

## PROBLEMS OF THE GROWER

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In the avocado business, there are almost as many opinions as there are growers, so I feel sure that I will only be following traditional procedure if I express mine. I have been asked to comment on the problems of raising avocados from the growers' standpoint only, so I feel I am taking very little risk that I will be mistaken for an expert.

One of the most important considerations for the grower, it seems to me, is the control of expenditures in line with the possible return. We live and farm today in a highly scientific age and we are constantly being told of new and better methods to improve the condition of our trees and our soil. Many of these methods are effective; some are not. Some are unproved as to their effectiveness. But the employment of any of these methods whether in fertilization, irrigation, soil conditioning, or tree care must be judged by one primary factor: will it pay? Speaking under the assumption that most growers are in the business to make a profit and a living, it appears obvious that we cannot spend \$10 to put \$5 worth of fruit on a tree. We are not operating a hobby or an endowed experiment or an income tax deduction (most of us), so we must carefully appraise each new idea as it is presented to us and try to measure it by that same material yardstick: will it pay? I suppose that with unlimited funds at our disposal each one of us who had the energy to write the checks and apply the methods might find himself the operator of an outstanding grove. But unfortunately our problem is to build an outstanding grove that also shows outstanding profits—and that calls for a pretty sound analysis of what pays off and what doesn't. We can't do everything; we can't try everything. Alluring though they may sound some ideas must be foregone because they cost too much, and others accepted even though their cost seems high. The basis for decision is always the same. If it brings more income than it costs, do it. If it doesn't, forget it.

How to know is a problem. Practices recommended by scientists are no less alluring than the wonder methods urged by salesmen. If the final outcome measured by profit is in doubt, a partial trial or test plot is to be recommended. New growers often spend unnecessary money simply because they feel that they must be constantly doing something to push those trees ahead. But careful consideration tells us that adequate irrigation and fertilization will keep the grove in good shape while we are making up our minds what further methods to follow. It has been said that any competent expert can lay out a general plan which if followed will result in a generally good orchard. I think this is true and that standard practices which have been proved should be the basis. How far beyond these we want to go is up to us, if we want an outstanding grove. A good, consistent grove, economically operated, may be better than a ninety-day wonder which in the end may become a deep source of disappointment, lined with the owner's money. While I would slow down the "eager beaver" who wants to try everything, I would also take a dim view of the agricultural reactionary who still does it like grandpa did.

Somewhere in between is the thoughtful, forward-minded (and open-minded) fellow who reads, listens, and thinks—and then does what makes sense to him.

I have observed that while there are any number of beautiful four and five year old plantings, the top groves of fifteen years or better in any community can be counted on the fingers of one hand.

The reasons for this situation are several. One of the most common is frequent change of ownership with corresponding changes in cultural practices. Another is lack of consistency in following through on a cultural program; another, lack of interest or money on the part of the owner. I believe that one of the major problems of every owner of a good grove is how to keep it good. Among the questions we should ask ourselves is "Are the practices I am following with my younger trees going to be proper as the trees increase in age?" If we have trees on shallow soil, how do we plan to compensate as the trees grow larger? How should we project our irrigation practices into the future when our trees will need more water and wider distribution? What changes may we want to make in our fertilizing program as the trees grow older? I do not think there is any static formula in growing avocados; our problem is to know when and how to change to most effectively meet changing conditions. Even the factors we once thought were stable are undergoing change; water is one of them. There is less of it than formerly as we all realize only too well, and what is left is of poor quality. There are chemical compensations for salinity, but may not the additional months of dry air and artificial irrigation during such a period of limited rainfall affect the balance and the growing, blossoming, and fruit-setting cycles of the trees?

A problem confronting many owners of mature groves, and one always ahead with younger trees, is crowding. Many a grower looks at his trees and says to himself that next year he will do something about thinning them out. But next year the crop looks just too good, or the family needs a new car or a boy is ready for college, and the thinning program is deferred for still another year. It takes courage to apply the axe to good trees, but the orchard that remains crowded is sure to go downhill, and intelligent thinning is one way to maintain the quality of your grove. The writer recently removed one out of every three trees in his grove and the results in increased growth and bearing with four sides of the trees exposed to sun and air are little short of spectacular. A further thinning program is already mapped for the future.

Many ranches in this district show a wide variation of soil types and structure. This creates a very definite problem in planning and carrying out irrigation, fertilization, and other cultural practices, particularly on properties where there is a wide and frequent variation. Proper water distribution and penetration under such conditions would call for a close analysis of all questionable areas with consideration of various devices to restrict or increase the volume and method of applying water. The availability of various nutrients differs with different soils and the compensating practices also differ.

Perhaps my thoughts may be summed up in the statement that no two groves are alike. Each has its own advantages and drawbacks, each has its individual set of factors in soil, water, sun, and wind. What will work for my neighbor won't necessarily work for me. The only thing we have in common is problems. As I stated at the outset, I make no claim to having the answers; I am only attempting to state some of the problems. But

the answers can be had by the grower who will learn each year more and more about his own particular piece of property. A soil tube and open mind are two essentials. Add to these a pinch of caution plus the ability to evaluate and act upon our findings, and I believe we will all go a long way toward finding the answers to many of our problems.