone 38
 Miller 13
 †Missouri 313
 †Pioneer 332
 †Reid-National 125
 †Reid-National 134D
 †Shannon 1300
 †U. S. 13
 †Ward 120A

Medium Late Maturity

Reid-National 134T
 Embros 49
 †Illinois 200
 †Merit Keystone 40
 †Missouri 148
 McNeilly 1980
 Ward 125

Late Maturity

Texas 18
 Illinois 448
 Henry Field 135
 †Kansas 1585
 Texas 20
 †Funk G-711
 †Kansas 1583
 Merit Keystone 222
 Pfister 660
 †Texas 12

White Hybrids

†Kansas 2234
 Pfister 630
 Texas 9W
 †Tennessee 10
 †Tennessee 15
 Ward 135W

Observations on Hybrid Corn Culture

Observations on methods of growing hybrid corn, as well as on yields, are made during the corn performance tests. These observations include:

Planting Rate.—Additional experiments have been conducted by the Experiment Station on the rate of planting of open pollinated varieties and of hybrids of different maturity. Results of these experiments indicate that maximum yields are obtained from hybrids by planting at a thicker rate than the rate which gives maximum yields with standard open pollinated varieties. It appears that hybrids planted somewhat thicker than the usual rates for open pollinated varieties will produce a greater amount of better quality grain than when these hybrids are planted at a thin rate or when they are planted much too thick. Increased planting rate on hybrids reduces ear size but does not materially decrease yield except at very thick rates. Late maturing hybrids will generally produce maximum yields when planted at a rate thinner than that required to produce greatest yields from early maturing hybrids. The same hybrid should be planted thicker on soils of high fertility than on soils of low fertility.

The "Planting Guide" presented on this page is based on experience in the Oklahoma tests and is presented as a guide rather than as an absolute recommendation. Exceptionally fertile soils may require thicker planting for maximum yields than any rate listed in this guide.

PLANTING GUIDE

This table is based on 42-inch row spacing. It is a guide rather than an absolute recommendation.

Estimated average production of field to be planted (Bushels per acre)	EARLIEST STRAINS		MID-MATURITY STRAINS		LATER STRAINS	
	Distance apart in row (inches)	Acres one bushel will plant*	Distance apart in row (inches)	Acres one bushel will plant*	Distance apart in row (inches)	Acres one bushel will plant*
25 to 35	18	10	20	10½		
35 to 50	14	7½	16	8½	20	10½
Over 50			12	6½	16	8½

* The acres which a bushel of seed will plant is based on "medium flat" size. Larger grain sizes will plant a smaller acreage.

Saving Seed from Hybrids.—In 1946, seed of U. S. Hybrid 13 saved from the 1945 harvest (U. S. 13 second generation) was planted in the tests along with new U. S. 13 seed. The inadvisability of saving hybrid seed from the harvest of one crop for the planting of the next year's crop will be evident by comparing the performance of these two types of seed in the tables, pages 15 to 33. These results duplicate those obtained in other states.

Harvesting.—The number of down plants will increase as the season progresses. This condition is well illustrated when the average percent lodged at different locations is compared with harvest data in Tables I to XI. Earlier maturing hybrids do not lodge as rapidly after maturity as do most late maturing strains. Resistance to lodging is particularly important if the crop is to be harvested mechanically, as mechanical pickers will not get many of the ears on down plants.

1946 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.¹ In so far 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. The following hybrids appear to belong in the indicated maturity group rather than in the group with which they were tested: Henry Field 135, late; McNeilly 1940, early; Pfister 630 white, medium late; Pfister 660, late; Reid-National 134D, medium early; Reid-National 134T, medium late; Shannon 1000, medium late; U. S. 44-1, medium late.

Seasonal Conditions.—The 1946 corn planting season was generally favorable and most of the tests were planted reasonably close to the optimum planting date. Moisture and temperature conditions were generally favorable up to the first week in July. Much of the remainder of the season was dry and temperatures were frequently high. In spite of this dry period there was apparently enough reserve moisture in the soil to permit the production of an above average crop.

¹ A 5x5 lattice square was used in all tests. All plots were 1x20 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.

Sources of Seed.—Two classes of entries are included in the 1946 tests:

1. Entries supplied by companies producing or distributing seed. These entries include some experimental hybrids, marked (ex) in the tables. Seed of these experimental hybrids are probably not available for general planting during 1947.
2. Entries supplied by the Oklahoma Agricultural Experiment Station. In all cases entries supplied by the Experiment Station were purchased by the Station from producers of certified seed.²

Seed sources for 1946 are listed on pages 36 to 39.

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 42 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 when they were leaning more than 45 degrees from the vertical or if the stalks were broken below the ear.

² 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.—BRYAN COUNTY (Red River Bottom)
George Lemons Farm; Yuba, 2½ miles south, 1 west
 Planted April 4; harvested September 17

Rank	Strain	Pct. Yield	Pct. Stand	Pct. Lodged	Rank	Strain	Pct. Yield	Pct. Stand	Pct. Lodged
Early Maturity									
5 grains planted per hill									
1	Ohio C-12	114.8	82	0	14	Iowealth 25A	104.1	75	2
2	Indiana 818	112.9	87	0	15	U. S. 379	103.2	82	0
3	Funk G-53	112.7	84	2	16	Iowealth 25	101.7	76	1
4	U. S. 13	112.3	84	0	17	Pioneer 339	101.4	77	0
5	Merit Key- stone 39	111.5	85	2	18	Embro 95	99.8	77	3
6	U. S. 35 (Mang.)	110.0	78	2	19	Embro 1020	97.4	76	1
7	U. S. 35	109.6	79	0	20	U. S. 44-1	97.2	71	1
8	Ohio C-38	108.8	84	0	21	U. S. 13			
9	Shannon 1000					2nd Gen.	92.2	78	2
	(w) (ex)	108.1	81	3	22	Miller 50	92.1	78	1
10	Indiana 844D	107.5	85	2	23	Indiana 210B	91.9	77	3
11	McNeilly 1942	106.7	81	3	24	Shannon 1100			
12	Indiana 610B	106.3	80	1		(ex)	85.3	71	2
13	Pioneer 334	105.3	79	2	25	Illinois 751	85.1	66	0
						Average	103.1	79	1
<p><i>Significant Difference:</i> A difference of less than 16.2 bushels per acre between any two strains should not be considered significant in this test.</p>									
Medium Early Maturity									
4 grains planted per hill									
1	Funk 52007 (ex)	113.1	82	10	13	Henry Field 135R	99.0	88	1
2	Razorback U. S. 13	110.4	89	0	14	Miller 201	98.2	84	3
3	Pioneer 332	104.3	87	1	15	Henry Field 129L	98.1	88	0
4	Merit Key- stone 38	103.5	86	2	16	Miller 13	97.9	86	1
5	Merit Key- stone U. S. 13	103.4	85	1	17	Funk G-94	96.5	81	1
6	Embro 36	102.8	89	1	18	Merit Key- stone 43	95.2	88	1
7	Reid-National 125	102.8	89	2	19	Pioneer 300	93.8	82	0
8	Pfister 170	102.6	77	1	20	Iowealth 29A	92.2	78	1
9	Ward 120A	102.4	87	2	21	Shannon 1300	89.0	75	1
10	U. S. 13	102.2	81	2	22	Pioneer 336	87.5	83	2
11	Crost-Rite Mo. 313	101.3	86	1	23	McNeilly 1940-A	87.0	77	1
12	U. S. 13 (Mang.)	100.6	83	1	24	McNeilly 1940	85.6	79	9
					25	*Hays Golden	69.8	70	4
						Average	97.5	83	2
<p><i>Significant Difference:</i> A difference of less than 13.1 bushels per acre between any two strains should not be considered significant in this test.</p>									

TABLE I—Bryan County, Continued.

Rank	Strain	Yield	Pct. Stand	Pct. Lodged	Rank	Strain	Yield	Pct. Stand	Pct. Lodged
Medium Late Maturity									
4 grains planted per hill									
1	Funk 2516 (ex)	116.8	87	8	16	*Woods Corn (w)	97.0	81	2
2	Henry Field 135	113.0	90	1	17	Illinois 200 (Mang.)	95.9	83	1
3	Pfister 660	112.1	87	4	18	Henry Field 32N (ex)	95.8	84	1
4	Crost-Rite Mo. 148	108.7	87	0	19	Henry Field 135L	94.6	85	1
5	Ward 125	108.2	85	5	20	Crost-Rite Mo. 8	93.7	72	4
1	Illinois 448	107.6	90	9	21	Pfister 2655 (ex)	92.9	78	1
7	McNeilly 1980	107.0	88	3	22	Razorback Mo. 8	92.2	77	3
8	Illinois 200	106.5	84	1	23	Shannon 1500	90.4	74	1
9	K.-2234 (Mang.) (w)	106.4	86	2	24	*Yellow Sur-cropper	79.5	79	2
10	Razorback Kas. 2234 (w)	103.0	84	1	25	Missouri 8 (Mang.)	74.1	56	1
11	Reid-National 134D	102.1	88	1	Average		100.0	83	2
12	*Midland Yellow Dent	102.0	88	4					
13	Embros 49	100.4	86	2					
14	Merit Keystone 40	100.3	83	2					
15	Shannon 1400 (w) (ex)	98.6	84	1					

Significant Difference: A difference of less than 10.7 bushels per acre between any two strains should not be considered significant in this test.

Late Maturity									
3 grains planted per hill									
1	Funk G-711	116.1	97	13	17	*Reid Yellow Dent	88.1	87	8
2	Tennessee 15 (w)	106.9	93	8	18	Reid-National 134T	86.5	87	2
3	Merit Keystone 222	104.5	86	6	19	Merit Keystone 106W (w)	82.8	84	0
4	Texas 18	102.4	73	12	20	Pfister 630 (w)	82.0	77	0
5	Texas 20	102.1	88	18	21	*Groenemans Mortgage Lifter	81.0	64	3
6	Texas 12	101.7	89	12	22	*Oklahoma Silvermine (w)	78.0	83	5
7	Tennessee 10 (w)	100.1	87	8	23	Funk G-789W (w)	75.5	65	7
8	Ward 135 (w)	99.7	85	3	24	*Ferguson Yellow Dent	73.0	81	7
9	Kansas 1583	97.5	96	2	25	Texas 22	64.3	58	3
10	Funk G-716	94.5	90	6	Average		91.3	84	7
11	Reid-National 134TH	94.0	88	14					
12	Kansas 1585	93.2	92	1					
13	Embros 1001	90.9	88	12					
14	Iowalth TX	90.5	84	5					
15	Illinois 448	89.2	88	4					
16	Texas 9W (w)	88.8	79	8					

Significant Difference: A difference of less than 13.0 bushels per acre between any two strains should not be considered significant in this test.

