Santa Barbara County - 1965

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BROCCOLI

Broccoli in Santa Barbara County in 1963 amounted to one-fourth of the total United States acreage and almost one-half of the California acreage. This was 11,000 acres with a value of $4,611,000 which represents 31% of the total vegetable return to the county.

Broccoli, when considered as a single commodity, was the second most valuable crop in Santa Barbara County in 1963. Lemons, with a value of almost $8 million, was the only crop to exceed broccoli. Broccoli, however, ranked first in acreage and value of all vegetable crops.

Year	Harvested Acreage	Average Yield (Tons/Ac.)	Total Production (Tons)	Farm Price (Per Ton)	Total Value
1959	8,960	2.9	26,335	$ 140	$3,699,047
1960	7,640	3.38	25,800	145	3,737,000
1961	8,350	3.26	27,265	144	3,928,000
1962	8,401	2.96	24,899	144	3,578,000
1963	11,000	3.04	33,400	138	4,611,000

Broccoli, long an important crop grown here for the fresh market took on increased importance with the advent of freezer processing plants in the Santa Maria Valley. Santa Maria Valley is a major production area because broccoli is raised the year around and the freezer plants generally process broccoli all but one month of the year. Also, this area consistently produces good top-quality broccoli.

CHARACTERISTICS OF BROCCOLI FARMS

Broccoli growing in Santa Maria Valley is concentrated primarily between Santa Maria and the west end of the valley. Other contributing areas are found within a few miles east of Santa Maria and in the Lompoc Valley, west of the city of Lompoc. A broccoli grower works primarily on leased land, obtaining all water for irrigation from wells.

Besides broccoli, the growers' other main vegetable crops would probably include celery, cauliflower, potatoes, carrots, and lettuce. He may also grow seed beans and sugar beets.

Soils. Medium textured soils and sandy loams, with good drainage and good water holding capacity are ideal for highest yields. The lighter and heavier soils can also produce good crops, but require more management of fertilizer and irrigation. The medium to lighter soils usually have the advantage of being warmer during colder months.

Irrigation. Frequent irrigations are required to keep the crop in good growing condition. Normally, two and one-half acre feet of water will be sufficient to grow a crop. Broccoli is moderately salt tolerant.

Climate. Because of the favorable climate, broccoli is grown the year around in Santa Barbara County. Broccoli is slightly less tolerant of frost than cabbage. It will, however, tolerate light frosts.

MANAGEMENT FACTORS

Successful production of quality broccoli with good yields requires good management.

Cultural operations for producing broccoli include land preparation (operations may include disking, plowing, land planing, chiseling, listing, and furrowing); planting; irrigating; cultivating; thinning; hoeing; fertilizing; and spraying for insect control. Nearly all of these operations are performed by the grower's own equipment; exceptions may be spraying and fertilizing, which can be done by some growers, but which are usually done by a custom operator.

Varieties. Varieties to be planted change according to the time of year. In order to obtain good yield it is essential to choose the right varieties.

Fertilizer. A crop of broccoli will require approximately 150 pounds nitrogen, 40 pounds phosphorus, and 40 pounds potassium, (actual pounds of nutrient).

Irrigation. Frequency of furrow irrigation depends on the temperature and the rainfall. During periods of little or no rainfall, broccoli is irrigated at one to two-week intervals during the whole life of the crop.

Harvest. Cutting broccoli is done completely by hand. During the harvest operation, a cart or trailer is drawn by a wheel tractor, which is followed by the cutting crew tossing the broccoli into the cart or trailer.

If broccoli is cut into a cart, it is generally being cut for the fresh market and will be put in one and one-half pound bunches, by either the cutting crew or a packing crew in the shed. If broccoli is being sent to a freezer, it is usually cut into a trailer and is cut to near freezer specification, that is, six inches long with little or no leaves on the heads.

Mechanization. Cutting broccoli with a machine would be the greatest labor saver of all. If this were done growers might lose the advantages of a changing fresh broccoli market. Broccoli for processing is on a contract price. Broccoli is harvested in five or six cuttings extending over a period of from one to two months. During this time the market can fluctuate rapidly.

Labor. Broccoli production requires a fairly even demand for labor the year around. The highest demand is usually reached in the months of January through April—the peak month being March.

OUTLOOK

Broccoli has now established itself in the vegetable economy of Santa Barbara County. As long as growers can produce a commodity of good quality and quantity, the demand for it will continue. Broccoli processing is an integral part of the processor's operation in this area and probably will remain so as long as there is a demand for the frozen product. Fresh marketing also appears to have a stable outlook. The demand remains for broccoli despite the increase in variety of processed products for the consumer.

However if the price of broccoli does not keep pace with the rising costs, growers who can afford to change to mechanization will do so; others will be forced to change their crop program so they will not grow broccoli.

If a mechanical harvester is used, a broccoli variety will have to be developed that will have all the characteristics adaptable to mechanical harvesting such as a uniform maturity date.

It is not expected that this machine will come into use for several years unless wages go up and availability of labor goes down.

The use of mechanical thinning will help to save much labor when certain problems of weeds and stands are solved.

The thinning operation may be eliminated if precision planting becomes a complete success. The hoeing operation may also become unnecessary should more selective herbicides be perfected.