

U.C. COOPERATIVE EXTENSION

SAMPLE COSTS TO PRODUCE Cantaloupe IN THE SAN JOAQUIN VALLEY - 1992

by

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The detailed costs for cantaloupe production in the San Joaquin Valley are presented in this study. The hypothetical farm used in this report consists of 1,200 acres of which 400 acres are in cantaloupe. The remainder of the farm is planted to different field and row crops.

Practices described in this study are based on those production procedures considered typical for this crop and area. Sample costs given for labor, materials, equipment and contract services are based on current figures. Some costs and practices detailed in this study may not be applicable to your situation. This study is only intended as a guide and can be used in making production decisions, determining potential returns, preparing budgets and evaluating production loans. A column for **Your Cost** is provided on **Tables 1 and 2, Costs Per Acre To Produce Cantaloupe and Detail Of Costs To Produce Cantaloupe**, respectively.

This study consists of **General Assumptions for Producing Cantaloupe** and six tables.

- Table 1. Costs Per Acre To Produce Cantaloupe**
- Table 2. Detail Of Costs Per Acre To Produce Cantaloupe**
- Table 3. Monthly Cash Costs Per Acre To Produce Cantaloupe**
- Table 4. Whole Farm Annual Equipment, Investment And Business Costs**
- Table 5. Hourly Equipment Costs**
- Table 6. Ranging Analysis**

For an explanation of calculations used for the study refer to the attached General Assumptions, call the Department of Agricultural Economics, Cooperative Extension, University of California, Davis, California, (916) 752-3589 or call the farm advisor in the county of interest.

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GENERAL ASSUMPTIONS FOR PRODUCING CANTALOUPE
San Joaquin Valley - 1992
U.C. Cooperative Extension

The following is a description of some general assumptions pertaining to sample costs of cantaloupe production in the San Joaquin Valley. Costs are presented as annual costs per acre. The costs are based on typical cultural practices used by growers in this region, some of which may not be used during every production year. The use of trade names in this report does not constitute an endorsement or recommendation by the University of California nor is any criticism implied by omission of other similar products.

1. LAND:

This cost of production study is based on a 1,200 acre field and row crop operation of which 400 acres is dedicated to growing cantaloupe. Other crops grown on the same acreage in rotation with cantaloupe might include small grains, broccoli, mixed melons, processing and fresh market tomatoes, field corn, etc.

2. RENT AGREEMENT:

The 400 acres used for cantaloupe production in this study is rented on a per acre basis. Under this agreement the landowner receives \$200 per acre annually. Interest costs for land and interest, depreciation and maintenance for the irrigation system is incurred by the landowner.

3. CULTURAL PRACTICES:

The cultural, pesticide and fertilizer inputs for the production of cantaloupes can vary considerably from grower to grower and field to field. Land preparation operations such as discing, land planing, subsoiling and listing, are done with a 270 hp (horsepower) crawler tractor during February and March. After bed shaping subsequent operations are performed with the 130 hp wheel tractor.

Nitrogen and phosphate are first applied as a liquid, preplant fertilizer during March when the beds are listed. A total of 17 pounds of nitrogen and 60 pounds of phosphate per acre are incorporated into the beds before planting. The remaining nitrogen is injected into the irrigation water during April adding 120 pounds of nitrogen for a total rate of 137 pounds per acre.

In March after the beds have been listed and the fertilizer has been spread, a fumigant is custom applied for weed control. Thinning, hand hoeing, mechanical cultivation and an herbicide application control weeds for the remainder of the season.

The irrigation water is supplied by a water district at \$30 per acre foot. Two pre-irrigations of 3 acre inches each are sprinkled onto the beds. These take place in March before the fertilizer, herbicide, and fumigant are worked into the beds. Cantaloupes are furrow irrigated 3 additional times during May and June and utilize with 18 acre inches of water. This totals 24 acre inches for crop use. Also, during one of the May irrigation, 120 pounds of N are injected into the irrigation water.