TABLE I—Bryan County, Continued.

Rank	Strain	Yield	Rank	Strain	Yield
3-YEAR SUMMARY: 1944, 1945, 1946					
1	Funk G-711	72.8	12	Tennessee 15	
2	K-2234 (Mang.) (w)	69.4		(w)	62.1
3	Missouri 148	67.1	12	Iowealth TX	62.1
4	Tennessee 10 (w)	66.5	14	Reid-National 134TH	61.7
4	Merit Key- stone 38	66.5	15	Illinois 751	59.8
6	Illinois 200	65.9	16	Kansas 1585	59.7
7	Texas 12	63.9	17	*Woods Corn (w)	56.7
8	U. S. 13	63.4	18	Missouri 8 (Mang.)	50.2
9	U. S. 13 (Mang.)	62.9	19	*Reid Yellow Dent	49.8
9	Reid-National 134T	62.9	20	*Ferguson Yellow Dent	47.2
11	Kansas 1583	62.3	21	*Hays Golden	43.7
				Average	60.8

TABLE II.—CADDO COUNTY (Bottom Land)
John Rogers Farm; Anadarko, 1 mile north and 3/4 mile east
Planted March 21; harvested October 9

Rank	Strain	Pct. Yield	Pct. Stand Lodged	Rank	Strain	Pct. Yield	Pct. Stand Lodged
Early Maturity							
4 grains planted per hill							
1	Indiana 844D	78.8		15	Miller 50	60.7	
2	Iowealth 25	74.4		15	Pioneer 334	60.7	
3	Pioneer 339	73.8		17	Embro 95	59.6	
4	U. S. 35	68.6		18	Ohio C-12	59.2	
5	U. S. 35 (Mang.)	66.5		19	U. S. 44-1	57.6	
6	Funk G-53	65.9		20	U. S. 13, 2nd Generation	57.5	
7	Embro 1020	64.5		20	Illinois 751	57.5	
8	U. S. 13	64.3		22	Ohio C-38	56.3	
9	Indiana 210B	64.1		23	Iowealth 25A	56.1	
10	Merit Key- stone 39	63.7		24	Shannon 1000 (w) (ex)	53.5	
11	Indiana 620	63.6		25	Shannon 1100 (ex)	49.3	
12	U. S. 379	63.1					
12	Indiana 818	63.1					
14	Indiana 610B	62.8			Average	62.6	

Significant Difference: A difference of less than 20.8 bushels per acre between any two strains should not be considered significant in this test.

Medium Early Maturity

1	Reid-National 125	83.9	4	Embro 36	79.7
2	Ward 120A	82.2	5	Merit Key- stone U. S. 13	75.9
3	Merit Key- tone 38	81.4	5	Razorback U. S. 13	75.9

TABLE II—Caddo County, Continued.

Rank	Strain	Pct. Yield	Pct. Stand Lodged	Rank	Strain	Pct. Yield	Pct. Stand Lodged
7	Pfister 170	71.9		15	Pioneer 336	65.2	
8	Funk 52007			16	Funk G-94	64.9	
	(ex)	71.1		17	U. S. 13	62.3	
8	Miller 13	71.1		18	Pioneer 300	61.3	
10	Merit Kay- stone 43	70.4		19	Pioneer 332	59.9	
11	Henry Field 135R	69.6		20	Miller 201	59.8	
12	*Mexican June	69.3		21	Iowearth 29A	57.9	
13	U. S. 13 (Mang.)	68.9		22	Shannon 1300	56.6	
14	Crost-Rite Mo. 313	65.9		23	*Red June	56.0	
				24	Henry Field 129L	50.4	
				25	*Hays Golden	37.8	
					Average	66.8	

Significant Difference: A difference of less than 16.8 bushels per acre between any two strains should not be considered significant in this test.

Medium Late Maturity

1	Funk 2516 (ex)	80.6		15	Shannon 1400 (w) (ex)	55.0	
2	Illinois 448	69.3		16	Reid-National 134D	54.5	
3	Pfister 660	68.5		17	Crost-Rite Mo. 8	53.5	
4	Henry Field 32N (ex)	65.7		18	Henry Field 135L	53.0	
5	Henry Field 135	65.6		19	*Woods Corn	52.6	
6	Ward 125	62.9		20	*Yellow Sur- cropper	51.0	
7	K-2234 (w) (Mang.)	60.5		21	Embro 49	49.4	
8	Razorback Kan. 2234 (w)	59.5		22	Pfister 2655 (ex)	47.1	
9	Merit Key- stone 40	58.0		23	Illinois 200 (Mang.)	46.1	
10	*Midland Yellow Dent	57.2		24	Missouri 8 (Mang.)	39.1	
11	Shannon 1500	57.0			Average	57.3	
12	Illinois 200	56.2					
13	Razorback Mo. 8	56.1					
13	Crost-Rite Mo. 148	56.1					

Significant Difference: A difference of less than 14.0 bushels per acre between any two strains should not be considered significant in this test.

Late Maturity

1	Texas 20	89.0		7	Kansas 1583	77.0	
2	Reid-National 134T	88.1		8	Tennessee 15 (w)	72.2	
3	Merit Key- stone 222	87.8		9	Ward 135W (w)	72.0	
4	Funk G-711	86.2		10	Tennessee 10 (w)	69.2	
5	Kansas 1585	78.1		11	Illinois 448	69.1	
6	Reid-National 134TH	77.4					

TABLE II—Caddo County. Continued.

Rank	Strain	Yield	Pct. Stand	Pct. Lodged	Rank	Strain	Yield	Pct. Stand	Pct. Lodged
12	Texas 12	68.5			20	*Groenemans Mortgage Lifter	51.0		
13	Funk G-716	64.2			21	Merit Keystone 106W (w)		48.5	
14	Texas 9W (w)	63.3			22	Iowealth TX		48.0	
15	*Reid Yellow Dent	61.2			23	Pfister 630 (w)		46.6	
16	Texas 18	60.3			24	Texas 22		44.5	
17	*Oklahoma Silvermine	59.2			25	Funk G-789W (w)		30.9	
18	Embro 1001	53.2				Average		64.7	
19	*Ferguson Yellow Dent	51.8							

Significant Difference: A difference of less than 9.1 bushels per acre between any two strains should not be considered significant in this test.

TABLE III.—CARTER COUNTY (Upland)
Southern Oklahoma Soil Improvement Station
Lone Grove, 1/2 mile west
Planted April 5; harvested October 11

Rank	Strain	Yield	Pct. Lodged	Rank	Strain	Yield	Pct. Lodged
Early Maturity							
1	Indiana 610B	34.5	7	15	U. S. 35 (Mang.)	27.8	9
2	Indiana 818	33.2	5	16	Indiana 844D	27.7	1
3	Merit Keystone 39	32.2	8	17	Iowealth 25A	27.4	5
4	Ohio C-38	31.5	1	18	U. S. 379	27.2	9
5	Indiana 620	31.4	0	19	Shannon 1000 (w) (ex)	26.0	2
6	Iowealth 25	31.4	3	20	Miller 50	25.8	3
7	Ohio C-12	29.9	1	21	Illinois 751	25.0	1
8	U. S. 35	29.5	2	22	Indiana 210B	25.0	2
9	Pioneer 339	29.4	1	23	U. S. 44-1	24.4	5
10	Embro 95	29.2	4	24	Shannon 1100 (ex)	24.3	1
11	U. S. 13	29.2	10	25	U. S. 13 2nd Generation	21.6	6
12	Embro 1020	29.0	6		Average	28.4	4
13	Funk G-53	28.9	4				
14	Pioneer 334	28.6	4				

Significant Difference: A difference of less than 5.8 bushels per acre between any two strains should not be considered significant in this test.

Medium Early Maturity

1	Reid-National 125	31.5	6	10	Merit Keystone 38	27.3	4
2	Embro 36	30.5	4	11	Pioneer 336	27.3	10
3	Crost-Rite Mo. 313	30.5	6	12	Pfister 170	27.0	4
4	Henry Field 135R	29.7	11	13	Funk G-94	27.0	5
5	Miller 13	29.5	12	14	Pioneer 332	26.2	12
6	Ward 120A	29.4	8	15	Merit Keystone U. S. 13	26.0	6
7	U. S. 13	29.0	8	16	Razorback U. S. 13	25.8	9
8	Shannon 1300	28.0	9	17	U. S. 13 (Mang.)	25.6	6
9	Henry Field 129L	27.7	10				

TABLE III—Carter County, Continued.

Rank	Strain	Yield	Pct. Stand	Pct. Lodged	Rank	Strain	Yield	Pct. Stand	Pct. Lodged
18	Miller 201	24.9	4		23	*Mexican June	21.1	18	
19	Merit Keystone 43	24.6	10		24	*Hays Golden	15.5	18	
20	Pioneer 300	24.6	11		25	*Red June	15.1	15	
21	Funk 52007 (ex)	23.8	7						
22	Iowealth 29A	21.9	15			Average	26.0	9	

Significant Difference: A difference of less than 5.3 bushels per acre between any two strains should not be considered significant in this test.

Medium Late Maturity

1	Illinois 200	21.0	2	14	Henry Field 32N (ex)	17.4	10
2	Crost-Rite Mo. 148	20.1	7	15	Shannon 1400 (w)		
3	Merit Keystone 40	19.8	7		(ex)	17.1	7
4	Henry Field 135	19.8	12	16	Pfister 2655 (ex)	17.0	9
5	Embros 49	19.6	9	17	Illinois 200 (Mang.)	16.6	3
6	Crost-Rite Mo. 8	18.7	6	18	Missouri 8 (Mang.)	16.3	10
7	Reid-National 134D	18.6	6	19	Pfister 660	16.2	13
8	Shannon 1500	18.5	3	20	Funk 2516 (ex)	15.2	13
9	Ward 125	18.2	11	21	Henry Field 135L	14.8	2
10	Razorback Mo. 8	18.1	12	22	*Yellow Surcropper	12.3	11
11	Illinois 448	17.6	11	23	*Woods Corn (w)	11.9	18
11	Razorback Kan. 234			24	*Midland Yellow		
	(w)	17.6	11		Dent	11.1	8
13	K-2234 (Mang.) (w)	17.4	6		Average	17.1	9

Significant Difference: A difference of less than 5.3 bushels per acre between any two strains should not be considered significant in this test.

