



OKLAHOMA AGRICULTURAL EXPERIMENT STATION Bulletin B-317 December, 1947

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Performance Tests of CORN VARIETIES AND HYBRIDS, 1947

By JAMES S. BROOKS and ROY A. CHESSMORE Respectively, Associate Agronomist (Corn), and Assistant in Agronomy

The 1947 Oklahoma Agricultural Experiment Station Corn Performance Tests were conducted at 7 locations in the corngrowing 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 Medium Early Maturing Medium Late Maturing †Illinois 448 Embro 36 †Crost-Rite Mo. 148 †Funk G-53 McCurdy 135M †Crost-Rite Mo. 313 †Funk G-94 †Texas 18 Embro 49 †Indiana 610B United U-68 Funk G-135 †Indiana 818 †Illinois 200 McCurdy 987M Iowealth 29A †Merit Keystone 38 Kansas 1639 †Merit Keystone 39 Kansas 1784 †Ohio C-12 McCurdy 130M †Ohio C-38 †Merit Keystone 40 †Pfister 170 †Pioneer 332 Pfister 173 Razorback 111 Pioneer 335 Razorback U. S. 13 Late Maturing White Hybrids †Shannon 1300 †Funk G-711 †Kansas 2234 (w) United U-50 Kansas 2275 (w) Iowealth TXN †U. S. 13 †Kansas 1583 McCurdy 1005W (w) †Tennessee 10 (w) †U. S. 35 +Kansas 1585 +Ward 120A Merit Keystone 222 Texas 9W (w) Ward 135W (w) †Texas 12 †Texas 20

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:
 - 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.
 - 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.

Strain

Rank

(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

Rank

Strain

Pct.

Yld. Std. Ldgd.

Pct.

Pct. Pct. Yld. Std. Ldgd.

,		E	arly N	Laturity			
	3	grain	ns pla	nted per hill			
Razorback U.S. 13	28.1	59	1	14 Funk G-53	24.8	63	3
Merit Keystone 39	28.1	49	6	15 Pioneer 335	24.3	54	. 9
Pfister 170	27.2	62	4	16 Illinois 751	23.8	50	2
Merit Keystone 38	27.2	62	6	17 Miller 13	23.7	54	2
U. S. 13	27.0	63	3	18 Hoosier Crost F. 138	23.7	54	. 7
McCurdy 987M	26.8	63	0	19 Embro 36	23.5	64	4
Ward 120A	26.5	54	6	20 Pfister 173	23.4	55	8
Shannon 1100 (ex)	26.4	56	3	21 Indiana 610B	23.2	63	10
Embro 95	26.1	57	5	22 Indiana 818	23.1	54	3
Ohio C-12	25.8	62	3	23 Hoosier Crost 616	23.0	53	7
McCurdy 112M	25.7	64	4	24 United U-50	22.2	63	5
Shannon 1300	25.7	62	9	25 Ohio C-38	21.9	67	1
Funk G-94	25.0	56	7	Average	25.0	59	5
nificant Difference: A	differ	rence	of less	than 6.7 bushels per acre	etween	anv	two
ains should not be con	ısidere	d sign	aificant	in this test.			
	TV	[eðin	m Ear	ly Maturity			
Millor 947		_	•	•	20.2	GE.	7
			- 1				3
							5
							3
							4
			1				18
			- 1				5
			- 1				7
			- 1				2
			- 1				:9
		_			14.0	99	9
			- 1		11.6	60	11
			- 1	(w)	11.0	04	11
Oklahoma 7604(ex)		53	19	Awaraga	21.1	59	8
TANAMINALISE (DOMESTAX)	41.1	อง	19	Average	41.1	บช	•
				than 5.5 bushels per acre a			
	Merit Keystone 39 Pfister 170 Merit Keystone 38 U. S. 13 McCurdy 987M Ward 120A Shannon 1100 (ex) Embro 95 Ohio C-12 McCurdy 112M Shannon 1300 Funk G-94 mificant Difference: A ains should not be con Miller 247 Oklahoma 7602 (ex) Oklahoma 7601 (ex) Funk G-135 Pioneer 332 Embro 49 Shannon 1500 Shannon 1700 Ward 125 Merit Keystone 40	Razorback U. S. 13 28.1 Merit Keystone 39 28.1 Pfister 170 27.2 Merit Keystone 38 27.2 U. S. 13 27.0 McCurdy 987M 26.8 Ward 120A 26.5 Shannon 1100 (ex) 26.4 Embro 95 26.1 Ohio C-12 25.8 McCurdy 112M 25.7 Shannon 1300 25.7 Funk G-94 25.0 mificant Difference: A differation of the considere deconsidere deco	3 grain Razorback U. S. 13 28.1 59 Merit Keystone 39 28.1 49 Pfister 170 27.2 62 Merit Keystone 38 27.2 62 U. S. 13 27.0 63 McCurdy 987M 26.8 63 Ward 120A 26.5 54 Shannon 1100 (ex) 26.4 56 Embro 95 26.1 57 Ohio C-12 25.8 62 McCurdy 112M 25.7 64 Shannon 1300 25.7 62 Funk G-94 25.0 56 mificant Difference: A difference ains should not be considered sign Mediu 3 grain Miller 247 27.5 55 Oklahoma 7602 (ex) 25.5 62 Oklahoma 7601 (ex) 25.1 58 Funk G-135 24.6 59 Pioneer 332 23.4 61 Embro 49 23.1 62 Shannon 1500 23.0 53 Shannon 1700 22.8 58 Ward 125 22.6 54 Merit Keystone 40 22.6 51 Crost-Rite Mo. 148 22.3 62 Illinois 200 22.0 63	3 grains pla Razorback U. S. 13 28.1 59 1 Merit Keystone 39 28.1 49 6 Pfister 170 27.2 62 4 Merit Keystone 38 27.2 62 6 U. S. 13 27.0 63 3 McCurdy 987M 26.8 63 0 Ward 120A 26.5 54 6 Shannon 1100 (ex) 26.4 56 3 Embro 95 26.1 57 55 Ohio C-12 25.8 62 3 McCurdy 112M 25.7 64 4 Shannon 1300 25.7 62 9 Funk G-94 25.0 56 7 mificant Difference: A difference of less ains should not be considered significant Medium Ear 3 grains plan Miller 247 27.5 55 3 Oklahoma 7602 (ex) 25.5 62 20 Oklahoma 7601 (ex) 25.1 58 22 Funk G-135 24.6 59 18 Pioneer 332 23.4 61 11 Embro 49 23.1 62 3 Shannon 1700 22.8 58 6 Ward 125 22.6 54 4 Merit Keystone 40 22.6 51 8 Crost-Rite Mo. 148 22.3 62 5 Illinois 200 22.0 63 6	Merit Keystone 39 28.1 49 6 15 Pioneer 335 Pfister 170 27.2 62 4 16 Illinois 751 Merit Keystone 38 27.2 62 6 17 Miller 13 U. S. 13 27.0 63 3 18 Hoosier Crost F. 138 McCurdy 987M 26.8 63 0 19 Embro 36 Ward 120A 26.5 54 6 20 Pfister 173 Shannon 1100 (ex) 26.4 56 3 21 Indiana 610B Embro 95 26.1 57 5 22 Indiana 818 Ohio C-12 25.8 62 3 23 Hoosier Crost 616 McCurdy 112M 25.7 64 4 24 United U-50 Shannon 1300 25.7 62 9 25 Ohio C-38 Funk G-94 25.0 56 7 Average mificant Difference: A difference of less than 6.7 bushels per acre to also should not be considered significant in this test. Medium Early Maturity 3 grains planted per hill	Razorback U. S. 13 28.1 59 1 14 Funk G-53 24.8 Merit Keystone 39 28.1 49 6 15 Pioneer 335 24.3 Pfister 170 27.2 62 4 16 Illinois 751 23.8 Merit Keystone 38 27.2 62 6 17 Miller 13 23.7 U. S. 13 27.0 63 3 18 Hoosier Crost F. 138 23.7 McCurdy 987M 26.8 63 0 19 Embro 36 23.5 Ward 120A 26.5 54 6 20 Pfister 173 23.4 Shannon 1100 (ex) 26.4 56 3 21 Indiana 610B 23.2 Embro 95 26.1 57 5 22 Indiana 818 23.1 Ohio C-12 25.8 62 3 23 Hoosier Crost 616 23.0 McCurdy 112M 25.7 64 4 24 United U-50 22.2 Shannon 1300 25.7 62 9 25 Ohio C-38 21.9 Funk G-94 25.0 56 7 Average 25.0 mificant Difference: A difference of less than 6.7 bushels per acre between ains should not be considered significant in this test. Medium Early Maturity 3 grains planted per hill Miller 247 27.5 55 3 15 Razorback 111 20.3 Oklahoma 7602 (ex) 25.5 62 20 16 Kansas 1639 20.0 Oklahoma 7601 (ex) 25.1 58 22 17 U. S. 35 20.0 Funk G-135 24.6 59 18 18 Oklahoma 7201 (ex) 19.9 Pioneer 332 23.4 61 11 19 Crost-Rite Mo. 313 19.7 Embro 49 23.1 62 3 20 Oklahoma 7601 (ex) 18.4 Shannon 1500 23.0 53 5 21 Kansas 1784 18.2 Shannon 1500 22.8 58 6 22 Oklahoma 7603 (ex) 18.2 Ward 125 22.6 54 4 23 McCurdy 130M 17.3 Merit Keystone 40 22.6 51 8 24 *Hays Golden 14.8 Crost-Rite Mo. 148 22.3 62 5 25 *St. Charles White Illinois 200 (ex) 11.6	Razorback U. S. 13 28.1 59 1 14 Funk G-53 24.8 63 Merit Keystone 39 28.1 49 6 15 Pioneer 335 24.3 54 Pfister 170 27.2 62 4 16 Illinois 751 23.8 50 Merit Keystone 38 27.2 62 6 17 Miller 13 23.7 54 U. S. 13 27.0 63 3 18 Hoosier Crost F. 138 23.7 54 McCurdy 987M 26.8 63 0 19 Embro 36 23.5 64 Ward 120A 26.5 54 6 20 Pfister 173 23.4 55 Shannon 1100 (ex) 26.4 56 3 21 Indiana 610B 23.2 63 Embro 95 26.1 57 5 22 Indiana 818 23.1 54 Ohio C-12 25.8 62 3 23 Hoosier Crost 616 23.0 53 McCurdy 112M 25.7 64 4 24 United U-50 22.2 63 Shannon 1300 25.7 62 9 25 Ohio C-38 21.9 67 Funk G-94 25.0 56 7 Average 25.0 59 mificant Difference: A difference of less than 6.7 bushels per acre between any ains should not be considered significant in this test. Medium Early Maturity 3 grains planted per hill Miller 247 27.5 55 3 15 Razorback 111 20.3 65 Oklahoma 7601 (ex) 25.1 58 22 17 U. S. 35 20.0 60 Funk G-135 24.6 59 18 18 Oklahoma 7201 (ex) 19.9 61 Pioneer 332 23.4 61 11 19 Crost-Rite Mo. 313 19.7 63 Embro 49 23.1 62 3 20 Oklahoma 7603 (ex) 18.4 63 Shannon 1700 22.8 58 6 22 Oklahoma 7603 (ex) 18.2 59 Ward 125 22.6 54 4 23 McCurdy 130M 17.3 60 Merit Keystone 40 22.6 51 8 24 *Hays Golden 14.8 55 Crost-Rite Mo. 148 22.3 62 5 25 *St. Charles White Illinois 200 (ex) 11.6 62

