

# Costs To Produce Walnuts In

**Glenn**



**County**

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SAMPLE COSTS OF PRODUCING PROCESSING TOMATOES  
San Benito County, 1973

*W. J. ...*  
173 1973

H. Bill Collins, Farm Advisor

Philip S. Parsons, Ext. Economist

200 acres of tomatoes on a 300 acre farm  
Yield --- 30 tons per acre

	Hrs. Per Acre	Cash and labor costs per acre				Total
		Labor	Fuel & Repairs	Materials What	Cost	
<b>Cultural Costs</b>						
Land preparation	2.09	\$ 12.64	\$14.60			\$ 27.24
Apply herbicide (contract), 1x				Herbicide applied	\$ 23.49	23.49
Fertilize, preplant (contract), 1x				400# 6-20-20	30.21	30.21
Plant, precision, 1x	.42	1.34	1.50	1/3 lb. @ \$12.00	4.00	6.84
Fertilize, sidedress (contract), 1x				400# 21-0-0 applied	18.45	18.45
Irrigate, sprinklers 2x	4.0	11.52		3 acre inches	2.48	14.00
Irrigate, furrows, 5x	10.0	23.80		25 acre inches	13.78	42.58
Cultivate, 7x	1.26	4.01	3.45			7.46
Hoe, 2x	12.0	31.20				31.20
Pest control (contract), 2x				pesticide applied	10.84	10.84
<b>TOTAL CULTURAL COST</b>		<b>\$ 89.51</b>	<b>\$19.55</b>		<b>\$103.25</b>	<b>\$212.31</b>
<b>Harvest Costs</b>						
Harvester	3.0		\$19.50			\$ 19.50
Harvester labor	37.2	\$100.45				100.45
Tractors & trailers	5.7	14.82	10.60			25.42
Forklift & swamper	5.9	19.31	4.78			24.09
Bin rental, 40¢/ton				40¢/ton	\$ 12.00	12.00
Inspection fees, asn. dues					9.30	9.30
<b>TOTAL HARVEST COST</b>		<b>\$134.53</b>	<b>\$34.88</b>		<b>\$ 21.30</b>	<b>\$190.76</b>
<b>Cash Overhead</b>						
Misc., office, interest on operating capital, pickup, insurance, 12% of cultural costs						\$ 25.48
Taxes on equipment						15.36
Rent, including well						115.00
<b>TOTAL CASH OVERHEAD</b>						<b>\$156.14</b>
<b>TOTAL CASH COST</b>						<b>\$559.21</b>
<b>Total Cash Cost Per Ton</b>					<b>\$ 18.64</b>	
<b>MANAGEMENT</b>						
5% of 30 tons @ \$29.00/ton						\$ 43.50
<b>Investment Costs</b>						
		<u>Per Acre</u>	<u>Annual Cost Per Acre</u>			
			<u>Depreciation</u>	<u>Interest</u>		
<b>TOTAL INVESTMENT OVERHEAD</b>		<b>\$321.06</b>	<b>\$95.43</b>	<b>\$32.50</b>		<b>\$127.93</b>
<b>TOTAL COST PER ACRE</b>						<b>\$730.64</b>
<b>Total Cost per ton @ 30 tons yield</b>					<b>\$ 24.35</b>	

COST OF PRODUCTION AT VARYING YIELDS

YIELD - Tons Per Acre	20	25	30	35	40	45
COST PER TON	\$33.89	\$28.17	\$24.34	\$21.63	\$19.59	\$17.54

BASIS FOR COST OF PRODUCING WALNUTS  
UNDER GLENN COUNTY CONDITIONS

This cost study is based upon information gathered from several Glenn County operations. The data should be used only as a guide for planning or evaluating your own operation.

All labor is shown as contract at either \$2.75 skilled or \$2.50 common per hour (including Social Security, Workmen's Compensation Insurance, and other minor costs). Operators performing their own labor or hiring non-contract labor should reduce the labor costs shown by an appropriate amount. It should be remembered that all contract labor in a cost study represents actual costs plus a profit to the contractor.

The equipment investment is based upon new cost. It should be realized that many operators own and maintain equipment which has been partially or completely depreciated. In such cases, proper adjustments should be made in depreciation and interest costs. Owning equipment jointly could allow a saving to be made in overhead costs. Such savings are not reflected in this study.

Cultural costs as shown are based upon maximum recommended requirements. It is recognized that in a given year it may not be necessary for all practices (pest control, etc.) to be performed.

