

NAVEL AND VALENCIA ORANGES  
SAMPLE COSTS OF PRODUCTION

SAN BERNARDINO COUNTY

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1964-65

Yields and costs for growing oranges in San Bernardino County vary considerably. This information is to serve as a guide for cost estimation and cost comparison. Sample costs in this report are based on a typical ten-acre orchard during a normal year in this county. The orchard would have 90 trees per acre, be 60 years old, irrigated by furrows, and protected by wind machine plus heaters.

University of California  
Agricultural Extension Service  
County of San Bernardino

SAMPLE COSTS TO PRODUCE ORANGES

SAN BERNARDINO COUNTY 1964-65 CROP

<u>CULTURAL OPERATION</u>	<u>Cost per acre</u>
Fertilization -----	\$ 30.00
Irrigation - labor -----	41.00
(17x) water -----	51.00
Pest Control -----	110.00
Disease Control -----	11.00
Other Pest Control -----	5.00
Weed Control and Cultivation -----	38.00
Pruning and Disposal -----	12.00
Frost Protection -----	65.00
Tree Replacement -----	12.00
Miscellaneous -----	5.00
Sub-total	<u>\$380.00</u>

CASH OVERHEAD

Taxes -----	70.00
Maintenance and Repair -----	10.00
General Expense -----	10.00
Sub-total	<u>\$ 90.00</u>

TOTAL ON-TREE CASH COSTS	\$470.00
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INVESTMENT OVERHEAD

Depreciation -----	153.70
Interest on Investment -----	332.10
Sub-total	<u>\$485.80</u>

TOTAL ON-TREE COSTS	\$955.80
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TOTAL ON-TREE COSTS (less interest)	\$623.70
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### Fertilization

1 lb. nitrogen per tree @10.5¢ per lb. = \$9.45  
Application cost @\$2.00 per acre = \$2.00

25 lbs. Z-M @28¢ per lb. - \$7.00

40 lbs. urea @9¢ per lb. = \$3.60

Cost of spray application if not included in a pesticide = \$8.00

### Irrigation

Labor - 5 acres irrigated in 8 hours @\$1.50 per hour  
17 times = \$40.80

Water - Costs of stocks and shares vary considerably  
but total to an average of \$12.50 per acre  
foot of water for large water companies.  
Cost to small groups on a cooperative will  
average 30¢ per miners inch. 10 miners  
inches per acre for 17 irrigations = \$51.00

### Pest Control

Two or three spider mite sprays @\$30, 1 scale spray  
@\$45, thrip spray @\$5, plus application cost if applied  
alone. If oil is used to control scale, usually only one  
additional spider control spray is necessary. This will  
reduce the cost \$30. If orange worms require control  
add \$22.

### Disease Control

Brown rot control @\$11 is necessary only during wet cool  
springs.

### Other Pest Control

Gophers are both trapped and poisoned.

### Weed Control and Cultivation

Cultivation - 4 hours for tractor and driver

@\$7.00 (contract operator) per hour = \$28.00

Weed oil @\$6.50 plus 1 hour application @\$3.50

If orchard is under noncultivation, it requires soil  
sterilant herbicides but no cultivation; thus costs are  
considerably less.

### Pruning and Disposal

Only dead wood, suckers and crossed branches need be removed from orange trees once every 4 or 5 years. However, extensive hand pruning will cost 50¢ to \$1.50 per tree. If mechanical topping and hedging machines are used to limit tree size, costs will range from \$20 to \$30 per acre.

### Frost Protection

Electric or gasoline powered wind machines, heater oil, and labor average about \$65. Costs vary with location and year.

### Tree Replacement

2 trees @ \$3.00 per tree = \$6.00

Planting and maintenance cost = \$3 per tree

### Taxes

Most taxes range from \$40 to above \$120 depending on location.

### General Expense

Includes office, accounting, insurance, transportation, etc.

### Harvest

These total on-tree costs do not include harvest costs.

### Interest

Land at 6%; trees, irrigation system, wind machines, and heaters 1/2 value at 6%

### INVESTMENT OVERHEAD PER ACRE

	<u>Years</u>	<u>Investment</u>	<u>Depreciation</u>
Trees	20	\$1800.00	\$ 90.00
Irrigation System	20	200.00	10.00
Wind Machine	10	420.00	42.00
Heaters - 15/acre	10	117.00	11.70
		<u>\$2537.00</u>	<u>\$153.70</u>