Cantaloupes are direct seeded into moisture on alternate 40 inch beds. After thinning, the plant population is approximately 6,000 to 6,500 plants per acre. When the stand is well established, the unplanted bed is tilled and split to widen the planted bed to 80 inches. One hive of bees per acre is required for good fruit set.

Pest management techniques are used to control several different species of aphids, worms and mites. Pesticide applications are put on by air.

Cultural practices for the production of cantaloupes vary from grower to grower and region to region. The practices and inputs used in this cost study serve only as a sample or guide. Variations can be significant. Contact your local farm advisor for advice on production practices.

4. HARVEST, YIELDS & RETURNS:

The cantaloupe crop is hand harvested in late June or early July by contract labor. Cantaloupes are picked and hauled from the field to the packing shed. Another harvesting option for growers is custom in-field harvesting and packing of cantaloupes. This is becoming a common practice in the San Joaquin Valley and costs approximately \$3.00 per box before it's cooled. Cost for this type of harvesting is not included in this study. If growers do their own harvesting, all contract harvest costs should be removed from harvest costs in **Table 1**. The equipment for harvest operations should be inventoried in investment costs on **Table 4**, and labor, fuel, repairs, depreciation, and operating interest, have to be calculated and added to harvest costs in **Table 1**.

Average cantaloupe yields for the past 5 years in the San Joaquin Valley ranged from 5 to 11.6 tons per acre or 300 to 500 boxes per acre. Crop yield assumed for this study is 10.7 gross tons per acre. A 75% pack-out rate equates to 8 net tons or 400 boxes per acre. A packed box of cantaloupes equals 40 pounds. The costs of harvesting, packing and selling total \$2.81 per box. A custom cooling charge is included in the cost study, but should be returned to the grower from the FOB settlement on the sale. The box cost is estimated to be \$0.69 each. Total harvest cost is \$4.50 per box.

Average prices received by San Joaquin Valley growers during the last 5 years ranged from \$2.40 to \$7.42 per packed box. No specific return price is assumed in this study due to the fluctuation of market prices received by growers. **Table 6**, Ranging Analysis, shows the net returns above operating costs, cash costs and total costs for various price and yield levels. Differences in cantaloupe prices and yields can be substantial over the season.

5. RISK:

The risks associated with fresh market vegetables should not be minimized. While this study makes every effort to model a production system based on typical, real world practices, it cannot fully represent financial, agronomic and market risks which affect the profitability and economic viability of fresh market vegetable production.

The market for fresh vegetables is very volatile for both price and quantity. Producers do not have control over either of these market components. Because of this, fresh market vegetables are a high risk enterprise. Risk is caused by uncontrollable factors such as a decrease in the demand for cantaloupes or an oversupply from other sources. Because of the risk involved, access to a market is crucial. A market channel should be determined before any cantaloupe production begins.

Perishability of fresh vegetables diminishes the opportunity to wait for a better market and price. Agronomic difficulties may also increase the risk to growers. Rain can interfere with harvest, planting delays may reduce the chance to sell in an early market or pest and disease might lower quality.

6. LABOR:

Basic hourly wages for workers are \$5.97 and \$4.48 per hour for machine operators and field workers respectively. Adding 34% for SDI, FICA, insurance and other benefits gives the labor rates shown of \$8.00 per hour for machine operators and \$6.00 per hour for field labor. The labor for operations involving machinery are 10% higher than the machine hours to account for the extra labor involved in equipment set-up, moving, maintenance and repair. Wages for managers are not included as a cash cost. Any returns above total costs are considered a return to management.

7. OVERHEAD:

County taxes are calculated as 1% of the average of the equipment, buildings and improvements. Insurance is charged at 0.5% of the average value of the equipment over its useful life. Office and business costs are estimated at \$30 per acre for the ranch. The expenses include office supplies, phone, bookkeeping, accounting, legal fees, road preparation and maintenance, etc.

