

**COST ANALYSIS WORK SHEET**  
**SAMPLE COSTS TO PRODUCE MANZANILLO OLIVES IN TULARE COUNTY**  
 1964

Based on a yield of 4 tons per acre. Man labor at \$1.30 and \$1.50 per hour.  
 Light wheel tractor: Cash cost \$1.20 per hour, depreciation 55¢, interest 25¢.

	<u>Sample Costs</u>		<u>Your Cost</u>	
	Per Acre	Per Ton	Per Acre	Per Ton
<b>PRE-HARVEST CASH COSTS:</b>				
Pruning: 40 trees @ \$1.30	\$ 52.00			
Brush disposal: contract	3.50			
Fertilize: 1 hr. M & T	2.70			
Fertilizer: 40 lbs. N @ 12¢	4.80			
Irrigate: 7 times - 12 M hrs.	15.60			
Water: power to pump 3 ac. ft. @ \$6	18.00			
Cultivate & furrow: 7 hrs. M & T	18.90			
Spray: 1½ times - contract 2000 gal. @ 1½¢	30.00			
Spray material: Parathion & oil + ½ Bordeaux	18.00			
Misc. labor: 4 M & 1 T hrs.	6.60			
Misc. material	4.00			
County taxes	25.00			
Office, car, operating capital, etc.	27.40			
Repairs: irrig. system, equip. except tractor	5.00			
<b>TOTAL PRE-HARVEST CASH AND LABOR COST</b>	<b>\$212.60</b>	<b>\$ 53.15</b>		
<b>HARVESTING COST:</b>				
Picking at \$85 per ton	340.00	85.00		
Hauling at \$4.50 per ton	18.00	4.50		
Misc. harvest: 2 M & 1 T hr.	4.00	1.00		
<b>TOTAL HARVESTING COST</b>	<b>\$362.00</b>	<b>\$ 90.50</b>		
<b>TOTAL CASH AND LABOR COST</b>	<b>\$574.60</b>	<b>\$143.65</b>		
<b>DEPRECIATION COSTS:</b>				
Trees: (\$624 cost - 50 years)	12.48			
Irrigation facilities: (\$200 cost)	12.00			
Tractor: 10 hrs. @ 55¢	5.50			
Buildings & equip.: (\$100 cost)	7.50			
<b>TOTAL DEPRECIATION COST</b>	<b>\$ 37.48</b>	<b>\$ 9.37</b>		
<b>TOTAL CASH AND DEPRECIATION COST</b>	<b>\$612.08</b>	<b>\$153.02</b>		
<b>INTEREST ON INVESTMENT @ 6%:</b>				
Trees: on ½ original cost (\$312)	18.72			
Irrigation facilities: on ½ cost (\$100)	6.00			
Tractor: 10 hrs. @ 25¢	2.50			
Buildings & equip.: on ½ cost (\$50)	3.00			
Land @ \$800	48.00			
<b>TOTAL INTEREST ON INVESTMENT</b>	<b>\$ 78.22</b>	<b>\$ 19.56</b>		
<b>TOTAL COST OF PRODUCTION</b>	<b>\$690.30</b>	<b>\$172.58</b>		

**COST PER TON AT VARYING YIELDS**

Yield - tons per acre	2	3	4	5	6	7
Cash and depreciation cost	\$216.54	\$174.19	\$153.02	\$140.32	\$131.85	\$125.80
<b>TOTAL Cost Per Ton</b>	<b>\$255.65</b>	<b>200.27</b>	<b>172.58</b>	<b>155.96</b>	<b>144.88</b>	<b>136.97</b>

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## 1964 MANZANILLO OLIVE COST AND MANAGEMENT DATA

Tulare County grows more manzanillo olives than the combined production for canning of all the other olive growing areas in California. Cost data presented herein represents the best available current estimates. Each grove varies according to its special situation relating to location, soil, water, tree and management factors.

Location: Manzanillo olives grow throughout the so-called "thermal belt" located roughly in a 10 to 15-mile zone along the Sierra foothills. Temperature minimums do not restrict olive growing. Scattered trees and small plantings may be found further west on the valley floor.

Soil Requirements: Olive trees tolerate a wide range of soil conditions. Highly alkaline soil, however, is unsuitable.

Water Requirements: Although olive trees withstand both drought and flooding, for best production, adequate, but not excessive, moisture should be available throughout the growing period. The most critical period is during flowering and fruit setting. Heaviest water use comes during hot weather--June, July, August and September. Total water applied varies according to season and to soil--about three acre feet per year is usual.

Pollination: Experimental work indicates the usefulness of Sevillanos as pollinators for Manzanillo, the reverse pollen cross benefits also.

Rootstocks: Own rooted (cuttings) Manzanillos bear more crop and grow more vigorously than grafted trees.

Planting Distances: Usual planting distances with Manzanillos varies from 30 x 30 to 35 x 35. With deep fertile soil, the wider spacing is preferred. Double setting in young groves assists in utilizing the ground area while the trees are young. Intersets should be removed when they crowd the permanent tree.

Fertilization: Orchards on fertile soils need only enough nitrogen to maintain the trees adequately. About one pound of nitrogen per tree per year will usually suffice. Excessive fertilization wastes money. No other fertilizer substance appears necessary under Tulare County conditions.

Pest and Disease Control: Olive scale must be controlled in order to produce canning quality olives. Peacock spot and olive knot are diseases that can be largely avoided or rectified by good cultural procedures.

Harvesting and Marketing: Good harvesting techniques, proper timing, expeditious, careful picking and rapid handling will assist in maintaining the best fruit quality. Olives harvested for oil bring very little returns.

Fruit Thinning: Chemical spray thinning offers the best means of reducing excessive crops. Proper dosage of the hormone and timing of the application is essential.

Outlook: Olive production costs are considerable and relatively "fixed." Costs per unit goes down with increasing production. Top quality commands the best prices. Maximum yields with good canning sizes brings the best returns.