

Performance Tests
of
CORN VARIETIES AND HYBRIDS
1954

By

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PERFORMANCE TESTS OF CORN VARIETIES AND HYBRIDS, 1954

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The 1954 Oklahoma Corn Performance Tests included 147 entries. Seventy-three hybrids were entered by seed corn producing or distributing companies. Three experimental hybrids were entered by these companies, and 43 experimental hybrids were entered by the Oklahoma Agricultural Experiment Station. Certified seed of 26 experiment station hybrids and two open-pollinated varieties were entered by the Oklahoma Station.

The 1954 season permitted the planting of all tests during the normal corn planting period. Seeding, at most locations, was done in a dry seedbed due to insufficient rainfall in the winter and early spring. Rain showers and warm temperatures following planting produced stands that were average or better for all locations.

Due to relatively dry sub-soil condition and the rapid depletion of surface moisture, early plant growth and development was slow.

Insufficient moisture coupled with hot, dry winds through the tasselling and pollination periods destroyed the chance of a corn crop for most of the state.

Tests located in Canadian, McClain, Muskogee, Nowata, Payne and Tulsa counties were abandoned because of the extremely drouthy conditions.

Yields for the two locations reported are below those obtained for these locations in years favorable to corn production. While statistical analysis indicates significant differences between varieties, the observed condition of these experiments raises considerable question as to the dependability of the results.

The testing procedure was the same as reported in Oklahoma Agricultural Experiment Station, Miscellaneous Publication MP-33, 1954 and MP-29, 1953.

Signs Used in Tables

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

GARVIN COUNTY (Washita River Bottom)

B. M. Prather Farm; Pauls Valley, 1 mile east, 1/2 south
 Planted April 6, 4 grains per hill
 Harvested September 8

Rank	Strain	Yield	Pct. Lodged	Pct. Stand	Quality Score	Picker Husking Score	Picker Shelling Score
Early Maturity							
1	Oklahoma 2803 (Exp)	56.6	16	83	3	3	2
2	Oklahoma 4703 (Exp)	53.0	18	82	4	3	2
3	Oklahoma 2802 (Exp)	52.3	17	79	3	3	2
4	Oklahoma 4701 (Exp)	51.8	16	81	3	4	1
5	Oklahoma 2801 (Exp)	51.7	10	79	3	3	2
6	Oklahoma 1815 (Exp)	51.4	8	87	3	3	2
7	Oklahoma T015 (Exp)	51.1	11	77	3	2	2
8	Oklahoma 4702 (Exp)	50.5	10	83	3	4	1
9	Oklahoma 3804 (Exp)	50.4	11	81	3	3	2
10	Tomson 44	49.5	10	69	3	1	3
11	Tomson 13	49.1	12	78	3	1	2
12	U.S. 13 (Kans)	48.9	19	73	3	2	3
13	M.F.A. 120A	48.2	26	79	3	2	2
14	Oklahoma 4704 (Exp)	47.6	16	73	3	5	2
15	Pioneer 300	47.5	6	82	4	2	3
16	Oklahoma T014 (Exp)	46.9	16	88	4	2	2
17	A.E.S. 805	46.5	10	77	3	1	3
18	Pioneer 503W (w)	45.0	11	79	3	3	2
19	Mangelsdorf U.S. 13	44.9	11	73	4	2	2
20	Kansas 1859	44.7	11	72	3	3	2
21	Pioneer 301C	44.3	22	77	3	2	3
22	A.E.S. 802	43.9	18	76	3	2	2
23	Kansas 1639	43.8	9	78	3	2	2
24	Oklahoma 3802 (Exp)	43.6	21	76	3	2	2
25	U.S. 13 (Okla)	43.4	15	79	3	1	3
26	DeKalb 876	42.9	18	76	4	2	2
27	A.E.S. 801	42.7	9	79	4	1	3
28	P.A.G. 170	42.6	8	78	4	2	2
29	Pioneer 301	42.3	9	79	4	2	3
30	McCurdy 987	42.0	12	72	3	1	2
31	DeKalb 816	42.0	14	72	3	2	3
32	Keystone U.S. 13	41.8	14	69	4	2	2
33	Embros 36	41.4	5	76	3	1	2
34	Funk G-95A	41.2	11	73	3	2	2
35	Keystone 42	41.1	8	75	3	2	2
36	Keystone 38A	40.9	6	77	3	2	2
37	Missouri King U.S. 13	40.9	9	66	3	2	2
38	Oklahoma 3803 (Exp)	40.1	17	69	3	2	2
39	Keystone 38	39.9	8	69	3	1	2
40	Missouri 313	39.6	30	79	3	1	2
41	Oklahoma T012 (Exp)	39.0	18	83	3	2	2
42	Funk G-79	38.7	16	77	3	2	3
43	Funk G-91	38.4	12	72	4	1	2
44	DeKalb 837	38.4	14	87	4	1	2
45	P.A.G. 347	37.5	3	78	4	2	2
46	Embros 95	36.7	9	71	3	2	2
47	Missouri King 101	35.3	18	65	3	1	2
48	A.E.S. 803	34.9	14	63	4	2	2
49	Shannon 1300	31.3	5	67	4	1	3
	Average	44.0	13.0	76.2	3.3	2.0	2.2