8. INTEREST:

Interest on operating capital is based on cash costs and is calculated monthly, for five months, until harvest at a real interest rate of 9.00% per year. Adjustments for inflation have not been included in these interest rates. Interest is also charged on investment at 4.00% per year to account for income foregone that could be received from an alternative investment (opportunity cost) and is based on the average value of the buildings and equipment.

9. INVESTMENT:

The investments shown in Table 3 are those that are partially or completely allocated to the cantaloupe operation. Investments including the fuel wagon, buildings, shop tools, etc., can be used by the whole farm so only a portion of the costs are assigned to the cantaloupe operation and the rest of the costs are distributed to the other farm enterprises. Annual investments shown in Table 1 represent depreciation and opportunity cost for each investment on an annual per acre basis.

10. EQUIPMENT COSTS:

In allocating the equipment costs per acre, the following calculations were made and shown in Table 3: (a) Original Cost of equipment is the cost of the new equipment plus sales tax. (b) Depreciation is straight line with a ten percent salvage value. (c) Interest on investment is calculated as the average value per acre of the equipment during its useful life, multiplied by an interest rate of 4.00%. Average value equals new cost plus salvage value divided by 2 on a per acre basis. (d) Total investment costs are also calculated as 60% of the depreciation and the interest costs for all new equipment to reflect a mix of the new and used equipment. These values are also used in **Table 1**. Most of this equipment is used on the entire 1,200 acre ranch.

11. FUEL & REPAIR:

The fuel and repair cost for each operation in **Table 1** is determined by multiplying the total hourly operating cost for each piece of equipment by the number of hours per acre for that operation. Prices for on-farm delivery of gasoline and diesel are \$0.71 and \$0.98 per gallon respectively.

Table 1.

U.C. COOPERATIVE EXTENSION
 COSTS PER ACRE TO PRODUCE CANTALOUPE
 SAN JOAQUIN VALLEY - 1992

Labor Rate: \$10.00/hr. machine labor Interest Rate: 9.00%
 \$7.00/hr. non-machine labor Yield per Acre: 450 boxes

Operation	Operation Time (Hrs/A)	Cash and Labor Costs per Acre					Total Cost	Your Cost
		Labor Cost	Fuel & Repairs	Material Cost	Custom/Rent			
Cultural:								
Disc 2X	0.29	3.43	8.30	0.00	0.00	11.73		
Subsoil	0.14	1.72	3.61	0.00	0.00	5.32		
Disc	0.20	2.38	6.15	0.00	0.00	8.53		
Land Plane Field	0.14	1.66	3.55	0.00	0.00	5.21		
Preirrigate	1.00	7.00	0.00	15.00	31.25	53.25		
List Beds & Fertilize	0.14	1.72	1.93	22.97	0.00	26.62		
Apply Herbicide	0.00	0.00	0.00	21.35	10.00	31.35		
Seed Bed Preparation	0.13	1.55	1.77	0.00	0.00	3.32		
Plant	0.27	3.29	4.04	12.00	0.00	19.33		
Cultivate	0.21	2.58	2.79	0.00	0.00	5.37		
Split Beds	0.13	1.55	1.77	0.00	0.00	3.32		
Thin & Weed	0.00	0.00	0.00	0.00	50.00	50.00		
Irrigate & Fertilize	0.00	0.00	0.00	42.98	0.00	42.98		
Spray Herbicide	0.13	1.50	1.59	6.05	0.00	9.14		
Incorporate	0.20	2.40	3.48	0.00	0.00	5.88		
Irrigate	0.42	2.94	0.00	30.00	0.00	32.94		
Hoe Weeds	0.00	0.00	0.00	0.00	50.00	50.00		
Spray Insecticide 2X	0.00	0.00	0.00	30.75	13.50	44.25		
Pollinate	0.00	0.00	0.00	15.00	0.00	15.00		
Pickup Truck Use	0.23	2.70	1.44	0.00	0.00	4.14		
TOTAL CULTURAL COSTS	3.63	36.40	40.44	196.11	154.75	427.69		
Harvest:								
Pick, Haul, Pack, Cool & Sell	0.00	0.00	0.00	0.00	1800.00	1800.00		
TOTAL HARVEST COSTS	0.00	0.00	0.00	0.00	1800.00	1800.00		
Postharvest:								
Disc Crop Residue 2X	0.29	3.43	8.17	0.00	0.00	11.60		
TOTAL POSTHARVEST COSTS	0.29	3.43	8.17	0.00	0.00	11.60		
Interest on operating capital @ 9.00%						24.81		
TOTAL OPERATING COSTS/ACRE		39.83	48.61	196.11	1954.75	2264.11		
TOTAL OPERATING COSTS/BOX						5.03		
CASH OVERHEAD:								
Land Rent						150.00		
Office Expense						30.00		
Property Taxes						1.80		
Equipment Insurance						0.90		
Investment Repairs						0.40		
TOTAL CASH OVERHEAD COSTS						183.10		
TOTAL CASH COSTS/ACRE						2447.20		
TOTAL CASH COSTS/BOX						5.44		
NON-CASH OVERHEAD:								
Investment	Per producing Acre		Annual Cost	Interest @ 4.00%				
Shop Building	30.83		1.54	0.62		2.16		
Fuel Tanks & Pumps	6.71		0.34	0.13		0.47		
Shop Tools	8.33		0.42	0.17		0.58		
Fuel Wagon	1.25		0.11	0.03		0.14		
Tool Carrier	10.17		0.46	0.22		0.68		
Equipment	274.38		19.81	6.04		25.85		
TOTAL NON-CASH OVERHEAD COSTS	331.67		22.67	7.20		29.88		
TOTAL COSTS/ACRE						2477.08		
TOTAL COSTS/BOX						5.50		

