

ASPARAGUS PRODUCTION COSTS IN SAN JOAQUIN COUNTY

PEAT SOIL

7-FOOT BEDS

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Crop Year

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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 this study of a 7 ft. bed on peat soil, a 10-year length of life was used. 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. A second tabulation made from the 1962 and 1963 Asparagus Surveys showed an average life of 10 years for peat soil and 12 years for sediment soil. Production of asparagus beds falls off rapidly with increased age.

In face of the present labor situation, the economical life of an asparagus bed may be quite different than it has been in the past. Figures in this study should be adjusted to fit the changing situation.

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COSTS OF ESTABLISHING ASPARAGUS ON PEAT SOIL - FIRST YEAR

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

Based on 300-acre operation, a 10-year
life of bed with 8 years of cutting.
See notes on page 6 for explanation of
various costs.

	Man labor (1) per acre		Cash costs per acre		Total per acre
	Hours	Cost	Equip- ment (1)	Materials and other costs	
<u>PRE-HARVEST CASH COSTS</u>					
Ditch cleaning				Contract \$4.00	\$ 4.00
Spread lime				Contract 10 tons @ 3.00 30.00	30.00
Plow	.7	1.23	2.04		3.27
Flood	1.0	1.50			1.50
Disc 3 X	.9	1.58	1.80	Rent of disc 1.50	4.88
Land plane 2 X	1.0	1.75	2.00	Rent of plane 1.00	4.75
Mark and furrow	.4	.70	1.00		1.70
Fertilize				Contract-applied 32.00	32.00
Plant				Contract (2) 132.00	132.00
Cover plants	.2	.35	.40		.75
Pack row	.1	.17	.10		.27
Weed control				Contract (3) 14.75	14.75
Cultivate and cover weeds 8 X	2.8	4.90	4.20		9.10
Mow ditch weeds	.2	.35	.25		.60
Hoe 3 X				Contract 50.00	50.00
Irrigation	1.0	1.50			1.50
Chop fern	.3	.53	.48		1.01
Disc	.2	.35	.52		.87
Flow-out charge				Contract (4) 1.33	1.33
Pre-Harvest Costs	8.80	14.91	12.79	266.58	\$294.28
Cash Overhead (office, accounting, auto, insurance, etc.) Management					14.71 5.00
TOTAL CASH COSTS					\$313.99
	<u>Investment per acre</u>	<u>Depreciation</u>	<u>Interest (6%)</u>		
Equipment	104.17	10.42	3.13		
Total	104.17	10.42	3.13		
Total Depreciation					10.42
Total Interest on Investment					3.13
TOTAL COST OF PRODUCTION PER ACRE					\$327.54

COSTS OF ESTABLISHING ASPARAGUS ON PEAT SOIL - SECOND YEAR

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

Based on 300-acre operation,
a 10-year life of bed with 8
years of cutting

	Man labor (1)		Cash costs per acre		Total per acre
	per acre Hours	Cost	Equip-ment (1)	Materials and other costs	
PRE-HARVEST CASH COSTS					
Ditch cleaning				Contract \$ 4.00	\$ 4.00
Spring discing 2 X	.4	.70	1.04		1.74
Summer discing 4 X	.8	1.40	.96		2.36
Hoe 2 X				Contract 30.00	30.00
Irrigate	.5	.75			.75
Mow ditch weeds	.2	.35	.25		.60
Chop fern	.3	.53	.48		1.01
Disc	.2	.35	.32		.67
Flow-out charge				Contract (4) 1.33	1.33
Pre-Harvest Costs	2.4	4.08	3.05	35.33	\$42.46
Cash overhead (office, accounting, auto, insurance, etc.)					2.12
Management					5.00
TOTAL CASH COSTS					\$49.58
	<u>Investment per acre</u>	<u>Depreciation</u>	<u>Interest (6%)</u>		
Equipment	104.17	10.42	3.13		
Total	104.17	10.42	3.13		
Total Depreciation					10.42
Total Interest on Investment					3.13
TOTAL COST OF PRODUCTION PER ACRE SECOND YEAR					63.13
TOTAL COST OF PRODUCTION PER ACRE FIRST YEAR					327.54
TOTAL COST OF PRODUCTION PER ACRE FIRST TWO YEARS					\$390.67

ANNUAL COSTS OF A PRODUCING ASPARAGUS BED

7-FT. BEDS, PEAT SOIL, 7-INCH ROOT SPACING, 3RD TO 10TH YEAR

	Man labor (1) per acre		Cash costs per acre		Total per acre
	Hours	Cost	Equip- ment(1)	Materials and other costs	
<u>PRE-HARVEST CASH COSTS</u>					
Ditch cleaning				Contract	\$ 2.00
Flood	1.0	1.50			\$ 2.00
Disc 2 X	.4	.70	.48		1.50
Work centers 4 X	.8	1.40	.96		1.18
Split ridge for white	.4	.70	.48		2.36
Inter-row plant				Grower's share	2.00
Re-ridge 3 X	.6	1.05	.72		2.00
Fertilize (alt. yrs.)				Cont.-app.	7.00
Split ridge for fern	.4	.70	1.04		1.77
Work centers 4 X	.8	1.40	.96		7.00
Irrigate	.3	.45			1.74
Chop fern	.3	.53	.48		2.36
Disc	.2	.35	.52		.45
Plow-out charge				Contract	1.33
					1.33
Pre-Harvest Costs	5.2	8.78	5.64		12.33
					\$26.75

ANNUAL COSTS, 3-10 YEAR (Cont'd)