Shredding orchard weed growth is now used by the majority of walnut growers. Orchards where non-tillage is practiced will benefit by "shallow working" the orchard floor every few years. This prevents dense sod formation, and on some soil types will improve water penetration.

Fertilizer programs may vary depending on soil type, tree vigor, and spacing. Growers should rely more on leaf analysis and production records to determine an appropriate fertilizer program. Many other factors such as pruning, irrigation and pest control contribute to quality production and yields.

The number of pest sprays may vary from orchard to orchard. Mites may become a summer pest problem, especially where dust is a problem. This cost study allows for two seasonal sprays. Early spring showers can stimulate sideblight. Such situations may require additional copper treatment.

The investment shown for trees reflects input costs covering those years up to self-sustaining production.

Interest on investment costs represents 7 per cent on the average value of all depreciable items. Land does not depreciate; therefore, interest is computed on the full value.

Land taxes are calculated by multiplying the market value by twenty-five percent times the tax rate. Taxes on depreciable property is allowed in the miscellaneous cost.

Note the blank column on the right margin. This is for your use in comparing your costs with the sample costs.

SAMPLE COSTS TO PRODUCE WALNUTS - NONI LLAGE  
GLENN COUNTY  
June 1973

Labor: Skilled \$2.75/hr.  
Regular \$2.50/hr.

Production data: Yield 2 tons Age of trees 15 years - 48 tree - 30' x 30' spacing

Operation	Hours Per Acre	Labor	Cash and labor cost per acre.		Total	Your Cost
			Fuel and repairs	Materials Kind and Quantity Cost		
<b>Cultural Costs</b>						
Pruning	6.0	\$15.00	\$ 3.90 (65¢ tower)		\$ 18.90	
Brush Disposal (contract)		12.00			12.00	
Fertilizer (contract)				250 lbs. N \$29.00	29.00	
Shred Covercrop 7x	1.75	4.81	2.63 (1.00 + .50)		7.44	
Strip Spraying 4x	1.0	2.75	2.00 (1.00 + 1.00) chemicals	2.50	7.25	
Blight Spray 2x	.5	1.38	3.50 (1.00 + 6.00) chemicals	25.00	29.88	
Insects 2x	1.0	2.75	7.00 (1.00 + 6.00) chemicals	20.00	29.75	
Sprinkler irrigation 6x	1.0	2.50	1.00 (repairs) 3 ac. ft. @\$2.25	6.75	10.25	
<b>TOTAL CULTURAL COSTS</b>	<b>11.25</b>	<b>\$41.19</b>	<b>\$20.03</b>	<b>\$83.25</b>	<b>\$144.47</b>	
<b>Harvest Costs</b>						
Shake (contract)				\$22.00 per hour \$11.00	\$ 11.00	
Sweep	.75	\$ 2.06	\$ 1.39 (1.85)		3.45	
Pickup	.75	2.06	1.50 (2.00)		3.56	
Haul	.75	2.06	1.50 (2.00 pickup truck)		3.56	
Hull and Dry	3.5	9.63	50.00		59.63	
<b>TOTAL HARVEST COSTS</b>	<b>5.75</b>	<b>\$15.81</b>	<b>\$54.39</b>	<b>\$11.00</b>	<b>\$ 81.20</b>	
<b>Cash Overhead</b>						
Misc., office, etc.			6% of above		\$ 13.54	
Taxes (\$800/acre x 25% x 6.76 rate)				\$13.52	13.52	
<b>TOTAL CASH OVERHEAD</b>					<b>\$ 27.06</b>	
<b>TOTAL CASH COST</b>					<b>\$252.73</b>	
Management 5% of 2 tons @ \$420					\$ 42.00	
<b>INVESTMENT</b>						
		<u>Per Acre</u>	<u>Annual Cost</u>			
			<u>Depreciation</u>	<u>Interest 7%</u>		
Land		\$ 800.00	\$ ---	\$ 56.00		
Trees		1800.00	60.00	63.00		
Sprinkler Irrigation Pipe		250.00	16.67	8.75		
Pump and Well		60.00	3.00	2.10		
Equipment		443.00	42.36	15.50		
<b>Total</b>		<b>\$3353.00</b>	<b>\$122.03</b>	<b>\$145.35</b>	<b>\$267.38</b>	
<b>TOTAL COST PER ACRE</b>					<b>\$562.11</b>	
Cost per ton @ 2 ton yield					<b>\$281.05</b>	