10 Iowealth TXN

12 Oklahoma T81

(w)

(ex)

13 United U-75

14 Kansas 1585

15 Funk G-716

16 Ward 135W (w)

11 McCurdy 1005W

38.6

38.4

37.9

37.7

37.3

37.1

36.6

strains should not be considered significant in this test.

71 21

80 15

81

73 20

71

82 21

78

14

10

26

Significant Difference: A difference of less than 7.8 bushels per acre between any two

Table I, Carter County, continued.

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.	Rank	Strair	l	Yld.	Pct. Std.	Pct Ldgd
			Medi	ium La	ate Matı	ırity				
		2	gra	ins pla	inted pe	r hill				
	lahoma 7806 (ex		86		14 Ok	lahoma	7811 (ex	39.5	86	
	lahoma 7802 (ex)		89		15 Ok	lahoma	7808 (ex	39.4	87	14
	lahoma 7809 (ex)		79				7807 (ex		85	_
	in o is 44 8	41.8	73		17 Ok	lahoma	1 78 05 (ex)	39.0	73	
	ited U-68	41.6	82		18 Pf	ster 61	2W (w)	38.0	79	13
	lahoma 78 03 (ex)	40.8	74	11	19 Ka	nsas 22	234 (w)	37.5	82	13
7 Pic	neer X 5973				20 Ok	lahoma	7801 (ex)	37.3	58	21
	(ex)	40.6	87		21 Me	rit Ke	ystone			
	Curdy 135M	40.6	75	12	1	106W	(w)	36.4	83	8
9 Te	xas 18	40.2	85	32	22 Ka	nsas 22	75 (w)	35.2	91	4
10 P ic	neer X 3005				23 Mi	ller 105	(w) W0	34.3	57	6
	(ex)	39.6	85	10	24 *M	idland	Yellow			
11 Ok	lahoma 7804					\mathbf{Dent}		32.2	85	10
	(ex)	39.6	78	15	25 *Y	ellow S	ur-			
l2 Em	bro 155W (w)	39.5	80	12		cropper	•	31.9	73	8
l3 Ok	lahoma 7810 (ex)	39.5	85	13	Avera	ge		39.1	80	13
Sign ific	ant Difference: A	diffe	rence	of less	than 7.7	bushels	per acre	betweer	n any	y two
stra ins	should not be cor	sidere	d sig	nifican	t in this	test.				
				ata M	laturity					
		9			nted per	hill				
		-	51 611	iis pia	irica per	11111				
1 Me	rit Keystone 222	45.1	88	18	17 Ok	ahoma	T83			
2 Tex	as 9W (w)	44.0	88	17		(ex)		36.5	79	11
3 Wa	rd 130	42.6	82	12	18 Okl	ahoma	T85			
4 Tex	as 12	42.0	87	28		(ex)		35.9	84	17
5 Tex	as 20	40.2	68	20	19 Okl	ahoma	T82			
6 Okl	ahoma T87 (ex)	39.5	79	14		(ex)		34.2	83	17
7 Kar	nsas 1583	39.5	81	17		k G-71	1	33.8	89	26
8 Okl	ahoma T84 (ex)	39.4	71	19		ahoma	_		-	_3
9 Ten	nessee 10 (w)	39.0	78	15		(ex)		32.2	73	10
	colth MIXAT	00.0	77.1	91		: -1 TT - 11		J=.=		

(Table continued on next page.)

Average

22 *Reid Yellow Dent

(Station)

24 *Ferguson Yellow

25 *Oklahoma Silver-

mine (w)

Dent

23 *Reid Yellow Dent 27.4

31.2

26.9

23.6

36.7

77

77 14

20 28

79

77 17

8

8

Table I, Carter County, continued.

Rank	Strain	Yield I	Pct dgd.	Rank Strain	Yield	Pct. Ldgd
	3-3	year Ave	rage:	1945, 1946, 1947		
1 Tex	as 12	33.7	24	16 Pioneer 332	27.4	12
2 Tex	as 18	31.3	32	17 Crost-Rite Mo. 313	26.6	5
3 Illi	nois 448	30.5	16	18 Crost-Rite Mo. 148	25.1	6
4 Me	rit Keystone 39	30.0	7	19 Funk G-94	24.9	6
	nnessee 10 (w)	30.0	24	20 Illinois 751	24.7	2
6 Ka	nsas 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 Fu	nk G-716	29.3	15	23 Merit Keystone 40	23.6	8
	rd 120A	29.1	7	24 U. S. 35	23.5	4
10 Me	rit Keystone 38	28.9	5	25 *Ferguson Yellow Den	t 20.3	21
	nsas 1583	28.6	15	26 *Reid Yellow Dent	20.0	23
	io C- 38	28.4	1	27 *Oklahoma Silvermine		
13 Ka	nsas 1585	28.3	10	(w)	18.6	13
14 Sha	nnon 1300	28.1	9	28 *Hays Golden	18.3	14
	k G-711	27.6	25	Average	26.6	12

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.
			1	Early I	Matur	ity			
		4	grai	ns pla	nted	per hill			
1 M	Curdy 987M	105.2	88	5 1	14]	Illinois 751	91.5	92	1
2 U.	S. 13	102.1	84	0	15	Pfister 173	90.5	79	0
3 Ur	nited U-50	102.0	83	3 0	16 0	Ohio C-38	89.2	83	7
4 Pie	oneer 335	101.2	83	3 2	17 1	Hoosier Crost I	₽.		
5 H	osier Crost 616	100.0	90	1	1	138	87.9	81	7
6 Oh	nio C-12	98.6	86	2	18 1	Embro 36	87.8	63	4
7 Inc	diana 818	97.7	91	. 1	19 1	McCurdy 112M	87.5	76	1
8 Fu	nk G-94	96.2	75	3	20 1	Indiana 610B	86.3	73	6
9 Fu	nk G-53	96.1	82	2	21 8	Shannon 1100 ((ex) 85.7	73	3
10 Ra	zorback U.S.				22 I	Merit Keystone	39 84.9	64	2
	13	94.2	62	2	23 I	Embro 95	84.8	70	2
11 Pf	ister 170	92.8	72	1	24 1	Miller 13	82.7	75	3
11 Sh	annon 1300	92.8	89	1	25 \	Ward 120A	81.4	75	1
13 Me	erit Keystone 38	92.4	84	2	Ave	rage	92.5	79	2
	cant Difference:						acre betwe	en ar	y two

Table II, Garvin County, continued.

Rank Strain	Yld.		Pct. dgd.	Rank	Strain	Yld.	Pct. Std.	Pet. Ldgd.
	N	Iediun	a Ear	rly Matu	rity			
•	4	grains	plai	nted per	hill			
1 Oklahoma 7602			1	14 U.	S. 35	88.0	89	3
(ex)	98.1	92	1	15 Okl	ahoma 7603			
2 McCurdy 130M	97.3	88	3		(ex)	87. 4	83	4
3 Oklahoma 7601				16 Sha	nnon 1500	87.0	88	2
(ex)	95.7	86	8	17 Kai	nsas 1784	85.4	89	(
4 Illinois 200	94.8	84	3	18 Wa	rd 125	8 2.6	81	2
5 Funk G-135	93.7	80	3	19 Raz	orback 111	82.2	92	:
6 *St. Charles Wh	ite			20 Okl	ahoma 7201			
(w)	91.0	83	3		(ex)	81.7	86	:
7 Merit Keystone	40 91.0	88	4	21 Sha	nnon 1700	80.8	83	:
8 Pioneer 332	90.8	86	1	22 Mil	ler 247	79.7	72	
9 Crost-Rite Mo.				23 OF	ahoma T61			
148	90.6	8 6	1		(ex)	79.0	92	20
0 Kansas 1639	90.5	90	1					
1 Iowealth 29A	89.7	92	1	24 Em		76.7	68	
2 Crost-Rite Mo.				25 *Ha	ıys Golden	65.0	83	10
313	89.6	88	3					
3 Oklahoma 7604				Averag	ge	87.1	85	4
(ex)	89.2	71	5					

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 Late Maturity

3 grains planted per hill

1	Oklahoma 7801			1	14 Kansas 2234			
•	(ex)	98.5	87	3	(w)	84.7	82	2
2	Oklahoma 7807				15 United U-68	84.4	90	1
_	(ex)	95.6	88	1	16 Oklahema 7805			
3	McCurdy 135M	94.5	88	0	(ex)	84.3	86	4
	Oklahoma 7802			1	17 Pfister 612W			
	(ex)	93.8	84	6	(w)	83.4	85	5
5	Kansas 2275 (w)	93.6	92	1	18 Oklahoma 7806			
6	Oklahoma 7803				(ex)	8 3.3	90	5
	(ex)	93.0	89	3	19 *Midland Yellow			
7	Oklahoma 7810				\mathbf{Dent}	83.1	86	10
	(ex)	90.3	92	3	20 Oklahoma 7809			
8	Oklahoma 7811				(ex)	82.0	89	3
	(ex)	89.8	91	3	21 Pioneer X 3905			
9	Texas 18	89.4	82	11	(ex)	79.7	81	0
10	Oklahoma 7808				22 Embro 155W			
	(ex)	87.4	85	4	(w)	76.6	81	3
11	Pioneer X 5973				23 Illinois 448	69.0	6 2	4
	(ex)	85.3	88	1	24 *Yellow Sur-			
12	Oklahoma 7804				cropper	54.7	64	•
	(ex)	85.1	81	9	25 Miller 1050W (w)	52.1	39	•
13	Merit Keystone							
	106W (w)	84.9	87	1	Average	83.9	83	3
Cr.	maidiannt Difference:	A differ	anaa	of loss	then 12.7 bushels ner sere	hatwaen		

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 II, Garvin County, continued.

