# Family Avocado Orchards size depends upon yield, costs of production, returns, and family income needed 

Harold E. Wahlberg

About 18 debt-free acres of avocados in Orange County with average yield will support a family of four if returns are $8 \phi$ or more per pound.

If the yield is exceptional only five acres may be necessary-but a mortgage carried on the farm will increase the acreage required.
Exact farm size needed to support a grower's family depends upon several variable factors. When these factors are combined as they apply to a particular grower, a basis for estimating the farm size necessary for his family is derived.

One of these items is yield per acre; another is cost of production; third is returns per pound and, finally, there is the income needed by the family.

Mortgaged or paid up property must be reckoned when estimating income needed by the family. If the grower has to meet a mortgage, an added acreage will be needed. In the accompanying table, a mortgage of $\$ 750$ per acre at $41 / 2 \%$ interest and amortized in 20 years is used as an example.

## Yield Per Acre

Climate, the soil in which the grove is planted, variety and strain selected, and management practices affect yield.

Data gathered over 19 years in Orange County showed a wide range of yields. The county average was 3,400 pounds per acre. This average was the basis for the estimate that an 18-acre debt-free avocado farm will support a family of four.

Production cost studies of 20 commercial plantings in Orange County showed an average yield of 4,500 pounds per acre for the past 10 years.

A good yield of 6,000 pounds per acre has been achieved in good locations. The avocados were of suited varieties on superior soils.
An exceptional yield of 9,000 pounds per acre has been attained in a few groves.

Each grower may select the yield level most likely to be attained by the variety and in the location he has with the management he applies.

## Cost of Production

Estimates drawn from the long-time avocado cost studies are useful in finding cost of production. Average cost per acre
can be adapted to the various levels of yield per acre.
The greater the yield, the higher the harvesting costs. Total costs were $\$ 148$ per acre for a 3,400 -pound yield. They ranged up to $\$ 195$ for a 9,000 -pound yield.

Records show that the average grower puts in about 50 hours of his own labor per acre per year. The going rate of labor today is $\$ 1.00$ per hour. Several years ago it was $35 \phi$ to $45 \phi$ per hour. At the recent Congressional minimum labor value of $75 \phi$ per hour, the grower's labor amounts to $\$ 38.00$ per acre per year. This is to be added to the fruit income per acre in computing the total farm income.

## Returns Per Pound

Greater production and marketings of avocados are ahead. Planting figures show 2,000 acres yet to come into bearing in southern California.

Since 1930, 11 years out of 19 brought
The Table Summarizes the Various Factors Described in Columns Under the Four Levels of Expected Yield Per Acre.

|  | Excepfional yield | Good yield | Average yield cost study | Average yield county |
| :---: | :---: | :---: | :---: | :---: |
| Yield per acre.... | 9,000\# | 6,000 ${ }^{\text {\# }}$ | 4,500\# | 3,400\# |
| Returns per pound .. | 8c | 8 c | 8c | 8c |
| Income per acre.... | \$720 | \$480 | \$360 | \$272 |
| Cash costs and depre... | \$195 | \$170 | \$158 | \$148 |
| Capital and mgt. income. | \$525 | \$310 | \$202 | \$124 |
| 50 hours operafors labor | \$ 38 | \$ 38 | \$ 38 | \$38 |
| Total farm income | \$563 | \$348 | \$240 | \$162 |
| Acres to earn $\$ 3,000$ (free of debt) | 5 | 9 | 12.5 | 18 |
| If debt of $\$ 750$ per acre amortize at 7.7\% (41/2\% at 20 yrs.). . | \$ 58 | \$ 58 | \$ 58 | \$ 58 |
| Net for living costs | \$505 | \$290 | \$182 | \$104 |
| Acres fo earn $\$ 3,000$. | 6 | 10 | 16 | 29 |

returns of $4.3 \phi$ to $8.6 \phi$ per pound. The other eight years, because of war and short crops, the price ranged from $10.6 \phi$ to $26.1 \phi$ per pound to the grower. The average for the high years was $16.4 \phi$ per pound.

Estimates are, that with the impact of supply of demand, $8 \phi$ per pound may be an average farm price for avocados in the future.

## Cost of Living

The cost of living factor differs with each family. In the accompanying table, the figure of $\$ 3,000$ is used as an estimate of income needed by a family of four, based on a 1948 study made by the Agricultural Extension Service.

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## PEARS

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In addition to continued efforts to expand domestic and non-European consumption, growers and shippers must give serious consideration to reducing costs of production and marketing. However, the industry still needs European outlets. If Europe does not resume importing a considerable tonnage of Pa cific Coast winter pears within a few years-through regular trade channelswithout the aid of substantial price subsidies growers may be forced to reduce the acreage and production of some varieties.
Substantial exports of food products to European countries-largely on the basis of dollars given, or loaned, by us for their industrial rehabilitation-can not be maintained indefinitely. Europe can step up its purchasing power for American fruits only if the United States substantially increases its imports of several manufactured goods from Europe and of some raw materials such as rubber, tin and copra, from countries that are markets for European industrial products.

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