



A SPARAGUS
PRODUCTION
COSTS IN
SAN JOAQUIN
COUNTY

SEDIMENTARY SOIL

7-FOOT BEDS

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Asparagus

GENERAL REMARKS

This estimate of production costs of asparagus was prepared from information supplied by a group of representative asparagus growers in San Joaquin County. These growers felt the need of preparing a cost estimate as a guide for growers in making management decisions in relation to their asparagus operations.

In the preparation of these figures, equipment was figured on a new cost basis. Harvest equipment was depreciated over the harvest life of the bed. Some growers who purchase used equipment, or who are able to use harvest equipment on successive plantings, will have a lower cost on these items. Also, farm operators usually perform some of the labor items which are charged in these data.

Operations vary widely among asparagus growers. In this study we attempted to include operations that most growers practice. Individual growers should examine these figures and make changes where their individual cost situations differ to make a more accurate estimate of their own operation.

The length of life of an asparagus bed is quite important in a cost analysis such as this and has considerable influence on the total cost of production. In the four studies, the following length of bed life was used: 5-foot row in peat - 8 years; 5-foot row in sedimentary-10 years; 7-foot row in peat - 10 years; 7-foot row in sedimentary-12 years. A tabulation made on the average age of beds (6 to 8-foot rows) at time of plowing out from the 1958 and 1959 Asparagus Surveys showed an average of 12 years in peat soil and 15 years in sedimentary soil. It was the general opinion of the growers, however, that this age of bed was unrealistic in face of present production costs. Production of asparagus beds falls off rapidly with increased age and the life of bed figures used in these studies was felt to be most realistic under present conditions.

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COSTS OF ESTABLISHING ASPARAGUS ON SEDIMENTARY SOIL - FIRST YEAR

7-FT. BEDS, 12-INCH ROOT SPACING - SAN JOAQUIN COUNTY

Based on a 300-acre operation
a 12-year life of bed with
10-years of cutting

Operation	CASH AND LABOR COSTS PER ACRE (1)					Total
	Hours	Labor	Fuel	Materials		
	per Acre	@1.25	and			
Subsoil	:	:	:	Contract	\$7.00	\$ 7.00
Disc 1 x	.3	.38	.81			1.19
Make and remove levee	:	:	:	Contract	3.00	3.00
Make drain ditches	:	:	:	Contract	1.50	1.50
Flood	.5	.63		Water \$1.25*		1.88
Disc 1 x	.3	.38	.81			1.19
Flow	1.0	1.25	2.70			3.95
Disc 1 x	.3	.38	.81			1.19
Land plane 2 x	1.0	1.25	2.40	Rent of plane	1.00	4.65
Mark and furrow	.43	.54	1.09			1.63
Spread fertilizer	:	:	:	Contract-mat'ls.app.		
					32.00	32.00
Plant	:	:	:	Contract (2)		70.25
Cover plants	.21	.27	.27			.54
Pack row	.11	.14	.11			.25
Irrigate 3 x	5.00	6.25				6.25
Weed control	:	:	:	Contract (3)	7.00	7.00
Cultivate and cover weeds 3 x	1.1	1.34	1.29			2.63
Spray irrigation ditches	.5	.63	.58	Chemicals	.79	2.00
Hoe 3 x	:	:	:	Contract	35.00	35.00
Furrow out centers 2 x	.7	.89	1.82			2.71
Irrigate 3 x	5.00	6.25		Water and drainage	5.00*	11.25
Cultivate 4 x	1.43	1.79	1.71			3.50
Chop fern	.36	.45	.54			.99
Disc 1 x	.43	.54	1.15			1.69
Plow-out charge	:	:	:	Contract (4)*		1.10
Miscellaneous (5)	:	:	:			10.22
TOTAL CASH AND LABOR COST:	:	:	:			\$ 214.56

Investment (8)	Per Acre	Annual Cost		
		Depreciation	Interest	
Equipment	\$115.58	\$ 16.51	\$ 3.46	\$ 19.97

TOTAL COST PER ACRE : : : : **\$ 234.53**

*Landlord pays equal amount.