Rank Strain		Pct. 1 Yield Ld	Pct.	Ra	nk S	train	Yld.	Pct. Std.	Pet Ldgd
		Lat	te I	I atur	ity				
	3	grains	pla	nted	per h	ill			
1 Funk G-711	121.1	92	1	15	*Oklai	homa s	Silver-		
2 McCurdy 1005W					mi	ne (w)	101.1	86	1
(w)	116.7	88	1	16	United	1 U-75	97.0	80	:
3 Ward 135W (w)	115.2	85	1	17	Ward	130	96.8	93	
4 Tennessee 10 (w)	114.9	93	4	18	Texas	9W (v	w) 94.7	81	
5 Oklahoma T84				19	Oklah	oma T	83		
(ex)	111.7	8 3	5	1	(ex)	93.8	80	
6 Merit Keystone				20	Oklah	oma T	87		
222	110.3	82	3		(ex)	93.6	81	1
7 Texas 20	106.2	85	4	21	*Reid	Yellow	Dent 93.1	83	
8 Oklahoma T81				22	*Reid	Yellow	7 Dent		
(ex)	105.8	94	8			ation)	92.8	78	
9 Texas 12	105.0	84	8	99	Funk		91.6	66	
0 Kansas 1583	104.0	87	2	1				00	
1 Oklahoma T86				24		oma T			
(ex)	103.1	84	2	1	(ex)	84.9	83	
2 Iowealth TXN	102.6	74	2 ·	25	*Fergu	ison Y	ellow		
3 Oklahoma T85				1	Dei	nt	60.2	27	1
(ex)	102.3	77	6						
4 Kansas 1585	102.2	90	1	Av	erage		100.8	81	1
Significant Difference: trains should not be c							er acre betwee	en an	y tw

Pct. Pct. Strain Rank Yield Ldgd. Yield Ldgd. Rank Strain 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) 1 87.5 3 Texas 12 107.5 9 13 Indiana 610B 85.6 4 Kansas 1585 99.4 1 14 *Reid Yellow Dent 85.4 7 5 Pioneer 332 98.6 1 15 U.S. 35 0 80.8 6 Kansas 1583 98.3 1 16 *Ferguson Yellow Dent 76.5 9 7 Indiana 818 94.5 17 *Hays Golden 0 65.3 11 8 Merit Keystone 39 92.9 1 18 *Yellow Surcropper 60.9 2 9 U.S. 13 89.8 10 Illinois 200 3 88.5 2 90.3 Average

Table III.—McClain County (Upland)

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

Planted March 27; harvested September 12.

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.	Rank Strain	Yld.	Pct. Std.	Pct Ldgd
			E	arly I	Maturity			
		3		-	nted per hill			
1 Sha	annon 1300	38.9	89	16	13 McCurdy 112M	33.3	78	;
2 M e	rit Keystone 38	37.1	88	13	14 United U-50	33.0	85	1
	nk G-94	36.5	79	13	15 U. S. 13	32.8	78	1
	ster 173	35.8	86	17	16 Embro 95	32.7	77	
	rd 120A	35.6	73	. 5	17 Embro 36	32.4	79	1
	io C-12	35.3	77	2	18 Indiana 818	32.2	81	1
	zorback U.S.				19 Pioneer 335	31.9	86	1
	13	34.8	86	13	20 Pfister 170	30.9	79	
	annon 1100 (ex)	34.8	83	16	21 Funk G-53	30.9	84	10
	liana 610B	34.4	88	19	22 McCurdy 987M	30.9	86	1
	rit Keystone 39	34.0	63	14	23 Hoosier Crost 616	30.8	85	1
l1 Mil		33.7	68	9	24 Illinois 751	29.0	82	1
	osier Crost F.	00.5	-00		25 Ohio C-38	28.5	87	
	138	33.5	80	14	Average	33.4	81	1
	cant Difference: A should not be con				s than 6.2 bushels per acre in this test.	betwee	n an	y tw
	-		Todin.	Fo	rly Maturity			
					nted per hill			
				-				
	lahoma 7604	40.0			13 McCurdy 130M	34.3	79	,
	(ex)	43.6	57	20	14 Shannon 1500	34.1	76	
	ahoma 7603	40.4	50	12	15 Iowealth 29A	34.1	77	1
	(ex)	43.4	76		16 Oklahoma 7601	04.0	=0	0.0
	nsas 1639	42.7	89	6	(ex)	34.0	70	29
	st-Rite Mo.	20.6	00	10	17 Miller 247	33.8	58	- 1
	313 	39.6	88	10	18 Merit Keystone 40	33.8	88	1
	st-Rite Mo. 148	38.1	7 8	13	19 Shannon 1700	32.1	83	(
	ahoma 7201	97.7	E77		20 Pioneer 332 21 Ward 125	31.7	77	
	(ex) orback 111	$37.7 \\ 37.4$	57 76	6 4		31.6	78	
8 U. S		36.7	85	7	22 Funk G-135	30.1	83	1.
	ois 200	36.4	73	11	23 *St. Charles White			
-	bro 49	35.1	76	6	(w)	27.0	88	2
	ahoma T 61	30.1	10	0	24 Kansas 1784	24.9	89	
	(ex)	35.0	67	28	25 *Hays Golden	23.2	62	1
(ahoma 7602	33.0	01	20	20 Hays Golden	43.4	04	1.
2 (1)-1								
	(ex)	35.0	87	29	Average	34.6	77	1:

Table III, McClain County, continued.

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.	Rank	Strain	¥ld.	Pct. Std.	Pct. Ldgd.
					te Mat				
		4	gran	is pia	nted pe	er min			
1 Ka	nsas 2275 (w)	54.1	99	5)	14 O	klahoma 7802			
2 Te	xas 18	53.3	75	36		(ex)	43.5	84	14
3 Ok	lahoma 7803					fister 612W (w)	40.3	81	10
(ez	()	49.7	87	9	16 O	klahoma 7809			
4 Ok	lahoma 7806					(ex)	40.2	88	10
	(ex)	47.5	90	16	17 Pi	oneer X 3005			
	nsas 2234 (w)	47.2	92	9		(ex)	40.1	84	3
6 Ok	lahoma 7807				18 O	klahoma 7804			
	(ex)	46.6	88	19		(ex)	39.5	75	15
7 Ok	lahoma 7801			- 1		nited U-68	39.2	83	_
	(ex)	46.4	70	20		nbro 155W (w)	39.1	85	6
8 P ic	oneer X 5973				21 O	klahoma 7808			
	(ex)	46. 2	99	4		(ex)	37.8	78	19
9 Ok	lahoma 7810				22 *1	Iidland Yellow			
	(ex)	46.2	90	9		Dent	37.3	86	10
	inois 448	46.0	85	9	23 M	Curdy 135M	35.4	83	9
1 Ok	lahoma 7811					iller 1050W (w)	32.4	36	4
	(ex)	45.1	88	16			34.4	30	4
.2 Ok	lahoma 7805		•		25 *Y	Tellow Surcrop-			_
	(ex)	44.1	80	20		per	31.2	70	1
3 M	erit Keystone 10		•	_			40.0		
	(w)	44.0	88	5	Avera	age	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

