

SAMPLE COSTS TO PRODUCE LETTUCE IN MONTEREY COUNTY - 1977

By J.W. Huffman and E.A. Yeary

YIELD: Based on 600-47 lb. cartons per acre
 HARVEST: April through October
 PLANT: December 15 through July 15

TOTAL LABOR COSTS/HR*

HOURLY TRACTOR COSTS

| | | | Cash Costs | Depreciation | Interest |
|-----------------------|------|------------------------|------------|--------------|----------|
| Cl. I Tractor Driver | 5.53 | 80 h.p. Crawler Diesel | 7.71 | 3.81 | 2.29 |
| Cl. II Tractor Driver | 5.41 | 50 h.p. Wheel Diesel | 2.82 | 1.80 | .90 |
| Other Labor | 4.55 | | | | |

| Operation | Tractor Used | Hours/Acre | Labor | Fuel & Repairs | Contract and Materials | Total/Acre |
|---|--------------|------------|-------|----------------|---|------------|
| CULTURAL | | | | | | |
| Cover Crop & Manure | | | | | Proportion to Lettuce | 30.00 |
| Disc & Roll 3x | C-80 | 0.69 | 3.82 | 5.32 | | 9.14 |
| Chisel 2x | C-80 | 1.0 | 5.53 | 7.71 | | 13.24 |
| Landplane 2x | C-80 | 0.52 | 2.88 | 4.01 | | 6.89 |
| List & Preplant Fertilizer | | | | | Contact @ \$4.50/Ac 500# 14-14-14 @ \$45.00 | 49.50 |
| Shape Beds & Roll | WD-50 | 0.25 | 1.35 | 0.71 | | 2.06 |
| Plant-4 Bed Planter | WD-50 | 0.50 | 2.77 | 1.41 | 2# Coated Seed @ \$10.00/lb | 24.18 |
| Herbicide** | | | | | Contract @ \$6.05/Ac Materials, \$9.00 | 15.05 |
| Irrigate 6x (1 pre, 2 Sprinkler, 3 Furrow) | | 10.0 | 45.50 | 8.00 | 2 Ac Ft @ \$7.50/Ft for power, \$2.00 booster pump | 70.50 |
| Thin | | 12.5 | 56.88 | | | 56.88 |
| Fertilizer, 2x | | | | | Contract @ \$3.75/Ac 180# N @ 0.26 per lb. | 54.30 |
| St Control 3x | | | | | Contract @ \$5.00/Ac Materials \$45.00 | 60.00 |
| Cultivate 5x | WD-50 | 2.0 | 10.82 | 5.64 | | 16.46 |
| Weed | | 8.0 | 36.40 | | | 36.40 |
| Miscellaneous | | 4.0 | 19.06 | 5.70 | | 24.76 |

TOTAL CULTURAL COSTS

469.36

Overhead

| | |
|--|--------|
| Business Costs: Office & Business Expense, etc., @ 8% Cultural Costs | 37.55 |
| Taxes: Equipment, except Tractors | 9.10 |
| Rent: \$300.00/Ac, 6 Months to Lettuce | 150.00 |

TOTAL OVERHEAD COSTS

196.65

TOTAL CULTURAL AND OVERHEAD COSTS

666.01

Harvest

| | |
|---|----------|
| Harvesting - Contract @ \$1.85 per Carton (includes selling cost) | 1,110.00 |
|---|----------|

TOTAL HARVEST COSTS

1,110.00

TOTAL CULTURAL, OVERHEAD AND HARVEST COSTS

1,776.01

| ANNUAL COSTS | Investment | Per Acre | Depreciation | Interest-8% |
|---------------------------------|----------------------|-----------------|----------------|----------------|
| 50% Charged to Lettuce, | Buildings | 50.00 | 2.50 | 2.00 |
| Tractors are on an Hourly basis | Irrig. System | 90.00 | 9.00 | 3.60 |
| | Tractors | 150.00 | 13.37 | 7.53 |
| | Equipment | 100.00 | 10.00 | 4.00 |
| | Portable Irrig. Sys. | 25.00 | 2.50 | 1.00 |
| | | <u>\$415.00</u> | <u>\$37.37</u> | <u>\$18.13</u> |

6 Months (Except Tractors and Equipment) to Lettuce

55.50

TOTAL COST PER ACRE

1,831.51

COST PER CARTON

3.05

9/77

UC Cooperative Extension

(see reverse side)

