

Making Plans For An Efficient Orchard

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Summary of talk given at Meeting in Ventura County, November 1, 1938.

A book could be written on each phase of so important a subject, therefore what I am about to discuss with you is a very brief outline.

In selecting a site for an orchard enterprise one of the first considerations is climate which includes: temperatures—the possible minimum, maximum, and mean temperature for the year; humidity; and susceptibility to winds—strong winds, hot winds, and drying winds.

Frequently elevation is a factor, especially as it may be necessary to have good air drainage to prevent accumulation of cold air in the orchard.

Avocados are grown in a variety of soils and usually a sandy loam type is safer because of the drainage factor. However, a loam or other heavy type may be satisfactory if well drained. A soil at least three or four feet deep will be more easily handled, other things being equal, than a very shallow soil for several reasons which we do not have time for, today.

Both quality and quantity of water are important and since cost is a factor in most agricultural enterprises a location where water is low in cost is desirable.

ACREAGE MUST BE LARGE ENOUGH

A prospective grower may well consider the size of the property, since too small an acreage may be the limiting factor in providing a satisfactory family income during the years to come when the production will be greater with a consistently lower price than may now be expected. The average profit to the citrus growers during the seven-year period ending December 31, 1937, in the Los Angeles County Cost Study amounted to \$105 for Navels, \$150 for Valencias, and \$231 for lemons. Out of these profits the grower must pay for interest on a mortgage he may have on the place, as well as interest on the equity, and depreciation of buildings and equipment.

These figures will indicate to you that a small orchard, five to ten acres, may not provide a living for a family if we can use them as a criterion. The figures may even be somewhat optimistic as the orchards in this cost study are somewhat above the average. It is advisable for the prospective grower to provide for a sizable enterprise.

A study of the varieties available for planting is continuing. This is one of the most

important phases of the study concerned with the building of a successful orchard and the prospective grower as well as the present grower, to be a profitable one, must give considerable study to varietal performance.

Preparing the land and laying it out for planting is a very important part of the preparation for a prospective orchard. It may be necessary to plant on contour or even on contoured terraces.

The surface soil should not be disturbed if possible but should remain as surface soil where feasible to leave it as such. In contour terracing, however, this is not possible.

The greatest care in the selection of trees for quality is important. Second quality trees do not pay. Unless one is experienced, assistance and advice should be obtained in this selection.

According to the variety selected, planting distances need to be carefully worked out, having in mind the space the trees will occupy when mature.

PROPER SOIL MANAGEMENT IMPORTANT

After having an orchard planted, much depends on the care in soil management, protection from adverse weather, and controlling diseases and pests if present. It is important to carefully regulate the soil moisture in order to provide ideal growing conditions in the root zone. Fertilization, using the least expensive sources of the required elements and materials, is necessary. If cultivation is practiced, roots should not be disturbed. Shallow cultivation is safer than deep cultivation and is all that is necessary. An accurate record of costs will be found very helpful. Trees are found to vary greatly in production especially the Fuerte variety of which a larger proportion of our present acreage is composed. Individual tree production records should be made each year for at least five years either by actual yield or by estimation in pounds of fruit produced. This will give the grower the performance-record by trees enabling him to know which trees are producing satisfactorily and also from which trees to obtain buds and scions for top-working the poorer producers.

Nearly all orchards have some especially good producers.

The future profitable orchard will be one which is carefully planned, planted to good trees and its efficiency studied. The simple procedure of buying some trees and planting them under just any conditions will not spell success.

What about production? Can we expect sufficient volume of production to make a profit if we obtain only 5c a pound for fruit on the trees? We no doubt can. The production of 10,000 to 15,000 lbs. of fruit per year is a possibility by the avocado grower who knows the business and has developed an orchard in the manner described above.

SUMMARY FOR CONSIDERATION

The production of fruit in California in 1938-39 is estimated to be around twenty-six million pounds from 11,000 commercial acres which is 2500 pounds per acre. Surely, the full-bearing efficient orchard of the future may be expected to bear four to six times

the average today when the fruit is borne on trees the larger number being under twelve years of age.

Briefly, the avocado industry is one which must be developed along safe and sane lines to be profitable. The following factors will have to be considered:

1. The climate and weather conditions.
2. Soil and water supply.
3. Care in laying out orchard.
4. Selection of quality trees.
5. The variety as far as possible with present knowledge should be adapted to conditions.
6. Diligence in the care of the orchard in that growth may be provided at all times.

The profitable grower will be a student and his business will be a profession.