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

Rank Strain	¥ld.	Pct. Std. I	Pct. Ldgd.	Ran	k Strai	n		Yld.	Pct. Std.	Po Ldge
		Ea	rly l	Matur	itv					
	4		•		per hill					
1 United U-50	48.1	68	13	15]	Illinois '	751		38.5	62	2
2 U. S. 13	47.4	60	24	16 8	Shannon	1100	(ex)	36.8	58	2
3 Shannon 1300	46.1	70	13	17 1	Hoosier	Crost	F.			
4 Embro 36	45.7	67	18		138			36.4	63	1
5 Pfister 173	43.5	77	9	18 1	Razorbac	k U. 8	3. 13		80	1
6 McCurdy 987M	43.5	65	15	19 1	Funk G.	94		36.2	70	:
7 Indiana 610B	43.4	73	15		Miller 1	-		35.7	63	
8 Pioneer 335	42.4	78	8		Hoosier		616	3 5.5	65	:
9 Merit Keystone 38	42.1	72	24		Embro 9	-		34.9	62	
0 McCurdy 112M	41.6	70	16		Indiana			34.3	69	
1 Ohio C-38	40.3	62	11		Ward 12			34.0	58	
2 Funk G-53	39.0	83	18	25 1	Merit Ke	ystone	39	29.1	4 0	
3 Ohio C-12	38.6	65	7					~~ ~		
4 Pfister 170	38.5	73	10		rage			39.8	67	
ignificant Difference: A rains should not be cons						s per a	acre l	between	n any	tı
Service of the servic	N	Aediur	n Ea	rly M	aturity					
	1 4	dediur grains	m Eas	rly Ma	aturity per hill	- 7004	•			
I Iowealth 29A	51.5	Aediur grains	n Eas	rly Ma	a turity per hill Oklahom	a 7604		24.6	50	
l Iowealth 29A 2 Kansas 1784	51.5 46.9	fediur grains 72 73	n Eas	rly Manted	aturity per hill Oklahom (ex)			34.6	50	
I Iowealth 29A 2 Kansas 1784 3 Kansas 1639	51.5	Aediur grains	n Eas	rly Manted	aturity per hill Oklahom (ex) Oklahom					
Iowealth 29A 2 Kansas 1784 3 Kansas 1639 4 Oklahoma T61	51.5 46.9 46.6	fediur grains 72 73 68	n Eas s pla 7 12 9	rly Manted	aturity per hill Oklahom (ex) Oklahom (ex)	a 7601		33.5	66	
I Iowealth 29A 2 Kansas 1784 3 Kansas 1639 4 Oklahoma T61 (ex)	51.5 46.9	fediur grains 72 73	n Eas	rly Manted 15 (aturity per hill Oklahom (ex) Oklahom (ex) Ward 12	a 7601		33.5 32.7	66 55	
I Iowealth 29A 2 Kansas 1784 3 Kansas 1639 4 Oklahoma T61 (ex) 5 Crost-Rite Mo.	51.5 46.9 46.6 44.9	72 73 68	m Eas plas 7 12 9 26	rly Minted 15 (16 (17 \ 18 I	aturity per hill Oklahom (ex) Oklahom (ex) Ward 12	a 7601 5		33.5	66	
I Iowealth 29A 2 Kansas 1784 3 Kansas 1639 4 Oklahoma T61 (ex) 5 Crost-Rite Mo. 313	51.5 46.9 46.6 44.9	72 73 68 70	m Ea. s pla 7 12 9 26	rly Minted 15 (16 (17 \ 18 I	aturity per hill Oklahom (ex) Oklahom (ex) Ward 12 Illinois 2 Oklahom	a 7601 5		33.5 32.7 32.6	66 55 71	
1 Iowealth 29A 2 Kansas 1784 3 Kansas 1639 4 Oklahoma T61 (ex) 5 Crost-Rite Mo. 313 5 Embro 49	51.5 46.9 46.6 44.9 44.4 44.3	72 73 68 70 71 73	m Eas plas 7 12 9 26 9 18	rly Manted 15 (16 (17) 18 I 19 (19 (19)	aturity per hill Oklahom (ex) Oklahom (ex) Ward 12 Illinois 2 Oklahom (ex)	a 7601 5 800 a 7603		33.5 32.7 32.6 31.8	66 55 71 60	
1 Iowealth 29A 2 Kansas 1784 3 Kansas 1639 4 Oklahoma T61 (ex) 5 Crost-Rite Mo. 313 5 Embro 49 7 McCurdy 130M	51.5 46.9 46.6 44.9 44.4 44.3 42.3	72 73 68 70 71 73 67	m Eas plas 7 12 9 26 9 18 13	rly Manted 15 (16 (17) 18 I 19 (19 (19)	aturity per hill Oklahom (ex) Oklahom (ex) Ward 12 Illinois 2 Oklahom (ex) Willer 24	a 7601 5 800 a 7603		33.5 32.7 32.6 31.8 30.5	66 55 71 60 53	
I Iowealth 29A 2 Kansas 1784 3 Kansas 1639 4 Oklahoma T61 (ex) 5 Crost-Rite Mo. 313 5 Embro 49 7 McCurdy 130M 3 Shannon 1700	51.5 46.9 46.6 44.9 44.4 44.3 42.3 40.8	72 73 68 70 71 73 67 72	m Eas plas 7 12 9 26 9 18 13 8	rly Manted 15 (16 (17 \ 18 I 19 (20 M 21 U	aturity per hill Oklahom (ex) Oklahom (ex) Ward 12 Illinois 2 Oklahom (ex) Willer 24 J. S. 35	a 7601 5 800 a 7603 7		33.5 32.7 32.6 31.8 30.5 30.0	66 55 71 60 53 70	
I Iowealth 29A 2 Kansas 1784 3 Kansas 1639 4 Oklahoma T61 (ex) 5 Crost-Rite Mo. 313 5 Embro 49 7 McCurdy 130M 3 Shannon 1700 9 Merit Keystone 40	51.5 46.9 46.6 44.9 44.4 44.3 42.3 40.8 40.1	72 73 68 70 71 73 67 72 67	m Eas pla 7 12 9 26 9 18 13 8 7	rly Manted 15 C 16 C 17 V 18 I 19 C 20 M 21 U 22 F	aturity per hill Oklahom (ex) Oklahom (ex) Ward 12 Illinois 2 Oklahom (ex) Miller 24 J. S. 35 Funk G-	a 7601 5 800 a 7603 7		33.5 32.7 32.6 31.8 30.5 30.0 29.3	66 55 71 60 53 70 75	
I Iowealth 29A 2 Kansas 1784 3 Kansas 1639 4 Oklahoma T61 (ex) 5 Crost-Rite Mo. 313 5 Embro 49 7 McCurdy 130M 3 Shannon 1700 9 Merit Keystone 40 1 Razorback 111	51.5 46.9 46.6 44.9 44.4 44.3 42.3 40.8	72 73 68 70 71 73 67 72	m Eas plas 7 12 9 26 9 18 13 8	rly Manted 15 C 16 C 17 V 18 I 19 C 20 M 21 U 22 H 23 **	aturity per hill Oklahom (ex) Oklahom (ex) Ward 12 Illinois 2 Oklahom (ex) Willer 24 U. S. 35 Funk G-	a 7601 5 200 a 7603 7 135 olden	3	33.5 32.7 32.6 31.8 30.5 30.0	66 55 71 60 53 70	
I Iowealth 29A 2 Kansas 1784 3 Kansas 1639 4 Oklahoma T61 (ex) 5 Crost-Rite Mo. 313 5 Embro 49 7 McCurdy 130M 3 Shannon 1700 9 Merit Keystone 40 9 Razorback 111 1 Oklahoma 7201	51.5 46.9 46.6 44.9 44.4 44.3 42.3 40.8 40.1 39.7	72 73 68 70 71 73 67 72 67 74	m Eas pla 7 12 9 26 9 18 13 8 7	rly Manted 15 C 16 C 17 V 18 I 19 C 20 M 21 U 22 H 23 **	aturity per hill Oklahom (ex) Oklahom (ex) Ward 12 Oklahom (ex) Miller 24 J. S. 35 Funk G- Hays Goklahom	a 7601 5 200 a 7603 7 135 olden	3	33.5 32.7 32.6 31.8 30.5 30.0 29.3	66 55 71 60 53 70 75	
I Iowealth 29A 2 Kansas 1784 3 Kansas 1639 4 Oklahoma T61 (ex) 5 Crost-Rite Mo. 313 5 Embro 49 7 McCurdy 130M 3 Shannon 1700 9 Merit Keystone 40 0 Razorback 111 0 Oklahoma 7201 (ex)	51.5 46.9 46.6 44.9 44.4 44.3 42.3 40.8 40.1	72 73 68 70 71 73 67 72 67	m Eas plas 7 12 9 26 9 18 13 8 7 16	rly M: nted 15 (16 (17 \ 18 I 19 (20 M 21 U 22 I 23 ** 24 (aturity per hill Oklahom (ex) Oklahom (ex) Ward 12 Oklahom (ex) Willer 24 J. S. 35 Funk G- Oklahom (ex)	a 7601 500 a 7603 7 135 olden a 7602	3	33.5 32.7 32.6 31.8 30.5 30.0 29.3 29.2	66 55 71 60 53 70 75 60	
I Iowealth 29A 2 Kansas 1784 3 Kansas 1639 4 Oklahoma T61 (ex) 5 Crost-Rite Mo. 313 5 Embro 49 7 McCurdy 130M 3 Shannon 1700 9 Merit Keystone 40 0 Razorback 111 0 Oklahoma 7201 (ex)	51.5 46.9 46.6 44.9 44.4 44.3 42.3 40.8 40.1 39.7	72 73 68 70 71 73 67 72 67 74	m Eas plas 7 12 9 26 9 18 13 8 7 16	rly M: nted 15 (16 (17 \ 18 I 19 (20 M 21 U 22 I 23 ** 24 (aturity per hill Oklahom (ex) Oklahom (ex) Ward 12 Oklahom (ex) Miller 24 J. S. 35 Funk G- Hays Goklahom	a 7601 500 a 7603 7 135 olden a 7602	3	33.5 32.7 32.6 31.8 30.5 30.0 29.3 29.2	66 55 71 60 53 70 75 60	
1 Iowealth 29A 2 Kansas 1784 3 Kansas 1639 4 Oklahoma T61 (ex) 5 Crost-Rite Mo. 313 5 Embro 49 7 McCurdy 130M 8 Shannon 1700 9 Merit Keystone 40 0 Razorback 111 1 Oklahoma 7201 (ex) 2 Crost-Rite Mo.	4 51.5 46.9 46.6 44.9 44.4 44.3 42.3 40.1 39.7 39.1	72 73 68 70 71 73 67 72 67 74 76	m Eas pla 7 12 9 26 9 18 13 8 7 16 12	rly M: nted 15 (16 (17 \ 18 I 19 (20 M 21 U 22 I 23 ** 24 (aturity per hill Oklahom (ex) Oklahom (ex) Ward 12 Illinois 2 Oklahom (ex) Miller 24 J. S. 35 Funk G- GHays G- Oklahom (ex) St. Cha	a 7601 500 a 7603 7 135 olden a 7602	3	33.5 32.7 32.6 31.8 30.5 30.0 29.3 29.2	66 55 71 60 53 70 75 60	
1 Iowealth 29A 2 Kansas 1784 3 Kansas 1639 4 Oklahoma T61 (ex) 5 Crost-Rite Mo. 313 5 Embro 49 7 McCurdy 130M 3 Shannon 1700 9 Merit Keystone 40 0 Razorback 111 1 Oklahoma 7201 (ex) 2 Crost-Rite Mo. 148	4 51.5 46.9 46.6 44.9 44.4 44.3 42.3 40.1 39.7 39.1 38.2	72 73 68 70 71 73 67 72 67 74 76 60	m Eas pla 7 12 9 26 9 18 13 8 7 16 12 12	rly Minted 15 C 16 C 17 V 18 I 19 C 20 M 21 U 22 F 23 * 24 C	aturity per hill Oklahom (ex) Oklahom (ex) Ward 12 Illinois 2 Oklahom (ex) Miller 24 J. S. 35 Funk G- GHays G- Oklahom (ex) St. Cha	a 7601 500 a 7603 7 135 olden a 7602	3	33.5 32.7 32.6 31.8 30.5 30.0 29.3 29.2	66 55 71 60 53 70 75 60	

