

1956 1957

**GENERAL:** Watermelons are well adapted to the desert region, primarily the Palo Verde Valley, which is noted for early production of melons of excellent quality.

**YIELDS:** Yields range from 7-11 tons of marketable melons per acre. Spring frosts and cool temperatures limit early yields and hot summer temperatures limit later yields.

**SOIL REQUIREMENTS:** Watermelons generally require lighter soils; however, the clay loams and clays of the Palo Verde Valley produce good yields. Heavier soils are not as subject to wind erosion as lighter soils and resulting blasting of crops is not as severe as on light soils.

**VARIETIES:** Black Seeded Klondike is the variety most commonly grown, although Peacock R-7 and Striped Klondike are also grown on considerable acreage. Wilt resistant varieties should be grown where watermelon wilt is known to be present in the soil.

**PLANTING:** Planting is done under caps from December to February or in the open field after danger of frost has passed. About two pounds of seed are required to plant an acre, including the seed necessary to replace "blown out" plants. They are generally planted in beds 8 to 9 feet apart, with a slope toward the south.

**FERTILIZERS:** Most soils require from 80 to 90 pounds of nitrogen and from 100 to 120 pounds of P<sub>2</sub>O<sub>5</sub>. Mixed fertilizers are generally used as the source of these nutrients. Occasionally a light application of ammonia gas is applied after the plants are well developed.

**IRRIGATION:** Watermelons growing on heavier soils require from 3 to 4 acre-feet of water. On light soils, lighter but more frequent irrigation is required than on the heavier soils.

**DISEASES AND PEST CONTROL:** Watermelon wilt is present in the area, so only varieties resistant to this disease should be planted where its presence is known. Blue Ribbon and Klondike R-7 are wilt resistant varieties. Curly top, transmitted by the sugar beet leafhopper, and a mosaic disease transmitted by aphids are virus diseases affecting watermelons. Good control of aphids may help in checking the spread of the latter disease.

Insect pests - aphids and red spider mites may be controlled with parathion dusts or sprays. Diabrotica and flea beetles may be controlled with D.D.T.

**HARVESTING:** Watermelons are cut from the vines by "pickers" or "cutters". Pitching crews follow these men through the fields and "pitch" the melons along to "loaders" in trucks in the fields. The melons are then hauled to collecting points where they are loaded onto refrigerator trucks or railroad cars. A bed of straw 5 or 6 inches deep should be placed in the bottoms of wagons or trucks in which the melons are hauled; both from the field and to market areas.

**NOTE:** The costs indicated on the opposite side of this sheet are for a crop grown under caps, and following a fall lettuce crop. The costs of watermelon production in this area, as in other early producing areas, will be affected by many factors. Of considerable importance among these factors are whether the melon crop is grown on new land or on land that has been in a previous crop; whether the crop is planted under caps or in the open; the crop rotation plan used, and as it affects the planting dates and fertilizer needs of the melon crop; and the climatic factors in the area experienced during the growing season of the melon crop.

**AVERAGE PRICES RECEIVED BY CALIFORNIA PRODUCERS PER TON, late spring crop.**

1949	1950	1951	1952	1953
25.80	33.05	30.55	59.50	57.60

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WHAT WILL IT COST TO GROW WATERMELONS IN THE PALO VERDE VALLEY

Based on a Yield of 9 Tons Per Acre

ITEMS	SAMPLE COSTS		YOUR COSTS	
	Per Acre	Per Ton	Per Acre	Per Ton
<u>Land Preparation and planting</u>				
Knife, plow, and disc 2x . . . . .	\$ 10.00		.....	.....
Land plane 2x . . . . .	2.00		.....	.....
Pre-irrigate (includes build borders, pre-irrig., level and disc 2x) . . . . .	5.50		.....	.....
Float 2x . . . . .	2.00		.....	.....
Bed up and level ends of beds for roads, build ditches for pipes, put in pipes. . . . .	4.00		.....	.....
Shape beds . . . . .	3.00		.....	.....
Plant (includes tamp hills & replant). . . . .	8.00		.....	.....
<b>LAND PREPARATION AND PLANT TOTAL . . . . .</b>	<b>\$ 34.50</b>	<b>\$ 3.83</b>	.....	.....
<u>Cultural Labor and Field Power</u>				
Cap - @ \$10/1000 . . . . .	\$ 10.00		.....	.....
Recap - caps removed, thin, recap. . . . .	15.00		.....	.....
Recap - after wind damage. . . . .	5.00		.....	.....
Removing caps and wire . . . . .	2.50		.....	.....
Fertilize - preplant, sidedress, gas . . . . .	5.00		.....	.....
Hoe and thin 2x . . . . .	10.00		.....	.....
Vine turning . . . . .	10.00		.....	.....
Irrigate - 7x . . . . .	10.00		.....	.....
Pest control . . . . .	15.00		.....	.....
Cultivate . . . . .	8.00		.....	.....
Miscellaneous. . . . .	4.00		.....	.....
<b>CULTURAL TOTAL . . . . .</b>	<b>\$ 94.50</b>	<b>\$10.50</b>	.....	.....
<u>Materials</u>				
Seed - 2# @ \$1.50/lb (includes replant). . . . .	\$ 3.00		.....	.....
Fertilizer - 120# N and 120# P2O5. . . . .	29.00		.....	.....
Irrigation water . . . . .	5.00		.....	.....
Insecticides - Parathion, DDT-100 lbs. . . . .	17.00		.....	.....
Caps @ \$8.25/1000. . . . .	10.00		.....	.....
Wires-includes replacement wires . . . . .	7.00		.....	.....
<b>MATERIALS TOTAL. . . . .</b>	<b>\$ 71.00</b>	<b>\$ 7.89</b>	.....	.....
<u>Cash Overhead</u>				
General expense @ 5% of above . . . . .	\$ 10.18		.....	.....
County taxes . . . . .	3.00		.....	.....
Repairs to heavy equipment . . . . .	3.00		.....	.....
Other repairs. . . . .	1.50		.....	.....
Compensation insurance . . . . .	1.25		.....	.....
<b>CASH OVERHEAD TOTAL. . . . .</b>	<b>\$ 18.93</b>	<b>\$ 2.10</b>	.....	.....
<b>TOTAL CASH COST . . . . .</b>	<b>\$218.93</b>	<b>\$24.33</b>	.....	.....
Land rent or interest- $\frac{1}{2}$ to watermelons . . . . .	\$ 32.50	\$ 3.61	.....	.....
<b>TOTAL COST BEFORE HARVESTING . . . . .</b>	<b>\$251.43</b>	<b>\$27.94</b>	.....	.....
<u>Harvesting</u>				
Picking @ \$2.50 per ton . . . . .	\$ 22.50		.....	.....
Hauling @ \$2.50 per ton . . . . .	22.50		.....	.....
Pitching @ \$2.50 per ton . . . . .	22.50		.....	.....
Loading @ \$1.50 per ton . . . . .	13.50		.....	.....
Boards and straw for loading @ \$.50/ton. . . . .	4.50		.....	.....
Brokerage @ \$2.50 per ton. . . . .	22.50		.....	.....
<b>HARVESTING, LOADING, BROKERAGE TOTAL . . . . .</b>	<b>\$108.00</b>	<b>\$12.00</b>	.....	.....
<b>TOTAL ALL COSTS. . . . .</b>	<b>\$359.43</b>	<b>\$39.94</b>	.....	.....