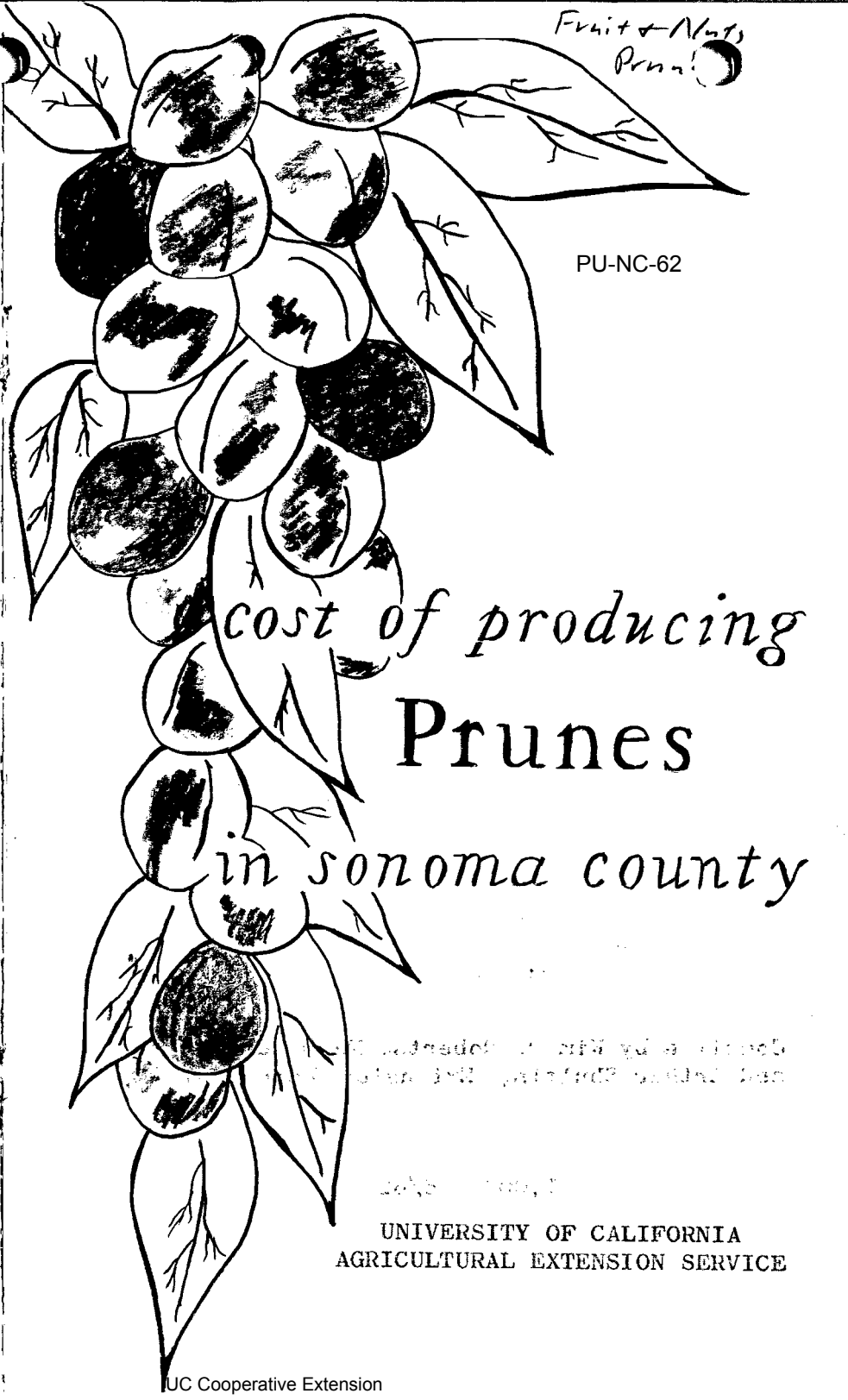


Fruit & Nuts
Prunes

PU-NC-62

cost of producing
Prunes
in sonoma county

UNIVERSITY OF CALIFORNIA
AGRICULTURAL EXTENSION SERVICE



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George B. Alcorn, Director, California Agricultural Extension Service.**

UC Cooperative Extension

COST OF PRODUCING PRUNES IN SONOMA COUNTY

The cost of producing a dry ton of prunes fluctuates considerably, and growers will want operation costs well in mind in order to apply the best in management skill. A complete analysis of crops enables a grower to know the part each crop demands of management. In order to best use resources available, the costs involved in producing a crop must be known to assess inputs.

This cost study is available as a guide to compare individual operations. The information to follow represents a combination of practices and costs being used by prune growers in Sonoma County. No extras or frills are included but only those practices actually being employed. A committee of growers cooperating with the University of California offer this study to enable growers to make comparisons and analyze other orchard situations.

The information included in the tables which follow is based on an 80-acre operation of horticultural crops. The unit may consist of three or more different crops, however, they would be of types which make use of much the same equipment.

Irrigated orchards producing 2½ dry tons per acre were selected as a reasonable yield. This is the current production competition growers are facing. Enterprise analysis and effective long-range planning are necessary in modern horticulture.