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

U-68 2275 (w) X 3005 612W (w)		grai 98 87			•			,
2275 (w) X 3005	53.3 51.7	98 87	26	14 Me	rit Keyst			
2275 (w) X 3005	51.7	87						
X 3005		•	13		106W/ (m			_
	49.4			1	TOO AA (.M.	36.7	83	1
612 W (w)	49.4			15 Ok	lahoma 7	811		
612W (w)		81	9		(ex)	36.4	74	. 1
	46.2	68	16	16 Pic	neer X 5	973		
2234 (w)	45.5	76	17		(ex)	36.0	80	1
155W (w)	45.0	87	13	17 Ok	lahoma 7	7801		
ma 7810					(ex)	35.5	76	2
	43.4	87	25	18 Illi	nois 44 8	35.5	84	2
ma 7803				19 *M	idland Y	ellow		
	40.8	92	22		Dent	35.2	77	2
ma 7809				20 Mc	Curdy 13	5M 34.6	80	2
	40.6	78	2 8	21 Te	xas 18	34.6	77	3
ma 78 06				22 Ok	lahoma 7	8 04		
	39 .6	84	24		(ex)	34.5	86	2
ma 7808				23 Ok	lahoma 7	802		
	37.6	74	25		(ex)	32.3	84	2
ma 7805				24 *Y	ellow Sur	-		
	37.5	88	2 5		cropper	26.7	51	2
ma 7807				25 Mi	ller 1050V	y (w) 18.0	39	1
	37.0	85	28	Avera	ge	38.6	79	2
	155W (w) ma 7810 ma 7803 ma 7809 ma 7806 ma 7808 ma 7805 ma 7807 Difference:	155W (w) 45.0 ma 7810 43.4 ma 7809 40.6 ma 7808 37.6 ma 7807 37.0	155W (w) 45.0 87 ma 7810 43.4 87 ma 7803 40.8 92 ma 7806 39.6 84 ma 7808 37.6 74 ma 7805 37.5 88 ma 7807 27.0 85 Difference: A difference	155W (w) 45.0 87 13 ma 7810 43.4 87 25 ma 7803 40.8 92 22 ma 7809 40.6 78 28 ma 7806 39.6 84 24 ma 7808 37.6 74 25 ma 7807 37.0 85 28 Difference: A difference of less	155W (w) 45.0 87 13 17 Ok ma 7810 43.4 87 25 18 Illi 19 *M 40.8 92 22 ma 7809 40.6 78 28 21 Ter 22 Ok ma 7808 39.6 84 24 ma 7808 37.6 74 25 ma 7805 37.5 88 25 ma 7807 37.0 85 28 Avera Difference: A difference of less than 12.	155W (w) 45.0 87 13 17 Oklahoma 7 (ex) ma 7810	155W (w) 45.0 87 13 17 Oklahoma 7801 ma 7810 43.4 87 25 18 Illinois 448 35.5 ma 7803 40.8 92 22 Dent 35.2 ma 7809 40.6 78 28 21 Texas 18 34.6 ma 7806 39.6 84 24 (ex) 34.5 ma 7808 37.6 74 25 (ex) 32.3 ma 7805 37.5 88 25 (ex) 32.3 ma 7807 37.0 85 28 Average 38.6	155W (w) 45.0 87 13 17 Oklahoma 7801 ma 7810 43.4 87 25 18 Illinois 448 35.5 84 19 *Midland Yellow Dent 35.2 77 20 McCurdy 135M 34.6 80 40.6 78 28 21 Texas 18 34.6 77 ma 7806 39.6 84 24 (ex) 34.5 86 ma 7808 23 Oklahoma 7802 (ex) 32.3 84 24 *Yellow Sur- cropper 26.7 51 ma 7807 25 Miller 1050W (w) 18.0 39

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			
2	Merit Keystone 222	42.1	72	47	(ex)	31.6	78	24
3	Kansas 1583	39.9	86	29	16 Texas 12	31.4	72	57
4	Tennessee 10 (w)	39.9	92	30	17 Oklahoma T86			
5	Kansas 1585	39.5	82	25	(ex)	30.8	74	17
6	McCurdy 1005W				18 Oklahoma T87			
	(w)	3 8.3	79	31	(ex)	30.2	73	10
7	Oklahoma T85				19 *Reid Yellow			
	(ex)	35.6	66	28	Dent	29.7	77	19
8	Oklahoma T83				20 United U-75	27.2	79	40
	(ex)	35.4	77	23	21 Funk G-711	25.7	74	30
9	Texas 20	34.5	78	46	22 Funk G-716	25.7	71	42
10	Texas 9W (w)	34.3	86	37	23 *Oklahoma Silver-			
11	Ward 135W (w)	33.9	78	31	mine (w)	24.9	66	12
12	Ward 130	33.5	82	29	24 *Reid Yellow Dent			
13	Oklahoma T84				(Station)	24.9	72	13
	(ex)	33.2	73	34	25 *Ferguson Yellow			
14	Oklahoma T82				Dent	12.9	23	54
	(ex)	31.9	83	22	Average	33.0	74	31

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), continued.

Rank	Strain	Yield I	Pct.	Rank	Strain	Yield :	Pct. Ldgd
	3-у	ear Ave	rage:	1945, 19	946, 1947		
1 Mei	rit Keystone 38	55.7	3 2	21 Ka	nsas 1583	43.5	39
2 Ind	iana 818	54.9	24	22 Ka	nsas 1585	42.0	36
3 Cro	st-Rite Mo. 313	54.8	31	23 Me	rit Keystone		
4 Fur	ık G-94	54.7	28		106W (w)	41.9	29
5 U.	S. 13	54.0	31	24 Illi	nois 200	41.7	32
6 Pfis	ter 170	53. 5	31	25 Wa	rd 125	41.5	36
7 Sha	nnon 1300	52.8	26	26 Sha	annon 1500	40.8	31
8 Pior	neer 332	52.5	29	27 Tex	as 20	40.4	48
9 Kar	ısas 2234 (w)	51.1	43	28 Fu	nk G-711	3 9.9	46
10 Ohi	o C-12	50.8	20	29 Ter	nessee 10 (w)	39.6	42
11 Ohi	o C-38	50.8	23	30 Tex	tas 12	3 8. 7	59
12 Ind	iana 610B	50.0	28	31 Tex	as 18	3 8.5	49
13 Mer	it Keystone 39	49.3	30	32 *Ha	ays Golden	35.3	47
14 Cro	st-Rite Mo. 148	47.9	30	33 Fu	nk G-716	34.2	53
15 Wai	rd 120A	47.3	31	34 *Ye	ellow Surcropper	33.0	37
16 M er	it Keystone 40	47.0	22	35 *Re	eid Yellow Dent	31.5	42
17 Fun	k G-53	45.7	32	36 *Ok	dahoma Silve rm ine		
18 Illir	nois 751	45.6	32		(w)	27.5	44
19 U.	S. 35	44.9	21	37 *Fe	rguson Yell ow De nt		56
20 Illir	nois 448	44.8	41	Averag	ge	44.4	36

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.	Ra	nk Strain	Yld.	Pct. Std.	Pct. Ldgd.
			I	Early 1	Matu	rity			
	3 grai	ns pla	nted	per h	ill; h	arvested Augu	st 31		
1 C	Ohio C-38	49.6	86	0	15	Funk G-94	35.4	55	0
2 F	Pioneer 335	48.1	92	0	16	McCurdy 9871	AI 35.2	55	0
3 E	Embro 36	46.8	77	0	17	Shannon 1300	35.2	62	3
4 N	Merit Keystone 3	8 46.5	81	1	18	Shannon 1100			
5 T	J. S. 13	45.4	81	0		(ex)	31.7	56	0
6 I	ndiana 818	43.8	83	0	19	Miller 13	31.3	41	1
7 T	Jnited U-50	43.1	92	2	20	Hoosier Crost	616 31.1	6 6	1
8 F	fister 170	42.4	66	0	21	McCurdy 1121	M 31.0	55	0
9 F	Razorback U.S. 1	3 41.8	78	0	22	Hoosier Crost	F.		
10 I	llinois 751	40.5	86	1	1	138	30.9	48	1
11 E	Embro 95	38.8	64	0	23	Pfister 173	29.0	53	0
12 C	Ohio C-12	36.8	63	0	24	Merit Keystor	ne 39 28.2	36	0
13 F	unk G-53	36.2	69	2	25	Ward 120A	27.6	63	1
14 I	ndiana 610B	35.8	66	1	Av	erage	37.7	67	1
	ificant Difference: Ins should not be co						acre betwe	en an	y two

Table V. Payne County (upland), continued.