U.C. COOPERATIVE EXTENSION
 Table 2. DETAILS OF COSTS PER ACRE TO PRODUCE CANTALOUPE
 SAN JOAQUIN VALLEY - 1992

Use of trade names does not constitute an endorsement or recommendation by the University of California nor is any criticism implied by omission of other similar products.

Labor Rate: \$10.00/hr. machine labor Interest Rate: 9.00%
 \$7.00/hr. non-machine labor

	Quantity/Acre	Unit	Price or Cost/Unit	Value or Cost/Acre	Your Cost
=====					
OPERATING COSTS					
Water:					
Water	24.00	acin	2.50	60.00	
Rent:					
Sprinkler Pipe	1.00	acre	31.25	31.25	
Fertilizer:					
10-34-0	15.21	gal	1.51	22.97	
Lbs of N = 11.6 lbs/gal X .1 X 15.21 gal					
UN-32	31.80	gal	0.88	27.98	
Lbs of N = 11.1 lbs/gal X .32 X 31.80 gal					
Herbicide:					
Vapam	6.55	gal	3.26	21.35	
Treflan PRO 5	1.00	pint	6.05	6.05	
Custom:					
Application	1.00	acre	10.00	10.00	
Air Application	2.00	acre	6.75	13.50	
Harvest	400.00	box	4.50	1800.00	
Seed:					
Seed	2.00	lb	6.00	12.00	
Contract:					
Thin	0.50	acre	50.00	25.00	
Hoeing	1.50	acre	50.00	75.00	
Insecticide:					
Thiodan	1.30	pint	5.54	7.20	
Miticide:					
Kelthane	3.00	lb	7.85	23.55	
Pollination:					
Bees - Pollination	1.00	hive	15.00	15.00	
Labor (machine)	2.99	hrs	10.00	29.89	
Labor (non-machine)	1.42	hrs	7.00	9.94	
Fuel - Gas	0.66	gal	0.98	0.64	
Fuel - Diesel	29.21	gal	0.71	20.74	
Lube				3.21	
Machinery repair				24.01	
Interest on operating capital @ 9.00%				24.81	
TOTAL OPERATING COSTS/ACRE				2264.11	
TOTAL OPERATING COSTS/BOX				5.03	

CASH OVERHEAD COSTS:					
Land Rent				150.00	
Office Expense				30.00	
Property Taxes				1.80	
Equipment Insurance				0.90	
Investment Repairs				0.40	
TOTAL CASH OVERHEAD COSTS/ACRE				183.10	

