

COST OF SWEET POTATO PRODUCTION
 in
Fresno County - 1960

Cost of production of a crop will vary from one farm to another depending on the many factors involved. These include the number of operations performed, size of operation, soil characteristics, water costs, insect control, etc.

This work sheet gives a sample of costs to produce yam or Jersey sweet potatoes and may or may not be typical of any one farm operation. It includes all those cultural operations and costs normally experienced to produce the crop in this area. Columns are provided for the grower to figure his own actual costs.

NOTES

1. Costs will vary with size of operation. These given are based on a 40 to 80 acre planting on rented land.
2. Costs are based on a total production of 12,500 lbs. per acre as follows:
 No. 1 marketable-8000 lbs.; saved for seed-500 lbs.; culls to cannery-2000 lbs.; culls for stock feed-2000 lbs. Credit for seed and culls has been deducted from total costs and all remaining costs allocated to the No. 1 marketable.
3. Interest and depreciation costs are based on ownership and use of a farm warehouse, one-row vine shredder, two-row digger, forklift, 400 field boxes and 10 pallets per acre, sorting table, conveyer belt, carton stitcher, plus power equipment and tools.
4. Cost of plants includes annual cost of hotbed, seed, hotbed labor and material such as cotton hulls, fumigant, etc.
5. Total cost of production will vary with different yields per acre. This is shown in the accompanying table and is based on the following estimated proportionate yields and pack-out percentage:

<u>Total Yield</u> (field run)	<u>Estimated</u> <u>% pack-out</u>	<u>Marketable yield</u> (pack out)
10,000 lbs.	60	150 cartons
11,250		175
12,500	65	200
13,500		225
14,250	70	250
15,100		275
16,000	75	300

PRODUCTION COST PER CARTON AT VARYING PACK-OUT YIELDS:

Yield-(40-lb. cartons/acre)	150	175	200	225	250	275	300
Net cost per carton(with storage)	\$3.13	2.74	2.45	2.25	2.10	1.98	1.87
(without storage)	\$2.86	2.51	2.25	2.07	1.94	1.83	1.74

6. A large portion of the local crop is marketed immediately after harvest in which case storage costs do not apply. Where the crop is stored for about 3 months, some loss due to shrinkage and spoilage is experienced. Due to the variable nature of this loss it has not been accounted for but may run from 5% to 10% of the yield per acre. Such losses would result in a higher over-all total cost per carton after storage.

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Farm Advisors

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October 1, 1960

SWEET POTATO

COST ANALYSIS WORK SHEET

Sample Costs to Produce Sweet Potatoes in Fresno County - 1960

Based on a yield of 200, 40 lb.-cartons of marketable sweet potatoes from a total yield of 12,500 lbs. per acre. Based on a 40-80 acre planting on rented land. Man labor @ \$1.05 per hour; tractor operator @ \$1.30.

	<u>Sample Costs</u>		<u>My Costs</u>	
	<u>Per Acre</u>	<u>Per Carton</u>	<u>Per Acre</u>	<u>Per Carton</u>
<u>PRE-HARVEST CASH COSTS:</u>				
<u>Disc 2 x at 1/2 hr. per acre</u> 1 hr. man & large tractor		2.60		
<u>Plow 1 x at 2.3 hr. per acre</u> 2/3 hr. man & large tractor		1.74		
<u>Disc 1 x at 1/2 hr. per acre</u> 1/2 hr. man & large tractor		1.30		
<u>Furrow out 1 x 1/3 hr. per acre</u> 1/3 hr. man & large tractor87		
<u>Pre-irrigate 2 hrs. per acre</u> 3/4 ac. ft. water at \$2.50 power cost		2.10 1.88		
<u>Disc 1 x at 1/2 hr. per acre</u> 1/2 hr. man & large tractor		1.30		
<u>Springtooth & harrow 1 x at 1/3 hr.</u> Per acre 1/3 hr. man & medium tractor77		
<u>Fumigate</u> 5 gals. material @ \$4.75 application - 1/2 hr. per acre man & large tractor		23.75 1.30		
<u>Harrow & cultipak 1/3 hr. per acre</u> 1/3 hr. man & medium tractor77		
<u>Soil insecticide 100 lbs. at \$9.00 cwt.</u> Spreading costs - 1/4 hr. man & medium tractor Rented spreader - 10¢ per acre		9.00 .58 .10		
<u>Disc 1 x, 1/2 hr. per acre</u> 1/2 hr. man & heavy tractor		1.30		
<u>Springtooth & harrow 1 x</u> 1/2 hr. man & medium tractor77		
<u>List 2 x at 1/3 hr. per acre</u> 2/3 hr. man & large tractor		1.74		
<u>Plants - 12,000 per acre @ \$3.50 per 1,000</u> to include all hotbed costs & seed cost		42.00		
<u>Pull plants from hotbed</u> 10 man hrs. for 12,000 plants @ \$1.05 truck cost for 1 hr.		10.50 3.00		
<u>Planting costs</u> 2 row planter at 2 hrs. per acre 2 hrs. man & medium tractor 8 hrs. man & labor		4.60 8.40		
<u>Irrigate 15 x @ 1 1/2 hrs. per acre per time</u> labor 22 1/2 hrs. @ \$1.05 power for 3 1/4 ac. ft. @ \$2.50		23.63 9.38		
<u>Cultivate 4 x at 2/3 hr. per acre</u> 2 2/3 hr. man & medium tractor		6.14		
<u>Fertilize & cultivate 2/3 hr. per acre</u> 250 lbs. ammonium sulphate @ \$54/ton 2/3 hr. man & medium tractor		6.75 1.54		
<u>Hand weed 2 x @ 2 1/2 hrs. per acre per time</u> 5 hrs. man labor		5.25		