Rank Strain	Yld.	Pct. Std. 1	Pct. Ldgd.	Rank	Strain	Yld.	Pct. Std.	Pot. Ldgd.
	M	Iediur	n Ea	rly Ma	turity			
3	grains pla	nted 1	per h	ill; har	vested August	31		
1 Pioneer 332	49.4	95	0	15 R	azorback 111	35.8	75	1
2 Kansas 1639	43.8	91	0	16 O	klahoma 7603			
3 Illinois 200	43.3	83	2	l	(ex)	35.3	93	
4 Oklahoma 72				17 O	klahoma 7602			
(ex)	42.9	94	1		(ex)	31.7	87	
5 Kansas 1784	42.8	88	0	18 C	rost-Rite Mo.	01 5	00	
6 Miller 247	42.7	70	0	10.0	148	31.5	83	:
7 Oklahoma T		05	3	19 0	klahoma 7604 (ex)	30.6	78	15
(ex) 8 Crost-Rite M	41.6	85	3	20 1/4	cCurdy 130M	30.0	72	-4
313	40.6	83	1	1	unk G-135	28.9	71	7
9 Embro 49	40.5	86	Ō		Hays Golden	28.7	77	
0 Iowealth 29A		88	1		ard 125	25.6	60	(
1 Shannon 17		68	ō		hannon 1500	25.3	35	
2 Oklahoma 7		00	·		st. Charles W	hite		
(ex)	37.8	96	9		(w)	17.6	62	1
3 U. S. 35	37.1	91	0					
4 Merit Keysto	ne 40 36.4	82	1	Aver	age	35.9	80	:
ignificant Differe		rence	of less	than 7	.6 bushels per ac	cre betwee	en any	two
	IV	Iediu	m La	te Mat	urity			
2	grains plar	ited i	per h	ill; har	vested Octobe	r 1		
1 Kansas 2275	(w) 44.4	98	22	14 O	klahoma 7807			
2 Oklahoma 78	306				(ex)	30.2	96	6:
(ex)	38.9	99	57	15 O	klahoma 7805			
3 Oklahoma 78					(ex)	30.0	98	5
(ex)	36.7	95	61	16 O	klahoma 7803			
4 Kansas 2234		79	36		(ex)	30.0	96	5
5 Oklahoma 78				17 O	klahoma 7804			
(ex)	36.2	97	45	40.77	(ex)	29.3	93	4
6 Oklahoma 78		0.0			linois 448	28.3	81	42
(ex)	35.2	96	68		exas 18	28.1	36	64
7 United U-68	34.6	88	34	20 Pi	oneer X 5973	27.9	52	1
8 Oklahoma 78		0.0	40	01 #T	(ex) Iidland Y ellov		04	1;
(ex)	34.2	96	46	21 1	Dent	w 26.8	81	45
9 Oklahoma 78 (ex)		93	54	99 TDf	ister 612W (w		45	21
(/	33.5	93	94		ellow Sur-) 24.0	40	21
Pioneer X 30 (ex)	33.1	75	14	45 ' I	cropper	23.8	55	16
McCurdy 135		79	38	94 TVT	erit Keystone		00	10
Embro 155W		81	22	2-1 IVI	(w)	21.3	44	22
		01	44	25 M	iller 1050W (w		23	15
3 Oklahoma 78		92	74	_				41
3 Okianoma 78 (ex) ignificant Differen	30.9	92	74	Avera		31.1	79	

Table V. Payne County (upland), continued.

lank	Strain	Yld.		Pct. Ldgd.	Ranl	s Strain	Y1	Pct. d. Std.	Pot Ligd
]	Late N	Iaturi	ty			
	2 grain	s pla	nted	per h	ill; ha	rvested O	tober 1		
1 Ka	ansas 1585	40.3	72	47	15 (Oklahoma	T83		
2 Io	wealth TXN	36.4	82	46		(ex)	27	7.7 97	7 4
3 Te	nnessee 10 (w)	34.7	65	42	16 1	United U-7	5 27	7.3 88	3 . 5
4 Fu	nk G-711	34.3	77	76	17 (Oklahoma	T87		
5 M	Curdy 1005W					(ex)	27	7.1 88	3 4
	(W)	33 .8	87	33	18 7	rexas 12	26	5.9 57	7
6 Ok	dahoma T85				19 1	Funk G-71	6 25	5.3 41	L 5
	(ex)	33.5	83	5 9	20 (Oklahoma	T84		
7 Me	erit Keystone 222	33.4	66	6 8	l	(ex)	25	5.5 84	4
8 Ka	ansas 1583	3 3.3	76	53	21 '	Reid Yello	w Dent 25	5. 3 83	3 2
9 Ok	lahoma T82				22	Texas 20	23	3.6	6
	(ex)	31.9	96	18	23 *	Reid Yello	w Dent		
0 Ok	dahoma T8 1				1	(Station) 22	2.3 81	3
	(ex)	31.8	97	57	24 *	Oklahoma	Silver-		
1 W	ard 135W (w)	29.9	78	53	l	mine (w) 16	3.8 76	3 4
2 W	ard 130	28.6	78	48	25 *	Ferguson '	Yellow		
3 Ok	lahoma T86					Dent	16	3.3 32	8 6
	(ex)	28.2	92	25					
4 Te	xas 9W (w)	28.0	61	61	Ave	rage	28	3.9 75	4
ianifi	cant Difference: A	diffe	rence	of less	than	9.6 bushels	per acre bet	ween ar	ny tw

Rank	Strain	Yield	Pct. Ldgd.	Rank	Strain	Yield	Pet. Ldgd.
	•	3-year Av	erage:	1945, 1	946, 1947		
1 Ohi	o C-38	41.7	18	21 Fu	nk G-53	33.0	21
2 Pio	neer 332	40.9	12	22 W	ard 120A	32.0	22
3 U.	S. 13	40.9	18	23 Te	nnessee 10 (w)	30.5	51
4 Me	rit Keystone 3	8 38.4	19	24 Te	xas 20	30.4	60
	iana 818	37.7	13	25 Illi	nois 448	29.9	46
6 Illin	nois 200	37.3	15	26 Ka	nsas 1583	29.9	58
7 Pfis	ster 170	37.3	18	27 Sh	annon 1500	28.7	16
8 Cro	st-Rite Mo.	313 36.1	22	28 W	ard 125	28.6	30
9 Kai	nsas 1585	36.1	50	29 Te	xas 18	28.5	60
10 Illin	nois 751	35.5	18	30 Te	xas 12	28.1	58
11 Oh:	o C-12	35.2	15	31 Me	rit Keystone 106W		
12 Ind	iana 610B	34.7	22	1	(w)	26.4	19
13 Me	rit Keystone	39 34.4	21	32 Fu	nk G-716	2 5.7	57
14 Fur	ık G-94	34.3	20	33 *H	ays Golden	25.3	34
15 U.	S. 35	34.1	15	34 *Y	ellow Surcropper	23.8	32
16 Sha	nnon 1300	33.7	16	35 *R	eid Yellow Dent	22.9	
17 Ka	nsas 2234 (w.	33.7	46	36 *F	erguson Yellow Der	nt 21.7	57
18 Crc	st-Rite Mo.	148 33.6	20	37 *O	klahoma Silver-		
19 Fu	nk G-711	33.3	61		mine (w)	18.2	81
20 Me	rit Keystone	40 33.2	20	Avera	ge	32.0	32

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.