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

DAWSON COUNTY (Washita River Bottom) continued

Rank	Farm	Yield	Pct. Lodged	Pct. Stand	Quality Score	Picker Husking Score	Picker Shelling Score
Medium Maturity							
1	W. B. ... (w) (mans)	53.1	7	90	3	2	2
2	...	52.3	12	83	3	2	1
3	... (Exp)	51.3	14	75	3	3	3
4	... (Exp)	49.5	13	83	3	3	2
5	... (Exp)	49.3	20	75	3	4	1
6	...	48.5	11	74	3	2	3
7	... (Exp)	48.4	10	83	3	3	2
8	...	48.2	14	83	3	2	2
9	... (w)	47.8	9	77	3	3	1
10	... (Exp)	47.5	15	73	3	2	2
11	... (v)	46.6	5	72	3	2	1
12	... (Exp)	46.0	14	75	3	2	2
13	... (Exp)	45.0	12	72	3	2	2
14	... (Exp)	45.0	14	85	3	2	2
15	...	44.7	9	72	3	3	1
16	...	44.7	24	76	3	2	2
17	...	44.5	8	85	3	2	2
18	...	44.4	10	73	3	1	2
19	...	44.4	11	77	3	3	1
20	...	44.2	15	83	3	2	2
21	...	43.4	8	82	4	2	3
22	...	43.2	8	88	3	2	2
23	... (Exp)	42.9	10	70	4	3	1
24	... (v)	42.9	10	69	3	2	2
25	... (Exp)	42.7	15	82	3	3	2
26	...	41.5	13	85	4	2	2
27	...	41.3	12	69	3	1	3
28	... (v)	40.8	9	68	3	2	2
29	... (Exp)	40.7	17	80	3	2	3
30	... (v)	40.4	29	73	3	1	2
31	...	39.6	23	70	4	2	2
32	... (w) 8	39.3	11	74	3	2	2
33	... 408	38.4	11	85	4	2	2
34	... (w)	37.7	7	80	4	2	2
35	... (w)	37.1	4	85	3	2	3
36	... (Exp)	37.0	15	75	4	2	2
37	...	36.9	23	69	4	2	2
38	...	36.5	10	77	3	2	1
39	...	36.4	20	71	3	2	3
40	...	35.9	17	77	3	2	2
41	...	35.3	10	77	3	2	1
42	... (v)	35.1	21	76	4	2	2
43	...	35.0	16	73	4	1	3
44	...	34.3	13	69	4	1	3
45	...	33.4	11	73	4	2	3
46	...	33.1	16	66	4	2	2
47	... (w)	32.6	2	79	4	2	2
48	...	32.3	11	71	4	1	3
49	... 43	31.7	6	72	3	1	2
		41.7	12.8	76.6	3.3	2.1	2.0

A difference of less than 8.4 bushels per acre between two treatments would not be considered significant in this test.