Late Maturity

1	Reid-National 134T	21.5	10	15	Merit Keystone 106W		
2	Texas 9W (w)	19.8	29		(w)	13.5	11
3	Ward 135W (w)	19.1	21	16	Illinois 448	13.2	10
4	Tennessee 10 (w)	19.1	32	17	Embros 1001	13.0	20
5	Texas 20	18.7	25	18	Kansas 1583	12.7	12
6	Tennessee 15 (w)	18.6	36	19	Funk G-789W	12.5	9
7	Texas 18	18.4	32	20	Funk G-711	11.7	24
8	Texas 12	17.8	19	21	Texas 22	9.6	21
9	Pfister 630 (w)	17.3	20	22	*Groenemans Mort- gage Lifter	9.0	23
10	Reid-National 134TH	15.3	39	23	*Ferguson Yellow		
11	Merit Keystone 222	15.2	27		Dent	7.9	14
12	Iowealth TX	14.9	26	24	*Oklahoma Silvermine	6.4	17
13	Funk G-716	14.7	19	25	*Reid Yellow Dent	6.2	32
14	Kansas 1585	14.4	10		Average	14.4	26

Significant Difference: A difference of less than 3.8 bushels per acre between any two strains should not be considered significant in this test.

3-YEAR SUMMARY: 1944, 1945, 1946

1	Pioneer 332	30.4	7	Ward 120A	27.6
2	Ohio C38	30.3	7	Shannon 1300	27.6
3	U. S. 13	29.0	9	U. S. 35 (Mang.)	27.5
4	Embros 1020	28.3	10	Merit Keystone 38	27.4
5	Merit Keystone 39	28.2	11	Crost-Rite Mo. 148	25.5
6	Crost-Rite Mo. 313	28.0	12	Texas 12	25.4

TABLE III—Carter County, Continued.

Rank	Strain	Yield	Pct. Lodged	Rank	Strain	Yield	Pct. Lodged
13	U. S. 44-1	25.2		26	*Hays Golden	19.0	
14	Pioneer 300	25.1		27	*Ferguson Yellow Dent	18.4	
14	Pioneer 334	25.1		28	Illinois 200 (Mang.)	18.1	
14	Reid-National 134D	25.1		29	*Groenemans Mortgage Lifter	17.0	
17	Funk G-94	24.6		30	*Woods Corn (w)	16.5	
17	Illinois 751	24.6		31	*Reid Yellow Dent	15.6	
19	U. S. 35	23.6		32	*Yellow Surcropper	15.5	
19	Iowealth TX	23.6		33	*Oklahoma Silvermine	13.4	
21	Crost-Rite Mo. 8	23.1			Average	23.6	
22	K-2234 (Mang.) (w)	22.9					
23	Kansas 1585	22.6					
24	Ward 125	22.1					
25	Kansas 1583	21.1					

TABLE IV.—CRAIG COUNTY (Bottom land)
Howard Tyler Farm, Vinita, 9 miles north, 3 west

Planted April 12; harvested October 4

Rank	Strain	Yield	Pct. Lodged	Rank	Strain	Yield	Pct. Lodged
Early Maturity							
1	U. S. 13	38.3	13	14	McNeilly 1942	29.1	16
2	Funk G-53	36.3	20	15	Pioneer 339	28.3	13
3	Indiana 210B	34.2	2	16	Ohio C-12	27.3	2
4	Embryo 1020	33.5	5	17	Pioneer 334	27.1	5
5	Merit Keytone 39	33.2	20	18	Indiana 818	26.6	32
6	Indiana 844D	33.2	23	19	Embryo 95	25.9	4
7	Ohio C-38	32.6	9	20	Iowealth 25A	25.9	16
8	Indiana 610B	32.2	13	21	Iowealth 25	24.4	2
9	Shannon 1100 (ex)	32.1	3	22	U. S. 44-1	23.0	14
10	Illinois 751	31.3	4	23	Miller 50	21.8	7
11	U. S. 35	31.3	8	24	U. S. 379	20.3	30
12	Shannon 1000 (w) (ex)	30.6	20	25	U. S. 13, 2nd Generation	18.9	7
13	U. S. 35 (Mang.)	29.1	9		Average	29.0	12

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

Medium Early Maturity

1	Razorback U. S. 13	35.3	5	10	Pfister 170	31.0	7
2	Funk G-94	33.8	12	11	U. S. 13	30.7	17
3	Merit Keytone U. S. 13	33.2	3	12	McNeilly 1940-A	29.3	12
4	Embryo 36	33.0	15	13	Miller 13	29.3	15
5	Henry Field 135R	32.6	4	14	Merit Keystone 43	29.2	6
6	Reid-National 125	32.4	31	15	Merit Keystone 38	29.0	18
7	Pioneer 332	31.8	3	16	Miller 201	28.9	16
8	Pioneer 300	31.4	16	17	Iowealth 29A	28.5	17
9	Ward 120A	31.2	11	18	Henry Field 129L	28.2	6
				19	Pioneer 336	28.0	3

TABLE IV—Craig County, Continued.

Rank	Strain	Yield	Pct. Lodged	Rank	Strain	Yield	Pct. Lodged
20	Crost-Rite Mo. 313	27.8	25	24	Funk 52007 (ex)	23.4	19
21	McNeilly 1940	27.4	30	25	*Hays Golden	17.6	35
22	Shannon 1300	27.3	12				
23	U. S. 13 (Mang.)	24.8	17		Average	29.4	14

Significant Difference: A difference of less than 5.6 bushels per acre between any two strains should not be considered significant in this test.

Medium Late Maturity

3 grains planted per hill

1	Reid-National 134D	32.5	16	14	Ward 125	26.1	15
2	Illinois 200 (Mang.)	31.9	4	15	McNeilly 1980	26.1	32
3	Henry Field 135	31.9	28	16	Crost-Rite Mo. 148	25.9	3
4	K-2234 (Mang.)			17	Merit Keystone 40	25.3	13
	(w)	31.2	13	18	*Woods Corn (w)	25.3	19
5	Embro 49	30.7	4	19	Shannon 1400 (w)		
6	Henry Field 135L	30.2	24		(ex)	24.9	6
7	Shannon 1500	28.5	10	20	Illinois 448	24.3	14
8	Pfister 660	26.6	24	21	Crost-Rite Mo. 8	24.2	37
9	Razorback Mo. 8	26.5	4	22	Henry Field 32N (ex)	24.0	8
10	Funk 2516 (ex)	26.4	28	23	*Midland Yellow		
11	Pfister 2655 (ex)	26.3	12		Dent	20.9	14
12	Razorback Kas.			24	Missouri 8 (Mang.)	20.2	22
	2234 (w)	26.2	10	25	*Yellow Surcropper	13.5	26
13	Illinois 200	26.2	19		Average	26.2	16

Significant Difference: A difference of less than 7.4 bushels per acre between any two strains should not be considered significant in this test.

Late Maturity

3 grains planted per hill

1	Reid-National 134T	30.2	21	15	Illinois 448	22.1	24
2	Funk G-711	28.9	54	16	Funk G-716	21.7	47
3	Merit Keystone 106W			17	Iowearth TX	21.4	27
	(w)	28.7	4	18	Texas 18	21.0	21
4	Kansas 1583	28.7	35	19	Reid-National		
5	Tennessee 15 (w)	27.6	16		134TH	19.5	42
6	Texas 20	27.1	19	20	Texas 12	19.1	47
7	Ward 135W (w)	27.0	21	21	*Reid Yellow Dent	19.0	13
8	Kansas 1585	25.8	11	22	Funk G-789W (w)	18.0	35
9	Merit Keystone 222	24.6	19	23	*Oklahoma Silver-		
10	Embro 1001	24.4	13		mine (w)	15.1	25
11	Pfister 630 (w)	24.1	31	24	Texas 22	14.9	14
12	Texas 9W (w)	23.9	30	25	*Ferguson Yellow		
13	Tennessee 10 (w)	23.6	26		Dent	14.1	21
14	*Groenemans Mort-				Average	22.9	26
	gage Lifter	22.5	26				

Significant Difference: A difference of less than 6.8 bushels per acre between any two strains should not be considered significant in this test.

3-year Summary: 1944, 1945, 1946

1	Kansas 1583	40.2		5	*Groenemans Mort-		
2	Merit Keystone 39	36.6			gage Lifter	33.0	
3	Illinois 200 (Mang.)	36.0		6	Texas 12	32.8	
4	*Woods Corn (w)	34.6		7	Pioneer 332	31.8	

TABLE IV—Craig County, Continued.