Ca nk	Strain	Yld.	Pct. Std.	Pct. Ldgd.	Rank	Strain	¥1d.	Pct. Std.	Pci Ldgd
			E	arly N	Maturity				
		4		-	nted per	hill			
1 Sha	annon 1300	80.7	86	2	15 Em	bro 36	69.4	81	
2 Mc	Curdy 987M	79.7	79	1	16 Ind	iana 610B	69.1	80	
3 Ohi	io C-12	76.1	79	1	17 Fur	nk G-53	68. 6	78	
4 U.	S. 13	74.9	76	0	18 Pfis	ster 170	67.2	75	
5 Mea	rit Keystone 38	74.1	75	1	19 Me	rit Keyston	e 39 64.1	67	
6 Pfis	ster 173	74.1	80	2	20 Illii	nois 751	62. 2	85	
7 Pio:	neer 335	73.4	83	0	21 Sha	nnon 1100	(ex) 59.3	68	
8 Hoo	osier Crost 616	73.2	81	1	22 Mil	ler 13	58.7	63	
9 Ohi	o C-38	72.5	93	2	23 Wa	rd 120A	58.3	63	
0 Raz	zorback U.S. 13	70.4	70	1	24 Ho	osier Crost	F.		
1 Fur	ık G-94	70.0	76	2	:	138	56.4	68	
2 Uni	ted U-50	69.8	82	1	25 Mc	Curdy 112N	£ 55.3	60	
3 Emi	bro 95	69.6	73	0					
4 Ind	ian a 81 8	69.5	79	4	Averag	ge	68.7	76	
2 , si .	ant Difference: A	diffe	rence	of lace	than 13.3	bushels per	acre betwe	en an	, tr
	should not be con	sidere M	d signi Iediu	ificant m Ear	in this te	rity			, •
		sidere M	d signi Iediu	ificant m Ear	in this te	rity			,
rains		N 4	d signi Iediui grain	m Ear	rly Matunted per	rity hill st-Rite Mo.	313 73.9	86	, •.
i Okl	ahoma 7603	sidere M	d signi Iediu	ificant m Ear	rly Matunted per 12 Cros 13 Iow	rity hill st-Rite Mo. ealth 29A	313 73.9 73.3	86 85	, •.
i Okl	should not be con	N 4	d signi Iediui grain	m Ear	rly Matunted per 12 Cros 13 Iow 14 Kan	rity hill st-Rite Mo. ealth 29A nsas 1639	313 73.9 73.3 72.4	86 85 81	, •
l Okl	ahoma 7603	N 4 81.6 80.8	fedium grain 90	m Ear us plan	rly Matu nted per 12 Cros 13 Iow 14 Kan 15 Mod	rity hill st-Rite Mo. ealth 29A sas 1639 Curdy 130M	313 73.9 73.3 72.4 1 72.3	86 85 81 83	
Okli	ahoma 7603 (ex) ahoma 7604 (ex) neer 332	N 4 81.6	fedium grain	m Ear	rly Matunted per 12 Cros 13 Iow 14 Kar 15 Mcc 16 Was	rity hill st-Rite Mo. ealth 29A usas 1639 Curdy 130M rd 125	313 73.9 73.3 72.4 1 72. 3 71.3	86 85 81 83 78	
Okli	ahoma 7603 (ex) ahoma 7604	N 4 81.6 80.8	fedium grain 90	m Ear us plan	rly Matunted per 12 Cros 13 Iow 14 Kar 15 Mcc 16 Was 17 Illir	rity hill st-Rite Mo. ealth 29A ssas 1639 Curdy 130N rd 125 nois 200	313 73.9 73.3 72.4 1 72.3 71.3 70.0	86 85 81 83 78	
Okli Okli Okli Okli Okli Okli Okli	ahoma 7603 (ex) ahoma 7604 (ex) heer 332 ahoma 7201	M 4 81.6 80.8 77.0 76.7	fedium grain 90	m Ear us plan	rly Matunted per 12 Cros 13 Iow 14 Kar 15 Mot 16 Was 17 Illir 18 U. 8	rity hill st-Rite Mo. ealth 29A nsas 1639 Curdy 130M rd 125 nois 200 3. 35	313 73.9 73.3 72.4 1 72.3 71.3 70.0 67.5	86 85 81 83 78 74 80	
Okli Okli Okli Okli Okli Okli Okli Okli	ahoma 7603 (ex) ahoma 7604 (ex) neer 332 ahoma 7201 ex) Charles White	M 4 81.6 80.8 77.0 76.7	fedium grain 90 85 88	m Ear s plan	rly Matunted per 12 Cros 13 Iow 14 Kar 15 Mcc 16 Was 17 Illir 18 U. \$ 19 Raz	rity hill st-Rite Mo. ealth 29A nsas 1639 Curdy 130M rd 125 nois 200 3. 35 orback 111	313 73.9 73.3 72.4 1 72.3 71.3 70.0 67.5 66.5	86 85 81 83 78 74 80 80	, •
Okli Okli Okli Okli Okli Okli Okli Okli	ahoma 7603 (ex) ahoma 7604 (ex) neer 332 ahoma 7201 ex) Charles White	81.6 80.8 77.0 76.7	fedium grain 90 85 88 90	m Ear is plant 1 3 1 0 2	rly Matunted per 12 Cross 13 Iows 14 Kars 15 Mood 16 Was 17 Illir 18 U. \$19 Raz 20 Emil	rity hill st-Rite Mo. ealth 29A nsas 1639 Curdy 130M rd 125 nois 200 3. 35 orback 111 oro 49	313 73.9 73.3 72.4 1 72.3 70.0 67.5 66.5 64.9	86 85 81 83 78 74 80 80	, •.
Okli	ahoma 7603 (ex) ahoma 7604 (ex) heer 332 ahoma 7201 (ex) Charles White (w) st-Rite Mo. 148	81.6 80.8 77.0 76.7 76.7	1edium grain 90 85 88 90 88 90	m Ear is plant 1 3 1 0 2 4	rly Matunted per 12 Cros 13 Iow 14 Kar 15 Mcc 16 Was 17 Illir 18 U. 8 19 Raz 20 Emil	rity hill st-Rite Mo. ealth 29A nsas 1639 Curdy 130M rd 125 nois 200 5. 35 orback 111 oro 49 nnon 1700	313 73.9 73.3 72.4 1 72.3 71.3 70.0 67.5 66.5	86 85 81 83 78 74 80 80	, •
1 Okl: (2 Okl: (3 Pior 4 Okl: (6 Crost Mer	ahoma 7603 (ex) ahoma 7604 (ex) ahoma 7201 (ex) Charles White (w) st-Rite Mo. 148 it Keystone 40	81.6 80.8 77.0 76.7 76.7 76.7	1edium grain 90 85 88 90 88 90	m Ear as plan 1 3 1 0 2 4	rly Matunted per 12 Cros 13 Iow 14 Kar 15 Med 16 Was 17 Illir 18 U. \$ 19 Raz 20 Emil 21 Sha 22 Okli	rity hill st-Rite Mo. ealth 29A sass 1639 Curdy 130M rd 125 nois 200 3. 35 orback 111 oro 49 nnon 1700 ahoma T61	313 73.9 73.3 72.4 1 72.3 71.3 70.0 67.5 66.5 64.9	86 85 81 83 78 74 80 80 75	, •
Okli Okli Okli Okli Okli Okli Okli Okli	ahoma 7603 (ex) ahoma 7604 (ex) heer 332 ahoma 7201 (ex) Charles White (w) st-Rite Mo. 148 it Keystone 40 hasa 1784	81.6 80.8 77.0 76.7 76.7	1edium grain 90 85 88 90 88 90	m Ear is plant 1 3 1 0 2 4	rly Matunted per 12 Cros 13 Iow 14 Kar 15 Med 16 Was 17 Illir 18 U. \$ 19 Raz 20 Emil 21 Sha 22 Okl	rity hill st-Rite Mo. ealth 29A sass 1639 Curdy 130M rd 125 nois 200 3. 35 orback 111	313 73.9 73.3 72.4 1 72.3 70.0 67.5 66.5 64.9 64.4	86 85 81 83 78 74 80 80 75	, •
Okli Okli Okli Okli Okli Okli Okli Okli	ahoma 7603 (ex) ahoma 7604 (ex) cer 332 ahoma 7201 (ex) Charles White (w) st-Rite Mo. 148 it Keystone 40 isas 1784 ahoma 7602	81.6 80.8 77.0 76.7 76.7 76.7 76.4 76.0	90 85 88 90 88 90 79 85	m Ear as plar 1 3 1 0 2 4 1 1	in this term that the rely Maturated per 12 Cross 13 Iow 14 Kar 15 Mcc 16 Was 17 Illir 18 U. \$19 Raz 20 Emil 21 Sha 22 Okl	rity hill st-Rite Mo. ealth 29A nsas 1639 Curdy 130M rd 125 nois 200 3. 35 orback 111 oro 49 nnon 1700 ahoma T61 (ex) nnon 1500	313 73.9 73.3 72.4 1 72.3 70.0 67.5 66.5 64.9 64.4 62.9 62.1	86 85 81 83 74 80 80 75	, •
Okli Okli Okli Okli Okli Okli Okli Okli	ahoma 7603 (ex) ahoma 7604 (ex) ahoma 7201 ex) Charles White (w) st-Rite Mo. 148 it Keystone 40 isas 1784 ahoma 7602 ex)	81.6 80.8 77.0 76.7 76.7 76.7	1edium grain 90 85 88 90 88 90	m Ear as plan 1 3 1 0 2 4	in this tell Maturated per 12 Cro. 13 Iow 14 Kar 15 Mcc 16 Wa. 17 Illir 18 U. § 19 Raz 20 Emil 21 Sha 22 Okl. 23 Sha 24 *Ha	rity hill st-Rite Mo. ealth 29A nsas 1639 Curdy 130M rd 125 nois 200 3. 35 orback 111 oro 49 nnon 1700 ahoma T61 (ex) nnon 1500 ys Golden	313 73.9 73.3 72.4 1 72.3 70.0 67.5 66.5 64.9 64.4 62.9 62.1 61.9	86 85 81 83 78 74 80 80 75	
Okli Okli Okli Okli Okli Okli Okli Okli	ahoma 7603 (ex) ahoma 7604 (ex) ahoma 7201 ex) Charles White (w) st-Rite Mo. 148 it Keystone 40 isas 1784 ahoma 7602 ex) ahoma 7601	81.6 80.8 77.0 76.7 76.7 76.7 76.4 76.0 75.8	90 85 88 90 88 90 85 85 81	m Ear s plant	in this term that the rely Maturated per 12 Cross 13 Iow 14 Kar 15 Mcc 16 Was 17 Illir 18 U. \$19 Raz 20 Emil 21 Sha 22 Okl	rity hill st-Rite Mo. ealth 29A nsas 1639 Curdy 130M rd 125 nois 200 3. 35 orback 111 oro 49 nnon 1700 ahoma T61 (ex) nnon 1500 ys Golden	313 73.9 73.3 72.4 1 72.3 70.0 67.5 66.5 64.9 64.4 62.9 62.1	86 85 81 83 74 80 80 75	
1 Okli 2 Okli 3 Pior 4 Okli 5 Cros 7 Mer 8 Kan 9 Okli () () Okli	ahoma 7603 (ex) ahoma 7604 (ex) ahoma 7201 ex) Charles White (w) st-Rite Mo. 148 it Keystone 40 isas 1784 ahoma 7602 ex)	81.6 80.8 77.0 76.7 76.7 76.7 76.4 76.0	90 85 88 90 88 90 79 85	m Ear as plar 1 3 1 0 2 4 1 1	in this tell Maturated per 12 Cro. 13 Iow 14 Kar 15 Mcc 16 Wa. 17 Illir 18 U. § 19 Raz 20 Emil 21 Sha 22 Okl. 23 Sha 24 *Ha	rity hill st-Rite Mo. ealth 29A nsas 1639 Curdy 130M rd 125 nois 200 3. 35 orback 111 oro 49 nnon 1700 ahoma T61 (ex) nnon 1500 ys Golden er 247	313 73.9 73.3 72.4 1 72.3 70.0 67.5 66.5 64.9 64.4 62.9 62.1 61.9	86 85 81 83 78 74 80 80 75	, •-

Table VI, Seminole County, continued.

Rank	Strain	Yld.	Pct. Std. I	Pct.	Ranl	k Str	ain	Yld.	Pct. Std.	Pct Ldgd
		:	Mediu	m La	te Ma	aturity				
		3	grain	s pla	nted 1	per hil	l			
10	klahoma 7809				13 T	United	U-68	76.9	91	:
	(ex)	89.5	96	2	14 1	Merit 1	Keystone			1
2 O	klahoma 7803					106V	V (w)	76.2	86	:
	(ex)	86.0	95	2	15 (Oklaho	ma 7808			
3 O	klahoma 7810					(ex)		76. 0	88	
	(ex)	84.6	94	5	16 (Oklaho	ma 7804			
	lansas 22 34 (w)	83.1	91	1		(ex)		74.9	87	(
5 O	klahoma 7802					Illinois		74.8	94	
	(ex)	82.5	92	2	18 1	McCuro	ly 135 M	74.6	89	
	exas 18	81.9	66	1	19 (Oklaho	ma 7811			
	(ansas 2275 (w)	81.6	94	1	l	(ex)		72.9	79	:
-	klahoma 7806				20 0	Oklaho	ma 7801			
	(ex)	80.8	94	0	1	(ex)		72.7	79	
9 O	klahoma 7807						612W (w)	71.4	86	
	(ex)	80.2	77	5			155 W (w)	70.1	85	(
10 *1	Midland Yellow				23 I		X 3005			
	Dent	78.5	96	0		(ex)		62.9	69	:
11 O	klahoma 7805			_	24 *		Surcrop-			
	(ex)	78.1	86	3		per		58. 8	67	1
12 P	ioneer X 5973						.05 0 W (w)	46.0	45	1
	(ex)	77.2	94	2	•	rage		75.7	85	:
Signi; strain	ficant Difference: as should not be con	A diffe asidere	rence d signi	of less ficant	than in this	15.6 bus s test.	hels per acre	betwee	en an	y two

Late Maturity

3 grains planted per hill

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

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 VI, Seminole County, continued.

