

ARTICHOKES

In Santa Barbara County, artichokes ranked as the eighth most important crop when compared on a basis of F.O.B. value in 1963. Even though the acreage decreased somewhat from 1962, the total value has not varied considerably for the past five years.

<u>Year</u>	<u>Acreage</u>	<u>Average Yield</u> (Tons/Ac)	<u>Total Production</u> (Tons)	<u>F.O.B. Price</u> (Per Ton)	<u>Total Value</u>
1959	1,405	1.90	2,690	\$ 149	\$ 400,026
1960	1,250	2.34	2,930	148	433,000
1961	1,210	2.57	3,114	143	447,000
1962	1,038	3.12	3,244	185	600,700
1963	810	2.30	2,670	205	547,000

California accounts for 99.8% of the artichokes produced in the United States. Santa Barbara County has the second largest acreage in the state, which amounts to one-eighth of the total.

CHARACTERISTICS OF ARTICHOKE FARMS

Artichokes require a climate that has a cool summer and a winter relatively free from frost. This is probably the greatest limiting factor as to where artichokes can be grown. The soil and climate of the western sections of the Santa Maria and Lompoc Valleys have proven to be ideal for the growing of artichokes. However, the yield of artichokes can be drastically affected by cold weather, frost injury, and the severity of plume moth damage.

Artichoke growers are usually vegetable farmers who grow other cool season crops such as broccoli, cauliflower, and celery.

MANAGEMENT FACTORS

Cultural. In addition to good farming techniques, better yields have become possible through these practices:

1. Stalk removal throughout the year, rather than cutting off the entire plant.
2. Continual fertilization during the irrigation season.
3. Control of the artichoke plume moth and other pests with insecticides and sanitation practices.

Labor. Labor requirements for all phases of artichoke production amount to approximately 145 hours per acre. Of this amount, about 60 total hours per acre is used in harvesting. The time for each harvest varies with the production. Packing requires a little less than half of the time that is needed for harvesting.

Harvest. Experiments have been carried out in developing labor aids. An example is the use of a tractor on a raised platform which straddles the plants. This machine carries crates in a position handy for the harvest crew to use, which eliminates carrying sacks or baskets and reduces some of the distance walked. Other mechanical aids are used in pest control.

MARKETING

Artichokes from this area are moved to the fresh market by truck to Los Angeles and other markets; most of the remainder are moved in cars of mixed vegetables.

Marketing Order for the Promotion of Globe Artichokes. In 1960, artichoke producers adopted a Marketing Order, under the California Marketing Act of 1937, for the principal purpose of promoting the sale of fresh California Globe artichokes. Earlier voluntary efforts at promoting artichokes had shown promise, but without full industry support were not sustained. The objective of Marketing Order promotional work since its inception has been to expand knowledge of the product and ways to use it. The work is primarily educational. Artichoke producers paid an assessment of \$4.00 per acre of artichokes planted for harvest during the 1963-64 marketing season to help cover the cost of this promotion.

OUTLOOK

Because of the promotional activities resulting from the marketing order, it is felt there has been a strengthening of demand for artichokes. As Santa Barbara County is one of the primary growing areas, it should be included in any expanded market. Improved cultural methods, such as those listed will tend to result in more income through increased yield.

Harvesting provides the greatest possibility for change in artichoke production. The amount of labor reduction possible depends upon equipment that is developed to aid in harvesting. If the chokes could be bulk-binned and delivered to a processor, packing labor could also be considerably reduced. This, of course, depends upon the expanding consumer demand for processed (frozen and preserved) artichokes.

SAMPLE COSTS TO PRODUCE ARTICHOXES

Based on 300 acres. Yield 300-22 lb. crates (3.1 ton).

Tractor driver @ \$1.65, Irrigator @ \$1.40. Other labor @ \$1.25.

Operation	Hours Per Acre	Labor	Fuel and Repairs	Materials & Other Cash	Total
Cultural					
Cultivate 12 times	6.0	\$ 9.90	\$ 8.10		\$ 18.00
Irrigate 7 times	14.0	19.60	3.40	Water 2.8' @ 5.00 \$14.00	37.00
Spray 11 times				Insecticide \$50.00 Applic. \$24.00 74.00	74.00
Stumping	9.5	12.00			12.00
Chop & crown	3.0	3.75	3.00		6.75
Fertilize 3 times				Fertilizer \$50.00 Applic. \$7.00 57.00	57.00
Replant	2.0	2.50			2.50
Hoe	6.4	8.00			8.00
Miscellaneous	4.0	5.00	3.75		8.75
Total Cultural	44.9	60.75	18.25	145.00	224.00
Harvest					
Pick	60.0	75.00	15.00		90.00
Haul	5.0	6.00	5.00		11.00
Packing	25.0	32.00		Crates 300 @ .45 135.00	167.00
Total Harvest	90.0	113.00	20.00	135.00	268.00
Misc. overhead					14.90
Rent					85.00
Total Cash Cost					591.90
Management 5% of 3.1 tons @ \$210 (\$651)					32.55

Investment	Per Acre	Annual Cost	
		Depreciation	Interest
Stand	40.00	4.00	1.20
Buildings	40.00	2.00	1.20
Irrigation System	20.00	1.00	.60
Equipment	235.00	23.50	7.05
Total	335.00	30.50	10.05

Total Cost Per Acre	665.00
Cost per ton @ 3.1 ton yield	221.65
Cost per crate @ 300 crate yield	2.20

ARTICHOKES - CASH FLOW

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	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Cultivate 12x	1.50	1.50	1.50			3.00	3.00	1.50	0.150	1.50	1.50	1.50	13.00
Irrigate 7x	5.30		5.30			5.30	5.30	5.30			5.20	12.25	37.00
Spray 11x	12.35	12.35							12.35	12.35	12.35	12.25	74.00
Stumping		4.00								3.30		4.70	12.00
Chop & Crown					6.75								6.75
Fertilize						19.00		19.00		19.00			57.00
Replant						2.50							2.50
Hoe						1.30		2.70			4.00		8.00
Misc. Cultural				4.35			4.40						8.75
Pick	12.00	15.00	16.50	19.50	3.00				2.50	5.25	7.50	8.75	90.00
Haul	1.10	1.10	1.10	2.20	1.10				1.10	1.10	1.10	1.10	11.00
Packing	20.00	26.80	30.00	40.00	6.70				3.35	10.00	13.40	16.75	167.00
Misc													
Overhead	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.15	14.90
Rent					42.50								42.50
Total													
Cash Cost	53.50	62.00	55.65	67.30	61.30	32.35	13.95	29.75	27.35	53.75	88.30	46.20	591.90
Income	55.00	65.00	87.00	109.00	120.00	140.00	22.00				15.00	38.00	651.00
Net Cash													
Income	1.50	4.50	35.85	77.55	136.25	243.90	251.95	222.20	194.85	141.10	67.30	59.10	59.10