MONTHLY CASH FLOW FOR WALNUTS

Glenn County  
June 1973

Description	Total	Month											
		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<u>Cultural Costs</u>													
Pruning	\$ 18.90	\$ 9.45	\$ 9.45	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Brush Disposal	12.00	6.00	6.00										
Fertilizer	29.00												29.00
Shred Cover													
Crop 7x	7.44			1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	
Strip Spray 4x	7.25			1.81		1.81			1.81		1.81		
Blight Spray 2x	29.88			14.94	14.94								
Insect Spray 2x	29.75				14.88			14.88					
Irrigate 6x	10.25				1.71	1.71	1.71	1.71	1.71	1.71	1.71		
Total	144.47	15.45	15.45	17.81	32.59	4.58	2.77	19.46	2.77	4.58			29.00
<u>Harvest Costs</u>													
Harvest	81.20									40.60	40.60		
Total	81.20									40.60	40.60		
<u>Cash Overhead</u>													
Miscellaneous	13.54	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Taxes	13.52				6.76								6.76
Total	27.06	1.13	1.13	1.13	7.89	1.13	1.13	1.13	1.13	1.13	1.13	1.13	7.89
TOTAL CASH COST	\$252.73	\$16.58	\$16.58	\$18.94	\$40.48	\$ 5.71	\$ 3.90	\$20.59	\$ 3.90	\$46.31	\$41.73	\$ 1.13	\$36.89

## EQUIPMENT INVESTMENT FOR WALNUTS

Glenn County  
June 1973

Based on 150 acres of walnuts

Item	Cost	Annual Use (acres)	Cost Per Acre	Life (yrs.)	Depreciation	7% Interest	Cash costs per hour		
							Fuel	Repairs	Total
Pruning Tower	\$ 6,000	150	\$ 40.00	10	\$ 4.00	\$ 1.40	\$ .35	\$ .30*	\$ .65
Chain Saw & Shears	500	150	3.33	10	.33	.116	---	---	.15
Pickup Truck	4,000	150	26.67	5	5.33	.933	---	---	2:00
Truck 1 1/2 ton used	3,000	150	20.00	10	2.00	.70	---	---	---
Tractor 40 H.P.W.D.	7,000	150	46.67	10	4.67	1.63	.32	.68	1.00
Flail Shredder 11'	1,600	150	10.67	5	2.13	.37	---	.50	.50
Rotary Shredder 10' used	500	150	3.33	5	.67	.116	---	.50	.50
Weed Sprayer P.T.O. Stainless Steel 150 gal.	1,000	150	6.67	10	.67	.233	---	1.00	1.00
Speed Sprayer 500 gal.	13,000	150	86.67	10	8.67	3.033	.80	5.20	6.00
Nurse Tank	500	150	3.33	10	.33	.116	---	.10	.10
Pickup Machine S.P.	3,500	150	23.33	10	2.33	.816	.35	1.65	2:00
Carts (3) @ \$450.	1,350	150	9.00	10	.90	.315	---	.60	.60
Sweeper S.P.	3,500	150	23.33	10	2.33	.816	.35	1.50	1.85
Tractor 30 H.P. used	1,000	150	6.67	5	1.33	.233	.35	.50	.85
Huller and Dryer and Building 20 T./day	20,000	150	133.33	20	6.67	4.67	\$25.00 per ton		
Total	\$66,450	xxx	\$443.00	xx	\$42.36	\$15.50			

\* 6 hrs./acre x 150 acres = 900 hrs. ÷ \$250/yr.

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The following University of California Agricultural Extension publications on walnuts are available at your local farm advisor's office.

- AXT-18 Branch Wilt Disease of English Walnut Trees
- AXT-n24 Pollination and Blooming Habits of Walnuts
- AXT-86 Training Young Walnut Trees by the Modified Central-Leader System
- AXT-120 Walnut Rootstocks
- AXT-238 Care of a Walnut Orchard
- AXT-333 An Analysis of Walnut Production Costs in California
- AXT-339 Retraining Walnut Trees
- AXT-360 Selecting New Walnut Varieties
- MA-32 Walnut Whitewash Spray Equipment for Ground Application
- OSA-n9 Walnut Dehydrator
- OSA-n71 Walnut Huller for Home Use
- OSA-38 Planting the Orchard With Seedling Walnut Trees, and Topworking
- OSA-176 Walnut Husk Fly Trapping Procedures
- OSA-181 Blackline in Walnut Trees
- OSA-182 Walnut Drying and Bleaching on a Small Scale
- Leaf. 137 Nutritional Deficiencies in California Walnuts
- Leaf. 194 Diuron and Simazine for Weed Control in Walnut Orchards
- 1973 Pest and Disease Control Program for Walnuts