

Cooperative Extension
University of California
Santa Barbara County

BUSH BEANS FOR SEED PRODUCTION
1977 - Cost Analysis Work Sheet

Warren E. Bendixen
Edward A. Yeary

BUSH BEAN YIELD - 2000 lbs/acre
(clean basis)

Operating Costs/Hour

| | Fuel & Repair | Deprec. | Interest | Total | |
|--|--------------------------|---------|----------|--------|---------|
| Class I Equipment Operator - \$5.60* total/hour | CT-Crawler tractor 80 hp | \$7.10 | \$3.08 | \$2.30 | \$12.48 |
| Class II Equipment Operator - \$5.50* total/hour | WT-Wheel tractor 60 hp | 2.86 | 1.90 | .95 | 5.71 |
| Other Labor - \$4.52* total/hour | SWT-Wheel tractor 40 hp | 2.16 | 1.60 | .80 | 4.56 |

| Operations | Trac- tor | **Acres /hour | Hours /acre | Labor | Fuel & Repairs | Materials | | Cost/Acre | |
|--|----------------------------------|------------------|----------------|----------------|-------------------|---|----------------|-----------------|-----------------|
| | | | | | | Kind and Amount | Costs | Sample | Yours |
| <u>Cultural Costs</u> | | Ac. | Hr. | \$ | \$ | | \$ | \$ | |
| Disc 2x | CT | 4.0 | .50 | 2.75 | 4.53 | | | | 7.28 |
| Chisel | CT | 2.0 | .50 | 2.75 | 4.05 | | | | 6.80 |
| Landplane | CT | 2.0 | .50 | 2.75 | 4.55 | | | | 7.30 |
| Disc 1x | CT | 4.0 | .25 | 1.38 | 2.51 | | | | 3.89 |
| Harrow 2x | CT | 10.0 | .20 | 1.10 | 1.64 | | | | 2.74 |
| List & Fertilize-custom | | | | | | 40 lb N;50 lb P ₂ O ₅ ; 50 lb K ₂ O App. | 5.50 | 36.30 | 36.30 |
| Weed control-custom | | | | | | Herbicide and application | | 19.50 | 19.50 |
| Plant | WT | 3.3 | .30 | 1.68 | 1.58 | Seed: 125 lbs @ 35¢ | | 43.75 | 47.01 |
| Cultivate 4x | SWT | 2.0 | 2.00 | 11.00 | 6.84 | | | | 17.84 |
| Fungicide-custom | | | | | | Material and Application \$20 | | 20.00 | 20.00 |
| Irrigate 5x | | | 4.00 | 18.08 | 7.00 | Water: 1.8 ac. ft. @ \$14 | | 25.20 | 50.28 |
| Hand weed,pull nightshade | | | 9.00 | 40.68 | | | | | 40.68 |
| Total Cultural Costs | | | 17.25 | \$82.17 | \$32.70 | | | \$144.75 | \$259.62 |
| <u>Harvesting Costs</u> | | | | | | | | | |
| Cutting | SWT | 3.3 | .30 | 1.65 | .95 | | | | 2.60 |
| Windrow | SWT | 3.3 | .30 | 1.65 | .83 | | | | 2.48 |
| Hand labor | | 1.0 | 1.00 | 4.52 | | | | | 4.52 |
| Threshing-custom | | | | | | \$2.00 cwt field run;20% over clean wt. | 48.00 | | 48.00 |
| Hauling-custom | | | | | | .25 cwt field run;20% over clean wt. | 6.00 | | 6.00 |
| Total Harvest Costs | | | 1.60 | \$ 7.82 | \$ 1.78 | | | \$54.00 | \$ 63.60 |
| Rent - 60% of \$200 | | | | | | | | | \$120.00 |
| Business and Miscellaneous Costs - 60% of cultural, harvest costs, and rent | | | | | | | | | \$ 26.60 |
| <u>Depreciation and Interest</u> | | | | | | Depreciation | Interest 8% | | |
| | Tractors | | | | | \$ 10.73 | \$ 6.88 | | |
| | Other equipment \$180-10 yr.-60% | | | | | 10.80 | 4.32 | | |
| Total Depreciation & Interest | | | | | | \$ 21.53 | \$11.20 | | \$ 32.73 |
| Total Cost per Acre | | | | | | | | | \$502.55 |
| Total Cost per Cwt (Cleaned basis) | | | | | | | | | 25.13 |

*Social Security, Workman's Compensation, and all other payroll costs included.

**The number of acres per hour for each time the operation is done.

BUSH BEANS FOR SEED PRODUCTION - PROFITS AS AFFECTED BY YIELD AND PRICE

| YIELD Cwt/Acre | Total Production Costs/Acre | Bean - Value per cwt. | | | | | | | |
|-----------------------------------|-----------------------------------|-----------------------|----------|----------|----------|----------|----------|----------|----------|
| | | \$ 25.00 | \$ 30.00 | \$ 35.00 | \$ 40.00 | \$ 45.00 | \$ 50.00 | \$ 55.00 | \$ 60.00 |
| <u>\$ Profit or Loss Per Acre</u> | | | | | | | | | |
| 14 | \$485.39 | -135.39 | - 65.39 | + 4.61 | 74.61 | 144.61 | 214.61 | 284.61 | 354.61 |
| 16 | 491.11 | - 91.11 | - 11.11 | + 68.89 | 148.89 | 228.89 | 308.89 | 388.89 | 468.89 |
| 18 | 496.83 | - 46.83 | + 43.17 | 133.17 | 223.17 | 313.17 | 403.17 | 493.17 | 583.17 |
| 20 | 502.55 | - 2.55 | + 97.45 | 197.45 | 297.45 | 397.45 | 497.45 | 597.45 | 697.45 |
| 22 | 508.27 | 41.73 | 151.73 | 261.73 | 371.73 | 481.73 | 591.73 | 701.73 | 811.73 |
| 24 | 513.99 | 86.01 | 206.01 | 326.01 | 446.01 | 566.01 | 686.01 | 806.01 | 926.01 |
| 26 | 519.71 | 130.29 | 260.29 | 390.29 | 520.29 | 650.29 | 780.29 | 910.29 | 1040.29 |
| 28 | 525.43 | 174.57 | 314.57 | 454.57 | 594.57 | 734.57 | 874.57 | 1014.57 | 1154.57 |
| 30 | 531.15 | 218.85 | 368.85 | 518.85 | 668.85 | 818.85 | 968.85 | 1118.85 | 1268.85 |
| 32 | 536.87 | 263.13 | 423.13 | 583.13 | 743.13 | 903.13 | 1063.13 | 1223.13 | 1383.13 |

Cooperative Extension
University of California
Santa Barbara County

WEB:EAY:jm C:200
June 1977