TOTAL CASH COSTS/ACRE				2447.20	
TOTAL CASH COSTS/BOX				5.44	

NON-CASH OVERHEAD COSTS (DEPRECIATION & INTEREST):					
Shop Building				2.16	
Fuel Tanks & Pumps				0.47	
Shop Tools				0.58	
Fuel Wagon				0.14	
Tool Carrier				0.68	
Equipment				25.85	
TOTAL NON-CASH OVERHEAD COSTS/ACRE				29.88	

TOTAL COSTS/ACRE				2477.08	
TOTAL COSTS/BOX				5.50	
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Table 3.

U.C. COOPERATIVE EXTENSION
MONTHLY CASH COSTS PER ACRE TO PRODUCE CANTALOUPE
SAN JOAQUIN VALLEY - 1992

Beginning FEB 92 Ending JAN 93	FEB 92	MAR 92	APR 92	MAY 92	JUN 92	JUL 92	AUG 92	SEP 92	OCT 92	NOV 92	DEC 92	JAN 93	TOTAL
=====													
Cultural:													
Disc 2X	11.73												11.73
Subsoil	5.32												5.32
Disc	4.26	4.26											8.53
Land Plane Field		5.21											5.21
Preirrigate		53.25											53.25
List Beds & Fertilize		26.62											26.62
Apply Herbicide		31.35											31.35
Seed Bed Preparation		3.32											3.32
Plant		19.33											19.33
Cultivate				5.37									5.37
Split Beds				3.32									3.32
Thin & Weed				50.00									50.00
Irrigate & Fertilize				42.98									42.98
Spray Herbicide				9.14									9.14
Incorporate				5.88									5.88
Irrigate				16.47	16.47								32.94
Hoe Weeds					50.00								50.00
Spray Insecticide 2X					44.25								44.25
Pollinate					15.00								15.00
Pickup Truck Use	0.59	0.59	0.59	0.59	0.59	0.59	0.59						4.14
TOTAL CULTURAL COSTS	21.91	143.94	0.59	133.76	126.31	0.59	0.59						427.69

Harvest:													
Pick, Haul, Pack, Cool & Sell						1800.00							1800.00
TOTAL HARVEST COSTS						1800.00							1800.00

Postharvest:													
Disc Crop Residue 2X							11.60						11.60
TOTAL POSTHARVEST COSTS							11.60						11.60

Interest on oper. capital	0.16	1.24	1.25	2.25	3.20	16.70							24.81
TOTAL OPERATING COSTS/ACRE	22.08	145.18	1.84	136.01	129.51	1817.30	12.19						2264.11
TOTAL OPERATING COSTS/BOX	0.05	0.32	0.00	0.30	0.29	4.04	0.03						5.03

OVERHEAD:													
Land Rent	150.00												150.00
Office Expense	4.29	4.29	4.29	4.29	4.29	4.29	4.29						30.00
Property Taxes							1.80						1.80
Equipment Insurance							0.90						0.90
Investment Repairs	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06					0.40
TOTAL CASH OVERHEAD COSTS	154.34	4.34	4.34	4.34	4.34	7.04	4.34						183.10

TOTAL CASH COSTS/ACRE	176.42	149.52	6.18	140.35	133.85	1824.34	16.54						2447.20
TOTAL CASH COSTS/BOX	0.39	0.33	0.01	0.31	0.30	4.05	0.04						5.44
=====													

Table 4. U.C. COOPERATIVE EXTENSION
WHOLE FARM ANNUAL EQUIPMENT, INVESTMENT, AND BUSINESS OVERHEAD COSTS
SAN JOAQUIN VALLEY

