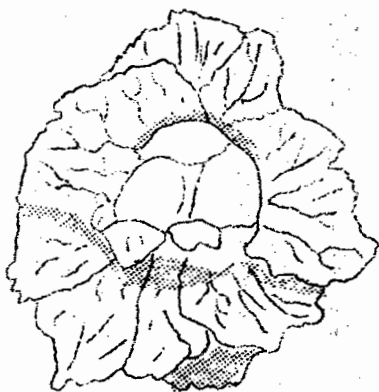


Lettuce
sample costs
and
production



Agricultural Extension
University of California
Imperial County
Court House, El Centro

Cost Data Sheet No. 15

LETTUCE--PROJECTED PRODUCTION COSTS

Mechanical operations at custom rates. Hand labor at \$3.75 per hour (\$3.00 plus Social Security, unemployment insurance, transportation, supervision and fringe benefits).

46.8 lb.

Yield - 500 cartons per acre (11.7 tons). 90-110 days to maturity.

OPERATION	Custom Rate	MATERIALS		HAND LABOR*		SAMPLE COSTS Per Acre
		Type	Cost	Hours	Dollars	
LAND PREPARATION						
Subsoil	\$ 12.50					\$ 12.50
Disc 2x	4.50					9.00
Border & break border	4.50					4.50
Flood		Water .75 ac ft	2.63	1	3.75*	6.38
Fertilize	3.00	400# 11-48-0	40.00			43.00
Disc 2x	4.50					9.00
Landplane 2x	5.00					10.00
List	5.00					5.00
TOTAL LAND PREPARATION						\$ 99.38
GROWING PERIOD						
Incorporated beds	8.00	herbicide	5.00	Balan [®]		13.00
Plant (Precision)	7.00	seed 1/4# @ 21.00 coating	5.25			26.50
Thin				20	75.00	75.00
Cultivate 3x	5.00					15.00
Fertilize - side - dress 3x	4.50	200# N @ 25¢	50.00			63.50
Weed				9	33.75	33.75
Sprinkler Irrigate		rent	35.00	9	33.75	68.75
Irrigate 6x		water 3 1/2 ac ft	12.75	20	75.00*	87.75
Insect control 10x	3.00	insecticides	60.00			90.00
GROWING PERIOD						\$ 473.25
GROWING PERIOD & LAND PREP COSTS						\$ 572.63
Land rent (new lease)						150.00
Cash Overhead - 12% of preharvest costs and land rent						86.72
TOTAL PREHARVEST COSTS						\$ 809.35
HARVEST COSTS						
Custom harvest: cut, pack, haul 500 cartons @ \$1.70						\$ 850.00
TOTAL ALL COSTS						\$1659.35

Cost per carton - 500 carton yield = \$3.32

*Includes shovel work, pipe setting and tractor work.

YEAR	ACRES	YIELD/ACRE (TONS)	VALUE/TON
1970	45,000	10.20	68.35
1971	38,000	11.69	100.89
1972	42,000	10.88	131.59
1973	42,000	13.40	130.02
1974	49,000	11.64	88.40

PLANTING DATES: Plantings extend continually from early September to mid-November. Early plantings are harvested in late November to early December while October and November plantings are cut during January, February, and March. Both coated and noncoated seed is used. Coated seed stands require less hand thinning. Seed may be planted 2-3 inches apart in row.

VARIETIES: The date of planting affects the variety grown since the season progresses from extreme heat to cool days and freezing nights, then back to moderately high temperatures in early spring. Varieties commonly planted in early-mid-September: GL 659, Mesa 659, Empire. Mid-late September: Merit (3186). Late September: Merit (3186), 49'er. Early-mid-October: 49'er, Climax. Mid-late

October: Climax, Vanguard. Late October-early November: Climax, Vanguard, Golden State D. Early plantings mature in about 90 days while later ones require 120 or more days. Newer varieties in use include: Winterhaven, Vanmax, RC 74 and Pico Verde.

SOILS

Silt loams and sandy soils are preferred. The lighter soils provide better drainage during cold weather and warm up more readily. Lettuce has moderate degree of salt tolerance. Excess salinity results in poor seed germination and small heads.

IRRIGATION

Most growers use sprinklers until the seedlings emerge to provide better stands with reduced seedling rates. Rental and labor costs for sprinkler use are \$60.00 - \$75.00 per acre. Gated pipe is also used especially near harvest. The irrigation labor costs used also include shovel work, grader work, and pipe setting.

FERTILIZERS

400 lbs of 11-48-0 are broadcast prior to listing. Nitrogen is side-dressed just after thinning and during later growth. Early, warm

season lettuce requires less N than that grown in January and February. About 120-150 lbs N is used early while 180 to over 250 lbs are applied to the cold weather crop. Lettuce should not be fertilized from December 25 to January 15 as it is normally too cold for efficient economic uptake.

WEED CONTROL

Herbicides are applied preplant, some are sprayed over the beds post-plant while others are incorporated with a ground or power driven incorporator. Consult the weed control Farm Advisor for latest recommendations.

PESTS AND DISEASES

Watch for crickets, cutworms, salt marsh caterpillars, beet armyworms, and cabbage loopers. Loopers can be especially serious after thinning. The most serious diseases are lettuce mosaic, big vein, damping off diseases, and Sclerotinia. Use mosaic-free seed 0:30000 and keep fields weeds down. Consult the Farm Advisor's office for pest control recommendations.

FUMIGATION

Fumigation is needed on early fields where rootknot and Longidorus nematodes are found. After soil temperatures cool down, Longidorus

nematodes are less active. Root-knot should be controlled anytime. Normal fumigation costs is \$32.50.

HARVESTING

Most lettuce is field packed in cartons, trucked to vacuum coolers, and shipped to market in refrigerated trucks and railway cars. Field packing of film-wrapped heads is also done.

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