

PU-SV-59

PRUNES  
IN

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TEHAMA COUNTY

1959

UNIVERSITY OF CALIFORNIA  
AGRICULTURAL EXTENSION SERVICE  
TEHAMA COUNTY

PRUNE PRODUCTION IN TEHAMA COUNTY 1959  
By Wallace Schreader, Farm Advisor

California produces about 85% of the world's prune tonnage. In 1958 there were 104,295 acres of prunes in California--19,411 acres of which were nonbearing.

Tehama County is the fourth largest prune growing county in California with 3,611 total acres; 1,740 bearing; and 1,871 nonbearing.

The marketing of prunes in California is regulated by state and federal marketing orders.

SOILS Prunes are raised on the deep, well-drained soils found along the Sacramento River and its tributaries. Nitrogen fertilizer is annually applied at about 100 pounds of actual nitrogen per acre.

Dieback, a result of overcropping and potassium deficiency, is found on most soils. Fruit thinning and supplemental potash injected into the soil at rates of 25-50 pounds per tree every 4-5 years corrects these conditions.

WATER Water requirements of 2.5 acre feet per growing season in mature orchards have been measured. Water quality is good except for a few isolated wells in the Salt Creek area.

VARIETIES French prunes are usually planted because of their consistent bearing of quality fruit. Robe de Sargent and Imperial are sometimes used to extend the harvest season. They do not bear consistently and are difficult to dehydrate.

ROOTSTOCKS Plum roots, Myrobalan 29C and Mariana 2623 and 2624 are used for their resistance to Oak Root Fungus and some nematodes. Peach roots are not used, except for interplants, because of their tendency to overbear. Planting distances are usually 25 feet on the square.

DISEASES The principal diseases are Bacterial Gummosis and Oak Root Fungus. Crown Rot, Crown Gall, and Brown Rot occur less frequently.

INSECT PESTS Mealy Plum Aphid, Leaf Curl Aphid, Spider Mites and Peach Twig Borer are common. Peach Tree Borer, Red Humped Caterpillar, San Jose Scale, Brown Scale, and Flower Thrips are a problem in some years.

### PRUNE PRODUCTION COSTS

The following cost study was designed to give an idea of expected costs per acre. The figures represent typical costs under assumed conditions. These conditions are as follows: 40 acres of land valued at \$1,000.00 an acre. The trees are planted on 25 foot squares with 69 trees per acre, producing 8 green tons per acre. An irrigation system is estimated at \$50.00 an acre and buildings other than dwellings at \$550.00 an acre.

A wheel tractor, 400 gallon sprayer, fertilizer spreader, and all other necessary tilling digging and harvesting implements are computed at their new retail value.

Major variations from these per acre costs will occur with size of plantings, use of machinery already on hand and size of crop.

TYPICAL COSTS TO PRODUCE DRIED FRENCH PRUNES IN TEHAMA COUNTY - 1959

OPERATION	HOURS PER ACRE	CASH AND LABOR COST			COST PER ACRE
		LABOR	EQUIPMENT	MATERIALS	
<b>CULTURAL</b>					
Prune	24.0	36.00			36.00
Brush Disposal	2.0	3.00	2.00		5.00
Fertilize	.3	.45	.25	100# Nitrogen 15.00	15.70
Disc 5 times	2.5	3.75	2.50		6.25
Irrigate 2 times	9.0	13.50	3.60	2.5 acre ft. water 10.00	23.50
Spray	.7	1.50		Spray material 10.00	14.65
Plant Covercrop	.2	.30	.30	Seed 2.00	2.60
Taxes, Insurance, and Misc.				39.00	39.00
<b>TOTAL CULTURAL &amp; MISC. COSTS</b>	<b>38.7</b>	<b>58.05</b>	<b>8.65</b>	<b>76.00</b>	<b>142.70</b>
<b>HARVEST &amp; PROCESS</b>					
Float & Roll	.50	.75	.50		1.25
Shake and Pickup \$12 a green ton		96.00	4.00		100.00
Hauling to Dipper \$3 " " "		18.00	6.00		24.00
Dip and Dehydrate \$12 " " "		96.00			96.00
<b>TOTAL HARVEST COSTS</b>					<b>221.25</b>
<b>TOTAL CASH COSTS</b>					<b>363.95</b>
<b>Annual Cost</b>					
Investment	Per Acre	6% Interest	Depreciation		
Land	\$1,000.00	\$ 60.00	\$		
Bldgs.	550.00	16.50	13.75		
Irrigation	50.00	1.50	2.50		
Equipment	350.00	10.50	35.00		
Trees	600.00	18.00	20.00		
<b>TOTAL</b>	<b>\$2,550.00</b>	<b>\$106.50</b>	<b>\$71.25</b>		<b>177.75</b>
					<b>541.70</b>
					<b>216.68</b>

LABOR - \$1.50 an hour

YIELD - 2½ Dry Tons Per Acre

## SUGGESTED READING

The following publications are available for distribution at the Farm Advisor Office, P. O. Box 391, Red Bluff, California (upstairs in the Post Office Building).

Prune Production in California

Fertilizers and Covercrops for California Orchards

Pruning Deciduous Fruit Trees

Costs of Establishing a Prune Orchard

Chemical Control of Prune Insect Pests and Diseases  
in Tehama County

Diseases of Fruits and Nuts

Oak Root Fungus and Its Control

Bacterial Canker

Dehydrating Prunes

Keep Your Dried Fruit Clean

Quality of Dried French Prunes

Prune Harvesting by Hand, Frames, and Machines

Contour Check Method of Orchard Irrigation

Sprinkler Irrigation

Essentials of Irrigation and Cultivation of Orchards

Whitewash Formulas

Propagation of Temperate-Zone Fruit Plants

This cost study was developed in cooperation with the Tehama County Prune Growers. Acknowledgment for checking the final figures are expressed to Andrew Micke, John Mohler, George Lindauer, Earl Lindauer, and Nelson Butler.

UC Cooperative Extension

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