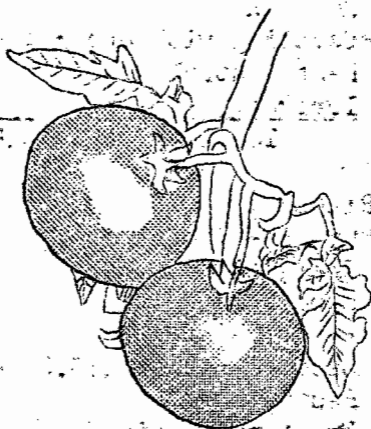


winter tomatoes

sample costs

and

production



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

Cost Data Sheet No. 1

UC Cooperative Extension

WINTER TOMATOES (Standard Type)--SAMPLE PRODUCTION COSTS

Costs based on 650 flats (22 lb.) per acre

ITEMS	SAMPLE COSTS	
	Per Acre	Per Flat
LAND PREPARATION		
Chisel or plow 1x	\$ 8.00	
Disc 2x	3.50	
Float 2x	3.00	
Beds	4.50	
Pre-irrigation	2.00	
TOTAL LAND PREPARATION	21.00	
CULTURAL LABOR & POWER		
Planting 1x	6.00	
Thin and replant 1x	44.50	
Cultivating 1x	16.00	
Fertilizer application 5x	16.00	
Hoe 2x	36.00	
*Covering with brush	57.00	
Pest control	15.00	
Irrigation 8x	16.50	
TOTAL CULTURAL LABOR & POWER	207.00	
MATERIALS		
**Water - 4 acre ft.	8.00	
Irrigation box	2.50	
Pipe	1.00	
Fertilizer	100.00	
Seed - 2 lb. @ \$15.00 per lb.	30.00	
Pesticides	45.00	
Frost protection	25.00	
Fuel, implements, repair	50.00	
Wire (1st yr. 13.00), 2nd yr.	3.00	
Brush (1st yr. 78.00), 2nd yr.	24.00	
Paper	40.00	
Stakes (1st yr. 17.00), 2nd yr.	8.00	
TOTAL MATERIALS	\$336.50	

*Brushing costs vary from \$30 to \$80 per A. Close spaced brush increases labor cost, but offers better protection from wind. Cost includes taking brush down after danger of frost is past.

**IID sells water at \$4 sec. ft. 2

ITEMS	SAMPLE COSTS	
	Per Acre	Per Flat
CASH OVERHEAD		
General expense--7%	\$ 39.50	
Insurance	1.50	
TOTAL CASH OVERHEAD	41.00	
LAND RENT (without land preparation)	45.00	
TOTAL UP TO HARVEST	650.50	\$ 1.00
HARVEST, PICK, HAUL		
	291.50	.45
TOTAL UP TO PACK	942.00	1.45
PACKING (Crate, label, paper, nailing, labor*, waxing, sorting, shed supervision.)		
	630.00	.97
TOTAL ALL COSTS	\$1572.00	\$ 2.42

*Other field labor costs based on \$1.05 per hour.

LOCATION

Winter tomatoes are produced in the warmer areas of Imperial Valley, primarily in the Calipatria-Niland area. Some are grown in the Bard area.

Most plantings are made using blocks of two or more varieties for maintaining production over a longer period.

PLANTING DATES

August 1 to September 1 for winter harvest. November and December for early spring harvest.

VARIETIES

Early Pak, Imperial, Pennheart, Pearson, and Earliana types are grown. Local and trade strains of these varieties and others are of importance.

PLANTING

Essentially all are direct seeded in the field. Plantings are made with Planet Jr. and "jab" type planters. Seeding is on the north slopes of raised melon type beds in August.

Beds are "subbed up" after planting by running small heads of water for four to six days or longer.

SOILS

Most land devoted to the winter crop is in the Niland area and is sandy with very tight heavy clay at depths generally less than two feet from the surface. Location of suitable tomatoe areas is based primarily on temperature factors, not on soil characteristics.

FERTILIZERS

Chicken or steer manure is placed in plow furrow near seed row ahead of planting.

Successful crops have been grown where no manure has been used but where ample quantities of commercial fertilizers were applied. In such cases, most of the phosphorus and part of the nitrogen have been applied at or ahead of planting. Later applications of nitrogen are sidedressed as

needed. Commercial fertilizers most frequently used are urea, 16-20-14, 14-14-14, and 20-20-0.

CULTIVATION, THINNING, IRRIGATION

When small plants are well established and before they become crowded, thin to desired spacing. Close spacings (12 to 18 in.) can result in early maturity. Blocks of close and wide spacing could help maintain production over a longer period. Two to four plants are sometimes left and thinned later to one or two plants per spacing desired. As soon as the weather begins to cool (September 15 to October 15), the beds are reshaped by cultivation, one-way plow, and hand work in such a way as to change the plant row from the north slope to the south slope of the bed.

Irrigation is by furrow from canals and head ditches. Surface drainage for tail water is essential.

BRUSHING

Average date of first killing frost is December 6. Brush and paper protective measures should be in place ahead of this date. They should be so placed that they admit all sunlight to warm the ground in the daytime with a strong slant to the south to intercept and reflect heat radiated from the ground at night. Brushing also prevents considerable damage from dry desert winds.

Brushing is considered to be adequate protection for about 3 to 4 degrees of frost.

DISEASE & PEST CONTROL

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

HARVEST AND PACKING

Harvest is by hand. Most packing is done in small packing sheds at the field.

Prepared by
James R. Breece
Farm Advisor

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