

WATERMELON PRODUCTION IN WESTERN RIVERSIDE COUNTY

Prepared by

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SOIL AND CLIMATE:

With specific exceptions watermelons are grown best on light sandy soils. The necessary nutrient elements are often deficient in such soils, but proper application of manures or commercial fertilizers helps to correct this situation.

FERTILIZERS:

In most cases, commercial fertilizers or manures should be applied to give 50 to 60 pounds of N per acre. Requirements of the various soils within the area for other plant nutrient elements vary considerably; therefore, on some soil types, fertilizers containing phosphate may be necessary for maximum yields.

CULTURAL PRACTICES:

Planting should be delayed until after the last spring frost, generally after March 15th. For good seed germination soil temperatures of 75° - 85° F. are necessary. Seed is planted 1½" - 2" deep in rows spaced about 9' apart with hills spaced 6' to 10' apart in the rows. After the plants are up and 2 or 3 true leaves have formed, they should be thinned to 2 or 3 plants to the hill.

Cultivation for weed control is necessary and must be thoroughly practiced several times during the growing season.

IRRIGATION:

The soil should be full of water from either pre-irrigation or winter rains when the seed is planted. Generally 2 or 3 irrigations of about 2 acre inches each are adequate prior to the time when runners are well formed. Weekly irrigations are necessary after the harvest begins. To produce a good crop of watermelons 20 to 24 acre inches of water are necessary.

INSECTS AND DISEASES:

Insect pests include wireworms, cutworms, nematodes, ground beetles, cucumber beetles, flea beetles, and red spider. Diseases include fusarium wilt, mosaic, and curly top.

WHAT WILL IT COST YOU TO GROW WATERMELONS IN WESTERN RIVERSIDE COUNTY?

A good average yield of 16 tons per acre is the basis of the following schedule of costs. Man labor is figured at \$1 per hour, a big tractor at \$2 and a small tractor at \$1.25 per hour.

Operation or item with hours or quantities and prices per acre	Sample Costs		Your Costs	
	Per Acre	Per Ton	Per Acre	Per Ton
<u>Land Preparation</u>				
Plow 2x, disc 2x, harrow 1x, float 3 $\frac{1}{4}$ hrs./A.	\$ 9.00	\$.56		
<u>Planting</u>				
$\frac{1}{2}$ hr./A. - 2 men and light tractor	\$ 1.63	\$.10		
<u>Cultural Labor and Field Power</u>				
Hoe, weed, thin, replant, turn vines 8.6 hrs.	\$ 8.60			
Cultivate 5x; 3 hrs; man and light tractor	6.75			
Irrigate - pre-irrigation is not a general practice, irrigate 12x @ 1.4 hrs./A./irrig.	16.80			
Fertilize - put in irrigation water, additional cost of changing tanks, turning on and off valves, etc.04			
Insect Control - Insecticide applied to soil for wireworm control; light tractor .	.75			
Mite control - 2x by plane.	4.50			
TOTAL CULTURAL LABOR AND FIELD POWER.	\$ 37.44	\$ 2.34		
<u>Materials</u>				
Seed - 2 lbs. @ \$1.60/lb.	\$ 3.20			
Irrigation Water - 2.3 A. ft. @ \$6.25/A.ft.	14.37			
Fertilizer - to furnish 50 lbs. N./A. . .	8.05			
Insecticides - TEPP and BHC.	7.00			
TOTAL MATERIALS COST	\$ 32.62	\$ 2.04		
TOTAL COST PRIOR TO HARVEST.	\$ 80.69	\$ 5.04		
<u>Harvest</u>				
Contracted picking @ \$2/T.	\$ 32.00	\$ 2.00		
Pitching and hauling from field @ \$4.50/T.	72.00	4.50		
Loading @ \$1.50/T.	24.00	1.50		
TOTAL HARVEST.	\$ 128.00	\$ 8.00		
Brokerage - @ \$2.00/T.	\$ 32.00	\$ 2.00		
<u>Cash Overhead Costs</u>				
Phone, car, office, etc., @ 5% of above - except for brokerage	\$ 10.43	\$.80		
County Taxes @ \$6 rate, 100% to melons . .	6.00			
Repairs.	1.25			
Compensation Insurance	1.00			
TOTAL CASH OVERHEAD COSTS.	\$ 18.68	\$ 1.17		
TOTAL CASH COST.	\$ 259.37	\$ 16.21		
<u>Depreciation</u>				
Irrigation System - figured in cost of water				
Tillage and other small equipment.	\$ 2.00			
TOTAL DEPRECIATION	\$ 2.00	\$.13		
<u>Interest on Investment - @ 5%</u>				
Irrigation facilities and equipment. . . .	\$ 4.00			
Land - \$700/A.	35.00	\$ 2.19		
TOTAL INVESTMENT COSTS	\$ 39.00	\$ 2.41		
TOTAL COST OF PRODUCTION	\$ 300.37	\$ 18.77		