Rank	Strain	Yield	Pct. Lodged	Rank	Strain	Yield	Pct. Lodged
8	Merit Keystone 38	31.5		17	Pioneer 334	26.7	
9	Embros 1020	31.0		18	*Hays Golden	23.6	
10	Illinois 751	30.7		19	*Reid Yellow Dent	20.9	
11	Shannon 1300	30.5		20	*Ferguson Yellow Dent	20.5	
12	Crost-Rite Missouri 313	30.2		21	*Oklahoma Silvermine (w)	19.1	
13	U. S. 35	30.0					
13	Crost-Rite Mo. 148	30.0					
15	U. S. 13 (Mang.)	29.8			Average	30.0	
16	Crost-Rite Mo. 8	28.1					

TABLE V.—GARVIN COUNTY (Bottom land)
D. J. Butler farm, Pauls Valley, 1 mile west
Planted March 22, harvested September 7

Rank	Strain	Yield	Pct. Stand	Pct. Lodged	Rank	Strain	Yield	Pct. Stand	Pct. Lodged
Early Maturity									
5 grains planted per hill									
1	Indiana 818	107.6	92	0	15	U. S. 35 (Mang.)	87.3	86	2
2	Merit Keystone 39	106.8	79	1	16	Illinois 751	87.1	81	2
3	Funk G-53	95.2	83	2	17	Iowealth 25A	86.3	86	2
4	Ohio C-38	94.1	86	0	18	U. S. 13	83.1	80	2
5	Ohio C-12	92.8	77	1	19	Iowealth 25	82.3	63	1
6	Indiana 844D	92.7	78	1	20	Shannon 1100 (ex)	80.1	74	3
7	Indiana 620	92.6	77	1	21	Miller 50	78.7	79	2
8	Pioneer 339	92.2	78	1	22	Pioneer 334	76.6	79	9
9	U. S. 35	91.6	72	1	23	Embros 1020	74.9	65	0
10	Indiana 610B	91.3	76	0	24	Indiana 210B	73.5	67	4
11	U. S. 379	89.7	85	1	25	U. S. 13 2nd Generation	68.9	65	0
12	Shannon 1000 (w) (ex)	89.3	83	3					
13	Embros 95	89.1	76	0					
14	U. S. 44-1	87.8	69	2		Average	87.7	77	2

Significant Difference: A difference of less than 15.7 bushels per acre between any two strains should not be considered significant in this test.

Medium Early Maturity
4 grains planted per hill

1	Crost-Rite Mo. 313	116.5	87	1	9	Funk 52007 (ex)	103.6	86	10
2	Pioneer 332	116.1	83	0	10	Miller 13	103.2	88	0
3	Pioneer 336	114.7	95	2	11	Henry Field 129L	102.0	85	1
4	Embros 36	114.5	86	0	12	Pfister 170	101.9	83	2
5	Ward 120A	110.3	92	1	13	Funk G-94	100.5	84	0
6	U. S. 13	110.3	85	2	14	Merit Keystone U. S. 13	100.4	89	1
7	Razorback U. S. 13	107.9	84	0	15	Henry Field 135R	99.8	85	1
8	Merit Keystone 38	105.6	83	0					

TABLE V—Garvin County, Continued.

Rank	Strain	Pct. Yield Lodged			Rank	Strain	Pct. Yield Lodged		
19	*Groenemans Mortgage Lifter	71.2	81	18	23	*Ferguson Yellow Dent	65.5	51	18
20	Pfister 630 (w)	70.5	82	4	24	Embro 1001	63.9	59	19
21	Iowealth TX	69.3	77	9	25	Funk G-789W (w)	47.1	31	3
22	Texas 22	65.5	51	17	Average		85.4	82	11

Significant Difference: A difference of less than 17.0 bushels per acre between any two strains should not be considered significant in this test.

2-year Summary: 1944-1946

1	Funk G-711	112.3	14	Illinois 751	86.5
2	Texas 12	108.8	15	Illinois 200	85.4
3	Tennessee 10 (w)	108.3	16	Indiana 610B	85.3
4	Pioneer 332	102.6	17	*Ferguson Yellow Dent	84.7
5	Pioneer 336	101.6	18	Indiana 844D	84.1
6	Tennessee 15 (w)	98.0	19	*Reid Yellow Dent	81.5
6	Kansas 1585	98.0	20	Pioneer 334	79.7
8	U. S. 13	97.3	20	Iowealth 25A	79.7
9	Merit Keystone 39	96.9	22	U. S. 35	77.2
10	Kansas 1583	95.5	23	*Woods Corn	75.9
11	Indiana 818	92.9	24	*Hays Golden	65.4
12	K-2234 (Mang.) (w)	88.9	25	*Yellow Surcropper	64.0
13	Iowealth TX	87.3	Average		89.5

TABLE VI.—HUGHES COUNTY (Upland)
C. D. Dean farm; Yeager, 1/2 mile south
Planted April 2; harvested October 1

Rank	Strain	Pct. Yield Stand		Pct. Lodged	Rank	Strain	Pct. Yield Stand		Pct. Lodged
Early Maturity 3 grains planted per hill									
1	Illinois 751	29.1	80	15	15	Shannon 1100 (ex)	20.9	75	27
2	Indiana 610B	26.5	83	12	16	U. S. 35	20.3	81	21
3	Embro 1020	25.7	77	9	17	U. S. 44-1	20.2	72	20
4	McNeilly 1942	25.2	67	24	18	Indiana 844D	20.2	76	22
5	Embro 95	24.4	84	15	19	Indiana 210B	19.8	77	26
6	Pioneer 339	24.2	86	24	20	Iowealth 25A	19.5	80	24
7	Merit Keystone 39	24.2	71	37	21	Indiana 818	18.8	81	45
8	Ohio C-12	24.0	86	20	22	Iowealth 25	18.4	85	44
9	Ohio C-38	22.9	85	19	23	Pioneer 334	18.1	79	48
10	Funk G-53	22.3	85	20	24	Shannon 1000 (w) (ex)	17.6	83	56
11	U. S. 35 (Mang.)	22.3	88	32	25	U. S. 13 2nd Generation	15.5	74	39
12	U. S. 379	21.7	85	40	Average		21.8	80	28
13	Miller 50	21.4	81	20					
14	U. S. 13	21.2	77	37					

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 VI—Hughes County, Continued.

Rank	Strain	Pct.		Rank	Strain	Pct.	
		Yield	Lodged			Yield	Lodged
Medium Early Maturity							
3 grains planted per hill							
1	Razorback			14	Merit Key-		
	U. S. 13	29.5	81	27	stone 38	20.7	74
2	Miller 13	28.0	77	18	15 Henry Field		
3	McNeilly 1940	27.0	84	22	129L	20.5	90
4	McNeilly			16	Shannon 1300	19.5	85
	1940-A	25.8	82	26	17 Iowearth 29A	19.3	84
5	Merit Keystone			18	Miller 201	19.2	76
	U. S. 13	25.7	79	22	19 Reid-National		
6	Pioneer 336	24.4	90	25	125	19.0	93
7	Merit Key-			20	Pioneer 300	18.7	84
	stone 43	23.1	85	26	21 Cross-Rite		
8	Pfister 170	23.0	91	21	Mo. 313	18.1	74
9	Ward 120A	22.3	90	20	22 Henry Field		
10	U. S. 13				135R	16.4	92
	(Mang.)	22.2	91	17	23 Pioneer 332	15.8	96
11	Embro 36	22.1	87	24	24 *Hays Golden	15.6	74
12	U. S. 13	21.9	83	25	25 Funk 52007		
13	Funk G-94	21.3	86	19	(ex)	15.2	86
					Average	21.4	85

Significant Difference: A difference of less than 9.2 bushels per acre between any two strains should not be considered significant in this test.

Medium Late Maturity							
2 grains planted per hill							
1	Merit Key-			15	Henry Field 135	23.1	71
	stone 40	28.5	72	14	16 Ward 125	22.6	86
2	K-2234 (Mang.)			26	17 Razorback		
	(w)	26.2	83	26	Kas. 2234 (w)	22.3	78
3	Merit Key-			17	18 Henry Field		
	stone 40	26.1	80	17	135L	22.3	84
4	Pfister 660	25.6	74	23	19 Razorback		
5	Embro 49	25.6	76	27	Mo. 8	20.6	87
6	Illinois 200	25.3	92	28	20 Pfister 2655		
7	McNeilly 1980	25.3	93	30	(ex)	20.4	58
8	Shannon 1500	24.8	74	37	21 Reid-National		
9	Illinois 200			24	134D	20.1	99
	(Mang.)	24.2	85	24	22 Henry Field		
10	Funk 2516 (ex)	23.6	88	24	32N (ex)	19.6	75
11	Cross-Rite			31	23 *Woods Corn	18.2	69
	Mo. 8	23.6	81	21	24 *Yellow Sur-		
12	Illinois 448	23.4	83	21	cropper	18.1	71
13	Missouri 8			30	25 *Midland Yellow		
	(Mang.)	23.2	63	30	Dent	16.4	86
14	Shannon 1400			35	Average	22.9	79
	(w) (ex)	23.1	72	35			

Significant Difference: A difference of less than 8.1 bushels per acre between any two strains should not be considered significant in this test.

TABLE VI—Hughes County, Continued.

Rank	Strain	Yield	Pct. Stand	Pct. Lodged	Rank	Strain	Yield	Pct. Stand	Pct. Lodged
Late Maturity									
2 grains planted per hill									
1	Kansas 1583	28.1	96	11	16	*Groenemans Mortgage Lifter	20.6	73	26
2	Texas 9W (w)	28.0	80	29	17	Funk G-711	20.0	76	40
3	Reid-National 134T	26.7	97	21	18	Merit Keystone 222	18.3	82	20
4	Texas 18	25.5	58	23	19	Funk G-716	17.4	68	32
5	Tennessee 10 (w)	25.2	86	31	20	Merit Keystone 106W (w)	16.4	84	33
6	Ward 135W (w)	25.0	90	19	21	Texas 22	16.1	62	16
7	Texas 20	24.8	85	28	22	Funk G-789W (w)	15.6	52	41
8	Texas 12	24.4	82	26	23	*Ferguson Yellow Dent	12.3	56	37
9	Iowearth TX	24.0	80	20	24	*Oklahoma Silvermine	11.6	69	34
10	Tennessee 15 (w)	23.3	88	19	25	*Reid Yellow Dent	11.1	87	30
11	Illinois 448	22.8	88	22	Average		21.0	79	27
12	Pfister 630 (w)	22.5	77	15					
13	Embros 1001	22.0	88	32					
14	Reid-National 134TH	22.0	93	33					
15	Kansas 1585	21.4	78	34					

Significant Difference: A difference of less than 7.4 bushels per acre between any two strains should not be considered significant in this test.

