STRUCTURAL FORMATION OF AVOCADO NURSERY PLANTS

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A structural model of avocado nursery plant has been defined and developed by Brokaw Nursery, Inc. It has a columnar form, with a strong central axis, multiple lateral ramification and abundant foliage in the variety portion. This corresponds to 90% of the plant shoot length, belonging the remainder 10% to the rootstock without branches and leaves.

Our nursery is located at the California coast, with a Mediterranean climate with mild summers and almost frost-free winters. Under those conditions, it is possible to grow avocado plants outdoors from transplanting to sale time without any kind of sun protection.

The columnar architecture, profuse foliage and the early and complete plant hardening outdoors in the nursery together with mulching in the orchard increases the rate of survival during the first years. It is not usually necessary to whitewash the trunk and branches.

In this work, the plant structural formation process in the outdoor nursery is described. This includes: selection of the central leader, tying of the central leader to a stake as it grows, desuckering, periodic tipping of lateral branches and tipping of the central leader when it reaches commercial size (1 m. approximately). Other nursery operations include: cutting back the central leader with a slanting cut when lateral branching is poor and periodical rearrangement of plants in rows according to size to avoid shading due to irregular growth.