

SAMPLE INPUTS AND COSTS FOR WALNUTS  
 Mature Orchard, with a Yield of 2000 lbs. per acre

	Hours per Acre			Cost per Acre	Cost per cwt.	Your cost
	Man labor	30 h.p. tractor	Pick up or truck			
Pruning	7			8.75		
Brush Disposal	2	1.0		3.75		
Spraying, 3 times, contract @ \$6.00 each				18.00		
Applying fertilizers, twice, broadcast	1	.4		1.75		
Cultivation and prep. for harvest	8	8.0		20.00		
Irrigation 2 to 3 times	10			12.50		
Misc., cover crop, etc.	3	.5	2.0	7.37		
<b>Total Cultural Work</b>	<b>31</b>	<b>9.9</b>	<b>2.0</b>	<b>72.12</b>	<b>3.61</b>	
Shaking	8	2.0		12.50	.63	
Picking 80 sacks at 40¢				32.00	1.60	
Supervision and hauling to dehyd.	4		2.0	8.00	.40	
Hulling and dehydrating, contract @ \$35/ton				35.00	1.75	
Hauling to market, contract				5.00	.25	
<b>Total harvesting</b>				<b>92.50</b>	<b>4.63</b>	
<b>Total labor and field power</b>				<b>164.62</b>	<b>8.24</b>	
Irrigation water, 2 A. ft. + assessment, Brentwood				16.00		
Spray materials, varies with need up to \$35 per A.				20.00		
Fertilizers to furnish 150 lb. of nitrogen				20.00		
Misc. and cover crop seed				3.00		
<b>Total material costs</b>				<b>59.00</b>	<b>2.95</b>	
<b>Total labor and materials</b>				<b>223.62</b>	<b>11.19</b>	
General expense, office, etc. est. at 5% of above				11.20		
County taxes, real estate and equip. in agric. area				25.00		
Repairs to equipment not included in above				2.00		
Insurance - compensation, social security, etc.				4.00		
<b>Total cash overhead costs</b>				<b>42.20</b>	<b>2.11</b>	
<b>Total cash costs</b>				<b>265.82</b>	<b>13.30</b>	
Investment overhead based on a 40 acre unit except as noted below*	Original cost 40A	Av. Value	6% Int.	Depreciation		
		Dollars per acre				
Trees development cost \$1000	40,000	500.00	30.00	25.00		
Building for equipment	1,000	12.50	.75	.63		
Irrigation pipeline & valves	4,000	50.00	3.00	3.33		
Tractor 30 hp	8,000	50.00	3.00	13.30		
Pick up and trailer	2,600	16.25	.98	4.30		
Tillage equipment	2,000	12.50	.75	3.33		
Shaker & misc. tools	1,200	15.00	.90	2.00		
Land	48,000	1200.00	72.00	-----		
<b>Total investment and depreciation</b>	<b>106,800</b>	<b>1856.25</b>	<b>111.38</b>	<b>51.89</b>	<b>51.89</b>	<b>2.59</b>
<b>Subtotal cash and depreciation costs</b>				<b>317.71</b>	<b>15.89</b>	
Interest on average investment				111.38	5.56	
<b>Total all costs except operators management</b>				<b>429.09</b>	<b>21.45</b>	

Labor costs above were figured at the following hourly rates: man labor \$1.25, 30 hp tractor, cash costs including repairs \$1.25, pickup \$1.50. Average value for figuring interest on investment is estimated at half of the original cost. Original costs for equipment are at current prices.

\*Investment and overhead on machinery and equipment is spread over 80 acres. This is based on the assumption that an operator with this investment in equipment would also have some other crops or would do some custom work.

## WALNUT ACREAGE SITUATION

There are approximately 16,000 acres of walnuts in Contra Costa County. The ratio of total acreage to the bearing acreage started to narrow from 1950 through 1958. This indicates there are less new plantings and the acreage will level off and gradually decline in the next few years. Orchards in Ygnacio Valley and San Ramon Valley have been desirable property for subdivision purposes.

Twenty percent of the growers produce 80% of the crop. The turn-over in ownership of these walnut orchards has produced an appreciation in land value and has also brought about different methods of management. In some cases it is more economical to hire custom operators to perform the necessary operations to produce a crop.

Average yield per acre in the county has increased from 620 pounds in 1940 to 1150 pounds. The yield used in this schedule represents a better than average operation. It is important to get a high production per acre with the minimum amount of cash costs and overhead expenses. By comparing your costs with those outlined on this sheet it is possible for you to determine any specific places where your costs might be cut and your production increased.

The operations listed in the sample input and cost schedule represent things that are being used to increase production and efficiency and should be analyzed and compared to your own operations.

## LAND VALUE AND TAXES

Two items reflected in the total cost of production figures in the schedule are appreciation in land value and increased high fixed costs including taxes. In some areas taxes per acre runs as high as \$40.

The average value of land and trees listed attempts to reflect the agricultural value of this type of orchard land rather than the present market value.

## CULTURAL PRACTICES

Reasons for the increased yields generally fit into 3 categories: 1) increased use and better management of irrigation water, 2) increased use of fertilizer up to 200 pounds of actual nitrogen per acre, and 3) better control of insects and diseases.

All of these practices represent increases in cash costs of production. Your successful application of these management practices will depend on how much you can increase yield and efficiency per acre in your orchard. A yield of 2000 pounds per acre or better in Contra Costa County is being obtained in areas where walnuts are growing on deep, well-drained soils laid out for efficient application of irrigation water coupled with the use of fertilizer and pesticides.