

ALMONDS

Butte County is the leading almond producing county in California with over 15,000 acres in 1949. Much of this acreage is concentrated in the Chico-Durham area where good soils result in high yields and successful production. Three thousand acres planted in the last 4 years indicate that the industry is on an expanding basis.

Requirements -- Almonds are grown on a great variety of soils, but in general they do not grow well on the heavier textured soils, on shallow soils, or those that are poorly drained. The deep Vina loam soils in the northwest part of the County are ideally suited to almond production. Almonds can be raised without irrigation but do much better when they receive two or three irrigations annually.

Because of their early blooming, spring frosts are a real hazard. There is great variation in this hazard between various locations in the County and even between different farms in the same general area. In most of the valley areas, orchard heating must be practiced.

Yields and Prices -- Because of the variation in soils and in the production methods used, yields vary from about 300 pounds to the acre to a ton or more per acre. The yield is also influenced by the combination of varieties in any particular orchard. Yields for the various varieties grown in this County obtained for one year were as follows: IXL -- 839 lbs. per acre, Ne Plus -- 1120 lbs. per acre, Nonpareil -- 1251 lbs. per acre, Texas -- 1325 lbs. per acre, Drake -- 1401 lbs. per acre and Peerless -- 1877 lbs. per acre. Average farm prices have varied in recent years from 8.3¢ per pound in 1932 to 37.2¢ in 1944.

Size of Enterprise -- Twenty-five acres is considered a minimum for an economic unit on our better soils. There are many 5, 10 and 15 acre tracts that are operated by people who work in an adjoining town or who have other sources of income. The cost of production is usually higher on these small units because of lack of equipment and hulling facilities. Also, many of these small units are not irrigated because the size of enterprise does not justify the cost of a well and pump.

Planting Recommendations -- On our good almond soils, a spacing distance of even 25 feet is too close and the trees become crowded when they reach full size. By planting the trees 22 feet apart on the square, every other row on the diagonal can be removed when they start crowding, and the planting will end up with a spacing of 31 feet which will probably be adequate.

Almonds require cross-pollination so a mixture of varieties must be planted. Through a period of years Nonpareil have been the most profitable variety so it usually constitutes 50% of the orchard. Two additional varieties are recommended. The most common combination to plant with the Nonpareil is Ne Plus and either Peerless or Texas. Drakes are not recommended because of their extreme susceptibility to brown rot even though they are heavy bearers in years when brown rot is not serious. IXL is seldom used any more because of its erratic and light bearing habits. Jordanolo is a good new variety but is a very early bloomer, is reasonably susceptible to brown rot, and at the present time a high percentage of the trees are developing the bud failure difficulty which appears to be a virus disease carried down from the parent stock from which the trees were started.

Almond Production Costs -- General figures on this subject have been briefed down and are summarized on the back of this sheet.

Production Data For ALMONDS In Butte County

This data sheet is one of a series that has been compiled on Butte County crops for the use of those who are contemplating the purchase of a farm and need some sort of measure as to what might be expected in the way of costs and returns from different crops they might raise. These data are based on cost of production studies, crop reporting service price figures, and, in part, on estimates. We believe they are as accurate as can be compiled for a purpose of this kind, but because of all the variables involved, they must be used only as a basic guide.

Size of Enterprise	25 acres
Estimated Average Yield	1200 pounds per acre
1946-49 Average Price	\$.22 per pound
Farm Income	*\$2600.00

*This figure represents the estimated gross income, minus cash costs (including a depreciation charge but not including interest on the investment) plus the cash value of the operator's labor.

	<u>Cost Per Acre</u>	
Cultural Labor ----- 40 hrs. @ \$1.00	\$ 40.00	
Tractor and Truck ----- 14 hrs. @ 1.50	21.00	
Harvest Labor ----- 1200 lbs. @ 3.00 per cwt.	36.00	
Hulling ----- 1200 lbs. @ 2.75 per cwt.	<u>33.00</u>	
Total Labor Costs		\$ 130.00
Material Cost	\$ 34.00	
Cash Overhead	14.00	
Depreciation	<u>22.00</u>	
Total Cash and Depreciation		<u>70.00</u> \$ 200.00
Gross Income ----- 1200 lbs. @ \$.22		<u>264.00</u>
Net Income (excluding operator's labor)		\$ 64.00
Net Income on 25 acres	\$1600.00	
Operator's Labor - 1000 hrs. @ \$1.00	<u>1000.00</u>	
Farm Income		\$2600.00