



**ASPARAGUS PRODUCTION COSTS IN
SAN JOAQUIN COUNTY**

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**SEDIMENTARY SOIL
6-FOOT BEDS**

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**UNIVERSITY OF CALIFORNIA
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SAN JOAQUIN COUNTY**

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COSTS OF ESTABLISHING ASPARAGUS ON SEDIMENTARY SOIL--FIRST YEAR

6-FT. BEDS, 8-INCH ROOT SPACING - SAN JOAQUIN COUNTY

Based on a 200-acre operation on a 600-acre farm,
a 10-year life of bed with 8 years of cutting

Operation	Hours per Acre	CASH AND LABOR COSTS PER ACRE (1)			
		Labor	Fuel and Repairs	Materials	Total
Disk stubble	2 x .66	\$ 1.98	\$ 3.04		\$ 5.02
Make levees	.50	1.50	2.30		3.80
Flood/Drain	1.00	2.75		Water \$ 2.50	5.25
Remove levees	.33	1.00	1.53		2.53
Plow	.66	1.98	3.04		5.02
Disk	.33	.99	1.52		2.51
Rip	2 x 1.00	3.00	4.60		7.60
Landplane	2 x 1.00	3.00	4.60	Rent of plane 2.00	9.60
Fumigate				Contract/Material & application (2) 149.00	149.00
Disk	.33	.99	1.52		2.51
Lime				Contract/Material & application (3) 19.25	19.25
Mark, furrow, fertilize				Contract/Material & application (4) 43.10	43.10
Plant				Contract (5) 180.00	180.00
Irrigate	3 x 5.00	13.75		Water 7.50	21.25
Weed Control				Contract (6) 16.00	16.00
Cultivate/cover weeds	4 x 1.20	3.60	3.12		6.72
Spray Irrigation Ditches	.50	1.50	1.30	Chemicals 2.00	4.80
Hoeing	3 x			Contract 60.00	60.00
Cultivate	4 x 1.33	3.99	3.46		7.45
Ditch Cleaning				Contract 5.00	5.00
Additional labor costs (7)		4.45			4.45
Miscellaneous (8)				44.87	44.87
TOTAL CASH & LABOR COSTS		\$44.48	\$30.03	\$531.22	\$605.73
			<u>Annual Cost</u>		
<u>Investment (11)</u>	<u>Per Acre</u>		<u>Depreciation</u>	<u>Interest--(9%)</u>	
Cultural Equipment	\$202.92		\$20.30	\$9.15	\$ 29.45
TOTAL COST PER ACRE					\$635.18

COSTS OF ESTABLISHING ASPARAGUS ON SEDIMENTARY SOIL--SECOND YEAR

6 FT. BEDS, 8-INCH ROOT SPACING--SAN JOAQUIN COUNTY

Based on a 200 acre operation on a 600-acre farm,
a 10-year life of bed with 8 years of cutting

Operation	Hours per Acre	CASH AND LABOR COSTS PER ACRE (1)			Total
		Labor	Fuel and Repairs	Materials	
Winter disking	2 x .66	\$ 1.98	\$ 3.04		\$ 5.02
Weed control				Contract (6) \$16.00	16.00
Hoeing	2 x			Contract 40.00	40.00
Cultivate	4 x 1.33	3.99	3.46		7.45
Irrigate	3 x 5.00	13.75		Water 7.50	21.25
Spray irrigation ditches	.50	1.50	1.30	Chemicals 2.00	4.80
Cultivate & cover weeds	4 x 1.20	3.60	3.12		6.72
Chop fern	.40	1.20	1.04		2.24
Furrow out	2 x .66	1.98	1.72		3.70
Chisel	.33	.99	1.52		2.51
Ditch cleaning				Contract 5.00	5.00
Additional labor costs (7)		3.22			3.22
Miscellaneous (8)				9.43	9.43
TOTAL CASH AND LABOR COST		\$32.21	\$15.20	\$79.93	\$127.34
		<u>Annual Cost</u>			
<u>Investment (11)</u>	<u>Per Acre</u>	<u>Depreciation</u>		<u>Interest 9%</u>	
Cultural equipment	\$202.92	\$20.30		\$ 9.15	\$ 29.45
TOTAL COST PER ACRE					\$156.79
Some growers harvest for a short time during the second year. Normally, income from this asparagus is only sufficient to cover costs of harvesting.					
<u>FIRST YEAR COST</u>					\$635.18
Interest on first year cost					57.17
TOTAL COST FIRST TWO YEARS					\$849.14