SAMPLE COSTS OF PRODUCTION AT VARYING YIELDS

| YIELD-CARTONS PER ACRE | 400 | 500 | 600 | 700 | 800 |
|-----------------------------|---------|---------|---------|---------|---------|
| Cost to Grow | 666.01 | 666.01 | 666.01 | 666.01 | 666.01 |
| Harvest Costs @ \$1.85/ctn. | 740.00 | 925.00 | 1110.00 | 1295.00 | 1480.00 |
| Annual Costs | 55.50 | 55.50 | 55.50 | 55.50 | 55.50 |
| <hr/> | | | | | |
| TOTAL COST PER ACRE | 1406.57 | 1646.51 | 1831.51 | 2016.51 | 2201.51 |
| Cost Per Carton | 3.52 | 3.29 | 3.05 | 2.88 | 2.75 |

Management has not been included as a cost of production in this study. It may be as much as 5% of the farm value of the crop.

* Labor costs per hour include fringe benefits paid by the farmer. Social security, workmen's compensation, unemployment, health plan, vacation, pension plan, and paid holidays.

** Herbicide: Kerb® applied at planting in 6" bands over the seed line at the rate of 1½ lbs a.i. per treated acre was the most commonly used material to control weeds in lettuce in 1977. Overhead or sprinkler irrigation is essential to the performance of this material.

For weeds not controlled by Kerb®, a Balan®-Chemhoe® combination is preferred. This is a preplant soil incorporated operation and results in uniformly shaped rows and an excellent seed bed. This operation costs about \$22.73 per acre. This includes \$11.50 (contract) for incorporation and \$11.23 for materials, 3 pints Balan® (1.5 lbs a.i. per treated acre) and 3 quarts Chemhoe® (0.56 lbs a.i. per treated acre). Either furrow or overhead irrigation can be followed with this combination.

TITLE: COSTS TO PRODUCE LETTUCE - MONTEREY COUNTY - 1977
 BASED ON 1975 YIELD & PRICE
 TENANT - LANDOWNER BASIS

| | UNIT | PRICE OR COST/UNIT | QUANTITY | VALUE OR COST PER ACRE | YOUR COST |
|--|-------|-----------------------|----------|------------------------------|-----------|
| 1. GROSS RECEIPTS FROM PRODUCTION: | | | | \$ | |
| LETTUCE, HEAD | TON | 150.000 | 14.100 | 2115.00 | |
| TOTAL RECEIPTS: | | | | \$ | 2115.00 |
| 2. VARIABLE COSTS: | | | | | |
| PREHARVEST: | | | | \$ | \$ |
| ANHY AMMONIA | LBS. | 0.100 | 500.000 | 50.00 | |
| HD LETTUCE SEED | LBS. | 5.300 | 3.000 | 15.90 | |
| HERBICIDE | ACRE | 9.000 | 1.000 | 9.00 | |
| FERTILIZER | LBS. | 0.290 | 180.000 | 52.20 | |
| INSECTICIDE | ACRE | 15.000 | 3.000 | 45.00 | |
| TRIMMING | HOURL | 3.650 | 18.000 | 65.70 | |
| HAND HOEING | HOURL | 3.650 | 8.000 | 29.20 | |
| TRACTOR (FUEL-OIL-REPAIRS) | ACRE | | | 20.98 | |
| EQUIPMENT (FUEL-OIL-REPAIRS) | ACRE | | | 5.24 | |
| IRRIGATION POWER COST | ACRE | | | 24.05 | |
| IRRIGATION (OIL-REPAIRS) | ACRE | | | 4.76 | |
| IRRIGATION WATER APPLIED | ACRM | 1.200 | 24.000 | | |
| MACHINERY LABOR | HOURL | 4.610 | 6.922 | 31.91 | |
| IRRIGATION LABOR | HOURL | 3.650 | 15.000 | 54.75 | |
| INTEREST ON OPERATING CAP. | DOL. | 0.080 | 97.143 | 7.77 | |
| TOTAL PREHARVEST COSTS: | | | | \$ | 416.46 |
| PREHARVEST COST PER CTNS | | | | \$ | 0.69 |
| HARVEST: | | | | \$ | \$ |
| CUSTOM HARVEST | ACRE | 1020.000 | 1.000 | 1020.00 | |
| INTEREST ON OPERATING CAP. | DOL. | 0.080 | 85.000 | 6.80 | |
| TOTAL HARVEST COSTS: | | | | \$ | 1026.80 |
| HARVEST COST PER CTNS | | | | \$ | 1.71 |
| TOTAL VARIABLE COSTS: | | | | \$ | 1443.26 |
| VARIABLE COST PER CTNS | | | | \$ | 2.41 |
| 3. INCOME ABOVE VARIABLE COSTS: | | | | \$ | 671.74 |
| INCOME PER CTNS | | | | \$ | 1.12 |
| 4. CASH OVERHEAD: (PROPERTY TAX & INSURANCE + 5.0% OF TOTAL VARIABLE COSTS) | | | | \$ | 88.46 |
| TOTAL CASH OVERHEAD: | | | | \$ | 88.46 |
| 5. OWNERSHIP COSTS: | | | | \$ | |
| DEPRECIATION: | | | | \$ | |
| MACHINERY & EQUIPMENT | ACRE | | | 40.69 | |
| IRRIGATION SYSTEM | ACRE | | | 8.03 | |
| BUILDINGS: | ACRE | | | 0.00 | |
| TOTAL DEPRECIATION: | | | | \$ | 52.72 |
| CAPITAL & INTEREST: | | | | \$ | |
| MACHINERY & EQUIPMENT | | 0.080 | 375.782 | 30.06 | |
| IRRIGATION SYSTEM | | 0.080 | 82.616 | 6.61 | |
| TOTAL INTEREST CHARGE: | | | | \$ | 36.67 |
| TOTAL FIXED COSTS: | | | | \$ | 177.85 |
| FIXED COST PER CTNS | | | | \$ | 0.30 |
| NET INCOME ABOVE FIXED & VARIABLE COSTS: | | | | \$ | 493.89 |
| NET INCOME PER CTNS | | | | \$ | 0.82 |
| 6. MANAGEMENT CHARGE (10.0% OF GROSS RECEIPTS) | | | | \$ | 211.50 |
| 7. LAND CHARGE (CASH RENT): | | | | \$ | 300.00 |
| 8. TOTAL OF ABOVE COSTS: | | | | \$ | 2132.61 |
| TOTAL COST PER CTNS | | | | \$ | 3.55 |
| 9. NET RETURNS: | | | | \$ | -17.61 |
| NET RETURNS PER CTNS | | | | \$ | -0.03 |