ANNUAL EQUIPMENT COSTS

Yr	Description	Price	Yrs Life	- Non-Cash Over. -		Cash Overhead -		Total
				Depre- ciation	Interest	Insur- ance	Taxes	
92	130 hp 2wd Tractor	77359	12	5801.92	1701.90	212.74	425.48	8142.04
92	270 hp Crawler	151940	12	11395.50	3342.68	417.84	835.67	15991.69
92	Cultivator - Rolling 16'	6500	15	390.00	143.00	17.88	35.75	586.63
92	Cultivator Sled	3745	15	224.67	82.40	10.30	20.60	337.97
92	Disc - Offset 18'	20230	15	1213.80	445.06	55.63	111.27	1825.76
92	Disc - Offset 26'	27310	15	1638.60	600.82	75.10	150.21	2464.73
92	Disc - Stubble 16'	18622	15	1117.33	409.68	51.21	102.42	1680.64
92	Incorporator - 15'	19260	15	1155.60	423.72	52.96	105.93	1738.21
92	Lister - 3 Row 16'	2838	15	170.27	62.44	7.81	15.61	256.13
92	Pickup Truck - 1/2 Ton	17655	7	2269.86	388.42	48.55	97.11	2803.94
92	Planter & Sled - 3 Row	5700	10	513.00	125.40	15.67	31.35	685.42
92	Saddle Tank - 300 Gal	1650	10	148.50	36.30	4.54	9.07	198.41
92	Subsoiler - 8'	6955	12	521.58	153.02	19.13	38.25	731.98
92	Triplane - 16'	17527	15	1051.60	385.60	48.20	96.40	1581.80
TOTAL		377291		27612.23	8300.44	1037.56	2075.12	39025.35
60% of New Cost *		226375		16567.34	4980.26	622.54	1245.07	23415.21

* Used to reflect a mix of new and used equipment.

ANNUAL INVESTMENT COSTS

Yr	Description	Price	Yrs Life	- Non-Cash Over. -		Cash Overhead -		Total
				Depre- ciation	Interest	Insur- ance	Taxes	
INVESTMENT								
	Fuel Tanks & Pumps	8050	20	402.50	161.00	20.13	40.25	748.88
	Fuel Wagon	1500	10	135.00	33.00	4.13	8.25	230.38
	Shop Building	37000	20	1850.00	740.00	92.50	185.00	2967.50
	Shop Tools	10000	20	500.00	200.00	25.00	50.00	875.00
	Tool Carrier	12200	20	549.00	268.40	33.55	67.10	1018.05
TOTAL INVESTMENT		68750		3436.50	1402.40	175.31	350.60	5839.81

ANNUAL BUSINESS OVERHEAD COSTS

Description	Units/ Farm	Unit	Price/ Unit	Total Cost
Land Rent	400.00	acre	150.00	60000.00
Office Expense	1200.00	acre	30.00	36000.00

Table 5. U.C. COOPERATIVE EXTENSION
HOURLY EQUIPMENT COSTS
SAN JOAQUIN VALLEY

COSTS PER HOUR

Yr	Description	Actual Hours Used	- Non-Cash Over. -		Cash Overhead -		Operating -		Total Costs/Hr.
			Depre- ciation	Interest	Insur- ance	Taxes	Repairs	Fuel & Lube	
92	130 hp 2wd Tractor	1046.1	3.33	0.98	0.12	0.24	4.64	6.16	10.80
92	270 hp Crawler	1053.1	6.49	1.90	0.24	0.48	7.60	13.51	21.11
92	Cultivator - Rolling 16'	165.2	1.42	0.52	0.06	0.13	1.87	0.00	1.87
92	Cultivator Sled	166.0	0.81	0.30	0.04	0.07	1.07	0.00	1.07
92	Disc - Offset 18'	165.4	4.40	1.61	0.20	0.40	5.81	0.00	5.81
92	Disc - Offset 26'	165.2	5.95	2.18	0.27	0.55	7.84	0.00	7.84
92	Disc - Stubble 16'	165.4	4.05	1.49	0.19	0.37	5.35	0.00	5.35
92	Incorporator - 15'	166.0	4.18	1.53	0.19	0.38	5.53	0.00	5.53
92	Lister - 3 Row 16'	165.2	0.62	0.23	0.03	0.06	0.82	0.00	0.82
92	Pickup Truck - 1/2 Ton	267.0	5.10	0.87	0.11	0.22	3.12	3.29	6.41
92	Planter & Sled - 3 Row	119.6	2.57	0.63	0.08	0.16	2.86	0.00	2.86
92	Saddle Tank - 300 Gal	119.2	0.75	0.18	0.02	0.05	0.83	0.00	0.83
92	Subsoiler - 8'	207.2	1.51	0.44	0.06	0.11	2.00	0.00	2.00
92	Triplane - 16'	165.2	3.82	1.40	0.18	0.35	2.54	0.00	2.54

