Production data:
2000 lbs., in shell,
per acre

SAMPLE COSTS TO PRODUCE ALMONDS

in Butte County under Nontillage

Using Orchard Heaters

(31)
Revised 4-72

Operation	Hours Per Acre	Labor	Fuel and Repairs	Cash and labor cost per acre Materials Kind and Quantity	Cost	Total
Prune	8.0	$20.00				$20.00
Pile brush	3.0	6.00				6.00
Buck brush	0.3	.90	$ .47			1.37
Fertilize (contract) 2X				3 1/2 lbs N/tr + $2/ac.	$21.25	21.25
Spray 3X	1.0	3.00	4.45	Various	40.00	47.45
Place, clean and remove heaters, burn 3X, 2 hrs. @ $3.00 2 hrs. @ $2.00	4.0	10.00	2.80	300 gal. oil	38.85	51.65
Lighting		5.66		(5 call outs)		5.66
Check thermometers	0.7	2.10	1.16			3.26
Fill heaters	1.5	3.00	2.10			5.10
Blow leaves	0.6	1.50	.90			2.40
Strip spray 2X	0.6	1.80	1.14	Various weed killers	5.00	7.94
Mow 6X	1.5	4.50	3.62			8.12
Irrigate 4X (sprinklers)	4.0	9.00		Power to pump 24 ac.in.	12.87	21.87
Flame 5X	2.5	7.50	5.15	Propane	10.00	22.65
Clean before harvest	0.3	.50	.10			.60
Bees				2 hives @ $4.00	8.00	8.00
Total Labor		75.46				
10% Soc. Sec. & Workmen's Comp.		7.55				7.55
TOTAL CULTURAL COSTS		$83.01	$21.89		$135.97	$240.87
Move windfalls	1.0	2.50	1.50			4.00
Knock	3.0	9.00	5.55			14.55
Pole	4.0	9.00				9.00
Rake	0.5	1.12				1.12
Sweep	1.0	2.50	1.50			4.00
Pick up	1.0	3.00	3.50			6.50
Haul to huller	1.0	2.50	1.50			4.00
Hull	1.5	4.50	5.00			9.50
Total Labor		34.12				
10% Soc. Sec. & Workmen's Comp.		3.41				3.41
TOTAL HARVEST COSTS		$37.53	$18.55			$56.08
Cash Overhead:						
Misc., office, accounting, etc.						15.00
Taxes (orchard and equipment)						43.00
TOTAL CASH OVERHEAD						$58.00
TOTAL CASH COST						$354.95
Management - 5% of 2000 lbs. @ 31¢						$31.00

INVESTMENT	Per Acre	Annual Cost Depreciation	Interest	
Land	$1100.00		$ 66.00	
Trees	1100.00	$31.46	33.00	
Irrigation System	200.00	13.33	6.00	
Buildings	60.00	2.01	1.81	
Cultural Equipment	223.47	20.00	6.72	
Harvest Equipment	190.94	15.90	5.73	
Orchard Heaters (20)	160.00	13.33	4.80	
Total	$3034.41	$96.03	$124.06	$220.09
TOTAL COST PER ACRE				$606.04
Cost per pound @ 2000 lbs. yield 30.3¢				

The production costs in this study are based on a 160-acre operation. A yield of one ton per acre, in shell, was used as a basis for figuring costs. A yield of one ton per acre is far better than the county average but is well within the range of the better orchards in the county.

Interest on investment was figured at 6%. This assumes that the orchard is free of debt. Interest at 7 or 8% would be more realistic for payments being made on the orchard or equipment.

Labor rates per hour as used in this study range from $2.00 for unskilled help to $2.25 and $2.50 for semi-skilled help and $3.00 for skilled help. An additional 10% must be added to these rates to cover the cost to the grower of Social Security and Workmen's Compensation.

Cultural Equipment for a 160-Acre Almond Orchard under Nontillage

1 - Diesel wheel tractor, 50 HP	$ 7,500
1 - Gasoline wheel tractor, used, 30 HP	2,000
1 - 4 WD Jeep or equal	3,300
1 - Truck, 1 1/2 ton, used	1,000
1 - Orchard sprayer	6,500
1 - Weed sprayer and boom, trailer mounted	750
3 - Heater oil service trailers	2,250
1 - 12-foot chopper	2,000
1 - 7-foot flail mower	800
1 - Flamer	1,500
1 - Front-end loader with brush rake attachment	1,800
2 - Sprinkler pipe trailers	400
1 - Chain saw and miscellaneous pruning equipment	600
2 - Heater oil storage tanks and pumps	2,000
1 - Fuel storage tank and pump	500
Thermometers and frost alarm	200
Soil moisture meter and blocks	150
Shop tools	2,000
Orchard heater lighting equipment	500
	$35,750

Harvest Equipment

1 - Pick-up machine	$ 3,000
1 - Knocker	6,500
1 - Sweeper	2,400
3 - Carts	1,200
	$15,600

Hulling Plant

1 - Receiving pit	$ 1,200
1 - Pre-cleaner and stoner, used	1,800
1 - Huller, used	2,000
2 - Air separators	2,500
Miscellaneous elevators, conveyors, bins, motors	3,500
Dust collectors and blowers	650
Electric service and wiring	3,300
	$13,950
1 - Metal building 40 x 60 x 15 side wall on 4" slab, including shop space	$ 9,600

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Fred Montgomery, Harry Mead, Sam Lewis, and Earl Decker, almond growers at Durham, Butte County; Clem Meith, University of California Farm Advisors' Office, Oroville; and Phil Parsons, Extension Economist, University of California, Davis; cooperated in preparing the data presented here.

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