	Sample Costs		My Costs	
	Per Acre	Per Carton	Per Acre	Per Carton
Misc. tractor work $\frac{1}{2}$ hr. man & large tractor	1.30			
Misc. overhead, including office, car, operating capital	25.00			
County taxes on equipment	0.75			
Repairs on equipment except tractor	2.00			
Cash rent	60.00			
Total Pre-harvest Cash Costs	262.11	1.31		

HARVESTING COSTS:

Shred vines, 1 hr. per acre				
1 hr. man & medium tractor	2.30			
Digging, 2 row digger 1 $\frac{1}{3}$ hrs. per acre				
1 $\frac{1}{3}$ hrs. man & large tractor	3.47			
Harvest labor - snapping, sorting, cleaning, field packing, etc.-contract @ \$60/acre	60.00			
Haul to shed & unload				
12 man hrs. per acre @ \$1.05	12.60			
truck cost	8.75			
Total Harvesting Costs	87.12	0.44		

MARKET PREPARATION:

Sort and pack for market				
200 cartons packed @ 15¢	30.00			
200 cartons cost 25¢ ea.	50.00			
Misc. handling labor 3 hrs. per acre	3.15			
Loading onto buyer's truck - 1 hr. per acre	1.05			
Total Market Preparation Costs	84.20	0.42		

TOTAL PRE-HARVEST, HARVEST & MARKET PREPARATION	\$432.73	2.17		
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DEPRECIATION:

Large wheel tractor 6 $\frac{1}{2}$ hrs. @ \$1.08	7.02			
Medium wheel tractor 7 $\frac{3}{4}$ hrs. @ .54¢	4.19			
All other equipment	52.12			
Total Depreciation on Equipment	63.33	0.32		

INTEREST

Large wheel tractor 6 $\frac{1}{2}$ hrs. at 34¢	2.21			
Medium wheel tractor 1 $\frac{3}{4}$ hrs. at 16¢	1.24			
All other equipment				
$\frac{1}{2}$ cost of \$521.20/acre (260.60) at 6%	15.64			
Total Interest on Equipment	19.09	0.09		

TOTAL COST: PRE-HARVEST, HARVEST, MARKET PREP., DEPREC., INT.	515.85	2.58		
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STORAGE:

Storage cost for 3 months period	40.00	0.20		
TOTAL COSTS PLUS STORAGE	\$555.85	2.78		

CREDIT

500 lbs. seed @ 6¢	30.00			
2000 lbs. culls to cannery at 1 $\frac{1}{2}$ ¢	30.00			
2000 lbs. culls for feed @ \$5.00/ton	5.00			
Total Credit	65.00	0.33		

NET TOTAL COST (With Storage):

To produce 200, 40-lb. cartons	490.85			
Per 40-lb. carton			2.45	

NET TOTAL COST (Without Storage)

To produce 200, 40-lb. cartons	450.85			
Per 40-lb. carton			2.25	