

tomatoes  
processing  
sample costs  
and  
production



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

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Cost Data Sheet No. 19

TOMATOES - PROCESSING--PROJECTED PRODUCTION COSTS

Mechanical operations at custom rates. Hand labor at \$3.75 per hour (\$3.00 plus Social Security, unemployment insurance, transportation, supervision and fringe benefits).

Yield - 25 tons. Growing period 140 days.

OPERATION	Custom Rate	MATERIALS		HAND LABOR		SAMPLE COSTS Per Acre
		Type	Cost	Hours	Dollars	
<b>LAND PREPARATION</b>						
Disc 2x	\$ 4.50					\$ 9.00
Borders - break border	4.50					4.50
Flood		Water	2.63	2	7.50*	10.13
Disc 2x	4.50					9.00
Landplane 2x	5.00					10.00
List Beds	6.00					6.00
Rotovate - shape beds	11.00					11.00
Fertilizer	3.00	fertilizer	30.00			33.00
		150 P <sub>2</sub> O <sub>5</sub> - 30 N				
<b>TOTAL LAND PREPARATION</b>						<b>\$ 92.63</b>
<b>GROWING PERIOD</b>						
Plant - shape beds	8.25	seed 1.5 lbs.	27.00			35.25
Preplant herbicide	3.00	Devrinol®	23.50			26.50
Sprinkler		Rent	35.00	9	33.75	68.75
Hand thin - weed				16	60.00	60.00
Cultivate 2x	5.00					10.00
Lilliston 2x	4.50					9.00
Fertilizer 2x	4.50	225 N	65.25			74.25
Hand Weed 3x				10	37.50	37.50
Irrigation 8x		6 1/2 ac ft	22.75	9	33.75*	56.40
Layby Herbicide	3.00	Dachtal®	22.20			25.20
Pest Control 8x	3.50		110.00			138.00
<b>GROWING PERIOD</b>						<b>\$ 540.85</b>
<b>GROWING PERIOD &amp; LAND PREP COSTS</b>						<b>\$ 633.48</b>
Land Rent (new lease)						125.00
Cash Overhead - 12% of preharvest costs and land rent						91.02
<b>TOTAL PREHARVEST COSTS</b>						<b>\$ 849.50</b>
<b>HARVEST</b>						
Custom harvest 25 tons @ \$24.00						\$ 600.00
<b>TOTAL ALL COSTS AND SELLING</b>						<b>\$ 1449.50</b>

Cost per ton = \$57.98

\* Includes shovel labor, pipe setting, miscellaneous tractor work.

**YIELDS-PRICES:** Approximately 2500 acres were harvested in 1975 and 600 acres in 1974. Yields in both years have ranged from 8 to over 40 tons per acre. In 1974 local prices were \$62.50 plus bonus for early harvest and in 1975, \$57.50 plus bonus.

**PLANTING:** Cannery tomatoes are planted and watered from January 10 to February 20. Seed is applied on double row beds, listed and shaped 60 inch, center to center, with rows 12 inches apart on a 36-38 inch bed top. Both sprinklers and furrow irrigation are used for germination. Sprinklers are most common.

**VARIETIES:** During the past two years several varieties have performed well. Early planted varieties have been VF 10, VF 270, VF 145-21-4, and VF 315. Approximate harvest dates - May 25 - June 20. VF 145-7879 and Castlemor are planted for late harvest - June 15 - July 10. Pear shape varieties also can be successfully grown and produce good yields.

**SOILS:** Medium to heavy soils that are well drained are generally best. Such soils maintain moisture longer and more uniformly than sandy soils. Fields selected should be low in salinity.

## FERTILIZER

Nitrogen and phosphorus may be either broadcast preplant or, injected, at or before planting. A combination of both methods also can be used. All of the phosphorus should be applied preplant or at planting. Fifty to 100 pounds  $P_2O_5$  injected or sidedressed is generally adequate. A small amount of nitrogen, 20-30 pounds, can be applied at or before planting. 225 pounds nitrogen is divided up into three or four applications beginning at thinning. Generally, two sidedressing are adequate with one application in the irrigation water several weeks before harvest.

## THINNING

All processor type cultivars are bush type vines allowing high plant population per acre. Single plant spacing is not necessary. Clump thinning allowing 2-3 plants per hill spaced at 9-12 inch centers down the row has performed very well. The use of coated seed and space planting is possible eliminating the need for thinning.

## IRRIGATION

Moisture should be maintained as uniformly as possible throughout the season. Too much water during the early growth of the plant encourages shallow roots. Adequate moisture needs to be maintained later in the season during maximum fruit development.

## PESTS AND DISEASES

Main insect pests are aphids, tomato fruit worms, armyworms, and pin worms. Curly top virus is an occasional problem. Fumigation is required for rootknot nematode infested fields. If fumigation is required add \$40.00 to costs. Consult your farm advisor for latest recommendations on weed, disease and pest control.

## HARVESTING

Local growers sign contracts with custom harvesters and truckers to harvest and haul to the processor. Harvesting is coordinated with the processor's plant capacity. Several companies market white reflective material for sunburn control - if used add from \$12.00 - \$15.00 per acre to costs.

Prepared by  
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