COSTS OF ESTABLISHING ASPARAGUS ON SEDIMENTARY SOIL - SECOND YEAR

7-FT. BEDS, 12-INCH ROOT SPACING - SAN JOAQUIN COUNTY

Based on 300-acre operation,
a 12-year life of bed with
10 years of cutting

Operation	: CASH AND LABOR COSTS PER ACRE (1):					
	Hours	Labor	Fuel	Materials	Total	
	per	@ 1.25	and			
	Acres	/Hour	Repairs			
Winter discing	2 x	.43	.54	1.15		\$ 1.69
Summer discing	4 x	.86	1.08	2.31		3.39
Hoe	2 x				Contract \$20.00	20.00
Mow ditches		.2	.25	.25		.50
Spray irrigation ditches		.5	.63	.58	Chemicals .79	2.00
Furrow out	2 x	.71	.89	1.82		2.71
Irrigate	3 x	5.0	6.25		Water and drainage	
					3.50	9.75
Cultivate	4 x	1.43	1.79	1.71		3.50
Chop fern		.36	.45	.54		.99
Disc	2 x	.43	.54	1.15		1.69
Chisel		.36	.45	.96		1.41
Plow-out charge					Contract (4)	1.32
Miscellaneous (5)						2.45
TOTAL CASH AND LABOR COST						\$51.40

Investment (8)	Per Acre	Annual Cost		
		Depreciation	Interest	
Equipment	\$115.58	\$ 16.51	\$3.46	\$ 19.97

TOTAL COST PER ACRE : : : : \$ 71.37

Some growers harvest for a short time during second year. Normally, income from this asparagus is only sufficient to cover costs of harvesting.

FIRST YEAR COST : : : : \$234.53

TOTAL COST FIRST 2 YEARS : : : : \$305.90

ANNUAL COSTS OF A PRODUCING ASPARAGUS BED

7-FT. BEDS, SEDIMENTARY SOIL, 12-INCH ROOT SPACING, 3RD TO 12TH YEAR

Operation	: CASH & LABOR COSTS PER ACRE (1) :					Total
	Hours	Labor	Fuel	Materials		
	: per Acre	: @ 1.25 /Hour	: and : Repairs:			
CULTURAL						
Disc.	3 x	.64	.81	1.74		\$ 2.55
Ridge		.21	.27	.58		.85
Roll		.07	.09	.11		.20
Reridge		.86	1.08	2.31		3.39
Work centers		.86	1.08	2.31		3.39
Split ridges		.43	.54	1.15		1.69
Fertilize					Contract-app.	
					mat'ls. 7.00	7.00
Hoe					Contract 10.00	10.00
Furrow out		.71	.89	1.82		2.71
Irrigate	2 x	1.21	1.52		Water & drainage	
					2.50	4.02
Cultivate		.71	.89	1.82		2.71
Chop fern		.36	.45	.54		.99
Plow-out charge					Contract (4)	1.32
Miscellaneous (5)						2.04
Share rent (6)					\$90.00	90.00
TOTAL CULTURAL COSTS						\$ 132.86

<u>HARVEST (90 days, 60-man crew Nationals) (7)</u>						
<u>Market (1,000 lbs.)</u>						
Cut, sled, pack, etc.			:45.54		: 33 crates @1.38:	45.54
Crates					: 33 crates @50¢	16.50
<u>Cannery Green (2,000 lbs.)</u>						
Cut and sled			:75.00		: 2,000 lbs. @	
					: 3.75 per 100#	75.00
Rack, wash and box			: 9.00		: 2,000 lbs. @	
					: .45 per 100#	9.00
Field hauling	: 3.0	: 3.75		4.35		8.10
Sled operation (3 sleds)	: 9.0			7.20		7.20
Housing, supervision, transportation, etc. of labor (8)						
					33.75	33.75
TOTAL HARVEST COSTS						\$ 195.09
TOTAL CULTURAL AND HARVEST COSTS						\$ 327.95