TABLE VII.—LE FLORE COUNTY (Bottom Land)
C. H. Reid farm; Spiro, 4 miles north

Planted April 3; harvested September 24

Rank	Strain	Yield	Pct. Stand	Pct. Lodged	Rank	Strain	Yield	Pct. Stand	Pct. Lodged
Early Maturity									
1	Shannon 1000 (w) (ex)	26.2			15	U. S. 35 (Mang.)	19.6		
2	Iowearth 25A	22.2			16	Pioneer 334	19.2		
3	Iowearth 25	21.6			17	McNeilly 1942	18.6		
4	Pioneer 339	21.5			17	U. S. 44-1	18.6		
4	U. S. 379	21.5			19	Indiana 844D	18.4		
6	U. S. 35	21.3			20	Illinois 751	18.3		
7	U. S. 13	21.0			21	Merit Keystone 39	18.2		
8	Ohio C-12	20.8			22	Indiana 818	17.3		
8	Embros 95	20.8			23	Miller 50	16.6		
10	Embros 1020	20.7			24	U. S. 13 2nd Generation	15.7		
11	Indiana 610B	20.4			25	Indiana 210B	15.0		
12	Shannon 1100 (ex)	19.9			Average		19.7		
13	Funk G-53	19.8							
14	Ohio C-38	19.7							

Significant Difference: A difference of less than 4.4 bushels per acre between any two strains should not be considered significant in this test.

TABLE VII—Le Flore County, Continued.

Rank	Strain	Yield	Pct. Stand	Pct. Lodged	Rank	Strain	Yield	Pct. Lodged
Medium Early Maturity								
1	Funk 52007 (ex)	23.1			14	Pioneer 336	19.8	
2	U. S. 13 (Mang.)	21.8			15	Iowealth 29A	19.7	
3	Crost-Rite Mo. 313	21.6			16	Funk G-94	19.6	
4	Ward 120A	21.2			17	Razorback U. S. 13	19.2	
5	Merit Keystone U. S. 13	21.0			18	Pioneer 300	18.8	
6	Shannon 1300	20.9			19	Henry Field 135R	18.7	
7	Merit Keystone 43	20.8			20	McNeilly 1940A	18.6	
7	Pfister 170	20.8			21	Reid-National 125	18.2	
9	Embros 36	20.6			22	Henry Field 129L	17.6	
9	Pioneer 332	20.6			23	McNeilly 1940	16.5	
11	Miller 13	20.3			24	Miller 201	16.3	
12	Merit Keystone 38	20.0			25	*Hays Golden	15.5	
13	U. S. 13	19.9			Average		19.6	

Significant Difference: A difference of less than 4.4 bushels per acre between any two strains should not be considered significant in this test.

Medium Late Maturity								
1	Razorback Kas. 2234 (w)	22.0			13	Shannon 1500	18.5	
2	Shanon 1400 (w) (ex)	20.8			13	*Yellow Sur- cropper	18.5	
2	Funk 2516 (ex)	20.8			16	Illinois 200	18.0	
4	K-2234 (Mang.) (w)	20.7			17	*Woods Corn	17.9	
5	Illinois 448	20.5			18	*Midland Yellow Dent	17.8	
6	McNeilly 1980	20.4			19	Crost-Rite Mo. 8	17.4	
7	Razorback Mo. 8	20.0			20	Embros 49	17.2	
8	Pfister 660	19.9			21	Crost-Rite Mo. 148	17.1	
9	Illinois 200 (Mang.)	19.2			22	Henry Field 135L	16.9	
10	Merit Keystone 40	19.1			22	Pfister 2655 (ex)	16.9	
11	Henry Field 135	19.0			24	Henry Field 32N (ex)	16.0	
12	Ward 125	18.9			25	Reid-National 134D	15.8	
13	Missouri 8 (Mang.)	18.5			Average		18.7	

Significant Difference: A difference of less than 4.3 bushels per acre between any two strains should not be considered significant in this test.

TABLE VII—Le Flore County, Continued.

Rank	Strain	Yield	Pct. Lodged	Rank	Strain	Yield	Pct. Lodged
Late Maturity							
1	Tennessee 15 (w)	23.3		16	Merit Keystone 106W (w)	18.1	
2	Texas 9W (w)	22.8		17	Reid-National 134T	18.0	
3	Texas 18	22.6		18	Ward 135W (w)	17.8	
4	Illinois 448	22.3		18	*Groenemans Mortgage Lifter	17.8	
4	Texas 20	22.3		18	Kansas 1583	17.8	
6	Merit Keystone 222	22.2		21	Funk G-716	15.7	
7	Iowearth TX	20.7		23	*Ferguson Yellow Dent	13.3	
8	Funk G-789W (w)	19.5		23	*Ferguson Yellow Dent	12.0	
9	Funk G-711	19.1		24	*Oklahoma Silvermine (w)	11.6	
10	Reid-National 134TH	19.0		25	Texas 22	10.0	
10	Kansas 1585	19.0			Average	18.3	
12	Embro 1001	18.6					
13	Pfister 630 (w)	18.5					
14	Texas 12	18.3					
15	Tennessee 10 (w)	18.2					

Significant Difference: A difference of less than 4.5 bushels per acre between any two strains should not be considered significant in this test.

TABLE VIII.—PAYNE COUNTY (Bottom land)
Herman Schroeder farm; Stillwater, 2 miles west
Planted April 24; harvested November 1

Rank	Strain	Yield	Pct. Stand	Pct. Lodged	Rank	Strain	Yield	Pct. Stand	Pct. Lodged
Early Maturity									
4 grains planted per hill									
1	U. S. 13	66.8	78	30	16	U. S. 379	52.4	67	57
2	Indiana 818	65.6	83	34	17	U. S. 35 (Mang.)	52.1	67	30
3	Funk G-53	64.0	78	41	18	Shannon 1000 (w) (ex)	50.5	64	44
4	Indiana 844D	60.9	76	23	19	McNeilly 1942	48.2	71	72
5	Iowearth 25A	60.4	74	29	20	U. S. 44-1	47.9	52	57
6	Merit Keystone 39	59.9	70	38	21	Shannon 1100 (ex)	47.7	65	26
7	Ohio C-38	59.8	85	35	22	Embo 1020	47.4	72	27
8	Iowearth 25	59.5	74	48	23	Pioneer 334	47.4	64	53
9	U. S. 35	57.8	73	43	24	Indiana 210B	47.1	75	63
10	Pioneer 339	56.8	74	20	25	U. S. 13 2nd Generation	46.1	79	16
11	Miller 50	56.0	77	51		Average	54.9	73	39
12	Embro 95	55.7	75	28					
13	Ohio C-12	55.5	79	21					
14	Indiana 610B	53.8	76	43					
15	Illinois 751	52.8	78	37					

Significant Difference: A difference of less than 12.1 bushels per acre between any two strains should not be considered significant in this test.

TABLE VIII—Payne County, (Bottom Land), Continued.

Rank	Strain	Pct. Yield	Pct. Stand	Pct. Lodged	Rank	Strain	Pct. Yield	Pct. Stand	Pct. Lodged
Medium Early Maturity									
4 grains planted per hill									
1	Embro 36	72.7	86	18	14	Shannon 1300	60.5	69	37
2	Funk G-94	69.9	83	54	15	Henry Field			
3	Pioneer 332	68.1	84	44		135R	60.5	80	48
4	Razorback				16	Iowearth 29A	60.4	75	52
	U. S. 13	66.8	72	47	17	Pioneer 300	59.7	73	42
5	Merit Keystone				18	Merit Keystone			
	38	66.3	87	39		43	59.6	81	47
6	Miller 13	64.1	77	39	19	U. S. 13			
7	Pioneer 336	63.6	85	30		(Mang.)	58.6	83	33
8	Reid-National				20	Pfister 170	56.4	82	47
	125	62.9	81	55	21	Funk 52007			
9	Crost-Rite					(ex)	56.4	84	52
	Mo. 313	62.4	76	54	22	McNeilly 1940-A	54.2	77	52
10	Ward 120A	62.1	80	38	23	Miller 201	54.1	77	28
11	U. S. 13	61.8	75	33	24	McNeilly 1940	52.0	76	64
12	Merit Keystone				25	*Hays Golden	35.6	57	76
	U. S. 13	61.6	83	32					
13	Henry Field					Average	60.4	78	44
	129L	61.2	76	49					

Significant Difference: A difference of less than 6.4 bushels per acre between any two strains should not be considered significant in this test.

Medium Late Maturity									
3 grains planted per hill									
1	Funk 2516				15	Illinois 200	53.9	80	43
	(ex)	69.1	87	30	16	Razorback			
2	K-2234 (Mang.)					Mo. 8	52.8	84	35
	(w)	67.7	84	58	17	Crost-Rite			
3	Reid-National					Mo. 8	52.7	66	37
	134D	64.2	88	22	18	Shannon 1500	51.1	70	60
4	Henry Field 135	63.3	85	30	19	Henry Field			
5	Embro 49	63.1	83	33		135L	49.3	71	31
6	McNeilly 1980	61.3	93	44	20	Pfister 2655			
7	Crost-Rite					(ex)	48.8	59	42
	Mo. 148	60.4	66	43	21	Henry Field			
8	Ward 125	60.1	84	35		32N (ex)	48.0	65	27
9	Illinois 200				22	*Yellow Sur-			
	(Mang.)	59.4	77	30		cropper	47.8	86	41
10	Pfister 660	59.4	83	32	23	*Woods' Corn			
11	Illinois 448	56.9	81	23		(w)	47.6	79	61
12	Merit Keystone				24	*Midland Yellow			
	40	56.6	80	31		Dent	46.6	84	52
13	Razorback Kan.				25	Missouri 8			
	2234 (w)	55.6	76	60		(Mang.)	42.6	56	34
14	Shannon 1400					Average	55.7	76	39
	(w) (ex)	55.0	71	45					

Significant Difference: A difference of less than 9.9 bushels per acre between any two strains should not be considered significant in this test.

TABLE VIII—Payne County (Bottom Land), Continued.

Rank	Strain	Pct. Yield	Pct. Stand	Pct. Lodged	Rank	Strain	Pct. Yield	Pct. Stand	Pct. Lodged
Late Maturity									
3 grains planted per hill									
1	Reid-National 134T	66.5	86	39	15	Tennessee 15 (w)	50.3	88	49
2	Merit Keystone 222	64.6	90	46	16	Tennessee 10 (w)	50.3	81	53
3	Funk G-711	60.0	84	49	17	Embros 1001	46.9	73	48
4	Illinois 448	59.1	88	44	18	Funk G-716	46.0	80	50
5	Kansas 1585	56.3	82	31	19	Ioweth TX	40.7	60	36
6	Pfister 630 (w)	56.1	74	64	20	*Groenemans Mortgage Lifter	40.7	75	47
7	Kansas 1583	55.5	74	40	21	*Oklahoma Silvermine (w)	40.0	74	61
8	Texas 9W (w)	54.4	77	41	22	*Reid Yellow Dent	38.7	78	46
9	Reid-National 134TH	54.0	83	38	23	*Ferguson Yellow Dent	38.5	70	54
10	Texas 20	53.7	81	34	24	Texas 22	34.0	48	50
11	Texas 18	53.0	61	48	25	Funk G-789W (w)	28.1	37	65
12	Ward 135W (w)	52.9	82	36	Average		49.7	75	47
13	Merit Keystone 106W (w)	51.7	73	50					
14	Texas 12	51.1	71	49					

Significant Difference: A difference of less than 11.0 bushels per acre between any two strains should not be considered significant in this test.

