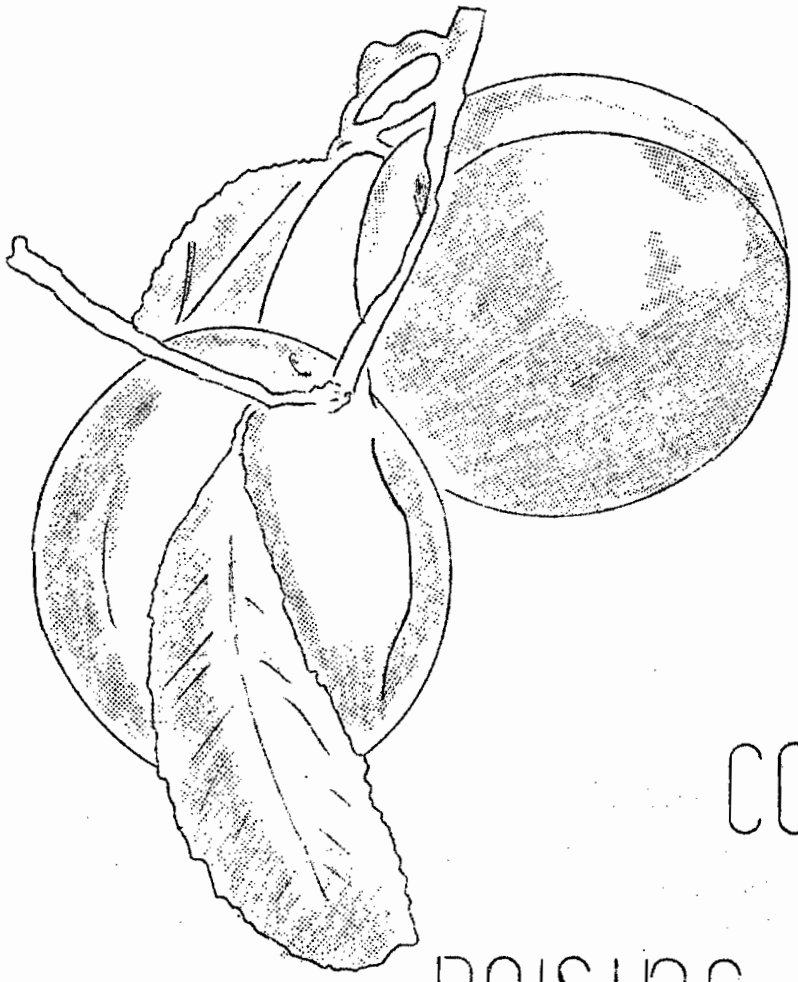
A. J. Reed

PH-SV-67



COSTS
IN
RAISING CLING PEACHES
IN
THE PEACH BOWL
BUTTE-SUTTER-YUBA COUNTIES

Butte County
Post Office Building
P. O. Box 991
Oroville, California
95965

Sutter County
Post Office Bldg.
P. O. Box 628
Yuba City, California
95991

Yuba County
Federal Building
P. O. Box 910
Marysville, California
95901

4/67
600 c.
(403)

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Scott McRitchie, Farm Advisor, Butte County

Acknowledgment

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CALENDAR OF OPERATIONS AND FACTS ON PEACH PRODUCTION

This peach study is a compilation of figures on production costs developed with growers located in the "Peach Bowl" of Butte, Sutter and Yuba Counties. Costs are based on an operation of 100 acres of cling peaches, with 75 acres in bearing. The yield figure in the study is based on above-average tonnage of 17 tons per acre following a 15% "green drop."

Land used for peach growing should be well drained loam or clay loam soil of the Gridley, Wyman, or Columbia series. Land value here is based on recent sales of the best peach growing land in the Yuba City-Gridley area. Orchard planting normally used is a 20' x 20' tree spacing or 109 trees per acre, and the tree cost per acre in this study is based on 15 years bearing life with 4 years required to begin bearing.

Cultural practices in peach production include: (1) spraying for insect and disease control, (2) fertilization, (3) cultivation for weed control and irrigation preparation, (4) irrigating, (5) thinning, (6) pruning, (7) cover crop planting, (8) harvesting.

The cultural season for cling peaches is assumed to start in the fall of the year following sufficient rainfall to allow spray application of chemicals for control of leaf curl, peach blight and overwintering insects.

Pruning of peach orchards begins as soon as leaves have fallen and continues until bloom. Small brush is chopped up by use of a rotary chopper and is incorporated into the soil through disking. Large brush is removed manually.

Nitrogen fertilizer is applied during the winter or early spring, and again in the late spring with an "easy flow" spreader pulled by a wheel tractor.

During bloom in March a fungicide spray is applied if rain is prevalent. During the period following bloom, if weather becomes cold, ridges are put up and an irrigation is applied if and when frost danger occurs. (This irrigation is not included in the study.)

May and June are busy months in peach orchards. Oriental fruit moth and peach twig borer plus other insects and mildew are controlled by a spray at this time. Fruit thinning also begins in mid-May during pit hardening, and thinning should be accomplished as rapidly as possible to remove competing fruit from trees. Thinning cost per tree in this study is based on $1.35 per tree including the cost of "green dropping." "Green drop" is a surplus fruit elimination program utilized by the peach industry during surplus years under a cling peach marketing order.

Upon completion of thinning, the orchard is usually ridged and irrigated. Peaches normally receive 5-7 irrigations per season, not including the "frost irrigation." Number of irrigations depends largely on weather, soil type, and variety. A ridger is used to prepare ridges for contour flood irrigation, and approximately six acre-inches of water per acre is applied per irrigation.

The orchard is disked for weed control, as it becomes necessary, with use of a track layer engine or diesel wheel tractor pulling usually a 10-foot disk.