Investment (9)	Per Acre	Annual Cost		
		Depreciation	Interest	
Cultural equipment	\$115.58	\$ 16.51	\$ 3.46	
Harvest equipment	53.60	5.36	1.61	
Labor camp	40.00	4.00	1.20	
Packing house	35.33	3.53	1.06	
Cost first 2 years	<u>305.90</u>	<u>30.59</u>	<u>9.17</u>	
Total		59.99	16.50	\$ 76.49
TOTAL COST PER ACRE				\$ 404.44
Cost per lb. @ 3,000 lb. yield				13.48

Cost per lb. @ 2,000 lb. yield - 17.80¢

Cost per lb. @ 4,000 lb. yield - 11.31¢

NOTES

- (1) All labor \$1.25 per hour, 60 HP tracklayer diesel tractor at \$2.40 per hour, 40 HP tracklayer diesel tractor at \$1.60 per hour, 40 HP diesel wheel tractor at \$1.25 per hour (fuel, repairs and other cash costs).
- (2) Planting \$15.00 per acre, 6,500 roots 12-inch spacing in row, \$8.50 per thousand which includes cost of delivery and treatment with fungicide.
- (3) Material 2 lbs. per acre CMU (7.00) application, \$2.50 per acre.
- (4) Plow-out charge \$22.50 per mile, 1.18 miles per acre of 5-ft. rows or \$26.55 per acre charge. Grower pays 1/2 which is prorated over the 12-yr. life of bed.
- (5) Miscellaneous costs are computed at 5% of the total cash and labor costs not including rent. This includes miscellaneous repairs, office, Social Security and Workmen's Compensation.
- (6) Share rent figured at 25 per cent of a 3,000 pound yield at 12¢ per lb.
- (7) Harvest labor rates taken from 1960 Dept. of Employment Agri. Wage Survey.
- (8) Housing, supervision, transportation, etc., of labor - (60-man crew).

Camp supervisor \$12.50 per day (90 days) - - - - -	\$1,125.00
Subsistence above \$1.75 paid by men 25¢ per day per man - -	1,350.00
Transportation to field (2 buses at \$25.00 per day) - - - -	2,250.00
Field supervisors (2 @ \$30.00 per day) - - - - -	2,640.00
Transportation to town (12 times @ \$25.00) - - - - -	300.00
Recruiting and transportation (\$33.00 per man) - - - - -	1,980.00
Blankets and mattresses (\$5.00 per man per year) - - - - -	300.00
Camp lights and fuel (\$1.00 per month per man) - - - - -	180.00

Total \$10,125.00
Per acre charge \$ 33.75

- (9) Investment includes -

<u>Cultural equipment</u>	<u>Price</u>	<u>Per cent charge to asparagus operation</u>
1 40 HP diesel tracklayer tractor \$	5,625	75%
1 tool bar and attachments	1,600	75%
2 40 HP diesel wheel tractor	15,000	100%
1 3-section smizer roller	1,000	100%
3 rotary hoes	1,000	100%
3 pair cultipackers	600	100%
1 roto chopper	850	100%
3 5-ft. discs	1,500	100%
1 2-ton truck	3,500	100%
1 mower	500	100%
1 spray rig	1,000	100%
1 pick-up truck	2,500	100%
Total	\$34,675	

Harvest equipment

Labor camp and furnishings (60 men)	\$12,000
Packing shed	10,600
Washer, buttsaw, press	5,000
Pump and well	3,000
Butt grinder	900
40 sleds	2,080
3 sled tractors	5,100
Total	\$38,680

Cultural equipment was given a 7-year life, harvest equipment a 10-year life. (Harvest life of the bed). Interest is figured at 6 per cent on 1/2 the original value. Permanent irrigation equipment is considered to be furnished by landlord in this study.