

# Oklahoma Corn Performance Tests; Summary: 1946, 1947, and 1948. 

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Many different names and numbers of hybrid corn are being distributed in Oklahoma, and new ones are added every year. This makes it increasingly difficult for a grower to select the hybrid best suited to his farm. The Oklahoma Corn Performance Tests were set up by the Experiment Station to test as many hybrids as possible, and thus supply information on the ones likely to give the best performance year after year.

Results of the Station's corn performance tests are reported annually. But only by combining results of several years can one determine which hybrids are most likely to give superior performance year after year. This publication therefore summarizes the performance of hybrids tested in the years 1946, 1947 and 1948.

Hybrid corn was included in Oklahoma yield trials as early as 1930; but, because of the many new hybrids on the market, a summary covering more than the past three years would leave out many of the newer and higher yielding strains.

## General Performance of Hybrids

All hybrids entered in the 1948 Oklahoma Corn Performance Tests produced yields averaging 36 per cent more than the openpollinated varieties included in the same tests. Slightly more than 55 per cent of all corn planted in Oklahoma in 1948 was planted with hybrid seed (as compared to 5 per cent in 1943). The State's total of $1,336,000$ acres in corn in 1948 made an estimated yield of 25 bushels an acre. Using these figures, it is estimated that Oklahoma farmers gained $5,564,000$ bushels by planting hybrid corn in 1948. If only the best adapted hybrids had been planted on the hybrid acreage, total production would have been increased by another $13 / 4$ million bushels.

## Test Procedure and Results

The sources of seed and methods used in conducting the tests are described in the reports published each year. The yield, per cent lodged and per cent stand reported for each hybrid are an average of the results of the tests for the years indicated.*

## Yield and Maturity

The yield for each strain is reported in the maturity group in which that strain was tested in 1948. The hybrids in the early maturity group will average about two weeks earlier in maturity than those in the late maturity group. The earliest hybrid in the early group is ready for harvest about three weeks earlier than the latest hybrid in the late group. There is no sharp line between the different maturity groups; some "border line" hybrids have been included in one maturity group one season and, for convenience, shifted to another group another season.

In the past three years' tests, late maturing hybrids produced yields equal to the early maturing hybrids at many locations. In tests prior to 1946, the earlier maturing hybrids were generally the best producers. The better performance of late hybrids during recent years may be the result of more favorable seasons, or it may be due to the development of late hybrids better adapted to Oklahoma conditions.

## Lodging

Plants reported as lodged are those likely to be missed by a mechanical picker. If the crop is to be mechanically harvested, the amount of lodging may decrease the actual yield reported in the tables by nearly as large a percentage as the amount of lodging.

The most severe lodging has usually occurred among the late maturing strains on upland soils. The longer the mature crop is left in the field, the more severe the lodging.

## Per Cent Stand

The per cent stand figures indicate the average number of mature plants obtained from each 100 grains planted. Data from all tests over a three-year period indicate that each 100 grains

[^0]planted will produce an average of 75 mature plants. Good quality seed planted in a well prepared seedbed with favorable season will produce 90 or more mature plants from each 100 grains planted.

Mechanical injury to the seed, which may occur during processing, makes the seed much more susceptible to environmental influences at planting time. Mechanical injury so slight that it can be seen only with a microscope may reduce germination under field conditions. Seed lots containing broken or chipped grain are likely to contain more seed with invisible injury than seed lots in which the more severe types of damage have been kept to a minimum.

## Quality

The quality rating reported in the tables is based on observations on the 1947 and 1948 tests. The amount of insect and disease damage and the number of nubbins were given the greatest weight in rating quality. At least two samples of each variety at each test location were examined to obtain the quality rating given in the tables. Ratings used were: Poor, medium poor, medium, medium good, and good. For the list of recommended hybrids and varieties see page 15 .

## In the Tables:

(w) - White Corn.
: - Open-pollinated variety (all others are hybrids).

