

Cooperative Extension Work in Agriculture and Home Economics
 United States Department of Agriculture and University of California Cooperating

WHAT DID IT COST TO GROW VALENCIA ORANGES IN ORANGE COUNTY, 1957?

(Based on yield of 275 field boxes, 54 lbs. net, per acre)

Cultural Operations	Costs Per Acre			Per Field Box	Your Cost
	High	Low	Typical		
Irrigation - Labor	\$20	\$13	\$16		
Pest Control - Application	27	20	25		
Soil Management - Cultivation	36	12	23		
- Non tillage, labor only	20*	7*	12*		
**Frost Protection - Service charges, etc.	5	0	3		
Tree Care and Replacement	12	3	10		
Windbreak Care	22	3	7		
Rodent Control	5	1	3		
Nutrient Spray - Application	12	6	10		
Fertilizer - Application	2	0	2		
Total Labor	<u>\$111</u>	<u>\$58</u>	<u>\$99</u>	<u>\$.36</u>	
Materials					
Water, all charges	\$50	\$10	\$23		
Pest Control - Oil, etc.	17	10	15		
Soil Management - Weed Oils & Chemicals	16*	3*	7*		
**Frost Protection - Standby & Power	46	30	35		
New Trees	20	0	5		
Fertilizer - Nitrogen, all sources	82	12	30		
- Nutrient Spray	22	6	9		
Total Materials	<u>\$237</u>	<u>\$68</u>	<u>\$117</u>	<u>\$.43</u>	
Cash Overhead					
General Expense	\$19	\$ 6	\$11		
Taxes, Land & Trees	90	35	55		
Insurance	8	1	3		
Repairs & Parts	19	0	5		
Total Cash Overhead	<u>\$136</u>	<u>\$42</u>	<u>\$74</u>	<u>\$.27</u>	
TOTAL CASH LABOR, MATERIALS & OVERHEAD COSTS	\$514	\$168	\$290	\$1.06	
Depreciation on pipelines, and wind machines and trees					
	\$66	\$28	\$36		
	16	16	16		
Interest @ 5% on average value of \$4300/A	215	215	215		
TOTAL DEPRECIATION AND INTEREST	<u>\$297</u>	<u>\$259</u>	<u>\$267</u>	<u>\$.97</u>	
TOTAL CASH COSTS PLUS DEP. & INT.	\$811	\$427	\$557	\$2.03	

*Non-tillage costs are for comparison and are not included in totals.

**Frost protection based on electric wind machine operation.

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EXPLANATION OF VALENCIA GROWING COSTS, 1957

Introduction: The cost of growing valencia oranges in Orange County has been computed on the basis of a typical orchard using normal operations for the area. Cultural practices for most districts include windbreak care and frost protection as well as irrigation, pest control, fertilization and nutrient spray.

The typical grove is set up as comprising 17 acres, mature bearing trees 35 years or older with concrete pipe line system for irrigation, and a wind machine of sufficient size to handle the entire acreage.

Production and Income: Production is estimated at 275 field boxes per acre for 1957. On-tree returns at \$1.75 a field box or \$480 per acre.

Irrigation: Irrigation labor and water costs varied depending upon irrigation district and method of application. The 1957 range was from under \$10 to over \$50 per acre. Labor charges varied between \$12 to \$20 per acre. One orchard using portable sprinklers reported \$18.50 for labor.

Pest Control: Orange County conditions favor a single oil spray in the fall, \$25 for application and \$15 materials.

Soil Management: Tillage costs showed a range of \$12 to \$36. Non-tillage costs were from \$3 to \$16 per acre for materials and \$7 to \$20 per acre for labor. All orchard traffic should be kept to a minimum.

Frost Protection: The winter of 1957 was mild. Using a typical installation for electric wind machine there were stand-by charges amounting to nearly \$35 per acre and service charges and other miscellaneous labor items of \$3 per acre.

Tree Care and Replacement: Typical orchards are replacing approximately two trees per acre each year. The cost of trees, planting and care amounts to nearly \$8 per acre. Additional tree care, trimming and pruning costs another \$7 per acre.

Windbreak Care: Management of windbreaks involves root cutting, trimming and raking. Costs for these operations vary from \$3 to \$22 per acre depending on location.

Rodent Control: The control of gophers is essential to good grove management. Charges range from \$1 to \$5 per acre per year where special attention is required.

Fertilization: Nitrogen fertilizers and nutrient sprays containing zinc and manganese are necessary. Good results are being obtained where growers are using 100 lbs. of nitrogen per acre from all sources. Cost for this amount is usually less than \$15 per acre per year. This study shows \$12 to \$82 per acre being spent for fertilizers. Nutrient sprays require \$9 for materials and \$10 for application.

Cash Overhead: Taxes are only reported for land and trees. Rates depend on nearness to urban centers. Insurance is only on items pertaining to grove operations and fruit production. General expense is calculated at 5% of the cultural and material cost.

Depreciation: Calculated on irrigation equipment and wind machines, and trees.

Interest: Calculated on original cost of land and average value of improvements and equipment.

3/58/1200

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