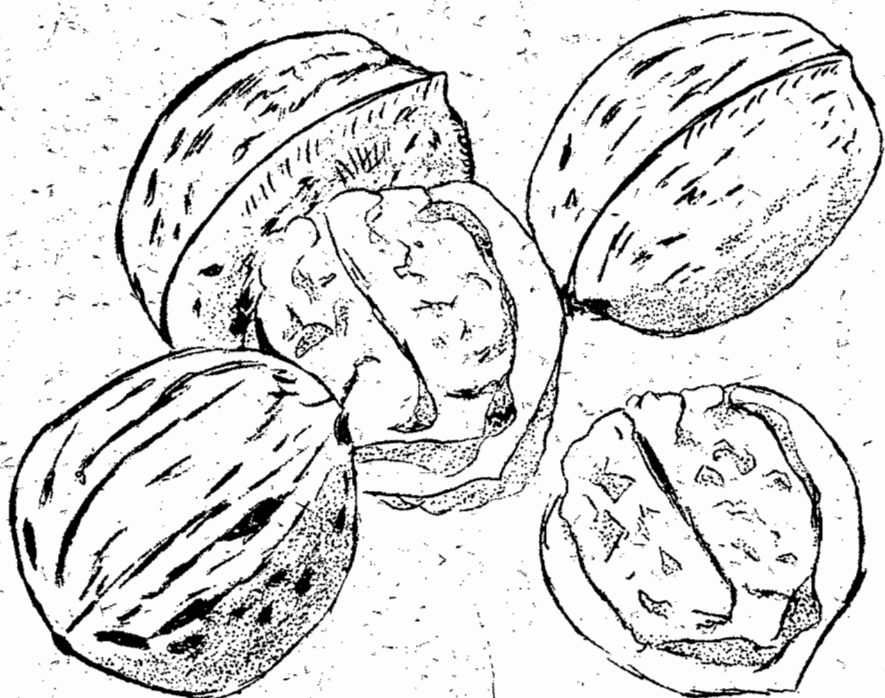


Walnut Production Costs
IN
Western Merced County



Fall 1968

SAMPLE COSTS TO PRODUCE WALNUTS IN WESTERN MERCED COUNTY - 1968

Lcnnie C. Hendricks, Farm Advisor

Edward Yeary, Farm Advisor Statewide

BASIS OF ESTIMATED COSTS:

Yield - 3000 lbs. per acre; 60 acres of Payne variety on 30' x 30', spacing 48 trees per acre. All labor \$2.00 per hour; tractors: 40 H.P. wheel diesel (WD40) cash cost \$1.20; depreciation \$.70, interest \$.28; older 40 H.P. crawler diesel (CD 40) cash cost \$1.50; depreciation \$.80, interest \$.30.

<u>PRE -HARVEST CASH COSTS</u>	<u>PER ACRE</u>	<u>PER POUND</u>
Pruning: 12 man hours	\$ 24.00	
Brush disposal: 2 man hours	4.00	
1 tractor (CD 40) hr.	1.50	
Herbicide strip spray	6.50	
Fertilizer: 200# N @ 13¢ applied	26.00	
Spray application: 3 @ 350 gpa - 2¢/gal.	21.00	
Spray chemicals	55.00	
Disking and chiseling: 6 man hours	12.00	
6 tractor hours (CD 40)	9.00	
Furrow 4 times: 2 man hours	4.00	
tractor (WD 40) hours	2.40	
Irrigate 5 times, 10 man hours	20.00	
Prepare for harvest: harrow, plane, roll, 2 man hr.	4.00	
2 tractor (WD 40) hours	2.40	
Water: CCID canal, 4 acre feet	8.00	
CCID tax @ \$2.15/acre	2.15	
Misc. labor: 4 man hours	8.00	
Misc. tractor work: WD 40 - 1 hour	1.20	
CD 40 - 1 hour	1.50	
Repairs except tractor	15.00	
Misc. material	15.00	
County taxes @ \$7.49/\$100	33.51	
Gustine Drainage District tax	1.49	
Office, pickup, int. on operating cap. (6% cash cost)	16.66	
TOTAL PRE-HARVEST CASH COSTS	\$294.31	9.81¢
HARVEST COSTS:		
Shaking: Contract @ #30.00/ton	45.00	
Picking: Contract @ \$30.00/ton	45.00	
Hulling & dehydrating: Contract @ \$35.00/ton	52.50	
Haul: Contract @5.00/ton	7.50	
TOTAL HARVEST COSTS	\$150.00	5.00¢
TOTAL CASH COSTS	\$444.31	14.81¢

(over)