ABLE I.-BRYAN COUNTY (Red River Bottom),
George Lemons Farm; Yuba, $21 / 2$ miles south, 1 west;
2-Year Average: 1946, 1948.

| Rank | Strain | Yield | Pct. Lodged | Pct. <br> Stand | Quality |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Early Maturity |  |  |  |  |  |
| 1 | Keystone 39 | 100.9 | 1 | 84 | Med. Good |
| 2 | P. A. G. 170 | 99.9 | 1 | 85 | Med. Good |
| 3 | U. S. 13 | 99.5 | 2 | 85 | Med. Good |
| 4 | Ohio C-38 | 98.9 | 1 | 84 | Med. Good |
| 5 | Razorback U. S. 13 | 97.8 | 1 | 83 | Medium |
| 6 | Keystone 38 | 97.4 | 2 | 81 | Med. Good |
| 7 | Indiana 610B | 97.2 | 2 | 78 | Med. Good |
| 8 | Embro 36 | 95.0 | 1 | 85 | Med. Good |
| 9 | Iowealth 29A | 94.9 | 1 | 81 | Med. Good |
| 10 | Funk G-94 | 91.0 | 2 | 81 | Med. Good |
| 11 | Missouri 313 | 90.8 | 2 | 83 | Medium |
| 12 | Funk G-53 | 90.6 | 2 | 75 | Medium |
| 13 | Ward 120A | 89.5 | 1 | 69 | Med. Good |
| 14 | Embro 95 | 88.4 | 2 | 75 | Medium |
| 15 | Shannon 1300 | 85.2 | 3 | 75 | Medium |
|  | Average | 94.5 | 2 | 80 | Medium |

Medium Maturity

| Kansas 2234 (w) | 103.1 | 1 | 89 | Good |
| :---: | :---: | :---: | :---: | :---: |
| Ohio C-12 --------- | 101.9 | 0 | 81 | Medium |
| Indiana 818 | 101.5 | 2 | 88 | Medium |
| Pioneer 332 | 100.4 | 2 | 84 | Med. Good |
| Crost Rite Mo. 148 | 98.5 | 1 | 83 | Med. Good |
| Illinois 200 | 97.1 | 2 | 82 | Med. Good |
| Embro 49 | 96.1 | 2 | 83 | Med. Good |
| Ward 125 | 95.7 | 3 | 84 | Medium |
| Keystone 40 | 94.0 | 2 | 85 | Medium |
| *Midland Yellow Dent | 87.4 | 2 | 82 | Med. Good |
| Shannon 1500 | 83.2 | 2 | 68 | Med. Good |
| Average | 96.3 | 2 | 83 | Med. Good |

Late Maturity

| Funk G-711 | 103.1 | 7 | 94 | Good |
| :---: | :---: | :---: | :---: | :---: |
| Keystone 222 | 97.7 | 5 | 87 | Good |
| Texas 18 | 97.4 | 9 | 79 | Med. Good |
| Texas 12 | 92.5 | 8 | 88 | Med. Good |
| Tennessee 10 (w) | 91.2 | 5 | 88 | Medium |
| Ward 135W (w) | 89.7 | 2 | 89 | Medium |
| Texas 20 | 88.6 | 15 | 80 | Med. Good |
| Keystone 106W (w) | 87.5 | 1 | 87 | Good |
| Kansas 1583 | 86.8 | 2 | 92 | Med. Good |
| Funk G-716 | 83.3 | 4 | 89 | Med. Good |
| Texas 9W (w) | 83.1 | 8 | 79 | Med. Good |
| Kansas 1585 | 78.7 | 3 | 85 | Med. Good |
| *Reid Yellow Dent | 72.8 | 8 | 77 | Med. Good |
| *Ferguson Yellow Dent | 67.2 | 6 | 83 | Med. Good |
| *Oklahoma Silvermine | 62.8 | 5 | 81 | Med. Good |
| Average | 85.5 | 6 | 85 | Med. Good |