GARVIN COUNTY (Washita River Bottom) continued

Rank	Strain	Yield	Pct. Lodged	Pct. Stand	Quality Score	Picker Husking Score	Picker Shelling Score
Late Maturity							
1	Oklahoma T023 (Exp)	48.8	11	84	3	2	2
2	Texas 28	45.5	25	64	3	2	2
3	P.A.G. 7339 (Exp)	44.9	22	86	3	2	2
4	Oklahoma T147 (Exp)	44.7	18	78	3	3	2
5	Oklahoma 2924 (Exp)	44.3	20	83	3	3	2
6	Texas 26	44.1	31	84	4	2	2
7	T.R.F. 3 (w)	42.9	11	80	3	3	1
8	Oklahoma 3901 (Exp)	42.7	10	85	3	2	1
9	Oklahoma CB8932 (Exp)	42.3	20	75	3	2	2
10	Oklahoma 1812A (Exp)	42.0	15	80	3	3	2
11	Oklahoma 3902 (Exp)	41.8	18	80	3	2	2
12	DeKalb 1002	41.1	42	78	4	3	2
13	Texas 24	40.7	34	74	4	3	2
14	Texas 30	40.2	15	78	3	3	2
15	DeKalb 1009	39.1	43	85	4	3	2
16	DeKalb 1024	38.8	33	84	3	2	3
17	Oklahoma 1812 (Exp)	38.6	23	80	3	3	2
18	Oklahoma T166 (Exp)	38.6	24	80	4	2	2
19	Pioneer 309A	38.1	12	74	3	1	3
20	Pioneer X9178 (Exp)	38.0	6	79	4	2	2
21	Texas 32	38.0	32	79	4	2	2
22	Texas 15W (w)	37.8	24	72	3	2	1
23	Oklahoma T131 (Exp)	37.4	13	76	3	2	2
24	Embro 155 (w)	37.3	22	66	3	2	2
25	Texas 11W (w)	34.9	21	61	3	2	1
26	Embro 101B	34.5	30	84	3	1	2
27	UH-72	34.0	22	68	3	2	2
28	Oklahoma CB8908 (Exp)	34.0	34	84	4	2	2
29	P.A.G. 484	33.7	31	77	3	2	2
30	DeKalb 1022	33.6	37	85	5	2	3
31	McCurdy 1000A	33.3	25	73	3	2	2
32	Oklahoma 301	33.0	19	78	4	2	2
33	McCurdy 135	32.7	16	75	3	2	2
34	McCurdy 1005W1 (w)	32.7	24	70	4	2	3
35	Kansas 1830	32.3	30	77	3	2	2
36	Oklahoma 2920 (Exp)	32.2	33	80	4	2	2
37	DeKalb 1026	32.1	30	86	4	2	3
38	Keystone 222A	31.8	37	85	4	2	2
39	Oklahoma 0806 (Exp)	30.8	33	72	3	2	2
40	Missouri 804	30.6	42	65	4	2	2
41	Nichols 101	30.5	17	76	4	2	2
42	Keystone 222	29.9	29	75	3	2	2
43	Watson 124	29.2	16	78	4	2	2
44	Funk G-733	28.4	25	75	4	2	1
45	P.A.G. 488	27.9	24	76	4	2	2
46	Watson 118	27.8	29	55	3	2	2
47	Funk G-711	27.4	23	82	4	2	2
48	*Reid Yellow Dent	15.1	16	78	5	2	2
49	*Oklahoma Silvermine (w)	11.7	18	71	5	2	2
	Average	35.5	24.2	76.9	3.5	2.1	2.0

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

SEMINOLE COUNTY (North Canadian River Bottom)

Ambrose Grain Farm; Prague, 8 miles south, 3 west
 Planted April 5, 4 grains per hill
 Harvested September 13

Rank	Strain	Yield	Pct. Lodged	Pct. Stand	Quality Score	Picker Husking Score	Picker Shelling Score
Early Maturity							
1	Pioneer 300	32.9	10	76	3	3	2
2	A.E.S. 805	32.5	9	74	4	2	2
3	Kansas 1859	32.2	13	74	3	3	2
4	P.A.G. 347	31.0	15	75	4	3	2
5	A.E.S. 802	30.6	11	72	4	3	2
6	U.S. 13 (Kans)	30.2	10	73	3	2	2
7	U.S. 13 (Okla)	30.0	19	62	4	3	2
8	Keystone 38	29.9	23	68	4	3	2
9	Oklahoma 2801 (Exp)	29.6	27	64	4	4	1
10	Oklahoma 2802 (Exp)	29.3	22	81	4	4	1
11	DeKalb 837	28.8	8	76	4	2	2
12	Oklahoma 4701 (Exp)	28.8	20	74	4	3	1
13	Mangelsdorf U.S. 13	28.7	16	82	4	3	2
14	M.F.A. 120A	28.5	24	71	4	2	1
15	Kansas 1639	28.3	16	83	4	2	1
16	Oklahoma 2803 (Exp)	28.0	36	81	3	4	1
17	P.A.G. 170	27.6	12	73	3	2	2
18	McCurdy 987	27.6	17	73	3	2	2
19	Funk G-79	27.5	14	73	4	2	2
20	A.E.S. 803	27.4	9	75	4	2	2
21	Oklahoma 1815 (Exp)	27.4	21	77	4	3	2
22	Missouri King U.S. 13	27.2	12	69	4	2	2
23	Funk G-91	26.9	15	66	4	1	2
24	Pioneer 301C	26.6	17	74	4	2	2
25	Keystone 38A	26.6	18	70	4	3	1
26	Oklahoma 4702 (Exp)	26.3	21	67	4	4	1
27	Oklahoma 3804 (Exp)	25.4	20	68	3	3	2
28	DeKalb 816	25.2	19	72	4	2	2
29	Oklahoma 3803 (Exp)	25.2	26	71	4	2	2
30	Tomson 44	25.2	31	75	4	2	2
31	Pioneer 301	25.1	17	74	3	2	2
32	Keystone U.S. 13	24.8	17	76	4	2	1
33	Tomson 13	24.4	16	71	3	2	1
34	DeKalb 876	24.4	27	82	4	2	1
35	Keystone 42	24.1	17	68	4	2	1
36	Embros 95	23.8	21	71	4	2	1
37	Funk G-95A	23.7	16	69	4	2	2
38	Oklahoma 4704 (Exp)	22.7	30	63	4	4	2
39	Oklahoma 4703 (Exp)	22.4	21	71	4	3	2
40	Oklahoma T014 (Exp)	21.6	29	59	4	3	1
41	Embros 36	21.2	24	69	4	2	2
42	Oklahoma T012 (Exp)	20.2	30	73	3	2	1
43	Shannon 1300	20.1	18	68	4	2	2
44	Missouri King 101	19.6	34	72	4	2	2
45	A.E.S. 801	19.5	15	69	4	3	1
46	Oklahoma 3802 (Exp)	19.5	35	71	4	2	1
47	Missouri 313	18.6	33	80	4	2	2
48	Oklahoma T015 (Exp)	14.1	28	59	5	2	1
49	Pioneer 503W (w)	11.1	19	58	4	2	1
	Average	25.6	20.0	71.7	3.8	2.5	1.6

