

Experiments and commercial practice have demonstrated the value of parathion—dusts and sprays—for the control of the artichoke plume moth. Control is a matter of proper timing to correspond with the time of peak production of artichokes.

Three applications of parathion timed at 15–20-day intervals—15 to 60 days prior to peak production—are necessary for adequate control. Single applications

applied at random intervals usually give only temporary control.

A peak in production during July to September requires three applications—about June 1, 15, and July 1. A peak crop during October to December requires treatment about September 1, 15, and October 1. A spring peak from March to May requires 3–5 applications starting about February 1.

Generations of the moth can be fol-

lowed closely by watching brood development in cages or by counting the number of eggs per leaf. In San Luis Obispo County a count is made of 10 to 30 leaves cut midway between the oldest and newest leaves on the southeast side of the plants selected at random. Egg counts are usually correlated with current worminess in the fields and worminess 30–60 days following counts. For ex-

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Artichoke Production

costs and returns to growers studied in survey conducted at Half Moon Bay

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Producing artichokes in the Half Moon Bay area during the 1956–57 season cost \$513.36 per acre—\$2.20 per 22-pound box—according to information obtained in a recent survey.

The sample costs in Half Moon Bay are not presented as average for San Mateo County, however, because charges for individual items may vary in different plantings and increased yields would reduce per box costs. A yield of 225

boxes per acre—of 22 pounds each—is considered good but in some seasons yields may be much lower. Under ideal growing conditions a yield of 300 boxes per acre is possible.

To achieve good quality and high yields of artichokes an adequate fertilizer program and an economic control of the plume moth—the most important pest of artichokes—must be maintained consistently.

The cost of developing artichoke plants on the ranches surveyed came to \$61.00 per acre which—spread over a five-year producing life—gives an annual cost of \$12.20. Development costs include:

Make plants	15 man hrs.	\$15.00
Planting	15 man hrs.	15.00
Truck	1.5 hrs.	3.00
Replant	3 man hrs.	3.00
Stumping, 1st year	5 man hrs.	5.00
Plants		20.00
		\$61.00

Other costs were obtained from a number of growers during the survey and a sample schedule of work done, materials used, and prices as of 1956–57 was prepared as shown in the large table at the lower left.

Successful growers of artichokes must be skilled in the cultural and management phases of the enterprise because risk of crop failure—due to frost injury,

Cost of Growing Artichokes in Half Moon Bay Area of San Mateo County
Yield 4,950 lbs. or 225 (22 lbs.) boxes—1956–57

	Hours per acre				Costs per acre
	Man labor	30 H.P. track tr.	20 H.P. wheel tr.	Pickup truck	
Disk 2X before, 2X after plow	2.00	2.00			\$ 7.00
Plow	1.25	1.25			4.38
Roll and ditch	1.00	1.00			3.50
Irrigate 9X, incl. moving pipe	45.00				45.00
Side dress	9.00	3.00			16.50
Cultivate with rows 7X	5.25		5.25		12.34
Cultivate across rows 2X	2.50		2.50		5.88
Hoe	5.00				5.00
Dust 8X (machine)	4.00		4.00		9.40
Pick, grade, pack and haul	58.00			9.00	76.00
Broadcast slug bait	1.50				1.50
Cut old growth, 2 men	1.50	.75			3.38
Burn old growth	5.00				5.00
Plow and ditch for drainage	1.75	1.75			6.13
Close ditch (plow)	1.25	1.25			4.38
Disk 2X harrow and roll	1.50	1.50			5.25
Misc. other labor	2.00	.50		.50	4.25
Total cultural and harvest labor costs	147.50	13.00	11.75	9.50	\$214.89
Manure					25.00
Fertilizer, commercial					20.00
Dust, 400 lbs.					40.00
Slug bait					9.00
Boxes, nails and paper—33¢ per box					74.25
Irrigation water—power to pump					10.50
Total material cost					\$178.75
General expense, taxes on plants and equipment, repairs, insurance					35.00
Land rent					50.00
Cash overhead costs					\$ 85.00
Total cash costs					\$478.64
Depreciation on tenant's field equipment					16.82
Depreciation of established artichokes, \$61 with 5 year life					12.20
Interest on investment in tenant's field equipment					5.70
Total overhead costs					34.72
Total all costs except management					\$513.36

Per Acre Net Returns from Artichokes in 1956–57 at Varying Levels of Yield, Cost and Price¹

Yield /Acre, and Boxes	Returns and Costs	Price /Box—22 lbs.				
		\$2.00	\$2.25	\$2.50	\$2.75	\$3.00
200	Gross	\$400	\$450	\$500	\$550	\$600
	Costs	505	505	505	505	505
	Net	-105	-55	-5	45	95
225	Gross	450	506	563	619	675
	Costs	513	513	513	513	513
	Net	-63	-7	50	106	162
250	Gross	500	563	625	688	750
	Costs	521	521	521	521	521
	Net	-21	42	104	167	229
275	Gross	550	619	688	756	825
	Costs	530	530	530	530	530
	Net	20	89	158	226	295
300	Gross	600	675	750	825	900
	Costs	538	538	538	538	538
	Net	62	137	212	287	362

¹ Variations in costs between various levels of yield caused by differences in harvest cost.

heavy rainfall, and artichoke plume moth damage—is high in the production of artichokes.

Factors influencing net returns to growers are shown in the above single column table. A yield of 225 boxes per acre would require a seasonal average price of slightly more than \$2.25 per box for the grower to break even with production costs.

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