

## THE AVOCADO INDUSTRY IN SAN DIEGO COUNTY, 1970

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### I. Acreage

The present acreage of avocados in San Diego County is approximately 12,500 acres. Of that, 2,100 are non-bearing acres. The future trend indicates increased planting. Nurserymen have not been able to supply the demand for trees.

The commercial avocado production is concentrated in an area bounded by the Riverside County line on the north; Bonsall and Vista on the west; Rincon Springs and Pauma Valley on the east; and Poway on the south. The old areas of La Mesa-El Cajón and the coastal cities still contribute a considerable amount of fruit from the many trees that are still being grown. Very few of the orchards in these areas, however, are large acreages. Most of them are being cared for by people who have built a home on a half-acre, an acre, or two acres. The newest areas for the development of avocados are in the Lilac, Valley Center, Rainbow, and Bonsall areas. These are districts either adjoining or in between the older commercial areas of Fallbrook, Pauma Valley, Vista, and Escondido.

### II. Varieties

The four main varieties grown are Fuerte, Hass, Zutano, and Bacon. The Jalna and other Mexican type varieties are being grown to a certain extent but are losing their desirability in the market place. The Fuertes are marketed from November to April. The Hass can be marketed as early as February, but the usual harvesting period is from April to August. The Bacon and Zutano, which are planted primarily in cold areas, are harvested from October to January. The only new experimental variety that is being planted in any quantity is the Reed. This is a patented variety with a marketing season from July to September. Other varieties that are still being grown but on a limited scale are Anaheim, Nabal, Wurtz, and the miscellaneous green and black fruit of seedling type.

### III. Production Problems

**A. Yields.** Fuerte production continues to be erratic. Alternate bearing is marked, and the fruit set is definitely influenced by climatic conditions during the months of April and May. The 1969-70 Hass crop is larger than the Fuerte on considerably less acreage. The early production of the Hass, plus the large amount of fruit produced, makes this variety more desirable, and are the reasons for its increased planting. The Reed is

promising as a new variety because fruit quality is excellent and production is good. The Reed is a round fruit weighing up to a pound and looks similar to the Nabal fruit. The roundness of the fruit and the size may be a drawback as far as the market is concerned. The internal (eating) quality is so good that these other two factors might be overcome once the consumer tastes the fruit. Increased numbers of cross-pollinator varieties are being planted among Fuerte trees to aid in increasing their yields. They are Topa-Topa, Zutano, Covacado, and other Mexican varieties.

**B. Diseases.** Avocado root rot continues to be the most serious disease affecting the avocado industry. Sunblotch is being gradually reduced by the fine work of nurserymen in good bud selection and seed selection. The only new disease to have come to the attention of growers in the past few years is crown gall. It has occurred in two or three cases but it is not a serious problem.

**C. Pests.** Brown mite is the pest giving the industry the most problem. Extensive work has been carried on for the past eight years. Research has indicated that with large releases of the *Stethorus* beetle, the amount of leaf damage and the number of mites are reduced. All other pests seem to be under biological control. Only occasionally there will be flare ups of pests such as looper, latania scale, and greenhouse thrips.

**D. Water Quality and Quantity.** Colorado River water is used on most avocado orchards in San Diego County. Water quality is adequate. The only exception is the relative high level of chlorides. The avocado tree is sensitive to this specification and less leaf damage would result if the chloride content were lower. With proper irrigation, however, the tipburn of the leaves can be kept to a minimum. Quantity of water should be sufficient for the future with the addition of the Feather River water after 1972.

**E. Labor.** Labor supply will become increasingly hard to obtain. If labor is available, the cost will be high. The avocado growers should give considerable attention to labor-saving devices and methods in their operation. If a grower can do most of the work himself, with a minimum of hired help, the net return should be good providing production is high.

**F. Material Costs.** The materials needed for production of avocados will continue to rise in cost. The materials include water, fertilizer, weed oil, rodent control baits, etc.

#### **IV. Marketing**

There are two types of marketing organizations and philosophies of marketing: (1) Cooperative and (2) Cash Buyer. The number of packing houses in the county are: One cooperative, one cooperative receiving dock, and between eight and 10 cash buyer houses. Harvesting is done by the grower, or by picking crews supplied by packing houses. Field boxes used in harvesting vary with packer. One cash buyer uses a bin that holds 800 to 900 pounds of fruit. Another cash buyer uses a bin half this size, or about 400 to 450 pounds. One cooperative is using bins and field boxes. Other packers use field boxes of various shapes and sizes and hold 35 to 45 pounds. The standard field box is 40 pounds. Increased emphasis is being placed upon improved fruit handling so fruit of higher quality reaches the consumer. Advertising and sales promotion is accomplished through a marketing order paid for by the growers.

## **V. Future Trends**

Acreage in San Diego County will continue to increase. It is estimated that there is a potential for at least 25,000 acres in the county alone, as compared with the present state acreage of about 25,000. Production will continue to increase, not only because of more trees coming into bearing, but because of improved cultural practices, use of cross-pollinators, and a better understanding of how to handle the crop. Costs will continue to spiral upward. This means the grower must do a lot of the work himself, as well as become increasingly efficient in irrigation practices, in the use of the various fertilizer and herbicide materials, and pursue an excellent weed and rodent control program. Varieties should be confined to the following: Fuerte, Hass, Bacon (in the cold areas), and possibly the Zutano and Reed.

Problems affecting the grower will be similar to what they are today. Solution to the root rot disease, especially the development of resistant rootstock to this disease, are being diligently worked upon. Production of high quality fruit must be increased. Though there are many problems in the cultural field to be solved, there are just as many in the marketing field. Improved fruit handling, more widespread distribution of fruit, increased promotion of avocados, and utilization of latest marketing techniques should go hand in hand with increased production of higher quality fruit. The industry is relatively small compared to other commodities, but with proper promotion and advertising, a cooperative spirit throughout the industry, and a constant search for ways to improve every facet of the industry can only result in an expanded and profitable industry.