	Man labor per acre (1)		Cash costs per acre		Total per Acre
	Hours	Cost	Equip-ment (1)	Materials and other costs	
HARVESTING: (3000 lbs. yield, 90 days 60-man crew, Nationals)					
<u>Market</u> (600 lbs.)					
Cut, sled, pack, etc.		40.00		20 crates @ 2.00 (7)	\$ 40.00
Crates				20 crates @ .52	10.40
<u>Cannery green</u> (400 lbs.)					
Cut and sled		23.00		400 lbs. @ 5.75 per C#	23.00
Rack, wash and box		2.20		400 lbs. @ .55 per C#	2.20
<u>Cannery white</u> (2000 lbs.)					
Cut and sled		130.00		2000 lbs. @ 6.50 per C#	130.00
Wash, rack and box		9.00		2000 lbs. @ .45 per C#	9.00
Field hauling	3	5.25	6.00		11.25
Sled operation (3 sleds)	9		8.10		8.10
Housing, supervision transportation, etc. of labor (8)					48.75
TOTAL HARVEST COSTS	12	209.45	14.10	59.15	\$282.70
Total Cultural and Harvest Costs		218.23	19.74	71.48	\$309.45
Cash overhead (office, accounting, auto, insurance, etc.) (5% of C and H costs).					15.47
Management (5% of 3000 lbs. x .16)					24.00
Share rent (25% of 3000 lbs. x .16)					120.00
TOTAL CASH COSTS					\$468.92
	<u>Investment per acre</u>	<u>Depreciation</u>	<u>Interest (6%)</u>		
Cultural equipment	104.17	10.42	3.13		
Harvest equipment	67.34	8.43	2.02		
Labor camp	50.00	6.25	1.50		
Packing house	40.00	2.00	1.20		
Cost of first 2 yrs.	<u>390.67</u>	<u>48.83</u>	<u>11.72</u>		
TOTAL	652.18	75.93	19.57		
Total Depreciation					75.93
Total Interest on Investment					19.57
TOTAL COST OF PRODUCTION PER ACRE					\$564.42

Cost per lb. @ 3000 lb. yield 18.81
 Cost per lb. @ 2500 lb. yield = 20.11
 Cost per lb. @ 3500 lb. yield = 17.89
 Cost per lb. @ 4000 lb. yield = 17.19

NOTES

- (1) All tractor labor \$1.75 per hour, other hourly labor \$1.50 per hour, 60 HP tracklayer diesel tractor at \$2.00 per hour, 40 HP tracklayer diesel tractor at \$1.40 per hour, 40 HP diesel wheel tractor at \$1.00 per hour (fuel, repairs and other cash costs). Appropriate tillage equipment charges are added to tractor costs in the study.
- (2) Planting \$30.00 per acre, 12,000 roots (7-inch spacing in row), \$8.50 per thousand which includes costs of delivery and treatment with fungicide.
- (3) Material 3½ lbs. per acre CMU (\$12.25) application \$2.50 per acre.
- (4) Plow-out charges \$22.50 per mile, 1.18 miles per acre of 7-ft. rows or \$26.55 per acre charge. Grower pays 1/2 which is prorated over the 10-year 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, interest on operating capital, insurance, etc.
- (6) Share rent figured at 25 per cent of a 3,500 pound yield at 16¢ per lb.
- (7) Harvest labor rates for market estimated from reports of individual growers, for cannery, green and white averaged from actual records for Mexican National workers of the San Joaquin Farm Production Association. The cannery green figure is the average of 25 actual pay periods, and the cannery white figure is the average of 48 actual pay periods during May and June 1965. Some growers paid less, and some growers more than these harvest labor figures used in this study depending on the type of labor utilized.
- (8) Housing, supervision, transportation, etc. of labor - (60-man crew)

Camp supervisor \$15.00 per day (90 days) - - - - -	\$ 1,350.00
Subsistence above \$2.25 paid by men (25¢ per day per man)	1,350.00
Transportation to field (2 buses at \$30.00 per day) - -	2,700.00
Field supervisors (2 @ \$40.00 per day) - - - - -	3,600.00
Transportation to town (12 times @ \$30.00) - - - - -	360.00
Recruiting and transportation (\$65.00 per man) - - - - -	3,900.00
Blankets and mattresses (\$16.00 per man per year) - - -	960.00
Camp lights and fuel (\$2.25 per man per month) - - - - -	405.00
TOTAL	\$14,625.00
Per acre charge	48.75
- (9) Investment includes -

<u>Cultural equipment</u>	<u>Price</u>	<u>Per cent charge to asparagus operation</u>
1 60-HP diesel tracklayer tractor	\$ 1,800	10%
1 36-inch disc plow	100	5%
1 40-HP diesel tracklayer tractor	6,000	75%
1 tool bar and attachments	2,000	75%
2 40-HP diesel wheel tractors	10,800	100%
1 roto chopper	950	100%
3 5-foot discs	1,800	100%
1 2-ton truck	3,700	100%
1 mower	500	100%
1 spray rig	1,000	100%
1 pick-up truck	2,600	100%
TOTAL	\$31,250	

(9) Investment includes - (Continued)

<u>Harvest facilities</u>	<u>Price</u>
Labor camp and furnishings (60 men)	\$15,000
Packing shed	12,000
Washer, buttsaw, press	8,000
2 loading platforms	1,500
Water pump	500
Butt grinder	900
40 sleds	2,400
3 sled tractors, 18 HP	<u>6,900</u>
TOTAL	\$47,200

Cultural equipment was given a 10-year life, harvest equipment an 8-year life (harvest life of bed). Interest is figured at 6 per cent on 1/2 the original value.