

GREENHOUSE CUCUMBERS - BAG CULTURE

COST OF PRODUCTION, CAPITAL AND FIXED COSTS IN SAN JOAQUIN COUNTY

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As with any cost study, certain assumptions must be made to complete the analysis. Listed below are those assumptions for this study:

- 20,000 square-foot greenhouse, metal with double-layer polyethylene covering.
- Natural gas heating.
- One-acre land requirement at \$5,000/acre.
- Production of 150 boxes (approx. 16 1# fruit) per 1,000 square feet, one 4-month winter crop.
- Plant density, 6 square feet per plant.
- Reuse of bag and media three times (one year of production).
- Labor costs based on \$4 per hour, interest rate of 12 percent.
- Figures presented are not average costs, but costs based on good cultural practices to produce a quality product.
- Interest charges are computed on one-half the original investment price, except for land.
- 1979 average San Francisco wholesale market price (September-December)--\$8.75/box; selling commission--\$1.30 (15%); freight--\$.50 (6%). Average net price received by grower--\$6.95/box.

GREENHOUSE CULTURE CUCUMBER PRODUCTION
SAN JOAQUIN COUNTY - 1979

ESTIMATED CAPITAL REQUIREMENTS & FIXED COSTS PER 1,000 SQUARE FEET OF GREENHOUSE

Item	Original Cost (Dollars)	Useful Life (Years)	Depreciation (Dollars)	Interest at 12% (Dollars)
<u>Growing Structures & Equipment</u>				
Land	\$ 250	--	--	\$ 30.00
Site Preparation	11	10	\$ 1.10	.66
Greenhouse (supports, gutters, plastic cover, doors, etc.)	1,450	10	145.00	87.00
Heaters, Fans, Cooling, Irrigation System	500	10	50.00	30.00
Pump, Well, Pressure Storage ' (150' head)	250	20	12.50	15.00
Electrical Material and Contract Labor	222	10	22.20	13.32
Greenhouse Construction Labor	455	10	45.50	27.30
<u>Other Equipment</u>				
Tools, Hoses, etc.	27	2	13.50	1.62
Pickup Truck	400	5	80.00	24.00
Pesticide Sprayer	30	5	6.00	1.80
Subtotal	<u>\$3,595</u>	--	<u>\$375.80</u>	<u>\$230.70</u>
<u>Grading, Packing, & Office Equipment</u>				
Structure (950 sq ft)	\$ 90	10	\$ 9.00	\$ 5.40
Grading Table & Shrink Wrapper	150	10	15.00	9.00
Office Equipment	51	10	5.10	3.06
Subtotal	<u>\$ 291</u>	--	<u>\$ 29.10</u>	<u>\$ 17.46</u>
Grand Total	<u>\$3,886</u>	--	<u>\$404.90</u>	<u>\$248.16</u>

Annual Fixed Costs

Depreciation and Interest	\$653.06
County Taxes	35.00
General Overhead--Office, Insurance, Accounting	<u>46.00</u>
Total Annual Fixed Costs	\$734.06

CUCUMBERS: Sample Cultural Costs for Greenhouse Production, 1979. Based on Bag Culture, One 4-month Winter Crop, Plant Density 6 sq ft/Plant

	Per 1,000 sq ft Growing Space				Total Cost
	Labor		Material and Equipment		
	Hours	Cost @ \$4/hr	Item	Cost	
<u>Cultural Operation</u>					
Bag Preparation, Filling, Setting Out	2.0	\$ 8.00	Bag & Media	\$ 27.80	\$ 35.80
Planting and Support	1.2	4.80	Plants, 167 @ \$.25	41.75	46.55
Prune, Train	10.0	40.00	Strings, Clips	10.00	50.00
Fertilize & Irrigation	1.2	4.80	Fertilizer	58.00	62.80
Pest Control	3.5	14.00	Chemicals	20.00	34.00
Utilities	--	--	{ Natural Gas	165.00	165.00
			{ Electricity	35.30	35.30
Plant Removal	1.2	4.80	--	--	4.80
Total Preharvest Costs	19.1	\$ 76.40		\$357.85	\$434.25
<u>Harvest Costs</u>					
Picking	15.0	\$ 60.00	--	--	\$ 60.00
Wrapping & Boxing	12.0	48.00	{ Plastic Wrap @ \$.22/box	\$ 33.00	
			{ Boxes @ \$.53/box	79.50	160.50
Total Harvest Costs	27.0	\$108.00		\$112.50	\$220.50
Total Fixed Costs Per Crop (Annual Fixed Cost ÷ 3)					\$244.69
Total Cost of Production (Preharvest, Harvest, Fixed)					\$899.44

Various Yields/1,000 sq ft/Crop

	100 Boxes	125 Boxes	150 Boxes	175 Boxes	200 Boxes	225 Boxes
Total Cost of Production	\$861.94	\$880.69	\$899.44	\$918.19	\$936.94	\$955.6
Cost per Box	8.62	7.05	6.00	5.25	4.68	4.2

Note: 1979 net price to grower was \$6.95/box. (Net Price = wholesale market price minus commission and freight)