3-year Average: 1944, 1945, 1946

1	Indiana 818	61.2	23	26	Kansas 1585	47.2	32
2	Funk G-94	60.4	23	27	U. S. 35 (Mang.)	46.2	21
3	Pioneer 332	60.3	26	28	Crost-Rite Mo. 8	46.0	38
4	Crost-Rite Mo. 313	58.1	32	29	Pioneer 334	45.9	31
5	Merit Keystone 38	57.6	25	30	Kansas 1583	45.4	35
6	U. S. 13	56.7	24	31	Embros 1020	44.7	22
7	Merit Keystone 39	56.2	23	32	Illinois 751	44.7	25
8	Ward 120A	55.5	27	33	Shannon 1500	44.4	29
9	Crost-Rite Mo. 148	55.5	27	34	Texas 12	44.4	45
10	Pioneer 300	55.2	26	35	Missouri 8 (Mang.)	42.6	38
11	Indiana 844D	54.5	16	36	Texas 18	42.4	46
12	Shannon 1300	53.8	25	37	Tennessee 10 (w)	41.5	34
13	Merit Keystone 40	53.4	21	38	Reid-National 134TH	41.2	43
14	Reid-National 125	53.4	41	39	Embros 1001	40.8	39
15	U. S. 13 (Mang.)	52.2	23	40	*Woods Corn (w)	40.4	51
16	K-2234 (Mang.) (w)	52.2	39	41	*Hays Golden	39.9	48
17	Reid-National 134D	51.9	27	42	Ioweth TX	38.9	31
18	Ohio C-38	50.6	21	43	*Reid Yellow Dent	35.0	41
19	U. S. 44-1	50.4	28	44	*Yellow Surcropper	34.0	36
20	Indiana 610B	50.1	25	45	*Ferguson Yellow Dent	32.7	43
21	Illinois 200 (Mang.)	49.5	25	46	Indiana 210B	32.2	30
22	Funk G-711	47.9	40	47	*Groenemans Mortgage Lifter	28.8	41
23	Reid-National 134T	47.8	33	Average		47.6	31.3
24	U. S. 35	47.3	22				
25	Illinois 200	47.2	31				

TABLE IX.—PAYNE COUNTY (Upland)
Oklahoma Agricultural Experiment Station farm
Perkins, 1 mile north, 1 mile west

Rank	Strain	Yield	Pct. Stand	Pct. Lodged	Rank	Strain	Yield	Pct. Stand	Pct. Lodged		
Early Maturity											
3 grains planted per hill											
1	Merit Key- stone 39	39.7	93	47	16	U. S. 35	31.2	93	30		
2	U. S. 13	39.1	90	36	17	Pioneer 334	31.0	87	26		
3	Ohio C-38	39.1	95	42	18	Funk G-53	30.9	91	36		
4	Indiana 844D	36.5	94	27	19	U. S. 35 (Mang.)	30.9	87	51		
5	U. S. 379	35.9	90	51	20	Shannon 1100 (ex)	29.8	82	32		
6	Indiana 818	35.7	92	29	21	Indiana 210B	29.7	91	24		
7	Iowealth 25	35.0	88	32	22	Miller 50	29.6	91	34		
8	Ohio C-12	34.9	93	31	23	Shannon 1000 (w) (ex)	27.5	86	30		
9	Embro 95	34.8	89	31	24	U. S. 13 2nd Generation	26.6	90	27		
10	Indiana 610B	33.5	94	47	25	U. S. 44-1	23.3	78	22		
11	Illinois 751	33.1	91	39	Average						
12	Pioneer 339	32.6	90	37					31.1	90	35
13	Embro 1020	32.3	90	37							
14	McNeilly 1942	31.6	90	50							
15	Iowealth 25A	31.3	90	39							

Significant Difference: A difference of less than 5.6 bushels per acre between any two strains should not be considered significant in this test.

Medium Early Maturity									
3 grains planted per hill									
1	Pioneer 332	37.6	94	30	14	Henry Field 129L	29.2	90	33
2	Merit Keystone U. S. 13	36.3	94	43	15	Pioneer 336	28.7	94	23
3	Pfister 170	33.6	88	45	16	Miller 13	28.7	90	33
4	Crost-Rite Mo. 313	33.0	89	42	17	Merit Keystone 43	28.7	95	35
5	Ward 120A	32.3	90	44	18	U. S. 13	27.2	85	39
6	Embro 36	31.8	91	49	19	U. S. 13 (Mang.)	27.1	95	31
7	Razorback U. S. 13	31.3	93	37	20	Miller 201	26.9	89	35
8	Shannon 1300	31.1	89	31	21	McNeilly 1940-A	26.0	88	42
9	Merit Keystone 38	30.9	94	39	22	Iowealth 29A	25.9	93	30
10	Henry Field 135R	30.6	92	37	23	Pioneer 300	25.7	91	32
11	Funk G-94	30.0	89	37	24	*Hays Golden	19.8	78	72
12	McNeilly 1940	29.8	93	52	25	Funk 52007 (ex)	15.3	89	48
13	Reid-National 125	29.7	68	40	Average				
							29.1	90	39

Signifinct Difference: A difference of less than 6.9 bushels per acre between any two strains should not be considered significant in this test.

TABLE IX—Payne County (Upland), Continued.

Rank	Strain	Yield	Pct. Stand	Pct. Lodged	Rank	Strain	Yield	Pct. Stand	Pct. Lodged
Medium Late Maturity									
2 grains planted per hill									
1	Embro 49	32.7	95	39	14	Crost-Rite			
2	Reid-National 134D	31.3	93	51	15	Mo. 8	26.3	73	57
3	Illinois 200 (Mang.)	31.1	90	38	16	Shannon 1500	26.1	83	29
4	Crost-Rite Mo. 148	29.5	88	43	17	*Midland Yellow Dent	26.0	91	50
5	Razorback Mo. 8	29.2	91	45	18	Illinois 448	26.0	93	60
6	Funk 2516 (ex)	28.6	88	61	19	*Wood's Corn (w)	25.0	92	56
7	Illinois 200	28.4	93	26	20	Razorback Kas. 2234 (w)	24.9	91	62
8	Merit Keystone 40	28.0	88	42	21	Henry Field 32N (ex)	24.4	89	47
9	Ward 125	27.9	94	54	22	Pfister 2655 (ex)	23.9	74	38
10	K-2234 (Mang.) (w)	27.6	94	69	23	Pfister 660	23.5	84	72
11	Henry Field 135	27.3	96	60	24	*Yellow Sur- cropper	22.0	86	47
12	McNeilly 1980	27.3	94	62	25	Missouri 8 (Mang.)	21.7	63	48
13	Shannon 1400 (w) (ex)	26.5	86	39		Henry Field 135L	19.8	91	25
						Average	26.6	88	49

Significant Difference: A difference of less than 4.8 bushels per acre between any two strains should not be considered significant in this test.

Late Maturity									
2 grains planted per hill									
1	Funk G-711	31.2	96	69	16	Iowearth TX	21.3	78	64
2	Reid-National 134T	29.9	97	56	17	Tennessee 10 (w)	20.9	91	78
3	Kansas 1585	29.5	99	55	18	Funk G-716	20.8	96	78
4	Merit Keystone 222	27.7	92	72	19	*Ferguson Yellow Dent	20.5	90	64
5	Texas 20	27.2	94	72	20	Tennessee 15 (w)	20.3	90	62
6	Illinois 448	27.0	96	60	21	*Groenemans Mort- gage Lifter	18.1	75	66
7	Texas 18	26.0	81	74	22	*Reid Yellow Dent	17.1	96	56
8	Texas 12	25.6	94	74	23	*Oklahoma Silver- mine (w)	16.5	95	54
9	Merit Keystone 106W (w)	25.3	93	21	24	Funk G-789W (w)	13.5	47	59
10	Pfister 630 (w)	25.2	85	77	25	Texas 22	9.9	68	65
11	Texas 9W (w)	24.9	90	79		Average	22.8	88	64
12	Kansas 1583	24.2	93	70					
13	Reid-Natinal 134TH	22.6	95	57					
14	Embro 1001	22.0	83	76					
15	Ward 135W (w)	21.8	89	53					

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 IX—Payne County (Upland), Continued.