ANNUAL COSTS OF A PRODUCING ASPARAGUS BED
3RD to 10TH YEAR
6-FT BEDS, 8-INCH ROOT SPACING--SAN JOAQUIN COUNTY

Based on a 200-acre operation on a 600-acre farm,
a 10-year life of bed with 8 years of cutting

Operation	Hours per Acre	CASH AND LABOR COSTS PER ACRE (1)			Total
		Labor	Fuel and Repairs	Materials	
CULTURAL					
Disk	2 x	.66	\$ 1.98	\$ 3.04	\$ 5.02
Ridge & roll		.25	.75	1.15	1.90
Fertilize				Contract/Materials & application 24.00	24.00
Bait	2 x			Contract/Materials & application 29.40	29.40
Work centers	8 x	1.60	4.80	4.16	8.96
Weed control				Contract/Materials & application 20.00	20.00
Furrow out	2 x	1.00	3.00	4.60	7.60
Irrigate	3 x	5.00	13.75	Water 7.50	21.25
Cultivate	2 x	.66	1.98	1.72	3.70
Split ridge for fern		.50	1.50	1.30	2.80
Chop fern		.40	1.20	1.04	2.24
Additional labor costs (7)			3.22		3.22
TOTAL CULTURAL COSTS			\$32.18	\$17.01	\$80.90
HARVEST (90 days-40 man crew)					
Market (1,000 lbs.)			94.05	(33 crates @ \$2.85)	94.05
Cut, sled, pack, etc.:				33 crates 41.25	41.25
Crates @ \$1.25					
Cannery Green (2,000 lbs.)					
Cut and sled			160.00	2000 lbs @8.00/100 lbs	160.00
Rack, wash and box			18.00	2000 lbs @.90/100 lbs	18.00
Field hauling	3.00	9.00	9.00		18.00
Sled operation (3 sleds)	9.00		13.50		13.50
Housing, supervision, camp maintenance & repairs etc. (10)				44.50	44.50
TOTAL HARVEST COSTS			\$281.05	\$22.50	\$85.75
TOTAL CULTURAL & HARVEST COSTS			\$313.23	\$39.51	\$166.65
Cash overhead					
Misc., office, bookkeeping, fire & liability ins., int. on operating capital, assoc. dues, etc.				8% of total cultural & harvest cost (8)	\$ 41.55
Share rent (9)					\$126.00
TOTAL CASH OVERHEAD					\$167.55
TOTAL CASH COST					\$686.94
Annual Cost					
Investment			Depreciation	Interest--(9%)	
(11) cultural equipment	\$202.92		\$ 20.30	\$ 9.15	
(12) harvest equipment	190.50		19.05	8.58	
(12) labor camp	250.00		12.50	11.25	
(12) packing shed	175.00		8.75	7.88	
Cost first 2 years	849.14		84.91	38.21	
Total	\$1667.56		\$145.51	\$75.07	\$220.58
TOTAL COST PER ACRE					\$907.52
Cost per lb. @ 3,000 lb. yield					30.25¢
Cost per lb. @ 4,000 lb. yield					22.68¢