| Strain | Yield | $\begin{gathered} \text { Pct. } \\ \text { Lodged } \end{gathered}$ | Pet. <br> Stand | Quality |
| :---: | :---: | :---: | :---: | :---: |
| Early Maturity |  |  |  |  |
| Missouri 313 | 101.3 | 3 | 81 | Medium |
| Embro 36 | 98.8 | 2 | 74 | Med. Good |
| Funk G-94 | 97.7 | 2 | 79 | Medium |
| U. S. 13 -------------------------1-10 | 96.9 | 1 | 82 | Med. Good |
|  | 95.5 | 2 | 75 | Med. Good |
|  | 95.0 | 2 | 72 | Medium |
|  | 94.1 | 3 | 88 | Medium |
| Iowealth 29A | 93.9 | 1 | 85 | Medium |
| P. A. G. 170 | 93.7 | 2 | 75 | Medium |
|  | 92.5 | 3 | 69 | Medium |
|  | 91.0 | 4 | 73 | Medium |
|  | 90.8 | 2 | 81 | Medium |
|  | 90.2 | 3 | 74 | Medium |
| Ward 120A | 88.7 | 2 | 73 | Medium |
| Embro 95 ------------------------- | 82.2 | 2 | 71 | Medium |
| Average | 93.5 | 2 | 77 | Medium |

Medium Maturity

| Pioneer 332 | 104.4 | 1 | 86 | Medium |
| :---: | :---: | :---: | :---: | :---: |
| Indiana 818 | 98.2 | 1 | 87 | Medium |
| Illinois 200 | 92.7 | 3 | 80 | Medium |
| Crost-Rite Mo. 148 | 91.7 | 5 | 83 | Medium |
| Kansas 2234 (w) | 91.4 | 3 | 82 | Med. Good |
| Ohio C-12 | 90.7 | 2 | 77 | Med. Good |
| Keystone 40 | 87.3 | 3 | 85 | Medium |
| Embro 49 | 85.6 | 3 | 77 | Medium |
| Shannon 1500 | 80.6 | 3 | 76 | Medium |
| Ward 125 | 80.5 | 4 | 73 | Medium |
| *Midland Yellow Dent | 76.7 | 11 | 81 | Med. Good |
| Average | 89.1 | 3 | 81 | Medium |

## Late Maturity

| Funk G-711 | 110.3 | 7 | 93 |
| :---: | :---: | :---: | :---: |
| Tennessee 10 (w) | 107.7 | 15 | 91 |
| Texas 12 | 103.9 | 14 | 79 |
| Keystone 222 | 99.9 | 7 | 86 |
| Ward 135W (w) | 99.6 | 13 | 80 |
| Kansas 1583 | 96.5 | 4 | 89 |
| Texas 20 | 95.2 | 12 | 82 |
| Funk G-716 | 92.3 | 9 | 86 |
| Texas 18 | 90.7 | 19 | 79 |
| Kansas 1585 | 90.2 | 6 | 91 |
| *Oklahoma Silvermine (w) | 88.9 | 11 | 91 |
| Texas 9W (w) | 87.9 | 7 | 85 |
| Keystone 106W (w) | 85.2 | 4 | 89 |
| *Reid Yellow Dent | 80.8 | 19 | 82 |
| *Ferguson Yellow Dent | 64.7 | 15 | 50 |
| Average | 92.9 | 11 | 84 |

Good Med. Good Good
Med. Good Med. Good Med. Good Med. Good Med. Good Good Medium Med. Good Good Med. Good Med. Good Med. Good Med. Good

TABLE III.-McCLAIN COUNTY (Upland);
Clifton Brown Farm; Purcell, 5 miles north, 5 west;
2-Year Average: 1947, 1948.