Rank	Strain	Pct. Yield	Pct. Stand Lodged	Rank	Strain	Pct. Yield	Pct. Stand Lodged
3-year Average: 1944, 1945, 1946							
1	Pioneer 332	41.0	17	25	Ward 125	34.6	43
2	Ohio C-38	40.9	22	26	Indiana 210B	34.3	14
3	U. S. 13	39.9	19	27	Crost-Rite		
4	Merit Keystone				Mo. 8	34.2	33
	39	39.6	24	28	U. S. 35	33.5	24
5	Indiana 844D	39.0	17	29	Tennessee 10		
6	Indiana 818	38.8	15		(w)	31.6	51
7	Crost-Rite			30	Reid-National		
	Mo. 313	38.8	21		134D	31.5	46
8	Illinois 751	38.3	21	31	Kansas 1583	31.5	50
9	Indiana 610B	38.0	27	32	Embryo 1001	31.5	61
10	Ward 120A	37.9	25	33	Reid-National		
11	Crost-Rite				134T	31.4	32
	Mo. 148	37.8	21	34	*Wood's Corn		
12	Shannon 1300	37.5	18		(w)	30.0	53
13	Illinois 200	37.4	20	35	Texas 12	29.9	56
14	Funk G-94	37.1	22	36	Tennessee 15		
15	Reid-National				(w)	29.2	61
	125	37.1	30	37	Reid-National		
16	Merit Keystone				134TH	28.9	51
	38	36.7	24	38	Iowealth TX	27.8	52
17	Kansas 1585	36.4	41	39	*Hays Golden	27.3	54
18	K-2234 (Mang.)			40	*Yellow Sur-		
	(w)	36.2	47		cropper	26.6	41
19	Shannon 1500	36.0	18	41	*Reid Yellow		
20	Pioneer 334	35.9	15		Dent	25.1	49
21	Funk G-711	35.9	54	42	*Ferguson Yellow		
22	Merit Keystone				Dent	24.6	59
	40	35.5	25	43	*Groenemans Mort-		
23	Embryo 1020	35.2	23		gage Lifter	23.0	60
24	Pioneer 300	34.9	15		Average	34.1	34

TABLE X.—SEMINOLE COUNTY (North Canadian Bottom)
 Ambrose Crain farm; Prague, 8 miles south and
 3 miles west

Planted March 25; harvested September 27

Rank	Strain	Pct. Yield	Pct. Stand Lodged	Rank	Strain	Pct. Yield	Pct. Stand Lodged
Early Maturity							
5 grains planted per hill							
1	Ohio C-12	65.3	80	1	U. S. 35		
2	U. S. 13	64.7	74	9	(Mang.)	60.1	68
3	Funk G-53	62.8	81	2	11	Illinois 751	58.8
4	Merit Keystone				12	Iowealth 25A	57.3
	39	62.7	70	7	13	Iowealth 25	56.8
5	Indiana 818	62.2	65	4	14	U. S. 35	56.7
6	Ohio C-38	61.3	85	2	15	Indiana 610B	55.5
7	U. S. 379	61.3	77	7	16	Shannon 1000	
8	Embryo 95	60.9	75	4		(w) (ex)	53.8
9	U. S. 44-1	60.4	64	4			66

TABLE X—Seminole County, Continued.

Rank	Strain	Yield	Pct. Stand	Pct. Lodged	Rank	Strain	Yield	Pct. Stand	Pct. Lodged
17	Indiana 844D	53.1	72	2	23	Shannon 1100			
18	McNeilly 1942	52.5	54	15		(ex)	48.2	63	4
19	Pioneer 339	51.9	73	2	24	U. S. 13 2nd			
20	Indiana 210B	51.5	55	5		Generation	45.9	71	15
21	Embro 1020	50.0	61	2	25	Miller 50	44.6	68	5
22	Pioneer 334	48.9	57	10		Average	56.3	69	5

Significant Difference: A difference of less than 10.7 bushels per acre between any two strains should not be considered significant in this test.

Medium Early Maturity
4 grains planted per hill

1	Henry Field 135R	68.5	70	3	13	Embro 36	55.1	78	6
2	Merit Keystone U. S. 13	64.3	83	6	14	U. S. 13	54.5	74	5
3	Crost-Rite Mo. 313	63.0	74	8	15	Funk 52007 (ex)	53.7	72	19
4	Merit Keystone 38	62.9	80	8	16	Henry Field 129L	52.6	76	4
5	Funk G-94	61.2	78	3	17	Iowealth 29A	52.2	78	6
6	Pfister 170	60.7	71	9	18	Keystone 43	52.0	80	6
7	Ward 120A	59.3	84	2	19	Miller 13	51.4	69	11
8	Reid-National 125	57.8	80	3	20	McNeilly 1940	50.5	70	23
9	Pioneer 300	57.8	74	11	21	Pioneer 332	50.3	81	4
10	Razorback U. S. 13	57.6	68	8	22	Shannon 1300	50.2	59	13
11	Pioneer 336	56.5	85	4	23	McNeilly 1940-A	47.7	65	16
12	U. S. 13 (Mang.)	55.8	73	5	24	Miller 201	43.9	55	3
					25	*Hays Golden	25.1	44	26
						Average	54.6	73	8

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

Medium Late Maturity
4 grains planted per hill

1	Embro 49	60.6	75	9	13	Shannon 1400 (w) (ex)	49.1	67	5
2	Illinois 200 (Mang.)	57.7	71	8	14	Pfister 2655 (ex)	48.3	48	8
3	Funk 2516 (ex)	56.5	65	12	15	K-2234 (Mang.) (w)	46.5	74	10
4	McNeilly 1980	56.4	76	5	16	Pfister 660	46.3	76	9
5	Merit Keystone 40	54.3	60	14	17	Crost-Rite Mo. 148	45.7	56	9
6	Ward 125	53.9	75	3	18	Henry Field 135	45.6	75	6
7	Shannon 1500	53.0	72	8	19	Missouri 8 (Mang.)	42.9	34	21
8	Razorback Kas. 2234 (w)	52.9	67	15	20	Henry Field 135L	40.5	63	7
9	Razorback Mo. 8	52.5	80	31	21	Crost-Rite Mo. 8	40.4	45	15
10	Henry Field 32N (ex)	50.7	75	3					
11	Illinois 200	49.7	68	7					
12	Illinois 448	49.3	73	8					

TABLE X—Semnole County, Continued.

Rank	Strain	Yield	Pct. Stand	Pct. Lodged	Rank	Strain	Yield	Pct. Stand	Pct. Lodged
22	Reid-National				24	*Yellow Sur-cropper	31.0	74	3
	134D	39.3	68	3	25	*Wood's Corn (w)	31.0	66	20
23	*Midland Yellow				Average	47.6	67	11	
	Dent	36.5	63	28					

Significant Difference: A difference of less than 14.7 bushels per acre between any two strains should not be considered significant in this test.

Late Maturity
3 grains planted per hill

1	Reid-National				15	Illinois 448	52.1	67	12
	134T	75.0	79	5	16	Ward 135W (w)	51.2	66	15
2	Funk G-711	70.8	80	21	17	Texas 12	50.3	58	24
3	Kansas 1585	69.0	73	12	18	Iowearth TX	46.5	52	4
4	Merit Keystone				19	Merit Keystone			
	222	65.3	68	18		106W (w)	44.4	54	9
5	Funk G-716	65.1	76	20	20	*Reid Yellow			
6	Texas 20	63.6	81	25		Dent	42.4	84	19
7	Texas 9W (w)	61.3	60	33	21	*Groenemans Mort-gage Lifter	42.0	58	26
8	Tennessee 15				22	*Ferguson Yellow			
	(w)	59.3	85	28		Dent	40.9	56	29
9	Kansas 1583	57.9	80	13	23	*Oklahoma Silver-mine (w)	38.6	73	31
10	Tennessee 10				24	Funk G-789W			
	(w)	55.0	77	14		(w)	36.6	25	20
11	Pfister 630 (w)	53.8	74	15	25	Texas 22	33.3	26	8
12	Embro 1001	53.8	59	27		Average	53.4	66	19
13	Texas 18	53.5	61	27					
14	Reid-National								
	134TH	52.6	75	14					

Significant Difference: A difference of less than 12.6 bushels per acre between any two strains should not be considered significant in this test.

3-year Average: 1944, 1945, 1946

1	Kansas 1585	78.7			12	Illinois 751	60.2		
2	Tennessee 10				13	*Groenemans Mort-gage Lifter	57.9		
	(w)	74.5			14	U. S. 35			
3	Texas 12	72.1				(Mang.)	56.4		
4	Kansas 1583	70.7			15	Reid-National			
5	K-2234 (Mang.)					134D	55.6		
	(w)	70.4			16	Embro 1020	54.1		
6	Tennessee 15				17	*Reid Yellow			
	(w)	67.7				Dent	53.3		
7	Crost-Rite				18	*Oklahoma Silver-mine (w)	52.4		
	Mo. 148	64.2			19	*Ferguson Yellow			
8	Merit Keystone					Dent	49.0		
	38	63.7			20	*Hays Golden	47.1		
9	Crost-Rite					Average	61.6		
	Mo. 8	62.0							
10	U. S. 13	61.9							
11	Pioneer 332	60.9							

TABLE XI.—TULSA COUNTY (Bottom land)
Oklahoma Vegetable Research Station, 1½ miles northeast (across river)

Planted April 13; harvested September 3

Rank	Strain	Yield	Pct. Stand	Pct. Lodged	Rank	Strain	Yield	Pct. Stand	Pct. Lodged
Early Maturity									
5 grains planted per hill and thinned to 3 plants per hill									
1	Merit Keystone 39	89.9	100	1	14	Ohio C-38	72.5	97	1
2	Indiana 610B	82.2	100	2	15	U. S. 44-1	71.8	95	1
3	U. S. 13	81.2	97	0	16	Pioneer 339	71.6	97	0
4	Ohio C-12	80.4	97	0	17	U. S. 35	71.3	98	0
5	Indiana 818	78.1	98	1	18	Pioneer 334	71.0	97	0
6	Embros 95	78.0	100	1	19	Illinois 751	70.9	100	0
7	U. S. 379	77.4	99	0	20	Miller 50	68.7	98	2
8	Iowealth 25A	76.5	91	2	21	McNeilly 1942	67.4	90	1
9	Iowealth 25	75.5	95	0	22	Indiana 844-D	66.0	90	0
10	Funk G-53	75.0	100	1	23	Shannon 1100 (ex)	64.3	96	0
11	Shannon 1000 (w) (ex)	74.4	98	2	24	Indiana 210B	64.0	100	5
12	Embros 1020	73.1	93	1	25	U. S. 13 2nd Generation	56.1	99	1
13	U. S. 35 (Mang.)	72.9	90	2	Average		73.2	96	1

Significant Difference: A difference of less than 11.2 bushels per acre between any two strains should not be considered significant in this test.

