

Planting Distances For Avocados

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Efficiency in the utilization of land is important in all farming operations. Either too few or too many trees per acre will reduce the potential production and therefore the net profits.

In the production of avocados it is necessary for the planter to know something of the type of growth of the variety he is going to plant; otherwise production per acre may be too low because of inefficiency in the use of the land, or too many trees may be planted and allowed to crowd each other.

When they crowd each other and the branches of different trees intermingle, the lower ones become shaded out, and there are very few lower branches to bear fruit. Therefore the bearing surface is at the top of the trees, constantly rising as the trees grow older. Not only is the yield reduced but the cost of picking advances. The three main factors involved in deciding on the number of trees per acre are concerned with the growth characteristics of the variety, the soil, and the climate. All three of these determine the size of the tree for any variety.

The decision as to the planting distances should be made after observation of a given variety and its reaction to soil and weather conditions.

The requirements as to space are quite well known for some varieties, such as the Fuerte, the Lyon, and others, but for some of the newer varieties, one has to judge by a few individuals and by the growth characteristics which have been observed of a limited number of trees.

In an article in the California Avocado Association Yearbook for 1916, Dr. H. J. Webber makes suggestions for spacing avocados in a commercial orchard. For a permanent planting he suggests 60 feet as the distance between permanent trees set on the square. That suggestion was made in the light of knowledge of the varieties which were then being considered for commercial plantings. At that time little was known of the Fuerte, and especially as to its habits of growth and its size when mature.

The tendency of fruit growers generally has been to plant too many trees per acre. Avocado growers in most instances have over-planted their acreage. This practice would have worked out satisfactorily if the orchard had been thinned before the trees crowded each other.

The Fuerte tree has a tendency to grow to a considerable height but will spread laterally if permitted to do so. Probably the most economical procedure would be to train this, our most important variety, to develop more of the horizontal branches as far as possible without weakening the tree, making it possible to pick the fruit at a minimum cost.

It is agreed by many that 45 to 48 feet would be a satisfactory distance between trees of the Fuerte variety when 18 to 20 years old in a deep, well-drained soil, and such a distance would permit the trees to spread as they should.

If the orchard is to be planted only to Fuertes, then it may be desirable to plant 24x24 feet, providing for a heavier per acre production during the earlier years of the life of the orchard.

Whatever the planting distance or the number of trees per acre, a study of each individual tree should be made. Observations of the growth of each tree will help the grower later. Any tree observed to have sunblotch should be removed while the tree is young.

An annual study of the yield of each tree is advised, to enable the grower to know the efficiency of each one.

As the trees grow and cover the land it is paramount that the grower prevent the limbs from each of the trees from growing into and crossing branches from other trees, as this condition in the orchard will cause a shading out of the lower growth already referred to above. If necessary, whole trees should be removed as soon as crowding takes place.

In removing trees, take out those which have shown during a period of years that they are not efficient producers and therefore not economical units.

When the trees have reached maturity in a deep soil and in an ideal environment the grower will have eliminated a large percentage of the original planting. However, he will find that after careful selection of the satisfactory producers, and after topworking, some trees with buds from trees known to be consistent in production the spacing will be uneven. Uniformity in spacing may be sacrificed for greater efficiency.

Another plan in planting a Fuerte orchard in deep soil which is comparatively level is to plant the permanent orchard 48x48 feet with two or three other varieties which appear promising as interplants.

A 24x24-foot planting will have four times the trees intended for the permanent orchard. However, later a decision may be made to retain one or two of the varieties on trial because of their commercial value instead of the Fuerte.

Only through a careful study and by building for a future high yield per acre will volume production be realized, which is probably the most important factor in a successful and profitable enterprise.