Medium Maturity

|  |
| :---: |
| Kansas 2234 (w) Crost-Rite Mo. 148 |
| Embro 49 |
| Illinois 200 |
| Indiana 818 |
| Ohio C-12 |
| Ward 125 |
| Pioneer 332 |
| Keystone 40 |
| Shannon 1500 |
| *Midland Yellow Dent |
| Average |


| 48.5 | 12 | 89 | Good |
| ---: | ---: | ---: | :--- |
| 48.3 | 12 | 85 | Medium |
| 43.8 | 10 | 82 | Medium |
| 42.3 | 11 | 79 | Med. Poor |
| 41.4 | 8 | 87 | Med. Poor |
| 40.5 | 3 | 75 | Med. Poor |
| 39.1 | 8 | 77 | Medium |
| 38.7 | 5 | 86 | Medium |
| 38.7 | 8 | 88 | Med. Poor |
| 37.3 | 7 | 73 | Med. Poor |
| 33.6 | 14 | 85 | Medium |
| 41.1 | 9 | 82 | Medium |

Late Maturity

| Texas 18 | 50.4 | 27 | 80 | Med. Good |
| :---: | :---: | :---: | :---: | :---: |
| Keystone 222 | 49.2 | 17 | 95 | Med. Good |
| Keystone 106W (w) | 49.0 | 5 | 94 | Med. Good |
| Texas 12 | 48.9 | 16 | 83 | Med. Good |
| Ward 135W (w) | 48.5 | 17 | 94 | Medium |
| Tennessee 10 (w) | 47.1 | 17 | 95 | Medium |
| Texas 9W (w) | 46.3 | 15 | 94 | Med. Good |
| Funk G-716 | 43.7 | 19 | 87 | Med. Good |
| Texas 20 | 43.5 | 25 | 80 | Med. Good |
| Funk G-711 | 42.9 | 15 | 95 | Med. Good |
| Kansas 1583 | 41.5 | 11 | 92 | Med. Good |
| Kansas 1585 | 40.7 | 16 | 94 | Med. Good |
| *Reid Yellow Dent | 35.9 | 24 | 81 | Med. Good |
| *Oklahoma Silvermine | 32.1 | 25 | 94 | Medium |
| *Ferguson Yellow Dent | 29.9 | 26 | 63 | Medium |
| Average | 43.3 | 18 | 88 | Med. Good |

# TABLE IV.-PAYNE COUNTY (Creek Bottom); <br> 3-Year Average: 1946, 1947, 1948. 

| Rank | Strain | Yield | $\begin{aligned} & \text { Pct. } \\ & \text { Lodged } \end{aligned}$ | Pct. Stand | Quality |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Early Maturity |  |  |  |  |  |
| 1 | U. S. 13 | 62.3 | 26 | 76 | Medium |
| 2 | Embro 36 | 61.3 | 17 | 81 | Medium |
| 3 | Keystone 38 | 60.5 | 25 | 86 | Medium |
| 4 | Funk G-94 | 60.0 | 26 | 81 | Medium |
| 5 | Iowealth 29A | 59.3 | 24 | 79 | Medium |
| 6 | Razorback U. S. 13 | 58.8 | 23 | 79 | Med. Poor |
| 7 | Missouri 313 | 57.7 | 26 | 77 | Medium |
| 8 | Shannon 1300 | 56.7 | 27 | 75 | Med. Poor |
| 9 | Indiana 610B | 55.9 | 28 | 79 | Medium |
| 10 | Funk G-53 | 55.0 | 25 | 83 | Medium |
| 11 | Ward 120A | 54.0 | 27 | 72 | Medium |
| 12 | P. A. G. 170 | 53.7 | 25 | 82 | Medium |
| 13 | Ohio C-38 | 53.4 | 26 | 79 | Med. Poor |
| 14 | Keystone 39 | 51.8 | 23 | 66 | Medium |
| 15 | Embro 95 | 47.1 | 22 | 73 | Med. Poor |
|  | Average | 56.5 | 25 | 78 | Medium |