FOOTNOTE: SPRINKLER & FURROW IRRIGATION
 YIELD 600 - 47LB CARTONS/ACRE
 SPRING HARVEST

DATE: 01/28/78

BUDGET IDENTIFICATION: ENTERPRISE 281 COUNTY 27 MISCL 00 IRRIGATION LEVEL 4 LAND CLASS 2
 INDIV. # 0 MACH. COMP. 3 TRIG. SYSTEM 6 PRICE VECTOR 2 EQUIP COMP 1
 DATE PRINTED: 03/10/78 ANNUAL CAPITAL MONTH: 4

COSTS TO PRODUCE LETTUCE - MONTEREY COUNTY - 1977

BASED ON 1975 YIELD & PRICE

TENANT - LANDOWNER BASTS

MONTHLY SUMMARY OF RECEIPTS AND EXPENSES

| CATEGORY | UNIT | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|------------------------|-------|--------|-------|-------|---------|------|------|------|------|------|------|-------|--------|---------|
| TOTAL RECEIPTS | \$/AC | 0.00 | 0.00 | 0.00 | 215.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 215.00 |
| OPERATING EXPENSES | | | | | | | | | | | | | | |
| ANHY AMMONIA | \$/AC | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 50.00 | 50.00 |
| HD LETTUCE SFED | \$/AC | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 15.90 | 15.90 |
| HERBICIDE | \$/AC | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.00 | 9.00 |
| FERTILIZER | \$/AC | 26.10 | 26.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 52.20 |
| INSECTICIDF | \$/AC | 15.00 | 15.00 | 15.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 45.00 |
| THINNING | \$/AC | 65.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 65.70 |
| HAND HOEING | \$/AC | 0.00 | 29.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.20 |
| CUSTOM HARVEST | \$/AC | 0.00 | 0.00 | 0.00 | 1020.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1020.00 |
| MACHINE LABOR COST | \$/AC | 2.66 | 4.46 | 3.22 | 1.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.05 | 9.87 | 31.91 |
| INTEREST ON OPER. CAP. | \$/AC | 2.55 | 1.27 | 0.25 | 6.93 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.66 | 2.91 | 14.57 |
| TRACTOR COST | \$/AC | 1.07 | 2.76 | 2.06 | 0.84 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.86 | 6.37 | 20.98 |
| EQUIPMENT COST | \$/AC | 0.09 | 0.46 | 0.40 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.79 | 2.32 | 5.24 |
| IRRIGATION COST | \$/AC | 6.00 | 6.00 | 6.00 | 6.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.80 | 28.81 |
| IRRIG LABOR COST | \$/AC | 10.95 | 10.95 | 10.95 | 10.95 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.95 | 54.75 |
| TOTAL EXPENSES | \$/AC | 130.13 | 96.71 | 37.88 | 1046.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.36 | 112.13 | 1443.26 |

