

CABBAGE

Yields

Yields of cabbage as reported by the Ventura County Agricultural Commissioner over the past 5 years ranged from 594 to 682 50 lb. cartons per acre. Yields of 600, 500, and 700 cartons are used to show effect of yield on cost per carton.

Varieties and Seed

Headstart is the main variety of cabbage on the Oxnard plain. It has the disadvantage of being susceptible to Fusarium yellows, which has been found in a few fields. Princess, Tuffy, and Tastie are also used. They are resistant to Fusarium.

Soil and Climate

Both soil and climate of the Oxnard Plain are suitable for growing cabbage for harvest at any time of the year. However, most of the cabbage in Ventura County is harvested in the cooler part of the year.

When to Plant and Harvest

A tentative planting schedule for cabbage is on page 24. This schedule shows not only the predicted harvest date for each planting date but also the rate of planting required for a uniform rate of harvest.

Planting, Cultivating, and Weed Control

Cabbage is planted by precision planters. Fields with single plants spaced at 2.5 inches apart are suitable for use of a synchronous mechanical thinner. Advantages of precision planting are (1) less damage to plants at thinning time, (2) lower costs of hand thinning, (3) a stand suitable for the synchronous mechanical thinner, and (4) saving of seed. Nine inches is probably the closest acceptable spacing for cabbage. Spacings greater than 12 inches are at a disadvantage because they allow excessive head size.

Spacing requirements for cabbage are too restrictive for planting to stand. Cultivation and hoeing are still practical weed control practices.

Fertilizing

Because cabbage heads larger than those required for the 2-dozen carton of 50 pounds are objectionable and may be of little retail value, it is important to avoid excessive amounts of nitrogen for this crop. In many

fields the crop will get off to a satisfactory start without any fertilizer at planting time and 50 to 100 pounds of nitrogen applied after thinning seems to be adequate. Phosphorus applied under the seed at planting time in the cooler part of the year may make maturity more uniform.

Irrigation

Following irrigation for germination and another irrigation just after thinning, another two or three irrigations are usually adequate.

Pest and Disease Control

Aphids and worms are the main insect pests of cabbage. Systemic insecticides are effective against early aphid infestations. Frequent field observations are necessary to decide on timing of and material for subsequent pesticide treatments. Sugar beet nematodes are present in most fields used for cabbage. Damage from this pest is seldom recognized and it is not expected to be serious in the cooler part of the year. It is advisable to watch summer cabbage for this pest. It is advisable to plant only varieties resistant to Fusarium Yellows. Princess, Tuffy and Tastie are resistant. Headstart is not.

University of California recommendations for pest and disease control are available at the Farm Advisors office.

Acres, Yields, and Prices as Reported by Ventura County Agricultural Commissioner

<u>Year</u>	<u>Acres</u>	<u>50-Lb. Cartons Per Acre</u>	<u>\$ Per 50-Lb. Carton</u>	<u>\$/A</u>
1964	2754	520	1.40	614
1965	2580	460	1.40	644
1966	2280	480	1.50	721
1967	2325	500	1.34	670
1968	2440	480	1.30	624
1969	2110	480	1.70	816
1970	2670	520	2.00	1040
1971	3617	440	2.05	902
1972	2891	514	2.02	1038
1973	2924	547	2.75	1504
1974	3172	573	2.10	1203
1975	3100	700	2.75	1925
1976	2122	464	2.75	1277
1977	1548	614	5.62	3456
1978	1760	596	3.87	2304
1979	1604	643	4.92	3171
1980	1727	594	3.91	2321
1981	1554	682	3.46	2362
1982	1832	682	3.46	2362
1983	1781	558	4.70	2623
1984	1984	610	6.63	5265

TENTATIVE PLANTING SCHEDULE FOR CABBAGE 1977

The purpose of each planting schedule is to provide two estimates:

1. Acres to plant each week in order to have the crop ready to harvest at the rate of ten acres a week.
2. Harvest date.

This schedule is based on records of planting and harvest dates provided by Pleasant Valley Co-op, Dullam Ranch and Santa Clara Farms. Its validity can be improved by adding more records from more farms.

