

## AZTEC, A NEW HORTICULTURAL VARIETY OF AVOCADO

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AFTER MANY YEARS of innocuous desuetude so far as the importation of new avocado varieties from Mexico is concerned the California Avocado Society got busy in 1947. An expedition composed of Harlan B. Griswold, at that time President of the Society, Carl S. Crawford, veteran explorer of Mexican avocado regions, Louis O. Williams and myself visited Atlixco to select promising seedlings in the Rodiles orchard and obtain propagating material for trial in California and elsewhere. Our work was made possible through the courtesy of the owner of the grove, and through the assistance of Henry Gilly, owner of Hacienda Xahuentla, next door to the Rodiles property.

Budwood of twelve varieties was taken to California by President Griswold. Budwood of these same varieties plus two more was taken to the Escuela Agrícola Panamericana where large West Indian seedlings were budded on 30 October 1947.

One of the varieties, N<sup>o</sup> 13520, was so vigorous in growth that it promptly attracted our attention. Blossoms commenced to appear on our four trees in January 1949 and fruit was matured by all of them in October and November of that year. Several other varieties of the 1947 collection also bore fruit in 1949 but we did not have sufficient specimens for study, nor do we feel that any of them has shown sufficient promise to warrant naming.

In the principal avocado-growing regions of the world, most of which lie in the subtropics (if we consider those areas in which the avocado is a vegetatively propagated orchard tree) a frost-resistant variety producing good-sized fruit of excellent quality has been one of the prime desiderata. Most avocados of the Mexican race, which is the most frost-resistant of the three recognized horticultural races, produce small, thin-skinned fruit of good flavor but are not very satisfactory from the commercial point of view.

The avocados of Atlixco, in the state of Puebla, Mexico, attracted attention as long as fifty years ago because of their

size and quality. In 1911 a variety introduced into California from Atlixco, which was given the name *Fuerte* because of its vigorous growth, was propagated commercially and rapidly assumed a leading place in the avocado industry of that state because of its resistance to frost and the appearance, size and quality of its fruit. This variety has always been considered a natural cross between the Mexican and Guatemalan races.

The varieties selected in 1947 are considered to be of the same general origin, crosses between these two races, but not necessarily first generation crosses. More probably they have been subject to crossing and back-crossing through several generations. Some of them approach more closely avocados of the Mexican race, others are more like Guatemalans.

Number 13520 is an exceedingly vigorous tree which in most respects would be taken for an avocado of the Mexican race, but its fruits are larger than most Mexicans and the season of ripening is later. We can only assume that it is a *Mexican* × *Guatemalan* cross with more Mexican than Guatemalan blood. Because of its vigorous growth; the probability that its large percentage of Mexican blood may give it frost-resistance (a point which can not be tested in this climate); its productiveness at an early age; and the size, appearance, and high quality of its fruits, we consider it appropriate to name it and publish a pomological description:

PERSEA AMERICANA var. **Aztec**, hort. var. nov.

Originated as a seedling of unknown provenance in the Rodiles orchard, Atlixco, Puebla, Mexico. Age of tree unknown, but probably 25 years or more. First propagated vegetatively in October 1947. Believed now to be established in California, Texas, Florida, Cuba and Honduras. To be known as "*Aztec*".

Form attractively and rather regularly pear-shaped; fruits produced in Honduras show less variation in form than those of *Fuerte* grown in the same orchard as well as fewer "cukes" or fruits with undeveloped seeds; size medium, commonly 5 inches in length by 3½ in greatest diameter; weight 10 to 12 ounces; surface smooth, glossy bright green in color, with numerous small yellowish-green lenticels; skin thinner than that of *Fuerte*, more like that of the Mexican race, with-

out stone cells and not separating readily from the flesh as in most of the Guatemalan avocados; flesh rich yellow in color, greenish yellow close to the skin, free from fiber; fat content not yet determined; flavor rich, dry, nutty, like that of good avocados of the Mexican race; quality excellent; seed small to medium-sized, tight in the cavity; season at Escuela Agrícola Panamericana, Tegucigalpa, Honduras (elevation 2600 feet) October and November.

Tree very vigorous in growth (definitely outgrowing stockplants of the West Indian race) with broad leaves dark green in color, of pronounced anise-like odor when crushed. Flowers large, noticeably pubescent. The tree comes into bearing at an early age and so far promises to be very productive. It makes excellent budwood and has proved easy to propagate by budding and grafting.

In moist climates we fear this fruit may be subject to anthracnose. It has been seriously attacked here by what we believe to be this disease, as have also fruits of *Fuerte* growing in the same orchard.

So far as we can ascertain, the name *Aztec* has not previously been applied to a recognized avocado variety. It is not included in the Check List published in the 1946 Yearbook of the California Avocado Society nor in the lists of seedlings registered with the Society since that time.

In choosing this name, we have particularly had in mind the desirability of a word which would seem appropriate if placed on "flats" of commercial avocados, that is to say, a word easily pronounced and remembered by the public and at the same time having some meaning. In this case the name suggests the country of origin. Up to now, the variety has been carried in experimental plantings under the number 13520, which refers to the botanical series of Louis O. Williams. Specimens of foliage from the original tree are to be found under this number in the Herbarium of Escuela Agrícola Panamericana as are also photographs of fruits from that tree, both in color and black and white, taken at Hacienda Xahuentla, Atlixco, Mexico, in October 1947.