MONTHLY IRRIGATION AND LABOR REQUIREMENTS

| | HR/AC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|----------------------|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| MACHINE LABOR | HR/AC | 0.58 | 1.08 | 0.70 | 0.25 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.18 | 2.14 | 6.92 |
| IRRIGATION LABOR | HR/AC | 3.00 | 3.00 | 3.00 | 3.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.00 | 15.00 |
| IRRIG. WATER APPLIED | ACIN | 5.00 | 5.00 | 5.00 | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.00 | 24.00 |

MACHINERY FIXED AND VARIABLE COSTS PER ACRE

| MACHINE | CODE | SIZE | PURCHASE PRICE | YEARS OWNED | ANNUAL FIXED COST PER ACRE | | | | VARIABLE COST PER ACRE | | | | HRS PER ACRE | |
|------------------|------|-------|----------------|-------------|----------------------------|--------|--------|----------|------------------------|--------|-------|---------|--------------|--------|
| | | | | | HOURS USED | DEPR. | INTER. | TAX RINS | TOTAL | FUEL | LUBE | REPAIRS | | TOTAL |
| TRACTOR 60 HP | 3 | 60.0 | 9410. | 10. | 500. | 2.329 | 1.713 | 0.743 | 4.785 | 2.276 | 0.341 | 0.978 | 3.595 | 1.757 |
| TRACTOR 105 HP | 6 | 105.0 | 18935. | 10. | 500. | 6.816 | 5.012 | 2.174 | 14.002 | 5.793 | 0.869 | 2.860 | 9.522 | 2.554 |
| CRAWLER 85 HP | 11 | 85.0 | 55200. | 10. | 400. | 19.271 | 14.171 | 6.147 | 39.590 | 4.245 | 0.637 | 2.976 | 7.858 | 1.982 |
| IRR PUMP 75 HP* | 22 | 2.0 | 11388. | 25. | 3200. | 1.564 | 1.853 | 0.915 | 4.331 | 24.053 | 0.361 | 0.875 | 25.289 | 12.000 |
| CHISEL | 42 | 10.0 | 2139. | 10. | 66. | 1.726 | 0.987 | 0.459 | 3.172 | 0.000 | 0.004 | 0.217 | 0.222 | 0.647 |
| CULTIVATOR 6ROW | 53 | 15.0 | 2900. | 10. | 155. | 1.586 | 0.907 | 0.422 | 2.915 | 0.000 | 0.018 | 0.896 | 0.914 | 1.030 |
| DISK OFFSET HYDR | 63 | 14.0 | 4260. | 10. | 75. | 3.131 | 1.790 | 0.832 | 5.754 | 0.000 | 0.016 | 0.780 | 0.796 | 0.670 |
| FERTILIZER APLIC | 70 | 10.0 | 713. | 5. | 130. | 0.716 | 0.268 | 0.116 | 1.100 | 0.000 | 0.003 | 0.163 | 0.166 | 0.938 |
| LISTER 6 ROW | 83 | 15.0 | 2220. | 10. | 38. | 0.830 | 0.475 | 0.221 | 1.526 | 0.000 | 0.001 | 0.059 | 0.061 | 0.173 |
| LAND PLANE | 85 | 12.0 | 10200. | 10. | 143. | 2.848 | 1.629 | 0.757 | 5.233 | 0.000 | 0.015 | 0.759 | 0.774 | 0.485 |
| SPRAYFR PTO | 93 | 35.0 | 1897. | 10. | 50. | 2.059 | 1.178 | 0.547 | 3.784 | 0.000 | 0.003 | 0.138 | 0.141 | 0.659 |
| PLANTER 6 ROW | 110 | 5.0 | 3300. | 10. | 90. | 3.379 | 1.432 | 0.898 | 6.209 | 0.000 | 0.042 | 2.124 | 2.167 | 1.119 |
| WELL + FURROW* | 132 | 2.0 | 38250. | 10. | 5000. | 6.468 | 4.757 | 2.063 | 13.288 | 0.000 | 0.069 | 3.451 | 3.520 | 12.000 |

TOTAL: UC Cooperative Extension 160812. 52.72 36.67 16.30 105.69 36.37 2.38 16.28 55.03