SAN DIEGO COUNTY AVOCADO INDUSTRY

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I. GENERAL SITUATION

The avocado acreage in San Diego County constitutes a large proportion of the total avocado acreage in the State of California. In 1957 the total acreage of avocados in the state was approximately 26,000 acres. Of this amount, about 15,000 bearing and non-bearing acres are in San Diego County. The value of this crop is such that it is always in the upper five agricultural crops produced in the county each year. In 1957 avocados were second only to tomatoes in plant crops. As far as the total agricultural return is concerned, it was fifth, following tomatoes, eggs, milk and cream, and beef. The total returns, according to the Agricultural Commissioner's San Diego County crop report for 1957, were \$4,325,000. The avocado industry is a comparatively new industry to the state, and is at this time going through a period of what we would call "growing pains." Many problems have descended upon us within the last two or three years, but at the same time it seems that in the last few years more has been learned about how to grow avocados than during the entire period that these trees have been in commercial production. We in San Diego feel that the avocado industry will continue to grow.

II. ACREAGE

In 1936 San Diego County had approximately 7,900 acres. This compares with 15,000 acres in the 1957 census. It is felt that there is sufficient land in the county for this acreage to double. This, of course, depends upon the amount of water which becomes available.

III. PRODUCTION

In 1936 California produced about 800,000 flats of avocados, compared with approximately 2,150,000 in 1956. In San Diego approximately 1,500,000 flats were produced in 1956. Many growers are top-working non-producing trees, as well as those varieties that are no longer acceptable by the trade. This means we can expect additional increases in the amount of fruit produced.

IV. PRODUCTION COSTS

In San Diego in 1936 avocado land and orchards were selling for from \$1,500 to \$3,000 per acre. In 1958 the land and orchard prices have risen until now they range from \$3,500 to \$8,000 per acre. It is true that for some virgin land where water has not yet

been developed, the price is considerably less, but we are assuming that the prices quoted are for established groves or for land where water is available. In 1936 it cost approximately \$265 per acre, excluding picking and hauling, to produce avocados. Today it costs nearly \$700 per acre, excluding picking and hauling charges.

V. CULTURE

Avocados are grown in four out of five climatic zones in San Diego County. These zones are: coastal, coastal valleys, intermediate areas, and the inland areas. The only area in the county where avocados are not grown commercially is on the desert. Avocados are grown successfully along the coast in the districts surrounding Carlsbad. Oceanside, Leucadia, Encinitas, and Solana Beach. Even though subdivision has encroached upon agricultural land in the southern part of the county, there are still many avocados grown in Spring Valley, La Mesa, El Cajon, Winter Gardens, and some parts of Lakeside. Fallbrook, Escondido, Vista, and the Rincon Springs - Pauma Valley areas of the county represent the largest percentage of the plantings. Soils will vary from a uniform loam soil on the coast, called an Elkhorn sandy loam, to the decomposed granite type soils of the Vista sandy loam and the Fallbrook fine sandy loams, found around Vista, Escondido, and Fallbrook. Soils are generally acid in reaction and range from a depth of six inches to six feet. Some avocado groves have been planted on a Merriam series, which is clay soil, and, as a result, root rot disease has claimed many acres. This disease is not confined to the clay-type soils, however, since we have found in San Diego County that the root rot fungus attacks trees on the lighter textured soils as well.

VI. VARIETIES

The two recommended varieties in San Diego County are the Fuerte and the Hass. On the coast one will find the largest number of varieties, some no longer recommended for commercial planting. Many of the growers are in the process of grafting these over to more profitable varieties, such as the Hass. The Hass is the only variety which does well in all climatic zones of the county. Hass plantings are increasing on the coast, replacing such trees as the Itzamna, Dickinson, Nabal, and some Anaheims. Fuerte is not recommended as a coastal fruit, but is the No. 1 commercial variety in other districts. The Hass is being planted in all districts and as a result production is continuing upward. Three varieties have been used recently to fill out orchards where portions of that land are too cold for planting Fuerte or Hass; they are the Bacon, Zutano, and Jalna. These three are not recommended for commercial planting, but are to be grown in areas too cold for other varieties. The avocado industry is dependent largely upon the type of tree obtained from the nurserymen. There are many avocado nurseries found throughout San Diego County. We are proud of the calibre of nurserymen who are growing trees for the industry, and because of their progressive attitude we are obtaining improved stock.

VII. PROBLEMS

No industry is without problems. The avocado industry is a young one, and, as mentioned before, is experiencing growing pains. Last year has seen some serious developments which have caused some growers to become discouraged. Fortunately, there are many growers who do not feel discouraged, but on the other hand feel that there is much work to be done. What are some of these problems facing not only the growers here in San Diego but in other counties? We can list them as follows:

- Avocado root rot disease
- 2. Marketing techniques
- 3. Market development
- 4. Clonal root stocks
- 5. Varieties
- 6. Irrigation (systems, water use)
- 7. Salinity
- 8. Sun-blotch disease

In listing these so-called problems, we do not mean to infer that these are the only problems, but they are the ones that seem to be most important. It is realized that an answer to some will take longer, such as root stocks and varieties, but with others some of the work now being done will soon produce the answers.

VIII. FUTURE OUTLOOK

No talk of this type would be complete without a brief look into the future. On the basis of what we have experienced in the past since our industry started, up until the present time, I can only say that I feel very confident of the future of the avocado industry. Some of the reasons for this confidence can be explained by listing some of the reasons:

- 1. Production will continue to increase.
- 2. Acreage will expand.
- 3. Improved varieties will be developed.
- 4. An answer to root rot should be forthcoming.
- 5. Clonal root stocks to give us an answer to our variability problem.
- 6. Improved marketing techniques to handle our increasing crops.
- 7. Expansion of markets will make more people acquainted with our product.
- 8. Improved irrigation systems and the use of water measuring devices will play an important part in more efficient irrigation operations.
- 9. Change in attitudes of growers to graft over non-producing trees.

In addition to these comments about the future, there are two things that must be considered:

- 1. Costs will continue to be high, but if growers can increase their production, either through additional acreage, use of varieties producing greater yields, or planting the trees closer together, resulting in more trees per acre and higher yields in the early age, this high cost of production can be offset.
- The must in production of any crop or product is that the crop or product be of the highest quality possible. This is no exception in the avocado industry. Therefore, the production of high quality fruit will in the long run return the greatest number of dollars.

IX. CONCLUSIONS

In viewing the industry today, it can be said that avocados are here to stay. The type of individual that constitutes the backbone of our industry is typified by being enthusiastic, energetic, intelligent, and with a determination to see that this industry becomes a big one. With the tremendous changes taking place in agriculture throughout the country, it might be well to look at some of these changes and how they possibly can affect the avocado industry. The experts tell us that in the years ahead we will have fewer small farms and more larger farms. Fewer people will be employed on the farm or ranch because of our technological advances reducing the need for a large agricultural force. More capital will be needed for the production of crops. A successful grower in the future will need a greater technological know-how. He will have to be a plant scientist, mechanic, electrician, construction engineer, nutritionist, chemist, economist, and marketing expert. With all this, he must acquire increased managerial ability. Many of you sitting here today have already realized some of what I have just mentioned. At the beginning of this talk, it was mentioned that the industry is going through its growing pains. We tried to highlight what some of these "pains" or problems are. Solving of problems which will always be with us will result in a stronger and healthier industry. The future of the avocado industry looks bright to me if we all work together in making this industry the best possible.