

OSU
Collection

HAYES AND PATRICK *Pecans*

New Varieties for the Cracking Trade



By
Frank B. Cross
Herman A. Hinrichs
and
Hugh J. Thomson
Department of Horticulture

Agricultural Experiment Station
DIVISION OF AGRICULTURE
Oklahoma A. & M. College, Stillwater

Hayes and Patrick Pecans

New Varieties for the Cracking Trade

By Frank B. Cross, Herman A. Hinrichs, and Hugh J. Thomson
Department of Horticulture

“Hayes” and “Patrick” are two new pecan varieties for Oklahoma. These two varieties were selected and named at the conclusion of an extensive survey which was undertaken to find a new pecan for the cracking trade.*

The survey was conducted as an annual contest among growers of native pecans in Oklahoma between 1946 and 1951. Each year interested growers entered samples of promising nuts. The ten best entries were selected from the samples entered each year, and at the end of six years the two best entries for the entire period were selected and named as varieties for propagation.

The individual entries were examined and placed according to desirability for shelling, taking into consideration such factors as kernel percentage, size and shape of nut, completeness of separation of kernels from shell, and color of kernel.

The trees which produced the top ten nut entries each year were located, and all information available was obtained from the owner. Thereafter, these trees were visited each year, and information was obtained on production, disease resistance, and date of maturity.

Both tree and nut characteristics were taken into account in rating and selecting the most desirable type.

Productiveness, disease resistance, good shelling quality, and high kernel percentage were the factors given the most consideration in making the final selection.

* The survey was made possible through a financial arrangement with commercial shellers of Tulsa by the Northeast Oklahoma Pecan Growers' Association.

DESCRIPTION AND CHARACTERISTICS**Hayes**

The parent tree of Hayes is located in the SW $\frac{1}{4}$ of Section 15, Township 14 North, Range 2 East, Lincoln county. The tree is large, 6 feet, 6 inches in circumference, and grows in a deep alluvial soil along the Deep Fork river. The tree bears regularly, averaging 64 pounds of nuts per year from 1947 to 1953. Damage by insects and crowding by other trees have reduced yields some years. According to unofficial reports, the tree has produced as high as 300 pounds of nuts in a single season. The parent tree has not shown signs of pecan scab, but some infections have been observed on grafted trees.

The Hayes nut is medium in size, 93 per pound. It is oblong to roundish in shape. It tapers to the apex and has a blunt base. It is 1 $\frac{1}{4}$ inches in length, and 12/16 of an inch in diameter. It has four to



A representative sample of the Hayes nut showing its oblong to roundish shape. It is 1 $\frac{1}{4}$ inches in length, and 12/16 of an inch in diameter.



This picture shows the oblong shape and distinct markings which are characteristic of the Patrick pecan. It is $1 \frac{3}{8}$ inches in length, and $\frac{11}{16}$ of an inch in diameter. It yields about 60 percent kernel.

five nuts per cluster. The shell is thin. The kernel is plump, wide, rather dark, and has good flavor and quality. The nuts are well filled which results in considerable breakage in shelling. About 61 percent kernel recovery can be obtained. The nut matures about mid-season.

Patrick

The parent tree of Patrick is located in the NE $\frac{1}{4}$ of Section 14, Township 22 North, Range 15 East, Rogers county. It grows in the deep, fertile soil of a cultivated field in the Verdigris river bottom. It bears every other year. From 1948 to 1953, production averaged 72 pounds a year. Both the parent tree and grafts have appeared resistant to pecan scab.

Patrick, an excellent shelling pecan, yields about 60 percent kernel. The kernel is light in color, elongated, plump, and smooth. The shell is thin and easy to crack. The nut is small, 115 per pound; and elongated, $1 \frac{3}{8}$ inches in length, and $\frac{11}{16}$ of an inch in diameter.

Slightly depressed, flat opposite sides give the Patrick an irregular shape. The apex is short pointed; the base is round and blunt. The nut is a dull brownish color with distinct markings at the apex. It matures about mid-season.

Other Contest Entries

Other contest entries given honorable mention were:

| | Kernel Percent | Nuts per Pound |
|-----------------|----------------|----------------|
| Friggel | 59.8 | 57 |
| Kirkpatrick | 54.5 | 74 |
| Mount (No. 512) | 53.9 | 91 |
| Bruner | 53.5 | 85 |
| Jones (No. 498) | 53.0 | 95 |
| Owens | 52.7 | 82 |
| Mount (No. 492) | 51.6 | 75 |
| Creagor | 48.8 | 95 |

The Friggel nut deserves special mention because of its kernel percentage (59.8), size (57 per pound), productiveness, and disease resistance. This is an outstanding nut, but apparently too late in maturity for northeastern Oklahoma.

The Kirkpatrick nut is outstanding in appearance. It is large (74 per pound), and has a satisfactory kernel percentage (53.5). It is a good shelling pecan. It was entered for the first time in 1951, and in common with all other trees in the vicinity had no crop in 1952. This may or may not indicate unsatisfactory productive capacity.

Mount (No. 512) an excellent cracking nut, runs 91 nuts per pound, and has a kernel percentage of 53.9. It was entered in the contest too late for complete evaluation.

Bruner matures early, and is a high, regular producer. It is a good cracking nut, and averages 53 percent kernel. It is medium to large in size, averaging 85 nuts per pound. So far, both nuts and grafts have been free of scab. The disadvantages are slight breakage of the kernel in shelling, and yellow centers in 2 percent of the kernels.

Jones (No. 498) is a medium to small pecan, 95 per pound. It is a good sheller, and yields 53 percent kernel. Yields have been regular, but

light. The nut matures at mid-season. So far, the parent tree has been free of scab.

Owens is a medium to large pecan, averaging 82 per pound. It is a good sheller, and yields about 52 percent kernel. The color of the kernel is considered good. It matures about midseason. The parent tree is apparently free of scab.

Mount (No. 492) separates freely from shells, and in halves. It averages 51 percent kernel. The nut is large, 75 per pound. Yields are average or below. The kernel is slightly dark, but light enough to be classed as Number 1. The pecans are slightly subject to scab. Grafts were free of scab when last observed at one year of age.

Creagor matures early, bears regularly, and is a high yielder. It is medium to small in size, 95 per pound. It is a poor cracker. Kernel percentage is low (48), and recovery of kernels is poor through a commercial cracker.

After the ten top entries were selected each year, scions were taken from the parent trees and top worked upon young trees on two farms in the Verdigris river bottom south of Claremore. **Each of these farms** now have from 3 to 5 trees from each of the selections which are available for observation and further evaluation. The oldest of these trees have started producing. As time passes, these two groups of trees, together with continued observation of the better of the original contest trees will provide the opportunity of making a long time careful evaluation of all entries and possibly could lead to the decision to introduce varieties other than Hayes and Patrick.