## Medium Maturity

| Kansas 2234 (w) | 63.4 | 38 | 84 | Med. Good |
| :---: | :---: | :---: | :---: | :---: |
| Embro 49 | 62.4 | 28 | 83 | Medium |
| Pioneer 332 | 56.3 | 24 | 80 | Medium |
| Illinois 200 | 55.1 | 32 | 80 | Medium |
| Crost-Rite Mo. 148 | 54.3 | 28 | 70 | Medium |
| Keystone 40 | 54.1 | 25 | 77 | Med. Poor |
| Ward 125 | 53.9 | 28 | 75 | Medium |
| Indiana 818 | 53.8 | 20 | 83 | Med. Poor |
| Ohio C-12 | 53.0 | 15 | 78 | Med. Poor |
| Shannon 1500 | 49.6 | 36 | 69 | Medium |
| *Midland Yellow Dent | 43.4 | 42 | 84 | Medium |
| Average | 54.5 | 29 | 78 | Medium |

## Late Maturity

| Tennessee 10 (w) | 54.4 | 42 | 89 | Medium |
| :---: | :---: | :---: | :---: | :---: |
| Keystone 222 | 53.9 | 49 | 85 | Medium |
| Ward 135W (w) | 53.7 | 32 | 85 | Medium |
| Funk G-711 | 53.4 | 34 | 85 | Med. Good |
| Kansas 1583 | 53.3 | 28 | 85 | Med. Good |
| Texas 20 | 52.3 | 40 | 83 | Medium |
| Texas 9W (w) | 51.8 | 40 | 87 | Medium |
| Keystone 106W (w) | 51.4 | 30 | 84 | Med. Good |
| Kansas 1585 | 50.6 | 25 | 96 | Medium |
| Texas 12 | 49.7 | 46 | 80 | Medium |
| Texas 18 | 49.6 | 47 | 78 | Med. Good |
| Funk G-716 | 46.0 | 44 | 81 | Med. Good |
| *Reid Yellow Dent | 38.9 | 42 | 81 | Medium |
| *Oklahoma Silvermine | 36.5 | 41 | 78 | Med. Good |
| *Ferguson Yellow Dent | 32.0 | 51 | 61 | Medium |
| Average | 48.5 | 39 | 83 | Medium |

> TABLE V.-PAYNE COUNTY (Upland); Oklahoma Agricultural Experiment Station Farm; Perkins, 1 mile north, 1 mile west; 3-Year Average: $1946,1947,1948$.

Rank
Strain

Yield | Lodged |
| :---: |
| Pot. |
| Stand |$\quad$ Quality

Early Maturity

| 1 | U. S. 13 | 45.5 | 16 | 89 | Medium |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Ohio C-38 | 44.1 | 22 | 92 | Medium |
| 3 | Keystone 38 | 43.2 | 17 | 88 | Medium |
| 4 | Embro 36 | 41.4 | 20 | 88 | Med. Poor |
| 5 | P. A. G. 170 | 41.2 | 23 | 84 | Med. Poor |
| 6 | Missouri 313 | 41.0 | 18 | 89 | Poor |
| 7 | Razorback U. S. 13 | 40.8 | 18 | 88 | Med. Poor |
| 8 | Funk G-94 | 39.7 | 17 | 80 | Medium |
| 9 | Iowealth 29A | 39.6 | 16 | 90 | Medium |
| 10 | Funk G-53 | 38.7 | 18 | 85 | Medium |
| 11 | Keystone 39 | 38.2 | 20 | 75 | Med. Poor |
| 12 | Embro 95 | 38.1 | 16 | 81 | Medium |
| 13 | Indiana 610B | 38.1 | 25 | 85 | Medium |
| 14 | Shannon 1300 | 36.6 | 16 | 82 | Med. Poor |
| 15 | Ward 120A | 36.2 | 19 | 78 | Med. Poor |
|  | Average | 40.2 | 19 | 85 | Medium |