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

SEMINOLE COUNTY (North Canadian River Bottom) continued

Rank	Strain	Yield	Pct. Lodged	Pct. Stand	Quality Score	Picker Husking Score	Picker Shelling Score
<u>Medium Maturity</u>							
1	U.S. 523W (w) (Kans)	34.6	22	79	3	4	2
2	Oklahoma 2921 (Exp)	34.0	17	71	3	4	2
3	Funk G-777W (w)	34.0	28	87	3	4	1
4	P.A.G. 403	32.8	9	83	3	3	2
5	McCurdy 988	30.8	33	68	3	2	1
6	Pioneer 332	30.7	27	77	4	3	1
7	Tomson BYB-100 (w)	29.5	26	74	3	4	1
8	Oklahoma 4801 (Exp)	29.5	29	69	3	5	1
9	Oklahoma 1813 (Exp)	29.0	22	77	4	4	1
10	DeKalb 925 (w)	28.8	41	82	4	2	2
11	Funk G-704	28.5	16	76	3	2	2
12	Oklahoma T021 (Exp)	28.4	23	76	4	3	2
13	DeKalb 898	27.5	14	76	4	3	1
14	Missouri 8	27.5	29	74	3	4	1
15	Pioneer 302	27.1	32	67	4	3	2
16	P.A.G. 383	26.6	30	72	4	3	2
17	Oklahoma 4803 (Exp)	26.3	28	65	3	4	1
18	U.S. 523W (w) (Mo)	25.6	24	62	4	3	1
19	Oklahoma 3801 (Exp)	25.5	39	71	4	3	2
20	P.A.G. 631W (w)	25.0	32	78	3	3	1
21	Missouri King J3	24.6	26	86	4	2	1
22	Shannon 1400W (w)	24.3	24	78	4	2	1
23	Oklahoma 2926 (Exp)	24.1	37	82	4	2	2
24	Oklahoma 2923 (Exp)	23.8	46	69	3	4	1
25	Missouri 148	23.7	22	73	3	2	3
26	Pioneer 312A	23.6	29	62	3	2	2
27	Oklahoma 4802 (Exp)	23.2	28	73	4	4	1
28	Oklahoma 2925 (Exp)	23.2	31	58	4	3	1
29	Oklahoma T140 (Exp)	23.2	33	75	3	2	2
30	Oklahoma 2804 (Exp)	22.9	29	59	3	3	1
31	Kansas 2234 (w)	22.7	30	73	3	3	1
32	DeKalb 896	22.6	37	87	3	3	2
33	Funk G-787W (w)	22.6	41	69	3	4	2
34	Watson 115 (Exp)	22.4	28	68	3	2	1
35	Pioneer 510W (w)	22.1	35	58	3	3	2
36	Oklahoma 2806 (Exp)	22.1	44	75	3	3	1
37	Oklahoma 2922 (Exp)	21.7	33	71	3	3	2
38	Oklahoma 4804 (Exp)	21.5	29	75	4	3	1
39	Mangelsdorf Mo. 8	21.3	41	72	4	3	2
40	McCurdy 910W (w)	20.9	41	68	4	2	1
41	DeKalb 894	20.6	16	59	4	2	2
42	Embros 49	20.6	31	61	4	1	2
43	Missouri King Mo. 8	20.2	18	60	3	3	1
44	Illinois 200	20.1	22	65	3	2	2
45	Keystone 107W (w)	19.6	29	69	4	3	1
46	Tomson K-2234 (w)	19.5	32	58	3	3	1
47	Watson 111	17.5	27	75	4	3	2
48	DeKalb 910 (w)	16.7	34	69	4	2	1
49	Oklahoma T183 (Exp)	14.3	43	60	4	3	1
	Average	24.6	29.3	71.2	3.5	2.9	1.5

