

SAMPLE INPUTS AND COSTS FOR WALNUTS IN SAN BENITO COUNTY

With a Yield of 2500 lbs. of Orchard Run Nuts per Acre

Investment overhead based on 20 acres of walnuts on a 40 acre orchard unit

	Hours per acre			Cost per acre	Cost per cwt.
	Man labor	30 hp. tractor	2 ton truck		
Pruning, average annual	10.0			10.25	
Brush disposal	3.0		1.0	5.25	
Spraying, 3 times, incl. sprayer	1.8	1.5	(1.5 sp.)	6.90	
Cultivation and furrowing	6.5	6.0		17.73	
Irrigation 3 times	18.0			22.50	
Miscel. cover crop, fertilize etc.	8.0	.5	1.5	12.80	
Total cultural labor and field power	47.3	8.0	2.5	75.43	3.02
Power shaking and some knocking	10.0	3.0		17.30	.69
Picking at \$2.25 per dry cwt.	50.0			56.25	2.25
Supervision and hauling to huller	5.0	2.0 f.	1.0	10.25	.41
Hulling and dehydrating at \$35.00 a ton contract				43.75	1.75
Hauling dehydrator to market	1.0		1.0	3.25	.13
Total harvesting	66.0	2.0 f.	2.0	130.80	5.23
Total labor and field power	113.3	8.0	4.5	206.23	8.25
Irrigation water, power to pump 18 acre inches, 100 ft. lift				6.45	
Fertilizer to provide 150 lbs. of nitrogen				22.50	
Spray materials - Bactericide and insecticides				17.50	
Miscellaneous, cover crop seed, etc.				6.00	
Total material cost				52.45	2.10
Total labor, field power, and materials				258.68	10.35
General expense, office, car etc., estimated at 5% of above				12.93	
County taxes, land and trees, \$450, eqt. \$80 at 4.25%				22.53	
Repairs to equipment, other than covered by hourly rates				5.00	
Insurance, compensation 3.50, soc. sec. liability and fire 1.50				5.00	
Total cash overhead costs				45.46	1.82
Total cash costs				304.14	12.17
Investment overhead based on 20 acres of walnuts on a 40 acre orchard unit	Original cost 40 A.	Av. value	6% int.	Depreciation	
		Dollars per acre			
Trees, cost \$600 - 40 yr. life	\$24,000	\$300.00	18.00	15.00	
Building for equipment	2000	25.00	1.50	1.70	
Irrigation system	7000	87.50	5.25	8.75	
Tillage equipment	2000	25.00	1.50	3.00	
Tractor, pickup, fork lift, truck	14,000	175.00	10.50	24.00	
Sprayer	6,000	75.00	4.50	10.00	
Walnut harvesting, misc. eqt.	1,600	20.00	1.20	3.00	
Land	40,000	1000.00	60.00	--	
Total investment and deprec.	96,600	1707.50		65.45	2.61
Total cash and depreciation costs				369.59	14.78
Interest on investment			102.45	102.45	4.10
Total all costs except management				472.04	18.88

Labor costs above are figured at the following hourly rates: skilled labor \$1.25, other labor \$1.00, 30 hp. crawler tractor \$1.60, fork lift \$1.00, air carrier sprayer \$1.50 and 2 ton truck \$2.00. These equipment rates are cash costs only, for fuel, oil, repairs and insurance and license in case of the truck. Average value of items that depreciate is assumed at half of the original cost to approximate average "book" or remaining value over the years of useful life.

WALNUT PRODUCTION IN SAN BENITO COUNTY

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Walnut production is an important industry in San Benito County. The total acreage is nearly 3,500 acres. According to the Agricultural Commissioner's report of 1960, the walnut crop grossed \$1,922,620 from 2,386 bearing acres. The principal variety is the Payne, which is a heavy producer and comes into production early. The most common rootstock is the Northern California Black Walnut; however the hybrid walnut root is being used in some nematode infested areas.

Requirements:

A medium textured soil, having a depth of at least five to six feet, is the most suitable for walnut production. Heavy adobe or soils underlain with clay are not satisfactory. Abundant water of good quality is required for irrigation, since high quality walnuts cannot be produced with profit in this area without irrigation.

Size of Business:

The equipment needed in an orchard will often serve more acres than are operated by a single grower. The smallest orchard that could justify owning all the equipment needed would be at least 40 acres. Investment overhead costs on the reverse side of this sheet are based on this total acreage with 20 acres of walnuts. The additional acreage may be in apricots, prunes, or pears. Outside custom work also offers opportunities to reduce the equipment overhead. Orchardists with smaller acreages would probably arrange to hire some of the work done in preference to owning expensive equipment. Older used equipment is often available.

Yield:

The yield per acre will vary considerably from orchard to orchard and year to year. The county average yield was .63 tons per acre in 1957 and 1.30 tons per acre in 1960. The average yield per acre in San Benito County during the five year period 1956-60 was .96 tons per acre. The sample costs on the opposite side are based on 2500 lbs. of orchard run walnuts. Costs per acre, except for harvesting, are about the same regardless of yield. Below are summary costs for other yields with growing and overhead costs the same as shown in the detailed schedule on the opposite side of this sheet.

SAMPLE COSTS WITH VARYING YIELDS PER ACRE

Yield, pounds per acre	1500	2000	2500	3000	4000
Costs per acre except harvesting	\$334.70	\$334.70	\$334.70	\$334.70	\$334.70
Harvesting cost at \$5.49 per cwt.*	82.35	109.80	137.34	164.70	219.60
Total cost per acre	417.05	444.50	472.04	499.40	554.30
Total cost per cwt.	\$ 27.80	22.23	18.88	16.65	13.86

*Includes 5% general expense