

SACRAMENTO COUNTY

March - 1965

Agriculture

• Notes from the Sacramento County Farm Advisor •

TOMATO PRODUCTION

Soil Requirements: Deep, fertile, well-drained soils of organic or mineral type. Texture can vary from sandy loam to clay if the clay has good internal drainage.

Planting Dates: Mechanical harvest, March 25 to May 25, planting interval first true leaf stage; hand pick, March 25 to April 25; transplants, April 10 to May 10.

Harvest Dates: August 1 to October 15. Delta--10 days later than warmer areas.

Varieties: Mechanical harvest, VF-145 and pear shape; hand pick, standard VF varieties.

Pre-emergence Herbicides: Tillam, Vegedex, or Diphenamid to reduce the cost of hoeing unless the field is exceptionally free of weeds.

Planting Rates: Seed, 1/3 to 2/3 lb./A (12-20 seeds/ft.); Plants, 6,000 to 8,000/A.

Spacing: Single or double rows, centers 4-5 ft apart, 12-16 ins. between double rows; space between plants or clumps, mechanical harvest, 6-12 ins., hand pick, 12-18 ins.

Thinning and Hoeing: Thin when plants are 2-3 ins. high with long handled hoes or block mechanically. Hoe weeds as needed.

Fertilizer Requirements: Organic soil, 0-15 lbs. N/acre with 15-25 P/acre, 2-3 ins. under seed; Mineral soil, 80-120 lbs. N/acre pre-fertilized or sidedressed early plus 10-20 lbs. N/acre with 10-20 lbs. P/acre, 3-4 ins. under seed.

Irrigation: 3-5 acre feet of water; Organic soil, sub or sprinkle; Mineral soil, sprinkle plus furrow or furrow only.

Cultivation: 4-8 times through the field for weed control, irrigation furrows, and shaping and smoothing beds for mechanical harvest.

Insect Control: Wireworms, flea beetles, darkling ground beetles early; Tomato russet mite plus fruit and defoliating worms. July, Aug., Sept., see current recommendations.

Special Problems and Control Measures

- * High cost of weed control--herbicides and management
- * Phytophthora root rot--water management
- * Non-uniformity of ripening on mechanical harvest acreage--better management
- * Too much acreage ripening at once--scheduled plantings and uniform conditions

New Developments

- * Long fruited varieties to reduce mechanical harvested damage
- * Complete mechanization--herbicides, mechanical thinning, mechanical harvest
- * Chemical growth regulators to synchronize ripening for mechanical harvest

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TL:dlc

SAMPLE COSTS TO PRODUCE TOMATOES ON MINERAL SOIL

Sacramento County, March, 1965

Yield: 20 Tons per Acre
 Price: \$ 30.00 per Ton.
 Gross: \$600.00

Labor
 Common \$1.50
 Skilled \$1.75

Operation	Date	Hours Per Acre	Cash and Labor Costs per Acre				
			Labor	Fuel & Repairs	Materials Kind & Quan. Cost	Total	
<u>Cultural</u>							
Disk 2X	Oct-Nov	.4	\$.70	\$ 1.06		\$ 1.76	
Plow	Nov-Dec	.3	.53	.80		1.33	
Landplane 2X	Nov-Dec	.6	1.05	1.50		2.55	
Disk 2X	Feb-Mar	.4	.70	1.06		1.76	
Float	Feb-Apr	.2	.35	.20		.55	
Plant, fert., herbicide	Mar-May	.6	1.05	.86	1/2# seed @ \$9 10 gal. 8-24-0 @ 40¢ 1.6# Tillam @ \$4.00 90# N @ 9¢ 1/2# DDT @ \$1.22 1/2# DDT @ \$1.22 40# S ₂ Air Appl. 2# Sevin @ \$1.10 Air Appl.	\$ 4.50 4.00 6.40 8.10 .61 1.83 2.20 2.00 4.40 4.00	16.81 9.04 1.29 2.51 4.20 8.40
Sidedress fert.	May-Jul	.3	.53	.41			
Flea Beetle control	Apr-Jn	.2	.35	.33			
First worm control	July	.2	.35	.33			
Russet Mite control	July	Contr.					
2nd and 3rd worm control	Aug-Sep	Contr.					
Thin and hoe	May-Aug	22.5	33.75			33.75	
Cultivate 5X	May-Jul	1.5	2.63	2.18		4.81	
Irrigate 8X	May-Aug	4.5	6.75	1.00	Water 4 ac. ft. @ \$3.50	14.00 21.75	
Prepare field for harvest	Jul-Aug	.2	.35	.53		.88	
TOTAL CULTURAL COSTS			\$49.09	\$10.26		\$52.04	\$111.39
<u>Harvest</u> Jul-Oct							
840 boxes: Box rent @ .1¢ = \$8.40, Pick @ 20¢ = \$168.00, Load @ 2 1/2¢ = \$21.00						\$197.40	
Inspection: 20 tons @ 17¢						3.40	
Dockage: 10% tomatoes, 5% contr.; \$1.00/ton for over-tolerance fruit						8.70	
Rejected loads: 1.75% of loads delivered and sorting						4.00	
Tomato Grower Assoc. dues: 20 tons @ 10¢/ton						2.00	
Additional labor costs: Supervision, recruitment, transp., housing, etc.						52.00	
Clean up after harvest						10.00	
TOTAL HARVEST COSTS						\$277.50	
<u>Cash overhead</u>							
Misc., ofc., etc.			5% of above			\$ 19.44	
Taxes on equip.						1.00	
Rent, share			17.5% of gross			105.00	
TOTAL CASH OVERHEAD						\$125.44	
TOTAL CASH COSTS						\$514.33	
Management 5% of gross						\$ 30.00	
Depreciation and interest on \$106,000 investment in equipment for 700 acres \$151.00 per acre, 10 year life (\$15.10), 6% interest (\$4.53)						\$ 19.63	
TOTAL COST PER ACRE						\$563.96	
COST PER TON @ 20 ton yield						\$ 28.20	