Rank Strain	Yield L	Pct. dgd.	Rank Strain	Yield I	Pct.
3-у	ear Ave	rage:	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	5 5. 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-		
11 Crost-Rite Mo. 313	63.1	4	mine (w)	51.0	24
12 Illinois 448	62.2	9	26 *Hays Golden	46.5	15
13 U. S. 13	62.0	5	27 *Ferguson Yellow Dent	40.7	18
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. L	Pct. dgd.	Rank	Strain	¥1d.	Pct. Std. I	Pct.
			Ea	rly I	Iaturi	ty			
		4	grains	s pla	nted p	er hill			
1 M	Curdy 987M	102.6	85	2	14 F	unk G-53	86.7	78	3
2 Un	ited U-50	99.9	88	6	15 S	hannon 1100 (ex)	85.9	75	9
3 Sh	annon 1300	98.6	85	6	16 H	Ioosier Crost 616	81.5	76	3
4 En	ibro 36	94.9	82	1	17 V	Vard 120A	81.4	76	1
5 Pf:	ister 173	94.6	88	1	18 P	fister 170	81.4	73	4
6 Oh	io C-3 8	94.6	86	9	19 C	hio C-12	80.9	6 6	3
7 Me	rit Keystone				20 I	ndiana 818	83.0	73	4
	38	93.4	85	1	21 E	mbro 95	81.4	80	5
8 Fu	nk G-94	91.5	79	3	22 N	Ierit Keystone 39	81.1	64	4
9 Ra	zorback U.S.	13 91.0	80	1	23 IV	IcCurdy 112M	78.0	76	4
10 Pic	neer 335	90.3	85	6	24 I	llinois 751	77.4	67	1
11 U.	S. 13	89.6	82	3	25 N	filler 13	71.5	68	3
12 Inc	diana 610B	89.0	81	3					
	osier Crost F.			_	Aver	age	87.5	78	4
	138	88.2	80 '	9		•			
		A differ	rence o			5.1 bushels per acre test.	betwe	en any	two

Table VIII, Tulsa County, continued.

Rank	Strain	Yld.	Pct. Std.	Pct. Ldgd.	Rank	Strain		Pol. Std.	Pot. Ldgd
		M	Iediu	m Eas	rly Matı	ırity			
		4	grair	is pla	nted per	hill			
1 Ka	msas 1 63 9	102.2	88	1	13 Fu	nk G-135	94.7	88	2
2 Ok	lahoma 7602				14 Ka	nsa s 1784	93.8	83	1
	(ex)	100.5	81	3	15 Ok	lahoma T6 1			
3 Ok	lahoma 7604					(ex)	93.1	87	11
	(ex)	99.4	81	15	16 Ra	zorback 111	92. 5	81	:
4 Ok	lahoma 7603				17 Me	rit Keystone 40	90.4	76	:
	(ex)	99.1	82	3	18 Iov	vealth 29A	89.8	83	:
5 Pic	oneer 332	97.9	88	3	19 Sh	annon 1700	89.7	84	:
6 III	inois 200	97.4	82	5	20 Em	bro 49	86.5	75	:
7 Cr	ost-Rite Mo.	313 96.9	87	2	21 Wa	rd 125	81.7	67	-
8 Mc	Curdy 130M	96.6	83	4	22 *St	. Charles White	е		
9 Ok	lahoma 7601					(w)	81.4	80	11
	(ex)	95.6	83	12	23 Mi	ler 247	74.0	63	4
O T.	S. 35	9 5 .5	83	5	24 Sh	annon 1 500	70.9	79	
1 Ok	lahoma 7201				25 *H	ays Golden	68.3	71	13
	(ex)	95.2	90	15		-			
2 Cr	ost-Rite Mo.	148 95.1	84	1	Avera	ge	91.1	81	(
	cant Difference					bushels per acre	bet we	en an	y two

strains should not be considered significant in this test.

Medium Late Maturity

3 grains planted per hill

			_	-	•			
1	Razorback Kas.			!	12 McCurdy 135M	90.1	91	6
	2234 (W)	99.4	94	7	13 Texas 18	87.2	73	28
1	Oklahoma 7802			- 1	14 United U-68	87.1	87	5
	(ex)	99.4	90	7	15 Oklahoma 7806			
3	Oklahoma 7810			I	(ex)	86.0	95	5
	(ex)	99.1	95	5	16 Kansas 2275 (w)	82.9	94	4
4	Oklahoma 7803			-	17 Oklahoma 7804			
	(ex)	99.0	98	3	(ex)	81.1	82	10
5	Pioneer X 5973				18 Embro 155W (w)	77.8	84	16
	(ex)	97.6	100	2	19 Pioneer X 3005			
6	Oklahoma 7809			_	(ex)	76.2	82	4
	(ex)	97.5	89 ·	16	20 Illinois 448	76.1	71	7
7	Oklahoma 7807				21 Pfister 612W (w)	75.1	76	9
	(ex)	96.9	99	1	22 *Midland Yellow			
8	Oklahoma 7801				\mathbf{Dent}	79.6	87	18
	(ex)	96.1	95	7	23 Keystone 106W			
9	Oklahoma 7808			l	(w)	66.9	66	8
	(ex)	93.2	93	5	24 *Yellow Sur-			
10	Oklahoma 7811			- 1	cropper	51.7	45	5
	(ex)	91.8	96	8	25 Miller 1059W (w)	44.4	26	6
11	Oklahoma 7805							
	(ex)	90.3	85	9	Average	84.9	84	8
					About 11 0 humbala man assa	h-4		*

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 VIII, Tulsa County, continued.

135W (w) Keystone 2 rdy 1005W	101.0	grai 88	ate Nns pla	nted	r ity per hill				
Keystone 2	101.0	88	-		per hill				
Keystone 2			19						
	222 98.2		10	1 15	Iowealth 7	XN	88.1	75	5
rdy 1005W		91	11	16	Oklahoma	T82 (ex)	86.8	98	18
				17	Oklahoma	T81			
)	96.5	86	16		(ex)		86.1	78	11
s 1585	94.9	94	1	18	Oklahoma	T87			
oma T84					(ex)		85.0	81	2
)	94.6	88	16	19	Ward 130		82.1	86	•
s 1583	94.2	82	6	20	Oklahoma	T83			
oma T85					(ex)		81.6	83	6
)	92.7	79	17	21	Funk G-71	6	79.9	79	7
G-711	92.2	93	9	22	*Reid Yell	ow Dent			
ssee 10 (w)	91.0	92	13		(Station	1)	77.7	64	41
9W (w)	90.6	81	12	23	*Reid Yell	ow Dent	67.2	78	17
20	89.9	77	14	24	*Oklahoma	Silver-			
l U-75	89.7	80	7		mine (v	7)	64.4	83	29
12	89.2	71	18	25	*Ferguson	Yellow			
oma T86					Dent		34.6	17	29
)	88.9	86	18	Av	erage		85.5	80	15
	s 1585 oma T84) s 1583 oma T85) G-711 ssee 10 (w) 9W (w) 20 i U-75 12 oma T86)	s 1585 94.9 oma T84) 94.6 94.2 oma T85) 92.7 G-711 92.2 ssee 10 (w) 91.0 9W (w) 90.6 20 1 U-75 89.7 12 89.2 oma T86) 88.9	as 1585 94.9 94 oma T84) 94.6 88 s 1583 94.2 82 oma T85) 92.7 79 G-711 92.2 93 ssee 10 (w) 91.0 92 9W (w) 90.6 81 20 89.9 77 1 U-75 89.7 80 12 89.2 71 oma T86) 88.9 86 Difference: A difference	as 1585 94.9 94 1 oma T84) 94.6 88 16 s 1583 94.2 82 6 oma T85) 92.7 79 17 G-711 92.2 93 9 ssee 10 (w) 91.0 92 13 9W (w) 90.6 81 12 20 89.9 77 14 1 U-75 89.7 80 7 12 89.2 71 18 oma T86) 88.9 86 18 Difference: A difference of less	as 1585 94.9 94 1 18 oma T84 b) 94.6 88 16 19 ss 1583 94.2 82 6 20 oma T85 c) 92.7 79 17 21 G-711 92.2 93 9 22 ssee 10 (w) 91.0 92 13 9W (w) 90.6 81 12 23 20 89.9 77 14 24 it U-75 89.7 80 7 12 89.2 71 18 25 oma T86 b) 88.9 86 18 Av	S 1585 94.9 94 1 18 Oklahoma (ex)	18 Oklahoma T87	18 Oklahoma T87 (ex) 85.0	18 Oklahoma T87

strains should not be considered significant in this test.

Rank	Strain	Yield L	Pct. dgd.	Rank	Strain	Yield 1	Pot. Ldgd.
	3-уе	ear Aver	age:	1945, 1	946, 1947		
1 Pio	neer 332	91.0	2	18 Wa	rd 120A	79.6	1
2 Me	rit Keystone 39	87.1	3	19 Me	rit Keystone 40	79.3	3
3 Kar	nsas 2234 (w)	85.9	5	20 Fw	nk G-711	78. 4	6
4 Kar	nsas 1583	85 .8	4	21 Illi	nois 448	75. 4	4
5 Pfis	ster 170	85.0	2	22 Illi	nois 751	74.9	1
6 Ohi	io C-38	84.6	5	23 Tex	kas 12	74.9	13
7 Kar	nsas 1585	84.3	1	24 Fu	nk G-716	74.7	6
8 Mei	rit Keystone 38	84.2	1	25 Sha	annon 1500	73.3	6
9 Ind	iana 818	84.0	3	26 Me	rit Keystone 106W		
10 Cro	st-Rite Mo. 313	83.8	1		(w)	71.8	5
11 Fur	ık G-53	83.6	2	27 *Re	eid Yellow Dent	60.8	10
12 Illir	nois 200	83.0	4	28 *Ol	klahoma Silvermine	9	
16 Fur	ık G-94	82.6	2		(w)	57.8	18
14 U.	S. 13	82.1	2	29 *H	ays Golden	55.8	10
15 U.	S. 35	81.2	4	30 *Fe	erguson Yellow Den	t 42.9	18
16 Sha	nnon 1300	80.6	4		•		
	st-Rite Mo. 148	80.0	1	Averag	ze	77.6	5

SOURCES OF SEED

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

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

Oklahoma Agricultural Experiment Station

