

Rec April 1955

GROWING LETTUCE IN THE WESTERN VALLEYS OF RIVERSIDE COUNTY

Lettuce has not so far been produced on a large scale in Western Riverside County. Recent experience has shown, however, that with good management it is possible to produce 200 to 275 crates per acre. More important, perhaps, than yield is time of harvest. Another important consideration is quality. It is possible to produce quality lettuce for November - December harvest when the market is, on the average good.

SOILS: Although lettuce will grow on a wide range of soils, sandy loam or heavier textured soils are preferred for best yield and head development. Lettuce will tolerate some alkali and some boron. Excessive alkali soils should, however, be avoided. Uniform soils are important for uniform maturity of heads.

VARIETIES: Great Lakes strains seem well adapted to the Western Part of the county. Varieties are usually determined by shippers.

PLANTING:

Time: August 1-10 appears to be the best average planting period, and will produce mature heads in late November to early December. December, January and February plantings have been tried in the San Jacinto Valley, but resulted in "sliming" of the heads - presumably due to late frosts during early head development.

Method: The standard method is to plant two rows $1\frac{1}{4}$ inches apart on beds centered $\frac{1}{2}$ inches apart. Bed spacings of $3\frac{1}{4}$ inches are occasionally used in the county to permit trucks to move through the field. $1\frac{1}{3}$ to $1\frac{1}{2}$ pounds of seed per acre planted to a depth of $\frac{1}{4}$ to $\frac{1}{2}$ inch is the usual practice.

FERTILIZERS: 120 pounds of actual nitrogen per acre from ammonia sources is the usual in lettuce growing areas. Generally half of this is applied at planting and half side-dressed at the time of thinning. Manure at the rate of five tons per acre applied and disced in well ahead of planting is often helpful especially on light soils. Phosphate may be needed on some Riverside County soils at the rate of 60-80# P_2O_5 per acre.

IRRIGATION: Since lettuce is shallow rooted (to two feet) frequent irrigation may be necessary for fall plantings. Irrigation every two weeks is not too often on sandy soils. Uniform irrigation is important and for that reason land-planing previous to planting to permit even distribution of water is standard practice. Two to two and one-half acre feet total for the season is applied per acre in Western Riverside County.

PEST CONTROL: Combinations of D.T.T. or Toxaphene and Parathion are used to control worms and aphid. Mosaic, an aphid and seed-borne virus, may sometimes be held in check by planting "mosaic-free" seed. Any pesticide activity should very carefully follow the label instructions on the package to avoid residue problems.

HARVESTING AND MARKETING: In established lettuce areas, shippers usually handle harvesting and make a standard charge to growers. Some growers rent special field wagons and tractors with wheels set for $40''$ bed centers. Most lettuce is marketed through a small number of shippers who contract with growers for the crop.

WHAT DOES IT COST TO GROW LETTUCE
IN THE WESTERN VALLEYS OF RIVERSIDE COUNTY?

Based on 200 crates per acre

ITEM	SAMPLE COSTS		YOUR COSTS	
	Per Acre	Per Crate	Per Acre	Per Crate
<u>Land Preparation and Planting</u>				
Plow (or chisel) 1x	\$ 4.00			
Disc 2x	3.00			
Land Plane (if necessary)	3.00			
Spring tooth 1x	1.00			
Furrow 1x	1.50			
Plant and shape beds in one operation	2.00			
TOTAL PREPARATION AND PLANT	\$ 14.50	\$.07		
<u>Cultural Labor and Field Power</u>				
Irrigation Labor 8x @ \$1.25	\$ 10.00			
Cultivate and/or furrow 3x	6.00			
Side dress fertilizer 1x	2.00			
Hoe weeds & thin plants	30.00			
TOTAL CULTURAL LABOR & FIELD POWER	\$ 48.00	\$.24		
<u>Materials</u>				
Water 2½ acre feet @ \$15.00	\$ 37.50			
Seed 1 1/3 pounds	7.00			
Fertilizer - 120 pounds Nitrogen	18.00			
Mamure (if needed) 5 tons	30.00			
TOTAL MATERIALS	\$ 92.50	\$.46		
<u>Cash Overhead</u>				
General Expense @ 5% of above	\$ 7.75			
Taxes (½ to lettuce)	3.00			
Insurance	2.00			
Miscellaneous	2.00			
TOTAL CASH OVERHEAD	\$ 14.75	\$.07		
TOTAL TO GROW Except Rent	\$ 169.75	\$.85		
Rent (estimate your own) ½ to lettuce	\$ 28.50	\$.14		
TOTAL PRE-HARVEST COST	\$ 198.25	\$.99		
<u>Harvesting</u>				
Harvest & Pack @ \$1.55 per crate (Includes freight to Los Angeles)	\$ 310.00	\$ 1.55		
TOTAL ALL COSTS	\$ 508.25	\$ 2.54		

Add 15% of market price for brokerage.

NOTE: The above SAMPLE COSTS are at the contract rate and are in some cases higher than efficient owner-operator costs. To estimate YOUR COSTS, use the columns at the right of the page.

Prepared by Otis A. Harvey, Farm Advisor, University of California, Agricultural Extension Service, Room 7, Post Office Building, Riverside, California