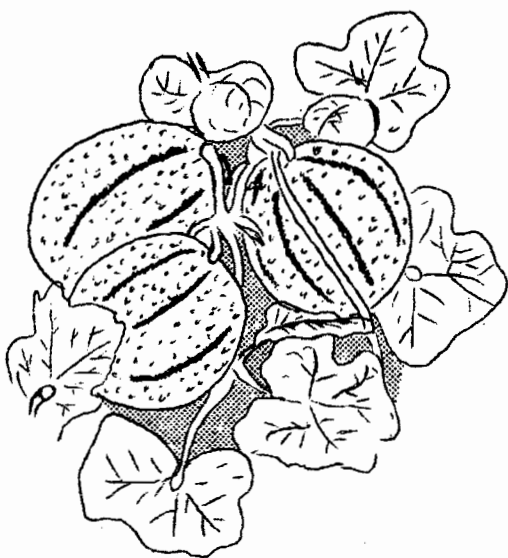


cantaloupes

sample costs

and

production



University of California
Agricultural Extension Service
Imperial County
Court House, El Centro

Cost Data Sheet No. 3

UC Cooperative Extension

CANTALOUPE--SAMPLE PRODUCTION COSTS

ITEMS	SAMPLE COSTS Per Acre
LAND PREPARATION	
Plow 1x	\$ 8.00
Disc 2x	3.50
Float 1x	1.50
Border	.75
Irrigate 1x	1.00
Knock down borders	.75
Disc 1x	1.75
Float 1x	1.50
Fertilizer (pre-plant)	2.00
Bedding	5.00
Ditching	.75
TOTAL LAND PREPARATION	26.50

CULTURAL LABOR* & POWER

Mulch beds	4.00
Planting	2.50
Capping 1½x	31.50
Thinning, weeding & replant	31.50
Cultivate 6x	21.00
Fertilizer application 2x	6.00
Vine turning 5x	21.50
Irrigation 10x	11.00
Pest control 6x	11.00
Ditching & knocking down ditches 3x	3.75
Setting irrigation pipes	5.50
TOTAL CULTURAL LABOR & POWER	\$150.25

* Labor costs are based on \$1.05 per hour.

**IID sells water at \$4 per sec. ft.

***Fall cantaloupes cost \$125 to \$175 less to grow because frost protection is not needed, fewer diseases and pests, less field work and lower rent.

ITEMS	SAMPLE COSTS Per Acre
MATERIALS	
**Water - 3 Acre ft.	\$ 7.00
Seed	4.00
Fertilizers	22.00
Insecticides & fungicides	23.00
Paper caps	21.00
Stick	2.00
Pollination	2.00
TOTAL MATERIALS	82.00
CASH OVERHEAD	
General expense 8% of the above	20.68
LAND RENT	65.00
***TOTAL ALL COSTS	\$344.43

CLIMATE

Cantaloupes require plenty of sunshine, low humidity, and little or no rain. Cantaloupes are susceptible to frost during all stages of growth and need protection during the cooler winter months. Temperatures above 85°F are desirable for good vine growth.

SOIL

In Imperial County cantaloupes are grown on sandy loam, loam, and clay loam soils. Melons planted on the light soils mature fruits earlier than those planted on the heavier types.

ACREAGE

The cantaloupe acreage has been on a decline the last few years due to crown blight, virus diseases, and competition from other areas. The spring acreage planted in 1962 was 4,900 acres.

PLANTING DATES

Most of the acreage is planted in December and capped for frost protection. A small acreage is open planted in February or March after the danger of frost has passed. The fall crop is generally planted during the first two weeks in August for harvest in October and early November.

VARIETIES

Varieties planted are SR 91, PMR 450, and PMR 45. There is only a small acreage planted to SR 91. Yields vary from 90 to 120 crates per acre. PMR 45 has been the most successful for early fall planting.

IRRIGATION

After the beds have been formed, the first irrigation is applied. The water runs until the beds are completely subbed.

When the beds have dried enough, they are mulched, shaped with a V shaper, and planted. After planting, the beds are irrigated again to assure adequate moisture for good germination. The next irrigation is usually delayed until soon after cap removal.

When the plants begin to set fruit, the crop is irrigated approximately every two weeks.

When harvesting begins, water is applied by quick, light irrigations at 3 to 5 day intervals.

It is necessary to keep a good supply of moisture in the beds throughout the growing season for maximum yields.

FERTILIZATION

Spring cantaloupes should receive 80 to 120 lbs. of phosphate applied ahead of bed formation. Eighty to 100 lbs. of nitrogen are applied in split applications. Half the nitrogen should be applied before bed formation, and the rest sidedressed after runners are formed.

Fall cantaloupes have been successfully grown with as little as 60 lbs. of nitrogen and 40 lbs. of P_2O_5 injected prior to planting and sidedressed with 200 lbs. of 10-10-10 when runners appear.

Ten tons of steer manure per acre have given good response. Manure should be applied before plowing or discing and ahead of the first irrigation. Manure should have a chance to decompose somewhat before planting. Then when plants form first runners, sidedress with 40 to 60 lbs. of actual nitrogen.

PESTS AND DISEASES

Cutworms, aphids, spider mites, darkling ground beetles, leafhoppers, cabbage loopers, and leafminers are the most serious pests of cantaloupes.

Crown blight, mosaic, curly top, powdery mildew, nematodes, seedling diseases and root rot are diseases found in Imperial County.

The cause of crown blight is unknown. However, it is felt that if a food supply of moisture and fertilizer is available throughout the growing season, losses from this disease can be minimized.

Consult the University of California Pest and Disease Control Guide for Imperial County for latest recommendations. Copies are available at your farm advisors' office.

POLLINATION

Production of quality fruit can be increased through the use of bees for pollination. One colony per acre is recommended.

The bees should be distributed on at least two sides of a 40 acre field.

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July 1962

Co-operative Extension work in Agriculture and Home Economics, College of Agriculture, University of California, and United States Department of Agriculture co-operating.