Table 6. U.C. COOPERATIVE EXTENSION
RANGING ANALYSIS
SAN JOAQUIN VALLEY - 1992

COSTS PER ACRE AT VARYING YIELDS TO PRODUCE CANTALOUPE							
	YIELD (BOX/ACRE)						
	100	200	300	400	500	600	700
OPERATING COSTS/ACRE:							
Cultural Cost	428	428	428	428	428	428	428
Harvest Cost	800	1200	1600	2000	2400	2800	3200
Postharvest Cost	12	12	12	12	12	12	12
Interest on operating capital	17	20	23	26	29	32	35
TOTAL OPERATING COSTS/ACRE	1257	1660	2063	2466	2869	3272	3675
TOTAL OPERATING COSTS/BOX	6.28	5.53	5.16	4.93	4.78	4.67	4.59
CASH OVERHEAD COSTS/ACRE							
	183	183	183	183	183	183	183
TOTAL CASH COSTS/ACRE	1440	1843	2246	2649	3052	3455	3858
TOTAL CASH COSTS/BOX	7.20	6.14	5.61	5.30	5.09	4.94	4.82
NON-CASH OVERHEAD COSTS/ACRE							
	30	30	30	30	30	30	30
TOTAL COSTS/ACRE	1470	1873	2276	2679	3082	3485	3888
TOTAL COSTS/BOX	7.35	6.24	5.69	5.36	5.14	4.98	4.86

NET RETURNS PER ACRE ABOVE OPERATING COSTS FOR CANTALOUPE							
PRICE (DOLLARS PER BOX)	YIELD (BOX/ACRE)						
	200	300	400	500	600	700	800
2.00	-857	-1060	-1263	-1466	-1669	-1872	-2075
3.00	-657	-760	-863	-966	-1069	-1172	-1275
4.00	-457	-460	-463	-466	-469	-472	-475
5.00	-257	-160	-63	34	131	228	325
6.00	-57	140	337	534	731	928	1125
7.00	143	440	737	1034	1331	1628	1925
8.00	343	740	1137	1534	1931	2328	2725

NET RETURNS PER ACRE ABOVE CASH COSTS FOR CANTALOUPE							
PRICE (DOLLARS PER BOX)	YIELD (BOX/ACRE)						
	200	300	400	500	600	700	800
2.00	-1040	-1243	-1446	-1649	-1852	-2055	-2258
3.00	-840	-943	-1046	-1149	-1252	-1355	-1458
4.00	-640	-643	-646	-649	-652	-655	-658
5.00	-440	-343	-246	-149	-52	45	142
6.00	-240	-43	154	351	548	745	942
7.00	-40	257	554	851	1148	1445	1742
8.00	160	557	954	1351	1748	2145	2542

NET RETURNS PER ACRE ABOVE TOTAL COSTS FOR CANTALOUPE							
PRICE (DOLLARS PER BOX)	YIELD (BOX/ACRE)						
	200	300	400	500	600	700	800
2.00	-1070	-1273	-1476	-1679	-1882	-2085	-2288
3.00	-870	-973	-1076	-1179	-1282	-1385	-1488
4.00	-670	-673	-676	-679	-682	-685	-688
5.00	-470	-373	-276	-179	-82	15	112
6.00	-270	-73	124	321	518	715	912
7.00	-70	227	524	821	1118	1415	1712
8.00	130	527	924	1321	1718	2115	2512