Planting Date	Acres to Plant/Week For Harvesting 10 A/Wk	Date of First Harvest	Planting Date	Acres to Plant/Week For Harvesting 10 A/Wk	Date of First Harvest
May 13	10	July 22	Aug. 25	15	Nov. 25
20	10	30	Sept. 2	17	Dec. 8
27	10	Aug. 6	9	21	22
June 3	10	13	16	21	Jan. 6
10	10	20	23	22	22
17	10	27	30	19	Feb. 6
24	10	Sept. 4	Oct. 7	14	19
July 1	11	11	14	11	25
8	12	19	21	10	Mar. 5
15	12	28	28	9	12
22	13	Oct. 7	Nov. 4	9	17
29	13	16	11	8	24
Aug. 5	14	26	18	7	28
12	14	Nov. 5	25	7	Apr. 1
19	14	15			

**CABBAGE - CASH FLOW
INCLUDING LAND RENT AND SUPERVISION**

Sept. Oct. Nov. Dec. Jan.

Start
\$850

Grow
\$470

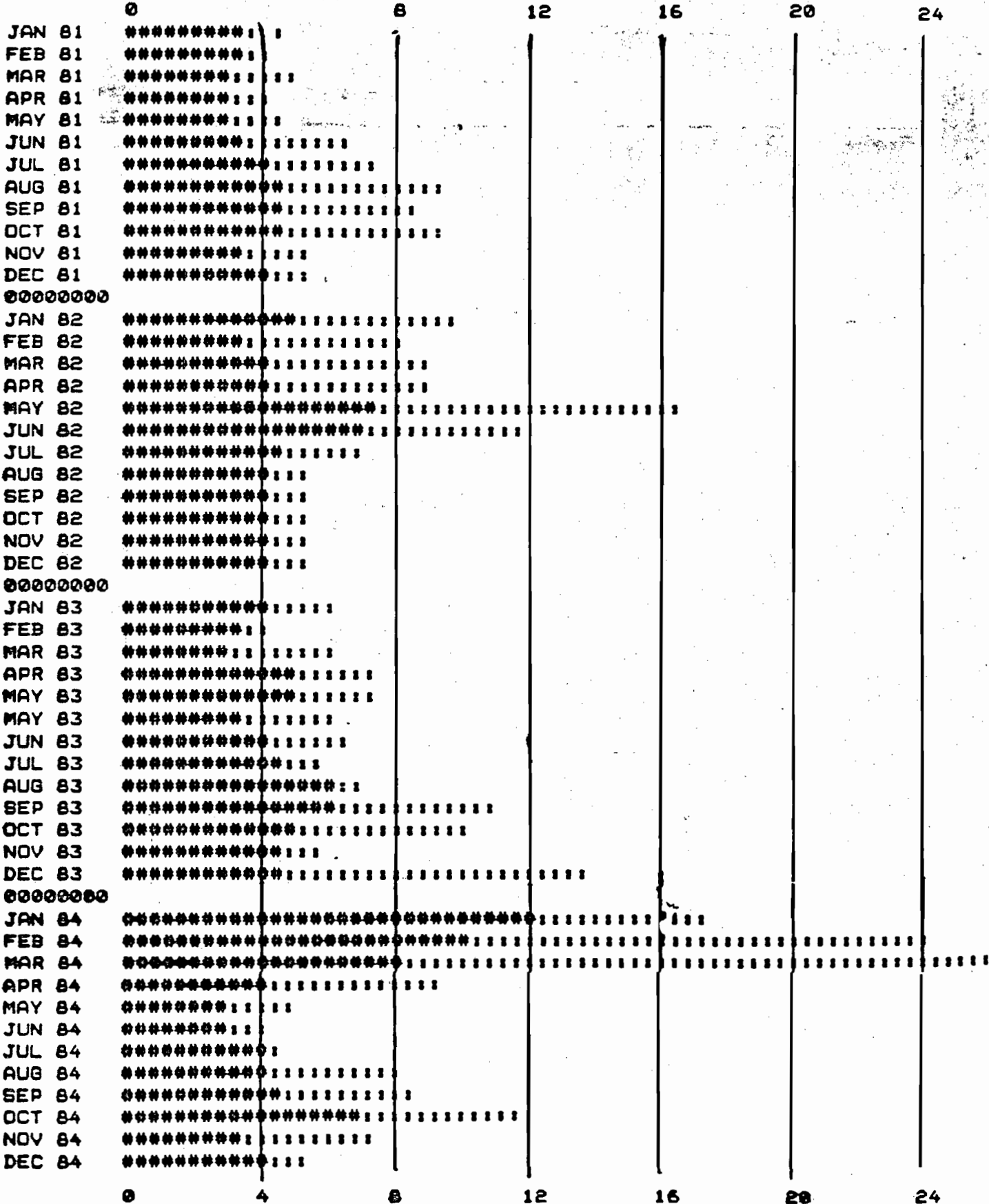
Harvest
\$2,050

LOW AND HIGH THURSDAY LOS ANGELES WHOLESALE MARKET PRICES
FOR CABBAGE IN DOLLARS PER CARTONS OF 22 TO 27 HEADS

1981 THRU 1984

DOLLARS PER CARTONS OF 22 TO 27 HEADS

* AND : = .4



LAND PREPARATION AND STAND ESTABLISHMENT

Sugar beets, broccoli, cabbage, cauliflower, cucumbers, head lettuce, and spinach all require approximately the same field operations for seedbed preparation, planting, pre-plant fertilizing, the first side-dressing, the first two cultivations, irrigation for germination, and the first irrigation after thinning. Costs of these operations are itemized below and entered in the cost of each crop as "land preparation and stand establishment". Costs of fertilizer, seed, herbicides, and thinning are