<u>DEPRECIATION</u>	<u>PER ACRE</u>	<u>PER POUND</u>
Trees: Cost \$1,837.00 - 40 year life	\$ 45.92	
Irrig. system: \$100.00 cost, 20 year life	5.00	
Bldgs. & equipment except tractors \$90.00 cost - 15 year life	6.00	
Tractors: WD 40 @ \$.70 (5 hours)	3.50	
CD 40 @ \$.80 (8 hours)	6.40	
TOTAL DEPRECIATION	\$66.82	2.23¢
INTEREST ON INVESTMENT @ 7%		
Irrigation system ($\frac{1}{2}$ cost) \$50.00	\$ 3.50	
Bldgs & equip except tractors ($\frac{1}{2}$ cost) \$45.00	3.15	
Trees: ($\frac{1}{2}$ cost) = \$918.00	64.26	
Land @ \$1,000.00 per acre	70.00	
Tractors: WD 40 @ \$.28 (5 hours)	1.40	
CD 40 @ \$.30 (8 hours)	2.40	
TOTAL INTEREST ON INVESTMENT	\$144.71	4.82¢
TOTAL COST OF PRODUCTION	\$655.84	21.86¢

This cost study was designed to give an idea of the costs involved in a well managed walnut orchard operation in Western Merced County. These costs of walnut production should not be thought of as county averages; they are not. These costs represent those that a good grower, on land well suited to orchard production, will incur.

The yield of 3000 pounds per acre is well above the county average, but this yield is a practical average yield for profitable walnut production.

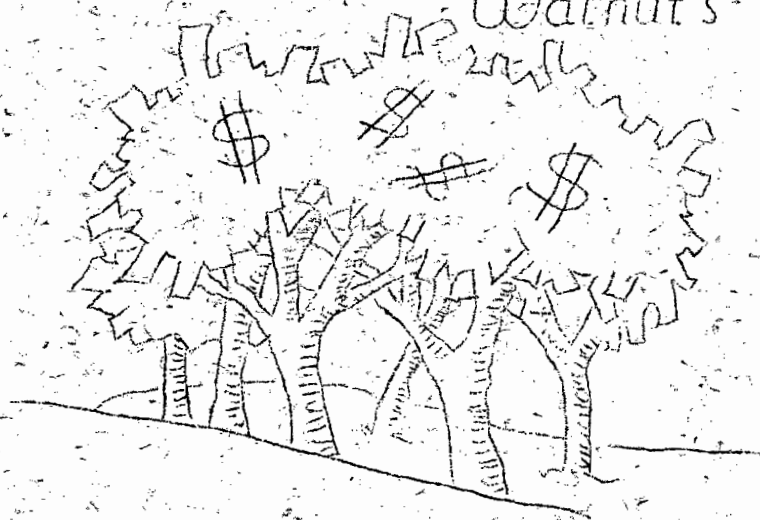
It is not expected that your costs will be the same as those presented in this publication. You will find this study most useful if you evaluate your costs by entering them opposite the listed costs.

L. C. Hendricks, Jr., Farm Advisor

E. A. Yeary, Farm Advisor

NOV 21 1968

Cost of
Establishing
Walnuts



Western Merced County
Fall 1968

COST ANALYSIS WORKSHEET

SAMPLE COSTS TO ESTABLISH A WALNUT ORCHARD IN WESTERN MERCED COUNTY - Fall, 1968

Basis of Calculations - Costs per hour:

Assume 60 acres of Payne variety at 30'x30' spacing (48 trees/acre)

Labor - \$2.00

Tractors: 40 H.P. Wheel Diesel (WD40) Cash Cost - \$1.20, Depreciation - .70,
Interest - \$.28

Older 40 H.P. Diesel Crawler (CD40) Cash Cost - \$1.50, Dep. - \$.80, Int. - \$.30

