

### CELERY

On a national scale, California is first in the production of celery. Santa Barbara County is one of the six most important producing counties in this state and accounted for approximately one-seventh of the central coast production in 1963. In Santa Barbara County, celery ranked eighth in acreage, but was fourth in value in 1963.

<u>Year</u>	<u>Harvested Acreage</u>	<u>Average Yield (Ton/Ac.)</u>	<u>Total Production (Ton)</u>	<u>Farm Price (Per Ton)</u>	<u>Total Value</u>
1959	1,771	24.6	43,536	\$ 80	\$3,488,657
1960	2,230	18.6	41,500	63	2,614,000
1961	1,420	24.2	34,382	61	2,084,000
1962	1,006	27.0	27,164	60	1,616,000
1963	900	26.9	24,200	68	1,646,000

### CHARACTERISTICS OF CELERY FARMS

Celery is one of the major vegetable crops a grower will produce and is usually located on the farmer's best land. It requires more water, fertilizer, and pest control than other vegetable grown in this area. Per acre, celery is the most expensive vegetable crop grown in Santa Barbara County.

Soil, Water, Climate. The heavier sandy loams of the vegetable areas are preferred for celery production. Irrigation is accomplished by furrow irrigating. Water requirements are high because the roots of celery are shallow, there is a large amount of growth per acre, and there is a need for continuous growth. Celery is very sensitive to saline conditions, especially during germination and the seedling stages. Celery is also exacting in respect to temperatures. The crop is subject to premature seeding, although some varieties show some resistance. It is considered that exposure for 10 days or longer to temperatures of 40° F to 50° F is likely to cause seed stalk formation before a marketable plant can be produced.

### MANAGEMENT FACTORS

Cultural. Celery is planted and harvested practically every month of the year in this area of the state. However, the major portion of the crop is usually planted between April 15 and August 15 and harvested between September 10 and March 10.

Almost all celery is direct-seeded in the Lompoc Valley and the Santa Maria Valley areas of both Santa Barbara County and San Luis Obispo County. However, in the Oceano area of San Luis Obispo County

a celery free period exists during January, so the first celery planted in the spring will be transplanted celery. This is planted in February and is usually harvested in June.

Cultural operations for producing celery (direct-seeded) include land preparation (operations may include disking, plowing, land planing, chiseling, furrowing, etc.); planting; irrigating; cultivating; fertilizing; spraying for weed control; spraying for insect control; thinning; and hoeing.

Irrigation. Probably more irrigating is done on this crop than most other crops, especially right after planting when the beds are kept wet while the seeds germinate. Usually the field is cultivated after each irrigation.

Pest Control. A weed oil is sprayed on the celery plants when they are in the seedling stage. Several sprays for insect control are applied during the growing season.

Fertilizer. Heavy amounts of fertilizer are also applied, usually in three or more operations.

Harvest. The harvest operation consists of cutting, trimming, and loading the stalks into trailers in the field. This work is usually done by temporary labor. Permanent help is used to pull the trailers in the field and to the shed.

Labor. September through February are the top months of labor requirement for celery production as this is the major harvest period. The December labor requirements are the highest of any month.

## OUTLOOK

It is felt that the present methods of mechanical harvesting have been given a fair trial in this area and have not worked satisfactorily. The stalks were bruised more and the costs in the shed were increased because of the labor required to clean the dirt from the stalks and trim them. This made a more expensive operation than the present method.

If seasonal labor becomes more scarce and wages rise, growers may be forced back into the mechanical harvesting, because they can obtain shed labor more easily than they can obtain field labor. However, it is felt that a product of poorer quality would result. If mechanization can be worked out that would eliminate some of the present problems, it is expected that it would be adopted by growers in this area.

If labor is scarce in 1965, the acreage is expected to drop, resulting in lower total production, offset by a higher price. Yield may decrease at first, but gradually increase due mainly to improved efficiency of labor and methods of harvest.

SAMPLE COSTS TO PRODUCE CELERY

Based on 300 acres. Yield 900 = 65 lb. crates (29 tons).  
Tractor driver @ \$1.65. Irrigator @ \$1.40. Other labor @ \$1.25.

Operation	Hours Per Acre	Fuel and		Materials and Other	Cash	Total
		Labor	Repairs			
<b>Cultural</b>						
Land preparation	5.0	\$ 8.25	\$ 13.75			\$ 22.00
Plant	1.0	1.65	1.35	Seed 1 lb./acre	\$17.00	20.00
Irrigate 13' times	20.0	28.00	5.00	Water 3.2' @ 5.00	16.00	49.00
Cultivate 8 times	4.0	6.60	5.00			11.60
Fertilize 4 times				Fertilizer \$135-Aplic. \$6	141.00	141.00
Weed spray				Oil \$18 - Applic. \$2	20.00	20.00
Insect spray 7 times				Spray \$75 - Applic. \$21	96.00	96.00
Thin - contract		33.00				33.00
Hoe	8.0	10.00				10.00
Miscellaneous	6.0	8.00	4.40			12.40
<b>Total Cultural</b>	<b>44.0</b>	<b>95.50</b>	<b>29.50</b>		<b>290.00</b>	<b>415.00</b>
<b>Harvest</b>						
Cut, trim, load, haul - 900 crates @ 1.50						1,350.00
Misc. overhead						19.30
Rent 1/2 year						42.50
<b>Total Cash Cost</b>						<b>1,826.80</b>
Management 5% of 29 tons @ \$60 (\$1,740)						87.00

Investment	Per Acre	Annual Cost		Total
		Depreciation	Interest	
Buildings	80.00	4.00	2.40	
Irrigation System	20.00	1.00	.60	
Equipment	240.00	24.00	7.20	
<b>Total</b>	<b>340.00</b>	<b>29.00</b>	<b>10.20</b>	<b>39.20</b>
<b>Total Cost per Acre</b>				<b>1,953.00</b>
<b>Cost per ton @ 29 ton yield</b>				<b>67.35</b>

CELERY - CASH FLOW  
Planted Almost the Year Around

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Land Preparation				22.00									22.00
Plant				20.00									20.00
Irrigate				11.30	7.55	11.30	7.55	11.30					49.00
Cultivate				1.45	2.90	2.90	2.90	1.45					11.60
Fertilize					35.55	35.15	35.15	35.15					141.00
Weed Spray					20.00								20.00
Insect Spray					13.50	27.50	27.50	27.50					96.00
Thin						33.00							33.00
Hoe							10.00						10.00
Miscellaneous				2.10	2.10	2.10	2.10	2.00	2.00				12.40
Harvest									1350.00				1350.00
Misc. Overhead				3.40	3.40	3.40	3.40	3.40	2.30				19.30
Rent					42.50								42.50
<b>Total Cash Cost</b>				60.25	127.50	115.35	88.60	80.80	1354.30				1826.80
<b>Income</b>											1740.00		1740.00
<b>Accumulated cash cost</b>				60.25	187.75	303.10	391.70	427.50	1826.80	1826.80	86.80		86.80