omitted here because they vary according to crop.

It is common practice to have furrowing and application of pre-plant fertilizer in the bed done by contract. This eliminates the need for fertilizing equipment on the sled used for bed shaping and planting.

Minor deviations from these procedures will not appreciably affect total cost.

CULTURAL CASH COSTS	Labor		Machinery* Cash Cost	Contract & Materials	Total Per Acre	
	Tractor	Hours				Cost
Subsoil 1 x	160	.32	\$2.73	\$6.48	\$	\$9.21
Plow 1 x	160	.32	2.73	6.88		9.61
Disc & Roll 2 x	160	.38	3.24	8.64		11.88
Land Plane 2 x	160	.36	3.06	7.50		10.56
Field Cultivator 2 x	160	.22	1.88	3.98		5.86
Furrow & Fertilize		Contract	(See each crop for fertilizer)	11.00		11.00
Shape Beds & Plant	65	.39	3.22	6.55 (See ea. crop for seed)		9.77
Irrigate for Germ.2x (Sprinkler)	4.00		29.88	15.00 1/3 A-Ft water	11.66	56.54
Cultivate, 4 beds 2 x	65	.52	4.44	4.86		9.30
Side-dress, 4 beds 1 x	65	.26	2.22	2.51 (See ea. crop for Fert.)		4.73
Irrigate 1 x (after thinning)	2.00		14.94	.49 1/4 A/Ft water	8.75	24.18
Total Cultural Cash Costs		8.77	\$68.34	\$62.89	\$31.41	\$162.64

Investment overhead for land preparation - Depreciation: \$25.99 Interest: \$16.72