Medium Early Maturity									
4 grains planted per hill and thinned to three plants									
1	Pioneer 332	87.2	98	1	14	Merit Keystone			
2	Pfister 170	78.7	100	0	15	U. S. 13	72.3	97	1
3	Reid-National 125	76.7	100	1	16	Miller 13	71.8	96	0
4	U. S. 13	76.3	97	0	16	Crost-Rite Mo. 313	71.8	95	0
5	Henry Field 129L	75.8	96	0	17	U. S. 13 (Mang.)	71.8	96	2
6	Pioneer 336	75.6	98	0	18	Funk G-94	70.8	94	1
7	Ward 120A	75.0	97	1	19	Razorback U. S. 13	70.3	99	0
8	Henry Field 135R	74.9	97	0	20	Funk 52007 (ex)	68.1	98	5
9	Embros 36	74.5	99	0	21	McNeilly 1940-A	65.7	85	1
10	Merit Keystone 43	73.4	98	0	22	McNeilly 1940	65.1	96	0
11	Pioneer 300	73.3	93	0	23	Iowealth 29A	61.7	92	0
12	Merit Keystone 38	73.3	98	1	24	Miller 201	61.3	91	1
13	Shannon 1300	72.8	96	1	25	*Hays Golden	47.8	68	7
Average							71.4	95	1

Significant Difference: A difference of less than 10.7 bushels per acre between any two strains should not be considered significant in this test.

TABLE XI—Tulsa County, Continued.

Rank	Strain	Yield	Pct. Stand	Pct. Lodged	Rank	Strain	Yield	Pct. Stand	Pct. Lodged
Medium Late Maturity									
4 grains planted per hill and thinned to three plants per hill									
1	K-2234 (Mang.) (w)	90.4	99	2	14	Crost-Rite Mo. 8	71.2	89	1
2	Crost-Rite Mo. 148	81.5	96	0	17	Illinois 448	70.9	97	1
3	Funks 1516 (ex)	80.9	98	3	16	Razorback Kas. 2234 (w)	70.0	96	0
4	Illinois 200	76.0	99	3	17	Ward 125	70.0	99	3
4	Henry Field 135	76.0	100	3	18	Henry Field 32N (ex)	69.9	97	0
6	McNeilly 1980	75.6	97	3	19	Merit Keystone 40	69.8	97	2
7	Illinois 200 (Mang.)	75.5	96	0	20	Razorback Mo. 8	69.4	97	2
8	Reil-National 134D	75.5	100	1	21	Shannon 1500	65.9	98	6
9	*Wood's Corn (w)	74.0	84	2	22	Pfister 660	65.8	98	2
10	Shannon 1400 (w) (ex)	73.3	97	12	23	Pfister 2655 (ex)	65.7	89	1
11	*Midland Yellow Dent	72.0	99	2	24	Missouri 8 (Mang.)	60.6	79	3
12	Embro 49	71.7	98	2	25	*Yelow Sur- cropper	54.8	87	1
13	Henry Field 135L	71.4	95	1	Average		71.9	95	2

Significant Difference: A difference of less than 9.3 bushels per acre between any two strains should not be considered significant in this test.

Late Maturity
3 grains planted per hill

1	Tennessee 15 (w)	86.3	91	10	14	Merit Keystone 106W (w)	65.9	84	1
2	Reid-National 134T	83.4	95	3	15	Embro 1001	63.2	69	6
3	Funk G-716	81.9	88	5	16	Pfister 630 (w)	61.3	78	2
4	Funk G-711	80.6	95	3	17	Texas 18	61.1	56	14
5	Merit Keystone 222	79.2	90	7	18	*Reid Yellow Dent	58.8	91	2
6	Kansas 1585	78.7	92	1	19	Iowearth TX	57.4	72	6
7	Texas 20	76.6	89	7	20	Texas 9W (w)	56.1	67	9
8	Illinois 448	76.5	91	3	21	*Oklahoma Silver- mine (w)	55.8	93	6
9	Ward 135W (w)	73.6	89	4	22	*Groenemans Mort- gage Lifter	54.1	66	5
10	Kansas 1583	72.8	89	1	23	*Ferguson Yellow Dent	39.3	64	6
11	Tennessee 10 (w)	70.9	83	9	24	Funk G-789W (w)	32.0	23	13
12	Reid-National 134TH	67.1	91	7	25	Texas 22	26.8	31	7
13	Texas 12	66.3	82	7	Average		65.0	78	6

Significant Difference: A difference of less than 20.5 bushels per acre between any two strains should not be considered significant in this test.

TABLE IX—Tulsa County, Continued.

Rank	Strain	Yield	Pct. Stand	Pct. Lodged	Rank	Strain	Yield	Pct. Stand	Pct. Lodged
3-year Average: 1944, 1945, 1946									
1	Ohio C-38	77.3			11	*Groenemans Mort- gage Lifter	57.4		
2	Illinois 200	71.9			12	*Reid Yellow Dent	53.0		
3	Embros 1020	71.6			13	*Hays Golden	50.3		
4	U. S. 13	71.4			14	*Oklahoma Silver- mine (w)	48.9		
5	Pioneer 334	69.9			15	*Ferguson Yellow Dent	47.1		
6	Illinois 751	68.4							
7	U. S. 44-1	67.9							
8	U. S. 35 (Mang.)	67.5							
9	Shannon 1300	67.4							
10	*Wood's Corn (w)	62.5				Average	63.5		

SOURCES OF SEED

SOURCE	STRAIN	MATURITY GROUP
Ed. F. Mangelsdorf & Bro., Inc., Atchison, Kan.	Embro 36	Medium Early
	Embro 49	Medium Late
	Embro 95	Early
	Embro 1001	Late
	Embro 1020	Early
C. F. McMullin Estate, Sikeston, Mo.	Crost-Rite Mo. 8	Medium Late
	Crost-Rite Mo. 148	Medium Late
	Crost-Rite Mo. 313	Medium Early
Peppard Seed Company, Kansas City, Mo.	Funk G-53	Early
	Funk G-94	Medium Early
	Funk G-711	Late
	Funk G-716	Late
	Funk G-789W (w)	Late
	Funk 2516 (ex)	Medium Late
	Funk 52007 (ex)	Medium Early
Oklahoma Experiment Station, Stillwater, Okla.	*Ferguson Yellow Dent	Late
	*Groenemans Mortgage Lifter	Late
	*Hays Golden	Medium Early
Henry Field Hybrid Corn Co., Shenandoah, Iowa	Henry Field 32N (ex)	Medium Late
	Henry Field 129L	Medium Early
	Henry Field 135	Medium Late
	Henry Field 135L	Medium Late
	Henry Field 135R	Medium Early
Oklahoma Experiment Station, Stillwater, Okla.	Illinois 200	Medium Late
Ed. F. Mangelsdorf & Bro., Inc., Atchison, Kan.	Illinois 200 (Mang.)	Medium Late
Oklahoma Experiment Station, Stillwater, Okla.	Illinois 448	Medium Late and Late
	Illinois 751	Early
	Indiana 210B	Early
	Indiana 610B	Early
	Indiana 818	Early
	Indiana 844D	Early

SOURCE	STRAIN	MATURITY GROUP
Iowealth Hybrid Corn Co., Lawson, Mo.	Iowealth 25	Early
	Iowealth 25A	Early
	Iowealth 29A	Medium Early
	Iowealth TX	Late
Ed. F. Mangelsdorf & Bro., Inc., Atchison, Kan. Oklahoma Experiment Station, Stillwater, Okla.	K-2234 (Mang.) (w)	Meidum Late
	Kansas 1583	Late
Nebraska Seed Company, Omaha, Neb.	Kansas 1585	Late
	McNeilly 1940	Medium Early
	McNeilly 1940-A	Medium Early
	McNeilly 1942	Medium Early
Merit Mills, Oklahoma City, Okla.	McNeilly 1980	Medium Late
	Merit Keystone U. S. 13	Medium Early
	Merit Keystone 38	Medium Early
	Merit Keystone 39	Early
	Merit Keystone 40	Medium Late
	Merit Keystone 43	Medium Early
Oklahoma Experiment Station, Stillwater, Okla. Ralph Kipper, Seedsman, Ordway, Colo.	Merit Keystone 106W (w)	Late
	Merit Keystone 222	Late
	*Midland Yellow Dent	Medium Late
	Miller 13	Medium Early
Ed. F. Mangelsdorf & Bro., Inc., Atchison, Kan. Oklahoma Experiment Station, Stillwater, Okla.	Miller 50	Early
	Miller 201	Medium Early
	Missouri 8 (Mang.)	Medium Late
	Ohio C-12	Early
Pfister Associated Growers, Inc., El Paso, Ill.	Ohio C-38	Early
	*Oklahoma Silvermine	Late
	Pfister 170	Medium Early
	Pfister 630 (w)	Late
	Pfister 660	Medium Late
	Pfister 2655 (ex)	Medium Late

SOURCE	STRAIN	MATURITY GROUP
Pioneer Hybrid Corn Co., Coon Rapids, Iowa	Pioneer 300	Medium Early
	Pioneer 332	Medium Early
	Pioneer 334	Early
	Pioneer 336	Medium Early
	Pioneer 339	Early
Jones Brothers Seed Co., Van Buren, Ark.	Razorback U. S. 13	Medium Early
	Razorback Mo. 8	Medium Late
	Razorback Kas. 2234 (w)	Medium Late
Reid National Corn Co., Anamosa, Iowa	Reid-National 125	Medium Early
	Reid-National 134D	Medium Late
	Reid-National 134T	Late
	Reid-National 134TH	Late
Oklahoma Experiment Station, Stillwater, Okla.	*Reid Yellow Dent	Late
Shannon Feed Co., Tulsa, Okla.	Shannon 1000 (w) (ex)	Early
	Shannon 1100 (ex)	Early
	Shannon 1300	Medium Early
	Shannon 1400 (w) (ex)	Medium Late
	Shannon 1500	Medium Late
Oklahoma Experiment Station, Stillwater, Okla.	Tennessee 10 (w)	Late
	Tennessee 15 (w)	Late
	Texas 9W (w)	Late
	Texas 12	Late
	Texas 18	Late
	Texas 20	Late
	Texas 22	Late
	U. S. 13	Early and Medium Early
	U. S. 13, 2nd Generation	Early

SOURCE	STRAIN	
Ed. F. Mangelsdorf & Bro., Inc., Atchison, Kan.	U. S. 13 (Mang.)	Medium Early
	U. S. 35 (Mang.)	Early
Oklahoma Experiment Station, Stillwater, Okla.	U. S. 35	Early
	U. S. 44-1	Early
	U. S. 379	Early
Montgomery Ward & Co., Chicago, Ill.	Ward 120A	Medium Early
	Ward 125	Medium Late
	Ward 135W (w)	Late
Oklahoma Experiment Station, Stillwater, Okla.	*Wood's Corn	Medium Late
	*Yellow Surcropper	Medium Late

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