

Chestnut Production

California leading state but commercial possibilities doubtful

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The chestnut will grow satisfactorily in many parts of California but it is questionable whether it can compete with European exports.

In spite of its small acreage—330 bearing acres in 1950—California is the leading chestnut producer in the United States.

To check tree growth, yields, and nut quality, 25 varieties of chestnuts were included in a tree nut variety trial orchard, near Riverside. Among the chestnut varieties were eight unnamed seedlings, and three hybrids of the American and European species.

The variety orchard was planted on a Ramona sandy loam soil which is common in southern California and many varieties of trees do well on it. The chestnuts were given the usual irrigation and cultivation. No fertilizer was applied. The trees apparently have not been affected by any fungus diseases or insect pests.

Trees of some varieties have made an excellent growth, the largest having reached a height of 30 to 35 feet. Some

varieties have not adopted to local conditions.

The largest trees belong to the varieties Eddy, Large American Sweet, Colossal, Bowman, and Rosa. The varieties producing the best yields are Large American Sweet, Champion, Colossal, Percy, Progress, Fuller, Boone, and Rosa.

Roasting and eating tests have indicated best quality in the varieties Champion, Fuller, Boone, Percy, Large American Sweet, Bowman, and Rosa.

The Fuller, Champion, Progress, Boone, and Large American Sweet are apparently hybrid seedlings of an American crossed with a European chestnut but the evidence of their origin is not conclusive.

Fifty years ago the American chestnut was common in the Eastern United States. It was an important source of hardwood lumber, telegraph and telephone poles, railroad ties, and tannin. The sweet palatable nuts were widely used, either roasted or boiled. About 1904 the blight, a fungus disease, killed so many trees that the species almost disappeared. Attempts to control the blight were futile.



Leaves, burr and nut of Colossal variety which produces large, high-yielding chestnut trees in California.

The varieties found growing in California are usually seedlings of the European and American chestnuts. The acreage is rather widely scattered throughout central California, with San Joaquin and Santa Cruz counties in the lead. In 1937, the state had 729 acres of which 395 were non-bearing. By 1950 even the decreased acreage of 330 bearing acres was apparently largely unprofitable.

Varieties grown in California are mainly selections made by growers and nurserymen from seedling plantings. Few varieties are available from nurserymen.

Since the blight was found in California in 1934, a vigorous eradication program has been under way. As soon as an infected tree is found it is removed and destroyed. The State also maintains a quarantine against the importation of chestnut trees from other states. By means of this quarantine and eradication campaign, it is believed that California's acreage can be kept commercially free from blight.

In spite of this successful fight against disease, and the fact that many varieties in California can produce high yields of quality nuts, the chestnut probably has only limited possibilities as a commercial crop under present conditions.

Imports dwindled from 22 million pounds in 1937 to a few hundred thousand pounds during the war. By 1946 they were up to about seven million pounds, and present imports indicate that there is now a limited market available. But whether chestnuts can be grown here in competition with European exporting countries is questionable.

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Three of the chestnut varieties tested: Rosa, top; Bowman, center; Percy, bottom.