* Includes Tractor

EQUIPMENT LIST AND OPERATION COSTS FOR A 350-ACRE VEGETABLE FARM, VENTURA COUNTY DECEMBER 1983

TRACTORS	Cash Cost/Hr	New Cost	Hours Per Yr	Life- Years	OVERHEAD COSTS				LABOR COSTS						
					DEPRECIATION		12.5% INTEREST		Hand	Tractor	Irrigator	Paid/Hr	Cost/Hr		
					Year	Per Hr	Year	Per Hr							
160 HP WD	\$17.00	\$65,000	1,300	10	\$6,500	\$5.00	\$4,062	\$3.15				\$5.35	\$7.01		
65 HP WD	8.00	48,000	850	14	1,286	1.50	1,125	1.32				6.50	8.52		
65 HP WD Big Wheels	9.06	24,500	850	14	1,750	2.06	1,531	2.06				5.70	7.47		
TILLAGE AND PLANTING															
												<u>CASH COSTS PER ACRE</u>			
												<u>Man</u>	<u>Trac</u>	<u>Mach</u>	<u>Total</u>
Subsoiler, 5 Shanks, 7.5'	3.25	160 HP 4,000	600	192	15	\$ 266	\$.44	\$ 215	\$.36	\$.32	\$2.73	\$5.44	\$1.04	\$9.21	
Plow 5'18", 2-way 7.5'	4.58	160 HP 9,000	750	240	10	900	1.20	562	.75	.32	2.73	5.44	1.44	9.61	
Disc and Roller 134'	5.73	160 HP 11,500	2,500	475	7	1,642	.66	709	.29	.19	1.62	3.23	1.09	5.96	
Landplane 14'	3.85	160 HP 17,000	1,500	270	15	1,133	.75	1,062	.71	.18	1.53	3.06	.69	5.28	
Drag Harrow 20'	1.00	160 HP 1,800	1,200	156	15	120	.10	112	.09	.13	1.11	2.22	.13	3.46	
Field Cultivator 24'	1.10	160 HP 4,000	1,200	336	15	267	.22	250	.21	.11	.94	1.87	.12	2.93	
Furrow or Cultivate			1,000	3,500	10	100	.03	62	.02						
4 40-inch Beds (13.3')	.35	65 HP	2,450	637						.26	2.22	2.34	.09	4.65	
4 30-inch Rows (10')	.35	65 HP	600	204						.34	2.90	2.72	.12	5.74	
3 60-inch Rows (15')	.35	65 HP	450	104						.23	1.96	1.84	.08	3.88	
Sled, Shape Beds, Plant			12,000	750	10	1,200	1.60	750	1.00						
4 40-inch Beds (13.3')	8.80	65 HP	600	293						.39	3.32	3.12	3.43	9.87	
3 60-inch Rows (tomatoes)(15')	6.60	65 HP	150	51						.34	2.90	2.72	2.24	7.86	
Plant Beans 8 rows	.55	65 HP 2,500	200	34	15	167	.83	156	.78	.17	1.45	1.36	.09	2.90	
Sidedress fertilizer	1.10	65 HP 4,500	550	143	10	450	.82	281	.81	.26	2.22	2.08	.29	4.59	
TOTAL TRACTORS AND IMPLEMENTS		\$174,800				\$15,751		\$10,887							
IRRIGATION															
Sprinkler System(1,000 gpmx10 Acres)		32,000	900	900	10	3,200	3.56	2,000	2.22	2.00	14.94		7.50*	22.51✓	
2,000 Ft. gated pipe 8"		9,775	2,200	2,200	10	978	.44	611	.27	2.00	14.94		.42	15.43✓	
Irrigation pipe trailer		2,225	3,100	310	15	148	.05	139	.05	.10			.07		
TOTAL IRRIGATION		\$44,000				\$4,326		\$2,750							
TOTAL TRACTORS, IMPLEMENTS & IRRIGATION		\$218,800				\$20,077		\$13,637							
TRANSPORTATION AND SHOP TOOLS															
Pickup 1/2 ton (2)		\$ 18,000			5	\$ 4,000		\$ 1,250							
Truck 1 1/2 ton		15,000			8	1,875		938							
Shop tools		5,500			10	550		344							
Tractor trailer		2,200			15	147		130							
TOTAL TRANSPORTATION AND SHOP		\$40,700				\$6,372		\$2,670							
MONTHLY CHARGE FOR DEPRECIATION AND INTEREST ON TRANSPORTATION AND SHOP						\$1.56/A-Mo		\$.64/A-Mo							
TOTAL ALL EQUIPMENT		\$259,500				\$26,649		\$16,307							

12.5% of 1/2 cost new

✓ One man @ \$8.52 and 1 man @ \$7.01 per Hr.

✓ Includes \$.07 per acre for trailer

* Includes \$2.00 per acre-inch for fuel

TAXES ON EQUIPMENT: $\frac{.5(259,500) \times .01}{4,200 \text{ acre-months}} = \$.31 \text{ per acre-month}$

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