## Medium Maturity

| Pioneer 332 | 44.3 | 15 | 95 | Med. Good |
| :---: | :---: | :---: | :---: | :---: |
| Indiana 818 | 43.5 | 13 | 91 | Med. Good |
| Embro 49 | 41.8 | 18 | 93 | Medium |
| Ohio C-12 | 40.6 | 14 | 84 | Medium |
| Illinois 200 | 40.3 | 14 | 91 | Medium |
| Kansas 2234 (w) | 37.6 | 47 | 91 | Good |
| Keystone 40 | 37.4 | 20 | 90 | Medium |
| Crost-Rite Mo. 148 | 37.4 | 20 | 89 | Medium |
| Ward 125 | 34.4 | 23 | 83 | Medium |
| Shannon 1500 | 31.9 | 15 | 72 | Medium |
| *Midland Yellow Dent | 29.3 | 44 | 88 | Medium |
| Average | 38.0 | 22 | 88 | Medium |

## Late Maturity

| 1 | Kansas 1585 | 37.5 | 40 | 89 | Med. Good |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Funk G-711 | 37.1 | 55 | 90 | Medium |
| 3 | Keystone 222 | 36.7 | 51 | 85 | Medium |
| 4 | Tennessee 10 (w) | 34.5 | 47 | 85 | Medium |
| 5 | Kansas 1583 | 34.2 | 47 | 89 | Med. Good |
| 6 | Texas 20 | 32.8 | 54 | 76 | Med. Good |
| 7 | Texas 18 | 32.8 | 59 | 72 | Medium |
| 8 | Texas 9W (w) | 32.8 | 62 | 83 | Med. Good |
| 9 | Ward 135W (w) | 32.4 | 41 | 88 | Medium |
| 10 | Keystone 106W (w) | 32.0 | 19 | 78 | Med. Grood |
| 11 | Texas 12 | 32.0 | 56 | 83 | Medium |
| 12 | Funk G-716 | 30.5 | 51 | 78 | Med. Good |
| 13 | *Reid Yellow Dent | 25.3 | 40 | 92 | Medium |
| 14 | *Ferguson Yellow Dent | 22.1 | 51 | 72 | Medium |
| 15 | *Oklahoma Silvermine | 21.5 | 47 | 89 | Medium |
|  | Average | 31.6 | 48 | 83 | Medium |

TABLE VI.-SEMINOLE COUNTY (North Canadian Bottom); Ambrose Crain Farm; Prague, 8 miles south and 3 miles west; 3-Year Average: 1946, 1947, 1948.

Rank Strain

Yield Lodged Pct.
Early Maturity
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

| U. S. 13 | 78.5 | 5 | 78 | Medium |
| :---: | :---: | :---: | :---: | :---: |
| Keystone 38 | 77.1 | 4 | 81 | Med. Good |
| Missouri 313 | 75.1 | 6 | 80 | Medium |
| Keystone 39 | 73.4 | 6 | 72 | Med. Good |
| Funk G-53 | 72.5 | 3 | 79 | Med. Good |
| Funk G-94 | 72.0 | 4 | 78 | Med. Good |
| P. A. G. 170 | 71.5 | 6 | 76 | Medium |
| Iowealth 29A | 71.0 | 5 | 82 | Medium |
| Ohio C-38 | 70.8 | 4 | 86 | Medium |
| Shannon 1300 | 70.2 | 7 | 77 | Medium |
| Razorback U. S. 13 | 69.7 | 4 | 69 | Medium |
| Embro 95 | 69.1 | 4 | 73 | Med. Good |
| Indiana 610B | 68.2 | 7 | 79 | Medium |
| Embro 36 | 67.1 | 4 | 79 | Medium |
| Ward 120A | 64.6 | 4 | 73 | Medium |
| Average | 71.4 | 5 | 77 | Medium |

