

GUAVAS AT THE CITRUS EXPERIMENT STATION

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A small variety orchard of guavas (*Psidium guajava*) was planted on the Citrus Experiment Station property at Riverside in 1943.

However, experiments have been conducted with guavas by the Station for a period of more than 30 years. The variety orchard consists of named seedling selections made by Dr. H. J. Webber. The seeds were secured in Florida, Hawaii, Cuba, Mexico, and a number of other countries. These varieties are the result of years of careful work and observation. They are probably the best varieties available for growing in California, and may have possibilities for other areas.

The variety orchard is located on a high, sloping hillside. The soil is a Ramona sandy loam and was cleared from the native growth. The land is not cultivated and the weeds are controlled with an occasional oil spray or by hoeing. The orchard is not heated. The trees have had little pruning and have been allowed to grow as large shrubs.

The guava is a native of tropical America, but we are growing it in a subtropical region. Dr. Webber stated in 1944 that the trees growing on the Station grounds have been severely damaged but two times in nearly 30 years. They were severely damaged again in early January 1949. On January 4, the temperature dropped to 25° F. and remained at that point for several hours. A low of 27.5° a few days earlier caused some leaf damage. During the period December 11 to 13, 1949 this planting suffered leaf damage from very low temperatures. Guavas are also subject to wind damage and the leaves are easily blown off by high winds. There are 25 varieties in the orchard that are now in bearing. The January freeze defoliated the trees, froze the unharvested fruit, and with most varieties, killed the tops back to the ground. The exceptions were the varieties Julia, Thick Pericarp, May, Turnbull, Hart, Home, Earle, Esther, Popenoe, Arrons, and Florence. The Julia suffered the least damage. However, none of these varieties set a crop in 1949, but should be back in production in 1950. The other varieties are suckering out from the base and it will take several years of careful training to rebuild the trees, and they cannot come into full production in less than 2 or 3 years.

Of the varieties mentioned above, the Home, Hart, May, Julia, and Esther are among the best, not only from the standpoint of hardiness, but because of good production and quality of fruit.

Of the less hardy varieties, the Abaza, Detwiler, Rolfs, Diaz, and Erhorn are promising. They are heavy yielders and produce fruit of good quality. Producing fruit of good quality, but not heavy producers, are the Webber, Greenskin, and Hawaiian seedling. The Rolfs and Hawaiian seedling have pink flesh and are more attractive for use as fresh fruits and are considered excellent for that purpose.

In making this brief report, it was not with the intention to attempt to develop interest in the guava as a commercial crop. In California it will probably never be more than a home garden tree grown in warm inland locations. It is not an attractive plant so will have little appeal as an ornamental.

The fruit of the guava is well liked by our Latin American neighbors and in such countries as India and Java where it was introduced from tropical America. Even South Africa has developed a small industry because of the healthful properties of the fruit. It is very high in Vitamin C as determined by analyses made at this Station. Recent reports state that Florida now has about 400 acres planted to the guava. There the fruit is being used mostly for processing. However, the people of the United States have shown little interest in the guava. Rather strange when you recall how many food conscious people there are who are interested in any fruit that is considered to be of particular value in some health giving property.

There are a number of properties that may account, in part, for its lack of popular appeal. The fresh fruit has a penetrating odor that is objectionable to most people. Its seediness is undesirable—most varieties contain numerous, small hard seeds. The guava is not a very tasty fruit by usual standards. However, its principal use in this country will probably be for jam, marmalades, juice, and for canning.