

July 1954

Sample Inputs and Costs in Garlic Production
San Benito County, with a Yield of 7500 Pounds per Acre

	Man	40 h.p.	30 h.p.	1½ ton	Cost per acre	Cost per cwt.
	labor	tractor	tractor	truck		
Hours per Acre						
Land preparation and shape beds	4.0	3.8		.1	14.53	.19
Seed preparation, contract					36.00	.48
Plant by machine, and mach. rent \$1 or plant by hand, is better	2.0		1.0		4.60 (80.00)	.06
Fertilize once, contract					1.50	.02
Cultivate 4 times	3.0		3.0		8.10	.11
Irrigate 2 times, and prepare	9.2	0.2			8.39	.11
Weed spray	.4		.3		.92	.01
Hand hoeing and weeding	50.0				42.50	.58
Pest control, dust 2, contract					3.50	.04
Miscellaneous other	2.0	0.4	.5	.5	5.09	.07
Total cultural labor	70.6	4.4	4.8	.6	125.13	1.67
Lift	1.0		1.0		2.70	.03
Pull, top and sack	62.0				56.20	.75
Haul in	2.4			.8	4.32	.06
Total harvest	65.4	--	1.0	.8	63.22	.84
Total labor	136.0	4.4	5.8	1.4	188.35	2.51
Irrigation water, power to pump 8 acre inches @ 35¢					2.80	.04
Seed, rough garlic 1200# to make 800# of pieces @ 20¢					240.00	3.20
Fertilizer - 400 lb. com'1 @ \$75 T.					15.00	.20
Selective weed spray					7.00	.09
Dust for pest control 40 lb. @ 15¢					6.00	.08
Used sacks for harvesting 80 @ 7½¢					6.00	.08
Total material cost					276.80	3.69
Total labor and material cost					465.15	6.20
General cash overhead expense, est. @ 5% of above					23.26	.31
County taxes on land for the year					9.00	.12
Repairs to equipment, except tractors and truck					2.00	.02
Insurance, compensation \$3.00 fire .50					3.50	.05
Total cash overhead cost					37.76	.50
Total cash costs					502.91	6.70
Investment overhead based on a 100 acre farm	Orig. cost	Av. value	5% int.	Deprec- iation		
	Dollars an acre					
General bldg. and improvements	20.	10.	.50	.50		
Irrigation well, pump, pipeline	86.	43.	2.15	3.43		
Tillage and cultiv. equipment	36.	18.	.90	2.44		
Miscel. small tools etc.	10.	5.	.25	1.00		
Land	800.	800.	40.00	--		
Total investment	952.	876.				
Total depreciation				7.37	7.37	.10
Total cash costs and depreciation					510.28	6.80
Interest on investment			43.80		43.80	.59
Total all costs					554.08	7.39

Labor costs above are figured at the following hourly rates: man labor \$1.10, .90, .85, 40-horsepower track tractor \$2.60, 30-horsepower wheel tractor \$1.60, 1½ ton truck \$2.50. Tractor and truck rates include repairs and overhead as well as operating costs.

GROWING GARLIC IN SAN BENITO COUNTY

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Garlic is one of the most important high value vegetable crops in San Benito County, and this county is one of the three major garlic producing counties in California. W. B. Saunders, San Benito County Agricultural Commissioner, reports 615 acres with a gross value of crop of \$693,000.00 in 1952, and 640 acres worth \$629,300.00 in 1953.

Cultural Requirements: Garlic is grown mostly in the Central Coast area of California, where a mild winter climate prevails. Planting dates extend from early December to early February. The harvest is usually completed by the middle of August. Silt loam soils produce the finest garlic. Sandy soils are usually avoided because of difficulties in maintaining favorable soil moisture. On the other hand, the heavy clay or adobe soils produce inferior garlic, with stained covering and often misshapen bulbs.

Winter rains furnish moisture for the early growth, but usually two irrigations are applied during the late spring and early summer. Since the crop is shallow rooted, four inches of irrigation water is usually sufficient for each irrigation.

Planting: Most of the garlic is now planted with machines. This results in somewhat lower yields than hand planting, but reduces planting costs materially. Labor for hand planting is not now readily available. Hand planted garlic is usually of better quality, being smoother. A premium of one cent a pound for better quality would offset the added cost of hand labor. Also an increase of eight sacks per acre at prevailing prices would pay for hand planting.

Varieties: The Early or Mexican variety has relatively few large, soft cloves. It is not a good keeper and must be marketed before January following the harvest. The Late or Italian garlic with many small cloves is the main crop. Early garlic is grown on land where garlic nematodes are a problem.

Pest Control: The most serious pest to growing garlic is thrips. Dusts or sprays must be applied, usually twice during the season, to keep the pests under control. Stem nematode infestation is serious, and soils on which the nematodes are established cannot be successfully used for garlic production more frequently than once in five years. Early garlic is resistant to nematode attacks. White rot, on casual examination, resembles nematode infestation, but is caused by a soil fungus, *Sclerotium cepivorum*. There is no practical control for this disease, and garlic should not be planted where this disease is extensive. Pinkroot is another common disease that frequently results in smaller bulbs and early maturity. There is no control for this disease.

Harvesting: When garlic is mature and the tops have dried, the crop is "lifted" from the ground, is placed in piles for curing, and is then trimmed by hand labor. Garlic grown for market must be graded and placed in open mesh bags. Garlic for dehydrators is sacked in the field following topping and delivered direct to dehydrators.

Production Costs: On the other side of this sheet is a sample set of production costs based on local observation and inquiry and on an assumed set of conditions as to size of farm, water, cost, etc. These are not represented as average costs, but are believed fairly typical for 1954. Actual costs vary widely from farm to farm and year to year. This sample schedule may be used as a guide in estimating costs for an individual operation.