Medium Maturity

| Ohio C-12 | 78.0 | 3 | 81 | Medium |
| :---: | :---: | :---: | :---: | :---: |
| Kansas 2234 (w) | 76.8 | 7 | 85 | Good |
| Indiana 818 | 75.8 | 5 | 76 | Med. Good |
| Keystone 40 | 75.1 | 7 | 73 | Medium |
| Illinois 200 | 72.5 | 5 | 75 | Medium |
| Crost-Rite Mo. 148 | 71.6 | 7 | 75 | Medium |
| Embro 49 | 71.5 | 7 | 79 | Med. Good |
| Pioneer 332 | 70.6 | 3 | 87 | Med. Good |
| Ward 125 | 66.1 | 5 | 69 | Med. Good |
| Shannon 1500 | 62.8 | 6 | 71 | Med. Poor |
| *Midland Yellow Dent | 57.4 | 20 | 78 | Med. Good |
| Average | 70.7 | 7 | 77 | Med. Good |

Late Maturity


| 79.1 | 11 | 87 | Good |
| ---: | ---: | ---: | :--- |
| 77.3 | 19 | 84 | Good |
| 76.9 | 6 | 75 | Good |
| 76.5 | 11 | 74 | Med. Good |
| 76.1 | 11 | 89 | Good |
| 75.9 | 15 | 64 | Good |
| 74.5 | 12 | 83 | Med. Good |
| 72.6 | 13 | 87 | Med. Good |
| 70.4 | 19 | 80 | Good |
| 69.5 | 11 | 88 | Med. Good |
| 69.0 | 16 | 77 | Good |
| 67.3 | 9 | 81 | Med. Good |
| 54.3 | 26 | 82 | Med. Good |
| 52.1 | 21 | 78 | Med. Good |
| 44.5 | 19 | 56 | Med. Good |
| 69.1 | 15 | 79 | Med. Good |

TABLE VII.-TULSA COUNTY (Arkansas River Bottom)
Oklahoma Vegetable Research Station;
Bixby, $11 / 2$ miles northeast (across river);
$3-Y e a r$ Average: 1946, 1947, 1948.

| Rank | Strain | Yield | Pct. <br> Lodged | Pct. Stand | Quality |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Early Maturity |  |  |  |  |  |
| 1 | U. S. 13 | 90.9 | 3 | 87 | Medium |
| 2 | Missouri 313 | 90.7 | 2 | 89 | Medium |
| 3 | Indiana 610B | 88.5 | 7 | 89 | Med. Good |
| 4 | Keystone 38 | 88.0 | 2 | 88 | Medium |
| 5 | Keystone 39 | 87.9 | 3 | 85 | Medium |
| 6 | Funk G-94 | 84.6 | 2 | 87 | Medium |
| 7 | P. A. G. 170 | 84.6 | 3 | 87 | Med. Good |
| 8 | Shannon 1300 | 84.6 | 4 | 89 | Medium |
| 9 | Embro 36 | 84.0 | 2 | 91 | Medium |
| 10 | Ohio C-38 | 83.4 | 6 | 89 | Medium |
| 11 | Razorback U. S. 13 | 82.6 | 1 | 88 | Medium |
| 12 | Iowealth 29A | 80.3 | 2 | 88 | Medium |
| 13 | Funk G-53 | 80.3 | 3 | 85 | Medium |
| 14 | Embro 95 | 78.0 | 2 | 87 | Medium |
| 15 | Ward 120A | 76.5 | 3 | 78 | Medium |
|  | Average . | 84.3 | 3 | 87 | Medium |

## Medium Maturity

1
2
3
4
5
6
7
8
9
10
11

| Kansas 2234 (w) | 100.9 | 6 | 93 | Good |
| :---: | :---: | :---: | :---: | :---: |
| Crost-Rite Mo. 148 | 94.5 | 2 | 88 | Med. Good |
| Illinois 200 | 90.0 | 5 | 87 | Medium |
| Embro 49 | 89.9 | 3 | 90 | Medium |
| Indiana 818 | 87.2 | 3 | 86 | Medium |
| Keystone 40 | 86.5 | 3 | 85 | Medium |
| Pioneer 332 | 84.1 | 4 | 91 | Medium |
| Ohio C-12 | 83.4 | 4 | 77 | Medium |
| Ward 125 | 78.7 | 4 | 77 | Medium |
| Shannon 1500 | 69.9 | 6 | 81 | Medium |
| *Midland Yellow Dent | 67.8 | 16 | 86 | Med. Good |
| Average | 84.8 | 5 | 86 | Medium |

