

## **Cooperative Test Plots**

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Mr. Chairman, Ladies, and Gentlemen: I am very pleased to have the privilege of appearing on this program today. We in Santa Barbara County, always welcome the opportunity to exchange ideas with other farmers in the State. It is this free exchange of ideas and unselfish cooperation that will make for a sound avocado industry. No one man, whether he be a farmer or a specialist, can do the job alone. The type of cooperation I am talking about can be seen in the report Doctor Halma\* gave on our avocado rootstock plots. In this report he has outlined the mechanics of getting our avocado rootstock test plots established. I want to tell you about some other things that are necessary to make test plots a success.

The importance of field test plots to the sound progress of agriculture does not need to be emphasized to this group; this being understood. The next important thing for every farmer to understand is what goes into these plots before the information from them can be of practical value. I think the most important factor in good field test plots is to get good grower cooperators. By this, I mean farmers who understand the benefits that come from cooperation. Not only among themselves but also with agencies which have information that might improve their farming practices. Santa Barbara County has a large number of this kind of farmers, but I am sure there are just as many in other counties.

I do not believe we can put our finger on just what is responsible for making a good cooperator. One thing that all of them have in common is that they live on their farms. They know every plant and every weed on that farm. They like to watch things grow. They are quick to see anything that is out of the ordinary. This type of self-training helps these farmers to recognize the problems as they appear. Also, it provides them with a good background for anticipating future problems. All of this, along with regular group meetings at which they compare notes, makes for good cooperators.

Over the past years our farmers have come to recognize three important requirements that must be met if they are to make the most of information developed by research. The first of these is that the best information they can get about scientific farming, is that which is obtained from field test plots conducted under local conditions; and better yet on their own farm. Second, is that in order to get these tests in their county it would be necessary for them to do some of the work and, maybe, share some of the expense. Third, test plots must receive special care if the information obtained from them is to be reliable. The importance of these three factors were known to the Santa Barbara County growers when they asked Doctor Halma to start the avocado rootstock test plot in our

county. What they wanted most from the plots was to have the trees where they could watch them grow. They also wanted the plots to be big enough so that they could make their own analyses of results. To get what they wanted, these farmers were willing to do their part. The first step in the avocado rootstock test was to find plots for a seed bed and nursery. These were furnished, free of charge, by a farmer although he knew at the time that he could not qualify as a cooperator to receive some of the test trees. Another farmer helped us bud all day one Sunday when we were crowded for time. All this was done for the good of the project, by growers who knew they would not get any of the test trees. This is the type of cooperation received from farmers who know the value of these tests and how they might affect the future of the industry in their county.

Once the problems of seeding, planting to the nursery and budding were met, our next step was to select good cooperators for field plots. It would have been an easy matter for us to get rid of the trees. It was not quite so simple, however, to find cooperators who had the facilities that were required to get the greatest value from the test for the county as a whole. These facilities included:

1. A good soil with good drainage, located out of the frost hazard.
2. The farmer himself must have time and interest enough to give personal attention to the trees.
3. There should be a fair degree of assurance that the property would not be sold.
4. The property must be representative of the main areas in the county likely to be planted to avocados.

Some of these factors may not seem important to many of you growers. You may say, "What if one or two trees do die. That is no great loss." In a commercial planting, I agree. Under those conditions all the farmer has to do is to call the nurseryman for more trees of the same kind. It is not so simple when one or two trees are lost from a test plot, where the loss of a tree is the loss of valuable information. To replace one test plot tree will require from two to three years, which is the time required to grow another tree from seed.

I am sure that all of you realize it would not be possible to get every farmer in a county to cooperate in a project. Fortunately, this is not necessary. To make a good project, however, it is important to have a few farmers who will take the lead in these matters. Once the work is far enough along for others to see, it will gain 100 percent support. At least that is what happened up our way and we are no different from thousands of other farmers in California.

I feel that it is necessary to demonstrate the value of a practice before much support can be expected from the general public. That is the reason why it is necessary to have a few farmers who will take the lead in getting these plots into the field. Once they are where the public can see them it does not take long for them to appreciate their value. An example of what can happen is seen in the action taken by our Board of Supervisors. When they saw some of our test plots, like the avocado rootstock which Doctor Halma has told you about, they were quick to realize the effect that large scale field test plots have on the agricultural wealth of the county. In support of this work they

have provided the following facilities:

1. From six to eight acres of county owned land for a variety garden and propagation work.
2. A greenhouse and a lath house.
3. A work room and a laboratory.
4. A full time assistant.
5. Transportation for the Senior Superintendent of Cultivation.

In order to use these facilities to their fullest advantage, the lemon growers of Santa Barbara County organized a non-profit corporation called, "Citrus Field Research" which provides:

1. A full time field assistant.
2. A Jeep.
3. Money for operation of the Jeep and purchase of test plot material not furnished by the county.

In further support of the local program the University of California Agricultural Extension Service has contributed:

1. Funds for a Senior Superintendent of Cultivation.
2. Loaned expensive equipment which will increase the amount and quality of information we can get from our local test plot.

All of this did not come as a windfall; nor is it the work of any one person. It came after a few farmers took the leadership to demonstrate that they were willing to help themselves through "all-out" cooperation.

This increase in facilities and field assistants, all of which was provided during the current year, has materially improved our field test plot work in all lines of agriculture. In avocados alone we have about 1500 seedlings of known varieties that are now ready for planting in the nursery. Some of these seedlings will be brought into fruiting in search for new varieties. Others will be used to test the performance of some commercial varieties on different varieties of rootstock and for test plots on replanting old avocado soil. In summary I wish to emphasize the following:

1. Any field test plot is only as good as the cooperator.
2. Cooperation from the farmer is necessary to test the practical application of the findings of research.
3. More good field test plots will have to be established before industry can realize full benefit from research work.
4. It is only human to blame some one else for our troubles. Let's be different and get behind such projects as this and take a lot of the guess work out of avocado growing.

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