Orchards are wired several times during their life to prevent limb breakage from weight of fruit. In this study the annual wiring cost is based on three wirings over a ten-year period, taking 10 man hours per acre per wiring, with materials based on .06 per tree per wiring for wire. Props are also used late in the season for limb support.

A second light thinning of fruit may be necessary in years of heavy crops and small fruit. This may be accomplished in June or July with poles or by hand. Minimum size requirements for canning cling peaches is 2-3/8 inches in diameter.

Spraying or dusting will be necessary in July-August for fruit moth and spider mites or brown rot threat in case of rain.

Peaches are a perishable commodity, and it is necessary to harvest the fruit within a 5-8 day period after picking commences, depending on weather. If ripening of the fruit is prolonged, or if fruit sizing is a problem, a second picking of a variety may be necessary. Fruit is hand picked into picking bags and dumped into 40-pound lug boxes, 800 1,000-pound bins, or 4,000-pound gondolas. These are on pallet wagons, and are pulled by a wheel tractor to a central grading station where peaches are graded and sized, followed by a state inspection for off-grade fruit percentage. Fruit may or may not be hydrocooled before shipment by truck to cannery. Fork lifts on wheel tractors handle bins in the fields when necessary. Mechanical harvesting is being considered by growers. This would involve a large investment for harvesting equipment but would provide potential cost savings on the harvesting operation.

ACREAGE FIGURES - 1966

	Bearing Acres	Non-bearing acres
SUTTER	12,892	1,176
YUBA	5,718	2,054
BUTTE	3,335	1,622

SAMPLE COSTS TO PRODUCE CLING PEACHES

Butte, Sutter & Yuba Counties -- 1967

Production data: 75 Acres (109 trees/acre)

Labor: $1.60 & $2.00 per hour, including social security and work insurance

Operation	Hours Per Acre	Cash and labor cost per acre: Labor	Fuel and Repairs	Materials: Kind and Quantity	Materials: Cost	Total
Cultural costs						
Cover crop	.2	.40	.50	Seed	2.80	3.70
Prune @ 70¢/tree		76.30				76.30
Brush removal	2.0	4.00	2.45			6.45
Wire	3.3	5.30		Wire	2.00	7.30
Spray	2.5	9.00	16.25	Material	60.00	85.25
Fertilize	.8	1.60	.95	150# N @ 11¢	16.50	19.05
Thin @ 1.35/tree		147.15				147.15
Cultivate 4X (2 ways)	4.0	8.00	7.60			15.60
Ridge 3X	.8	1.60	1.35			2.95
Knock ridges 3X	.4	.80	.50			1.30
Irrigate 6X	12.0	19.20		Power	9.75	28.95
TOTAL CULTURAL COSTS		273.35	29.60		91.05	394.00
Harvest costs						
Pick @ 10.00/ton		170.00				170.00
Haul out		9.25	7.05			16.30
Supervision	3.0	10.00				10.00
Marketing order				2.25/ton		38.25
TOTAL HARVEST COSTS		159.25	7.05			234.55
Cash overhead						
Misc., office, etc.					27.20	27.20
Taxes					32.60	32.60
Rent						
TOTAL CASH OVERHEAD					59.80	59.80
TOTAL CASH COST		432.60	36.65		150.85	688.35
Management 5% of 17 tons @ $60/ton						51.00

INVESTMENT	Per Acre		Annual Cost: Depreciation	Interest	
Land	1200	1200	2.60	72.00	
Trees	300	600	5.40	40.00	18.00
Irrigation system	55	110	1.00	5.50	3.30
Buildings	37	75	.60	3.00	2.25
Equipment	223	446	4.00	35.28	12.18
Total		2431	32.60	83.78	107.73
					191.51
TOTAL COST PER ACRE					~~879.86~~ 930.86
Cost per Ton @ 17 Ton Yield					~~51.75~~ 54.76

INVESTMENT FOR CLING PEACHES PRODUCTION IN BUTTE, SUTTER & YUBA COUNTIES - 1967

Based on 100 acres Cling Peaches, 75 acres in bearing

Item	Yrs. Life	Orig. Cost 1966 Total	Orig. Cost 1966 Per Acre	Deprec.	Int.	Cash Operating Cost per Acre or Hour Total
Tracklayer 40 H.P.	15	11700	117	7.80	3.50	1.40
Wheel tractor 30 H.P. gas	15	4370	44	2.95	1.30	1.10
Speed sprayer 500 gallon	10	5500	55	5.50	1.65	3.50
Disk 10' 6"	10	1500	15	1.50	.45	.30
Cultipacker 8'	10	460	45	.45	.15	.20
Ridger	10	850	85	.85	.26	.30
Check breaker	10	200	2	.20	.06	
Brush chopper	10	1000	10	1.00	.30	.25
Spring tooth	10	400	4	.40	.12	
Truck 1½ Ton	10	3600	36	3.60	1.08	1.80
Pickup truck 3/4 Ton	10	2800	28	2.80	.84	
600 gal. water tank	10	150	1.5	.15	.05	
Pallet wagons - 2	10	1000	10	1.00	.30	
Forklift and used tractor	10	2000	20	2.00	.60	1.10
Drag	10	500	5	.50	.15	
Ladders 40 @ $12.50	10	500	5	.50	.15	
Shop equipment	15	2000	20	2.00	.60	
Props	10	1000	10	1.00	.30	
Miscellaneous	10	1000	10	1.00	.30	
SUBTOTAL			446.00	35.20	12.16	
Labor and storage building	25	7500	75.00	3.00	2.25	
Trees	15		600.00	40.00	18.00	
Irrigation system	20	11000	110.00	5.50	3.30	
Land	-		1200.00		72.00	
GRAND TOTAL			$2431.00	$83.70	$107.71	