

CANTALOUPE

CN-SE-90-2

Spring

Imperial County 1989 - 1990

**University of California
Cooperative Extension**



UC COOPERATIVE EXTENSION

Spring Cantaloupe Projected Production Costs 1989-1990

Mechanical operations at custom rates. Hand labor at \$5.75 per hour (\$4.50 plus Social Security, unemployment insurance, transportation, supervision and fringe benefits).

Yield--350 cartons per acre. 120 days to maturity. Hybrid variety

OPERATION	CUSTOM RATE	MATERIALS		HAND LABOR		COSTS Per Acre
		Type	Cost	Hours	Dollars	
LAND PREPARATION						
Stubble disc 1x	18.25					18.25
Disc 1x	9.50					9.50
List beds	18.50					18.50
Rerun beds	10.00					10.00
TOTAL LAND PREPARATION						56.25

GROWING PERIOD						
Plant, shape beds and fertilize	19.00	1.5 lbs. hybrid seed @ 35 gal. 10-34-0	110.00 / lb.			184.00
Back fill furrow	9.50		56.00			56.00
Spray herbicide	8.00	Herbicide	9.60			17.60
Thin				6	34.50	34.50
Center beds	13.75					13.75
Spike	10.00					10.00
Cultivate 1x	14.00					14.00
Fertilize (side-dress) (water-run)	10.50	80# N @ .31	24.80			35.30
		40# N @ .31	12.40			12.40
Hand weed 1x				6	34.50	34.50
layby herbicide	17.50	Herbicide	2.50			20.00
Pollination		1.5 Hives @ 18.00 / hive				27.00
Irrigate 5x		Water 3 3/4 ac/ft	41.25	8	46.00	87.25
Insect control 3x	5.00	Insecticides	25.50			40.50
Disease control 1x	5.00	Fungicides	10.75			15.75
Disc out beds	9.50					9.00
TOTAL GROWING PERIOD						621.05

GROWING PERIOD & LAND PREPARATION COSTS						677.30
Land Rent (net acres)						200.00
Cash Overhead-----		12% of preharvest costs & land rent				105.28
TOTAL PREHARVEST COSTS						982.58

HARVEST (field pack)						
Pick, haul, pack and sell		350 cartons @	2.80 per carton			980.00
TOTAL ALL COSTS						1962.58

		PROJECTED INCOME ABOVE COSTS				Breakeven	
		price/carton					
		4.00	5.00	6.00	7.00	8.00	\$/carton
	300	-623	-323	-23	277	577	6.08
Cartons	350	-563	-213	137	487	837	5.61
per	400	-503	-103	297	697	1097	5.26
acre	450	-443	7	457	907	1357	4.98
	500	-383	117	617	1117	1617	4.77

SPRING CANTALOUPE CULTURE
1989-1990

<u>YEAR</u>	<u>ACRES</u>	<u>YIELD/ACRE (CARTONS)</u>	<u>VALUE/ACRE</u>
1988	20517	264	\$ 2401
1987	18935	485	2789
1986	17324	347	1884
1985	16147	262	1382
1984	13605	270	1580

PLANTING DATES: Cantaloupes are planted from Mid-January through Mid-March. Harvesting begins in May and continues through early July.

VARIETIES AND PLANTING: Nearly all of the acreage is planted to hybrid varieties such as "Topscore", "Easyrider", "Aragon", "Mission", "Laguna", "Caravelle" and "Highline". The seed is planted 1/2 inch deep with custom-built slant-bed planters using random flow seeding units. Open pollinated varieties (i.e. Topmark) sell for 10% of the cost of most hybrids, however, hybrids are often used due to earliness and higher yield potential.

SPECIAL PRACTICES: A growing technique known as mid-bed trench utilizes a 30" plastic film cover laid over a 20" X 6" deep groove in the center of a bed. The plants develop in an enclosed "greenhouse" atmosphere for 40-50 days. The plastic cover offers frost protection, increased heat, and insect exclusion.

SOILS: Well-drained soils are preferred. Sandy or silt loams are sometimes selected for the earliest crop. Heavier soils are preferred because of their greater water holding capacity which slows the onset of vine collapse.

IRRIGATION: After planting, the beds are subbed past the seedline. Following emergence, water is often withheld for several weeks. This is done to maintain soil warmth and promote early production. The last irrigation is scheduled one week prior to harvest. Excessive moisture during harvest may increase ground spotting, rotted and soft fruit.

FERTILIZERS: Most growers apply 10-34-0 liquid in the beds at planting. Up to 150 pounds of nitrogen are sidedressed.

POLLINATION: At least one hive of bees per acre is recommended and 1 1/2 hives are better. The bees should be distributed on at least two sides of a 40 acre field. Recent studies have indicated that yields are increased with heavy bee saturation.

PEST CONTROL: Cantaloupes are subject to a number of problems including nematodes, cutworms, aphids, mites, loopers, leafhoppers, leafminers, ground beetles, crickets, sudden wilt, mosaic virus and powdery mildew. Consult your farm advisor for pest control information.

Weed are serious problems in spring cantaloupes. Herbicides have not been successful, therefore growers rely on hand weeding and cultivation.

HARVESTING: Spring melons are harvested from May to July. The fruit are hand picked at the full slip stage. Field packing is rapidly being adopted due to better fruit quality and greater yield potential. They are field sorted and graded into cartons holding 9, 12, 18 and 23 melons. Cooling and palletizing cost are paid by the receiver.

GUIDELINES TO PRODUCTION COSTS AND PRACTICES
IMPERIAL COUNTY CROPS, CIRCULAR 104
 1989 - 1990

CUSTOM RATE CHARGES

HEAVY TRACTOR WORK

	<u>PRICE/ACRE</u>
Plow	\$ 24.75
Subsoil 2nd Gear	29.25
Disc, Regular	9.50
Disc, Stubble	18.25
Float	8.25
Triplane	8.75
List, Regular	11.50
List, and Rerun 80" Melon Beds	22.00
Reshape 80" Melon Beds	10.00
Landplane	10.00
Chisel	20.75

PLANTING AND CULTIVATING

Plant and Shape Melon Beds	16.75
Precision Plant 42" Beds	14.50
Plant Carrots	13.75
Plant Onions	16.75
Cultivate 4-Row 42" Beds	10.75
Cultivate Melon Beds	14.00
Spike and Furrow Out (2 row)	10.50
Lilliston	9.50
Furrow out alone	8.00
Move N-Side 80" Beds for Irrigation	9.50

INCORPORATING, BORDER AND BED WORK

Power Incorporate herbicides	20.25
Border, Cross checks and Break Borders	15.00
Bust Melon Beds	9.00
Roll Beds	5.00

FERTILIZER APPLICATION

Broadcast Fertilizer	6.00
Inject Fertilizer (Flat)	9.00
Fertilize and Furrow Out 42" Beds	10.50
Fertilize and Furrow Out 80" Beds	10.50

IRRIGATION

Custom Sprinkle	135.00-145.00
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MISCELLANEOUS

Motor Grader/Hour	42.75
Chop Broccoli, Corn Stalks, Etc.	10.00
Water truck/Hour	34.00
Cultipacker	6.00
Ground Spray Pesticides (4 Row)	7.00
Aerial Spray 5 Gal. (Insecticides)	4.50
Aerial Spray 10 Gal. (Fungicides)	5.00