

1956 SAMPLE INPUTS AND COSTS FOR SNAP BEANS (BLUE LAKES) FOR PROCESSING
Watsonville Area - Santa Cruz County

Based on a Yield of 10 tons per Acre

	Man	45 h.p.	Wheel	1½ ton	Cost	Cost
	Labor	T.trac.	Tractors			
	Hours per Acre				Acres	Ton
Land preparation total	4.0	4.0			\$19.60	
Preplant irrigation & preparation	2.5	.5	.5		5.45	
Planting - 2 men (planter \$1.00 A)	2.0		1.0		5.00	
Prestake cultivation, 2 times	1.0		1.0		2.50	
Irrigate 6 times @ 2 hrs.	12.0				12.00	
Staking - 7 men (Tractor Staker \$10)	7.0			1.0	21.00	
Anchor post work & patching	2.0				2.00	
Stringing & stringer \$5.00	7.5				13.75	
Cultivation after staking	6.0		6.0		18.00	
Fertilizer, 1 side dressing (contract)					1.50	
Hoe, weed, train vines	5.0				5.00	
Pest control - dust 2X by plane (contract)					6.00	
Misc. supervision, hauling, etc.	6.0		.5	1.0	12.75	
Total Cultural Labor	55.0	4.5	9.0	2.0	124.55	\$12.45
Picking 2¢ pound plus ½¢ contractor's supervision					500.00	
Extra supervision & misc.	5.0				7.50	
Labor procurement overhead					37.50	
Hauling by buyer					- -	
Total Harvesting					545.00	54.50
Post harvest - Remove wire	2.0		1.0		4.00	
Remove & store stakes	12.0			3.0	21.00	
Disk once	.5			.5	2.45	
Total Labor					697.00	69.70
Irrigation water - power to pump 18 to 20 acre inches @ 38¢					7.60	
Seed 40 lbs. @ 32¢					12.80	
Fertilizers - 400 lb. 16-20 @ \$16, 50 lb. Ammonia \$5.50, Manure 2.5T \$20					41.50	
Stake rent 800 @ 2¢					16.00	
Wire cost \$24/A, 3 yrs. use (\$8 annually) plus staples & sleeves \$2					10.00	
String and twine					35.00	
Dusts 50 lbs. DDT/S 50 lbs. TEPP or similar					16.00	
Total material cost					138.90	13.89
Total labor and material cost					835.90	83.59
General expense, office, etc. 5% of total labor & material costs					41.80	
County Taxes					22.00	
Comp. ins. \$1 plus repairs \$2 except tractors & truck					3.00	
Total cash overhead costs					66.80	6.68
Total cash costs					902.70	90.27
Investment	Orig. cost	Av. Value	5% Int.	Depre- ciation		
overhead based on 100 A farm with 25 acres in beans		Dollars per Acre				
Building for equipment	20.00	10.00	.50	1.00		
Irrigation well, pump, pipe	92.00	46.00	2.30	4.20		
Tillage and misc. equipment	32.00	16.00	.80	1.90		
Land	1500.00	1500.00	75.00	-		
Total investment	1644.00	1572.00				
Total Interest & Depreciation			78.60	7.10	85.70	8.57
TOTAL ALL COSTS 10 TON YIELD					988.40	98.84
TOTAL ALL COSTS 9 Ton Yield					932.26	103.58
TOTAL ALL COSTS 8 Ton Yield					876.12	109.52

Hourly Labor Costs were: Tractor driver \$1.50; other Labor \$1.00. Hourly Equipment Costs including depreciation and overhead were: 45 h.p. Track tractor \$3.40, 25 h.p. wheel or narrow tractor \$1.50, 1½ Ton truck \$3.00.

NOTE: The above costs are based on the average of labor & equipment used by 6 growers, who cooperated in this study.

Charles B. Atlee - Farm Advisor
Agricultural Extension Service
Santa Cruz County

Arthur Shultis
Extension Economist
Farm Management, Berkeley

SNAP BEANS (BLUE LAKES) FOR PROCESSING
Santa Cruz County

Among the irrigated crops of Santa Cruz County, green beans for processing now occupy an important position in the Pajaro Valley. Acreages have increased from 60 acres in 1953 to an estimated 1,000 acres in 1959. The main reasons for this increase is the improved quality and yield in the cooler climate of Santa Cruz County. Beans arrive at the processing plant without heating. Good water and soil and a dependable labor supply are added advantages.

Requirements: - Green beans make their best growth on deep fertile soils. They require fairly warm daytime temperatures and a frost free growing season.

Irrigation: - An abundant supply of irrigation water is required for this crop. A minimum of five irrigations is needed with a total application of at least 18 acre inches. Green beans need water of good quality.

Cultural Practice: - Green beans are seeded from May 1st till June 30th. Distance between rows varies, but 50-54 inches is common. Time and frequency of cultivation depends on the amount of weeds, but usually one cultivation before staking and three after staking is adequate. Picking begins the first of August. Five pickings are common, usually 4-5 days apart. When the plants have become established, stakes are inserted every 15 feet in the row and a wire-twine trellis is attached to the stakes for support of the growing vines.

Fertilizer is side dressed when plants are 8-10" high and anhydrous ammonia is applied to the water after the first picking.

Varieties: - The variety grown is Blue Lakes, but the most accepted strain for use in the Pajaro Valley is the F.M.1. It is a stringless, smooth, full, uniformly shaped bean. The color is consistent throughout and the bean is well adapted for both freezing and canning. Another strain being grown this year is FM-1k.

Diseases: - Mildew, rhizoctonia and fusarium are the major bean diseases in Santa Cruz County. Rhizoctonia becomes a problem in soils which are planted too early or when they are too wet. Fusarium is more active during warm weather. Seed treatment with Arasan is helpful. Mildew can usually be controlled with applications of sulfur combined with the insecticide.

Pests: - Black aphid, woolly caterpillars, Lygus bug, and white fly appear to be the most common pests. Fair control of caterpillars, Lygus bug, is obtained by applying D.D.T. before beans set. Aphid and white fly are controlled with later applications of T.E.P.P. and sulfur. Seed treatment with lindane is helpful in controlling soil insects and the seed corn maggot.

Yields: - The State average yield has increased from 6.1 tons per acre (average - 1945-1954) to 8.3 tons per acre in 1956. Locally, yields of 14 tons have been reported, but the average yield appears to be close to 10 tons per acre. Yields vary considerably from farm to farm and year to year.