Significant Difference: A difference of less than 8.3 bushels per acre between any two strains should not be considered significant in this test.

SEMINOLE COUNTY (North Canadian River Bottom) Continued

Rank	Strain	Yield	Pct. Lodged	Pct. Stand	Quality Score	Picker Husking Score	Picker Shelling Score
Late Maturity							
1	Texas 30	26.9	37	69	3	3	1
2	T.R.F. 3 (w)	25.9	25	75	3	4	1
3	Texas 28	24.3	28	82	3	3	1
4	Oklahoma T023 (Exp)	23.9	21	63	4	3	1
5	Oklahoma 2924 (Exp)	23.9	24	76	4	4	1
6	Embros 101E	23.1	47	81	4	2	2
7	Pioneer 309A	22.8	27	74	4	3	1
8	Oklahoma 3902 (Exp)	22.7	22	73	4	3	1
9	P.A.G. 7339 (Exp)	22.6	36	76	4	3	1
10	Embros 155 (w)	22.4	23	70	4	2	1
11	Texas 11W (w)	22.4	28	71	3	4	1
12	Texas 15W (w)	21.6	31	77	4	3	1
13	Nichols 101	21.4	20	79	4	3	1
14	DeKalb 1002	21.1	34	72	4	3	2
15	DeKalb 1022	21.1	42	80	4	3	2
16	DeKalb 1024	21.0	43	75	4	3	2
17	Texas 26	20.5	34	64	3	3	1
18	Oklahoma 1812A (Exp)	20.1	20	79	4	3	1
19	Oklahoma CB8908 (Exp)	20.0	24	76	4	3	1
20	Oklahoma 2920 (Exp)	19.9	41	77	4	3	1
21	Oklahoma T147 (Exp)	19.6	37	66	4	3	1
22	Oklahoma GB8932 (Exp)	19.5	36	78	4	3	1
23	DeKalb 1009	19.5	45	78	4	3	2
24	Oklahoma 1812 (Exp)	19.2	29	67	4	3	1
25	Texas 32	18.6	39	77	4	3	1
26	Oklahoma 0806 (Exp)	18.5	33	75	4	3	1
27	UH-72	18.4	45	78	4	4	1
28	McCurdy 1000A	18.3	56	72	4	2	1
29	P.A.G. 488	18.2	46	61	4	4	1
30	Oklahoma 301	17.6	19	72	4	3	1
31	Funk G-711	17.6	47	75	4	3	2
32	P.A.G. 484	17.5	37	72	4	3	1
33	Keystone 222	17.1	53	75	4	3	1
34	Watson 118	16.6	50	46	4	2	2
35	Keystone 222A	16.5	39	66	4	2	1
36	Oklahoma 3901 (Exp)	16.4	26	74	4	3	2
37	Oklahoma T166 (Exp)	16.3	42	78	4	2	1
38	DeKalb 1026	16.2	32	73	4	2	2
39	Watson 124	15.9	40	72	4	3	2
40	Missouri 804	15.6	30	70	4	2	2
41	Oklahoma T131 (Exp)	15.5	33	73	4	2	1
42	McCurdy 135	15.3	43	69	4	3	1
43	Pioneer X9178 (Exp)	15.1	47	68	4	3	2
44	Texas 24	15.0	38	72	4	3	1
45	Kansas 1830	14.6	50	70	4	2	2
46	McCurdy 1005W1 (w)	13.1	43	65	4	3	1
47	Funk G-733	9.0	26	71	4	3	1
48	*Reid Yellow Dent	9.0	41	75	5	2	2
49	*Oklahoma Silvermine (w)	4.7	26	68	5	2	1
	Average	18.6	35.4	72.3	3.9	2.9	1.3

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