NOTES

- (1) All tractor labor \$3.00 per hour, other hourly labor \$2.75 per hour. Fuel, repairs, and other cash costs per hour are: 80-100 HP track-layer diesel tractor at \$4.60 per hour, 55 HP diesel wheel tractor at \$2.60 per hour.
- (2) Application rate of fumigant 40 gal/acre at \$3.50 per gallon. Application cost at \$9.00 per acre.
- (3) Lime application 3 tons per acre at \$5.00 per ton. Application cost at \$4.25 per acre.
- (4) Fertilizer application 400# 14-7-14 + 5% sulfur at \$186.75 per ton. Application cost \$5.75 per acre.
- (5) Planting \$50.00 per acre; 10,000 roots, 8-inch spacing in row. Plants \$13.00 per thousand, which includes cost of delivery and treatment with fungicide.
- (6) Herbicide materials \$12.00 per acre and application cost at \$4.00 per acre.
- (7) Additional labor costs include compensation insurance at 3.26% and Social Security at 5.85%, other miscellaneous costs including bonuses, etc., 2.00%. These percentages are used to figure out the additional labor costs in each section.
- (8) Miscellaneous costs are computed at 8.0% of the total cash and labor costs not including rent. This includes office, bookkeeping, fire and liability insurance, interest on operating capital, association dues (if applicable), etc.
- (9) Share rent figured at 20 percent of a 3,000-pound yield at 21¢ per pound. No rent charged during first two years of establishment.
- (10) Housing, supervision, etc., of labor (40-man crew)

Camp supervisor \$40.00 per day (90 days)-----	\$3,600.00
Camp lights and fuel (\$15.00 per mo. per man)	1,800.00
Blankets and Mattresses (\$12.50 per man per yr)	500.00
Camp maintenance	
(labor and materials) @ \$50.00 per man-----	2,000.00
Misc. repairs, field transportation, etc.-----	<u>1,000.00</u>
	<u>\$8,900.00</u>

Per Acre Charge \$ 44.50

EQUIPMENT LIST (11)

Items	Original Cost		Years Life	Annual Use (acres)	Non-Cash	Overhead
	Total	Per Acre Annual Use			Depre- ciation	Interest 9%
<u>CULTURAL EQUIPMENT</u>						
D4 crawler tractor 80-100 HP	\$31,800	\$ 53.00	10	600	\$ 5.30	\$2.38
W. D. tractor (55 HP-2)	26,500	44.17	10	600	4.42	1.99
Smizer roller (3 section)	3,350	5.58	10	600	.56	.25
Lilliston (3 section)	6,000	10.00	10	600	1.00	.45
Cultipacker	1,200	2.00	10	600	.20	.09
Roto chopper	1,500	7.50	10	200	.75	.34
Disk (3-5 ft. sections)	5,000	25.00	10	200	2.50	1.13
Truck (1-1/2 ton)	8,400	14.00	10	600	1.40	.63
Sprayer (300 gallon 10 GPM pump)	2,000	3.33	10	600	.33	.15
Pickup truck (3/4 ton 4X4)	7,000	11.67	10	600	1.17	.53
Plow 3 bottom 16" two-way	5,500	9.17	10	600	.92	.41
Disk, 18' offset	6,200	10.33	10	600	1.03	.47
Disk, 6' single border	700	3.50	10	200	.35	.16
Tool bar	2,200	3.67	10	600	.37	.17
TOTALS	\$107,350	\$202.92			\$20.30	\$9.15

EQUIPMENT LIST (12)

Items	Original Cost		Years Life	Annual Use (Acres)	Non-cash Overhead	
	Total	Per Acre Annual Use			Depreciation	Interest at 9%
<u>HARVEST FACILITIES</u>						
Labor camp and furnishings 45 men	\$50,000	\$250.00	20	200	\$12.50	\$11.25
Packing shed 50 ft X 140 ft	35,000	175.00	20	200	8.75	7.88
<u>HARVEST EQUIPMENT</u>						
Washer, butt saw, and press	11,000	55.00	10	200	5.50	2.48
Pump 5 HP & well 100 ft	4,000	20.00	10	200	2.00	.90
Auger & elevator	2,100	10.50	10	200	1.05	.47
Sleds (30)	3,000	15.00	10	200	1.50	.68
Sled tractors 25 HP-WD (3)	18,000	90.00	10	200	9.00	4.05
TOTAL	\$38,100	\$190.50			\$19.05	\$8.58