SAMPLE INPUTS AND COSTS OF PRODUCING PRUNES

Sonoma County, with a yield of 2.5 tons per acre
1962

	Man	Trac-	Truck	Cost per Acre	Cost per Ton
	Labor	tor			
Hours per Acre					
Pruning, about 75 trees per A. @ 50¢	25.0			\$ 37.50	
Brush disposal	1.5	.5		.275	
Apply fertilizer, 2.25 times, average	1.2	1.2		3.30	
Spraying, 3½ times av., incl. sprayer	2.0	2.0		8.75	
Dust once	.2	.2		.50	
Cultivation	4.0	4.0		13.00	
Irrigate, 3 times by sprinkler	4.0			6.00	
Prop, wire, etc.	4.0		2.0	8.00	
Miscellaneous, cover crop, etc.	6.0	1.5	1.0	12.50	
Total cultural labor and field power	47.9	9.4	3.0	92.30	\$ 36.92
Shaking, twice, boom and pole follow up	6.0	3.0		12.00	4.80
Picking, ground to bins, 6.25 T. at \$10	62.5			62.50	25.00
Move and load, bins, supervision, bin rent \$2	2.0	1.0		6.00	2.40
Haul to dehydrator and return bins	2.0		2.0	7.00	2.80
Dehydrating \$12 a ton				75.00	30.00
Total harvest labor and field power	72.5	4.0	2.0	162.50	65.00
Total labor and field power	120.4	13.4	5.0	254.80	101.92
Irrigation, power to pump 18 acre inches, 150 ft. head				6.00	
Fertilizers: Nitrogen, some phosphorus, potash every 4th year, av.				40.00	
Spray materials, various \$32 and dush \$1.60				33.60	
Miscellaneous materials, cover crop, etc.				6.00	
Total material cost				85.60	34.24
Total labor and material cost				340.40	136.16
General expense, office car etc., est. at 5% of above				17.02	
County taxes, land, trees, equipment				25.00	
Repairs to equipment except tractors and truck				5.00	
Compensation, social security and other insurance				9.00	
Total cash overhead costs				56.02	22.41
Total cash costs				396.42	158.57
Investment Overhead based on an 80 acre orchard unit	Original cost 80 acres	Average Invest.	6% int.	Depre- ciation	
		Dollars per Acre			
Trees, cost \$1050 acre, 35 years	84,000	525.00	31.50	30.00	
Building, for equipment	4,000	25.00	1.50	1.25	
Irrigation system and pipe	12,000	75.00	4.50	12.25	
Tractors, fork lift, truck, pickup	20,000	125.00	7.50	17.50	
Tillage equipment	1,800	11.25	.68	1.50	
Sprayer	5,600	35.00	2.10	4.00	
Misc. eqt. props, etc.	6,000	37.50	2.25	5.00	
Housing for help	6,000	37.50	2.25	3.00	
Land, at agricultural value	80,000	1000.00	60.00	--	
Total investment and depre.	219,400	1871.25		74.50	29.80
Total cash and depreciation costs				470.92	188.37
Interest on investment			112.28	112.28	44.91
TOTAL all costs				\$ 583.20	\$233.28

Labor and field power costs are figured at the following hourly rates: man labor, \$1.50; 40 hp. crawler tractor, \$1.75; 30 hp. wheel tractor, \$1; fork lift, \$1; spray engine, \$1.50; 2-ton truck, \$2. These equipment rates are cash costs only for fuel repairs and insurance and license for the truck.

Interest on investment is figured at 6% of the average lifetime value of depreciable items, which is estimated at half of the new cost at current prices.

FROST PROTECTION COST

This expense has not been included in the cost tables principally because it is not a practice which all growers use. Some orchards are located in areas where orchard heaters of one type or another are used while others are so favored that heating is usually unnecessary. The frost warning service of the United States Weather Bureau, in operation with key growers, effectively serves all growers with daily temperature information. Growers heating argue that it will cost approximately 10 cents per tree for each firing. Add this cost to the tables if heating is a practice in your management.

QUALITY CONTROL

The north coastal area enjoys the reputation of producing some of the premium fruit in the nation. This is characterized by the large size and high sugar content. Growers are largely controlling this quality by adequate fertilizer, good irrigation practices, and most important, careful harvesting. Size is dependent on total set of fruit, however, adjusting fertilizer programs and supplying enough moisture can help to size even the heavy set orchards.

Harvesting, drying, and storing fruit is the area which is most demanding of growers if quality is to be maintained. Fruit must be ripe yet not overripe. Shaking in a manner to prevent splitting and careful handling from the orchard to the drier fit into this scene. Major size differences require different dehydration practices.

The crop needs to be harvested with the highest sugar content possible; however, soft, overripe fruit in the orchard means a lower quality in the finished product.

YIELD--Yield per acre is one of the most important factors, in determining cost per ton. Shown below are costs for different yields with costs per acre the same.

SAMPLE COSTS WITH VARYING YIELDS

Yield in Dry Tons per Acre	1.5	2.0	2.5	3.0	3.5	4.0
All Costs Except Harvesting	408.45	408.45	408.45	408.45	408.45	408.45
Harvesting Cost at \$69.90 per Ton*	104.85	139.80	174.75	209.70	244.65	279.60
Total Cost per Acre	513.30	548.25	583.20	618.15	653.10	688.05
Total Cost per Ton	342.25	274.13	233.28	206.05	186.60	172.01

*Includes general expense and insurance on harvest

FIVE-YEAR PRODUCTION DATA

All varieties are grouped--French represents 90 per cent of production.

Year	Acreage		Production		Values	
	Non-Bearing	Bearing	Tons per Acre	Total Tons	Per Ton	Total
1957	3,195	14,795	1.74	25,261	208	5,233,044
1958	3,534	14,893	.84	12,516	387	4,852,840
1959	3,557	15,090	1.20	17,792	374	6,646,532
1960	4,163	13,918	1.62	22,460	378	8,481,294
1961	3,966	14,197	1.87	26,520	321	8,508,000
Av.	3,683	14,579	1.45	20,910	334	6,744,342