3.412 8-27-54 200 c. University of California Agricultural Extension Service Imperial County

CARROTS 1954

## WHAT DOES IT COST YOU TO GROW CARROTS? (Based on 300 crates/acre)

ITEMS .	SAMPLE COSTS		YOUR COSTS	
	Fer Acre	Per Crate	Per Acre	Per Crate
LAND PREFARATION				
Plow lx	5.00	٠.		
Disc 2x	3.00			
Float lx	1.25			}
Border	.75			
Irrigate lx	1.00			
Knock down borders	•50			
Disc lx	1.50			
Float lx	1.25			
Fertilize (Pre-plant)	1.00			1
List				
TOTAL LAND PREPARATION	2,25	.06		· · · · · · · · · · · · · · · · · · ·
	17.50	,00		
CULTURAL LABOR & FIELD POWER				
Mulch beds	1.75	•		ļ.
Planting	2.25			1
Cultivate 2x	4.50			-
Fertilization lx	2.25			
Weed control lx (oil)	2.50			
Irrigation 8x	6.00			
Pest control 2x	4.00			
Miscellaneous	2.00			
TOTAL CULTURAL LABOR & POWER	25.25	.08		
MATERIALS				
Water	5.25			
Seed - 3 lbs./acre	6.00			ŀ
Fertilizer (100 N + 100 $P_2O_5$ )	25.00			
Insecticide	6.00			
Weed oil - 40 gals. @ $19¢$	7.60			
Miscellaneous	2.00			
TOTAL MATERIALS	51.85	.17		
CASH OVERHEAD				
General expense 5% of the above	4.70			
Taxes	2.00			
Insurance	1.00			
Miscellaneous	2.00			,
TOTAL CASH OVERHEAD	9.70	.03		
LAND RENT (1/2 year)	30.00	.10		
DEPRECIATION	2.00	• = 0		+
TOTAL ALL COSTS				
TOTAL ALL OOSIS	138.30	.44		

The above costs are based on current contract rates which are higher than efficient owner-operator costs. Taxes are included in rent.

Estimate your own costs by filling in the last two columns based on your own expected yields, cost of operations, and material that would be required on your land.

SEE REVERSE SIDE

## CARROT PRODUCTION

- ACREAGE: In 1953 there were 6,500 acres of carrots grown in the county. In past years there have been as high as 10,000 acres planted to carrots.
- <u>YIELDS</u>: The average yield is 250 crates per acre. Yields of 500 crates or more per acre have been reported by some growers. To get high yields, there has to be a very low percentage of malformed carrots. There are several factors which may tend to promote pronging. These are misplacement of fertilizer, close cultivation, carrots following sesbania, nematodes, insect injury, certain diseases, and soil structure.
- <u>VARIETIES</u>: The varieties most extensively used by produce growers are the Imperator and Long Imperator. The difference between the two varieties is in length. They have the same color and bunching quality. Long Imperator tends to be a little earlier than other varieties.
- SOILS: Carrots can be grown on many of the soil types in the valley. East root development is obtained in the lighter soils. Soils that tend to be on the salty side are not too desirable for carrot production.
- LAND PREPARATION: See reverse side. Crop history will determine the type of land preparation followed by grower.
- <u>PLANTING DATE</u>: The early carrots are planted the last week in August and early September. Later maturing carrots are planted in October and early November.
- IRRIGATION: The first irrigation or "subbing" the beds for seed germination in August or early September, is important. This time of the year the air temperatures are usually high, so beds have to be wet constantly until after seedling emergence. When plants are well established, the irrigation schedule should be set up to give maximum growth. Weather and soil type are factors that will help determine when to irrigate.
- <u>FERTILIZERS</u>: Previous crop history will help in determining fertilizer requirements. Nitrogen is the one that is most often required for maximum yields. Phosphate when used is usually applied ahead of planting. 100 to 120 lbs. of nitrogen and 100 lbs. of phosphate are usually ample for growing carrots.
- <u>PESTS AND DISEASES</u>: Crickets, grasshoppers, and cutworms can be a problem when the seedlings emerge. Later in the season, spider mites and aphis can be a problem. Frequent field inspections are important to determine whether control measures are necessary.
  - Disease that can be a problem in the valley are: nematodes, damping-off, and root rot. Nematodes are controlled by fumigation; damping-off by seed treatment; and root rot is usually not a problem where good cultural practices have been followed. For control recommendations, consult your Farm Advisor.
- HARVESTING: The carrots are removed from the beds by tractor and carrot lifter. How the carrots are marketed will determine handling in the field. Carrots sold in bunches with tops will be graded and bunched in the field and hauled to the shed for cleaning and crating. Cello-pack carrots are hauled from the field without tops, in burlap bags, cleaned and packed in the shed. Canning carrots are topped in the field and hauled to the processor. The trend in carrot marketing is toward cello-pack.
  - -- Frepared by Robert A. Kortsen, Farm Advisor