	1ST Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.	6th Yr.
Yield: Pounds per Acre					500	1,000
CASH COSTS PER ACRE:						
Land Preparation: Subsoil-contract	\$11.60					
Disk and Float-2 man hrs.	4.00					
2 tractor(CD40) hrs.	3.00					
Survey and Mark	5.00					
Dig Holes - 2 man hrs.	4.00					
2 tractor(WD40) hrs.	2.40					
Plant and Prune 8 man hrs.	16.00	2.00	2.00			
2 tractor(WD40) hrs.	2.40					
Trees: 48 @ \$3.00 (3/4" to 7/8")	144.00	6.00	3.00			
Stakes: 48 @ \$.25	12.00	.50				
4 man hrs.	8.00	2.00				
1 tractor(WD40) hr.	1.20					
Training, Tying, Pruning	30.00	20.00	20.00	20.00	24.00	30.00
Disking: 3 times, 2 ways						
3 tractor(CD40) hrs.	4.50	4.50	4.50	4.50	4.50	4.50
3 man hrs.	6.00	6.00	6.00	6.00	6.00	6.00
Harrow: 2 times, 2 ways						
1 tractor (WD40) hr.	1.20	1.20	1.20	1.20	1.20	1.20
1 man hr.	2.00	2.00	2.00	2.00	2.00	2.00
Furrow: 4 times-2 tractor(WD40) hrs.	2.40	2.40	2.40	2.40	2.40	2.40
2 man hrs.	4.00	4.00	4.00	4.00	4.00	4.00
Irrigation: 4 times - 6 man hrs.	12.00	12.00	12.00	12.00	12.00	12.00
Water-C.C.I.C. Canal \$2.00/acre ft.	6.00	6.00	8.00	8.00	8.00	8.00
C.C.I.D. Tax \$2.15/acre	2.15	2.15	2.15	2.15	2.15	2.15
Whitewash trunks: 2 man hrs.	4.00	4.00	4.00			
Fertilizer: \$.13/lb. applied	1.63	1.63	3.25	3.25	6.50	6.50
Herbicide Strip Spray	-	6.50	6.50	6.50	6.50	6.50
Spray-Custom Application	4.00	4.00	4.00	8.00	8.00	8.00
Materials	5.00	10.00	10.00	12.00	15.00	30.00
Miscellaneous Material	10.00	10.00	10.00	10.00	10.00	10.00
Miscellaneous Labor: 4 man hrs.	8.00	8.00	8.00	8.00	8.00	8.00
Miscellaneous Tractor(WD40) 1 hr.	1.20	1.20	1.20	1.20	1.20	1.20
Repairs except tractors(Disk,Harrow, etc.)	15.00	10.00	10.00	10.00	10.00	10.00
County Taxes @ \$7.49/\$100	18.73	18.73	18.73	22.48	23.23	23.98
Gustine Drainage District Tax \$.33/\$100	.83	.83	.83	1.00	1.03	1.07
Office, Pickup, Interest on Operating Cap. (6% Cash Cost)	21.13	10.19	8.63	8.68	9.34	10.65
Harvest Costs @ \$100.00 per ton					25.00	50.00
TOTAL CASH COSTS	\$373.37	155.83	152.39	153.36	190.05	238.15

(Cont'd)

<u>DEPRECIATION COSTS:</u>	<u>1st Yr.</u>	<u>2nd Yr.</u>	<u>3rd Yr.</u>	<u>4th Yr.</u>	<u>5th Yr.</u>	<u>6th Yr.</u>
Irrigation System: \$100/acre-20 rs.	\$ 5.00	5.00	5.00	5.00	5.00	5.00
Bldgs. and Equip. except tractors \$9000 Cost - 15 yrs. life	6.00	6.00	6.00	6.00	6.00	6.00
Tractors-WD40 @ \$.70	6.30	2.80	2.80	2.80	2.80	2.80
CD40 @ \$.80	4.00	2.40	2.40	2.40	2.40	2.40
TOTAL DEPRECIATION COSTS	\$21.30	16.20	16.20	16.20	16.20	16.20
<u>INTEREST ON INVESTMENT @ 7%</u>						
Irrigation System(1/2 Cost) \$ 50.00	3.50	3.50	3.50	3.50	3.50	3.50
Bldgs. & Equip.-exc.Tractor (1/2 Cost) \$45.00	3.15	3.15	3.15	3.15	3.15	3.15
Tractors: WD40 @ \$.28	2.52	1.12	1.12	1.12	1.12	1.12
CD40 @ \$.30	1.50	.90	.90	.90	.90	.90
Land @ \$1000 per acre	70.00	70.00	70.00	70.00	70.00	70.00
Interest on Accumulated Costs	0.00	33.27	53.15	74.18	96.75	114.72
TOTAL INTEREST ON INVESTMENT	80.67	111.94	131.22	152.85	175.42	193.39
TOTAL COST FOR YEAR	\$475.34	283.97	300.41	322.41	381.67	447.74
<u>VALUE OF CROP HARVESTED</u>	--	--	--	--	125.00	250.00
NET COST FOR YEAR	475.34	283.97	300.41	322.41	256.67	197.74
TOTAL ACCUMULATED COST	475.34	759.31	1059.72	1382.13	1638.80	1836.54

This cost study is designed to give prospective walnut growers an idea of the costs involved in establishing a walnut orchard in Western Merced County. Costs may vary widely. These costs we feel are typical although they may not be average.

Depending on variety, some return on the investment may be realized in as few as five years or as many as seven to ten years. Six years non-bearing was chosen as an average, even though some nuts may be harvested the fifth and sixth seasons on early bearing varieties.

As with all tree fruits and nuts, the choice of location is vital. The land cost of \$1000 per acre assumes that the grower will be planting on alkali - free, deep, well-drained loams or clay loams. In Western Merced County the bulk of the commercial walnut orchards are planted on Sorrento or Mocho Series soil of the loam, sandy loam, silty loam, or clay loam types.

L. C. Hendricks Jr., Farm Advisor

E. A. Yeary, Farm Advisor