Late Maturity

| Ward 135W (w) | 92.9 | 14 | 87 | Med. Good |
| :---: | :---: | :---: | :---: | :---: |
| Keystone 222 | 90.9 | 8 | 93 | Good |
| Tennessee 10 (w) | 90.6 | 10 | 89 | Med. Good |
| Funk G-711 | 90.1 | 11 | 94 | Med. Good |
| Kansas 1583 | 86.3 | 4 | 90 | Med. Good |
| Kansas 1585 | 84.5 | 1 | 94 | Med. Good |
| Funk G-716 | 82.6 | 8 | 86 | Med. Good |
| Texas 12 | 80.9 | 14 | 81 | Good |
| Texas 20 | 78.9 | 15 | 73 | Good |
| Keystone 106W (w) | 77.6 | 4 | 82 | Med. Good |
| Texas 18 | 77.6 | 24 | 73 | Med. Good |
| Texas 9W (w) | 74.7 | 11 | 81 | Good |
| *Oklahoma Silvermine | 62.6 | 20 | 89 | Med. Good |
| Reid Yellow Dent | 56.2 | 14 | 86 | Med. Good |
| *Ferguson Yellow Dent | 43.8 | 18 | 57 | Med. Good |
| Average | 78.0 | 12 | 84 | Med. Good |

Twenty-eight recommended hybrids and varieties are listed on the following page.

The yields range from 63.0, Kansas 2234 (w), to 36.4, *Ferguson Yellow Dent.

## Recommended Hybrids and Varieties

The hybrids and open-pollinated varieties listed here have been tested each of the years, 1946, 1947, 1948. Each hybrid or variety was included in 29 tests during the period. The yield and per cent lodged figures are an average of all 29 tests, 15 of which were on bottom land and 14 on upland.

| Variety | Yield | Per Cent Lodged | Maturity |
| :---: | :---: | :---: | :---: |
| Kansas 2234 (w) | 63.0 | 16 | Medium |
| U. S. 13 | 62.5 | 11 | Early |
| Funk G-711 | 62.3 | 23 | Late |
| Keystone 222 | 61.2 | 21 | Late |
| Keystone 38 | 60.0 | 9 | Early |
| Tennessee 10 (w) | 59.9 | 23 | Late |
| Missouri 313 | 59.8 | 12 | Early |
| Ward 135 (w) | 59.2 | 20 | Late |
| Embro 36 | 58.7 | 9 | Early |
| Razorback U. S. 13 | 58.5 | 10 | Early |
| Crost Rite Mo. 148 | 58.5 | 11 | Medium |
| Funk G-94 | 58.3 | 10 | Early |
| Pioneer 332 | 58.0 | 10 | Medium |
| Illinois 200 | 57.7 | 11 | Medium |
| Texas 12 | 57.7 | 25 | Late |
| P. A. G. 170 | 57.5 | 9 | Early |
| Keystone 39 | 57.4 | 11 | Early |
| Texas 18 | 57.2 | 29 | Late |
| Kansas 1583 | 56.8 | 16 | Late |
| Texas 20 | 56.7 | 26 | Late |
| Keystone 40 | 55.9 | 10 | Medium |
| Shannon 1300 | 54.7 | 11 | Early |
| Kansas 1585 | 54.6 | 14 | Late |
| Ward 120A | 54.1 | 11 | Early |
| *Midland Yellow Dent | 47.1 | 21 | Medium |
| *Reid Yellow Dent | 43.2 | 23 | Late |
| *Oklahoma Silvermine | 42.2 | 24 | Late |
| *Ferguson Yellow Dent | 36.4 | 26 | Late |


[^0]:    * Annual reports were given in the following publications, all carrying the title "Oklahoma Corn Performance Tests": 1946, Bul. B-306; 1947, Bul. B-317; and 1948, Mimeo. Cir. M-177.

