

These examples of growing costs are calculated from the following assumptions. The farms are owner-operated with sufficient acreage to warrant shop and machinery shed, pick-up, tractor, small blade, harrow, float, and weed sprayer (\$250 investment per acre).

Orchards are located in good districts for citrus production. Frost hazard is moderate with protection required each winter. Wind machine investment \$600 per acre. The cultural practices are for a grove with better-than-average yields of 500 to 600 boxes per acre. Capitalization values are \$1200 for land, plus \$2200 tree development costs per acre.

Cultural costs itemized include labor at \$2.50 per hour, incl. compensation and social security, wind machine operating costs at \$3/hour, incl. fuel, upkeep and repairs, tractor at \$2/hr. and weed sprayer (PTO) at \$1/hr. No provision is made for value of supervision or management.

Groves are in irrigation districts charging \$10/acre foot plus \$6 assessment. Distribution is by 10-day dragline sprinkler systems installed @ \$250/acre. The season requires seven to eight complete irrigations. The method of soil management in non-tillage, fall soil sterilant spray and three spot sprayings with oil during rest of the season. Drive rows and rough spots are occasionally harrowed and graded to keep smooth.

The spray programs vary for the varieties. Navels are treated for thrips, mites, scale and brown rot. A growth regulator spray is applied to late picks. Valencias receive treatment for thrips, scale and Septoria. Lemons receive thrips, scale and brown rot sprays.

Frost protection is by wind machines. Navels receive 100 hours, valencias and lemons 150 hours running time.

Nutritional programs include nitrogen and zinc. Leaf tissue analysis provides guidelines for amounts.

For both navel and valencia oranges, a light pruning is done every five years, prorated at 20% per year. Lemons are pruned annually. Brush is shredded in row middles.

Depreciation schedules are the same for all varieties. Useful life rates are 40 years for trees and sheds, 15 for wind machines, 12½ for sprinkler system, 7 years for pick-up, tractor and weed sprayer, 14 years for tillage equipment. Interest charges of 7½% are on one-half of original cost, except land.

Picking of fruit is done by the packinghouse and charges deducted at that point. These sample costs are on-tree expenses up to harvesting. Orange harvesting costs per field box (1972-73) were about 37¢ picking labor, 9¢ hauling and 11¢ overhead for all harvesting operations. Lemon picking labor costs were 63¢ per box during this period.

INVESTMENT, DEPRECIATION & INTEREST SCHEDULE PER ACRE

	<u>Investment</u>	<u>Depreciation</u>	<u>Interest</u>
Land	\$1200	\$ -	\$ 90
Tree Development costs	2200	55	83
Irrigation system	250	20	9
Buildings & Equipment	250	22	9
Wind machine	600	40	22
	<u>\$4500</u>	<u>\$137</u>	<u>\$213</u>

1973
✓

SAMPLE COSTS TO PRODUCE CITRUS, TULARE COUNTY - 1973

<u>Pre-Harvest Cash Cultural Costs \$/Acre</u>	<u>Navels</u>	<u>Valencias</u>	<u>Lemons</u>
Fertilization	25	25	35
Irrigation - Labor	32	32	32
Water	36	36	36
Pest and disease control	112	105	100
Weed control and Cultivation	28	28	28
Pruning and Disposal	18	18	80
Frost protection	30	45	45
Miscl., Tree care replacement	<u>39</u>	<u>26</u>	<u>39</u>
Subtotal	\$320	\$315	\$395
<u>Cash Overhead</u>			
Taxes	64	55	70
Maintenance & Repair	15	15	15
General expense	<u>23</u>	<u>22</u>	<u>27</u>
Subtotal	\$102	\$ 92	\$112
TOTAL ON-TREE CASH COSTS	<u>\$422</u>	<u>\$407</u>	<u>\$507</u>
<u>Investment Overhead</u>			
Depreciation, Equipment, Buildings, trees	137	137	137
TOTAL ON-TREE CASH COST PLUS DEPRECIATION	<u>\$559</u>	<u>\$544</u>	<u>\$644</u>
Interest on investment	213	213	213
TOTAL PRE-HARVEST COST	<u>\$772</u>	<u>\$757</u>	<u>\$857</u>

COST PER FIELD BOX AT VARYING YIELDS

Yield: boxes/acre	200	300	400	500	600
On-tree cash cost - navels	\$2.11	\$1.40	\$1.05	\$.84	\$.70
On-tree cash cost - valencias	2.04	1.36	1.02	.82	.68
On-tree cash cost - lemons	2.54	1.69	1.27	1.01	.85

John Pehrson, Farm Advisor
Tulare County
mch - 1000 c

Robert C. Rock
Extension Economist
8/73

UC Cooperative Extension