

**CAULIFLOWER
PROJECTED PRODUCTION
COSTS
1989 - 1990**

CL-SE-90

IMPERIAL COUNTY



*Imperial
County

**UNIVERSITY OF CALIFORNIA
COOPERATIVE EXTENSION**

UC COOPERATIVE EXTENSION

Cauliflower Projected Production Costs 1989-1990

Mechanical operations at custom rates. Hand labor at \$5.75 per hour (\$4.50 plus Social Security, unemployment insurance, transportation, supervision and fringe benefits)

Yield--500 23-lb. cartons

Direct seeded

OPERATION	CUSTOM RATE	MATERIALS		HAND LABOR--		COSTS Per Acre
		Type	Cost	Hours	Dollars	
LAND PREPARATION						
Stubble disc	18.25					18.25
Subsoil	29.25					29.25
Disc 1x	9.50					9.50
Landplane 2x	10.00					20.00
Border, cross check & break borders	15.00					15.00
Flood		Water 1/2 ac/ft	5.50	1	5.75	11.25
Fertilize	6.00	450# -- 11-52-0	61.00			67.00
Disc 1x	9.50					19.00
Triplane 1x	8.75					8.75
List	11.50					11.50
TOTAL LAND PREPARATION						209.50

GROWING PERIOD						
Precision plant	14.50	Hybrid seed-1.0# @	225.00/#			239.50
Sprinkler Irrigate						135.00
Apply herbicide	8.00	Herbicide	33.75			41.75
Thin				10	57.50	57.50
Cultivate 3x	9.75					29.25
Fertilize & furrow out 2x	10.50	150# N @ .31	46.50			67.50
Water-run fertilizer 2x		40# N @ .31	12.40			12.40
Hand weed				4	23.00	23.00
Irrigate 8x		4 1/2 ac/ft	40.50	8	46.00	86.50
Insect control 5x	5.00	Insecticides	42.50			67.50
Disease control 5x	6.00	Fungicide	18.75			48.75
Chop residue	10.00					10.00
TOTAL GROWING PERIOD COSTS						818.65

GROWING PERIOD & LAND PREPARATION COSTS							1028.15
Land Rent (net acres)						200.00	
Cash Overhead---		12% of preharvest costs & land rent					147.38
TOTAL PREHARVEST COSTS						1375.53	

HARVEST (Field pack)						
Custom harvest, pack, sell and haul		500-23 lb. cartons @	3.90/carton			1950.00

TOTAL ALL COSTS **3325.53**

		PROJECTED INCOME ABOVE COSTS (PER ACRE)						
		price/carton						
		5.00	6.00	7.00	8.00	9.00	Breakeven	
							\$/carton	
Cartons per acre	300	-1046	-746	-446	-146	154	8.49	
	400	-936	-536	-136	264	664	7.34	
	500	-826	-326	174	674	1174	6.65	
	600	-716	-116	484	1084	1684	6.19	
	700	-606	94	794	1494	2194	5.87	

UC COOPERATIVE EXTENSION

CAULIFLOWER CULTURE

1989-1990

<u>YEAR</u>	<u>ACRES</u>	<u>YIELD/ACRE (CARTONS)</u>	<u>VALUE/ACRE</u>
1988	7507	371	\$3291
1987	5640	428	2671
1986	3187	442	2898
1985	1989	534	3909
1984	1006	712	3046

PLANTING AND HARVESTING DATES: Plantings start in August and continues through October. While most of the cauliflower is direct seeded, transplanting is also used. Cauliflower is usually grown single rows on 42 inch beds. Natural seed is planted 2-3 inches apart using a precision planter. The stands are thinned to 12-18 inches between plants. Some varieties are grown double row on 42 inch beds. Check with your seedsmen for recommendations. Transplants are placed in premoistened beds and sprinkler irrigated immediately. Cauliflower is harvested from December through early March.

VARIETIES: Several cauliflower varieties are needed to produce a continuous supply of 'flower' throughout the season. Varieties include: "Snow Crown", "Candid Charm", "Snow-pak", "Arapaho", "White Rock", "Matra", "Snowball", "Glacier", "Igloo", "Suprimax". Cauliflower seed costs from \$50 per pound for the lowest priced open pollinated variety to \$450 per pound for the newer hybrids. There are 80,000-140,000 seeds per pound. New varieties are continuously being developed. Proper varietal selection keyed to specific planting dates is crucial for cauliflower. A given variety is highly specific as to maturity periods and varieties out-of-slot will give poor performance. Ricing, light weights, and curd breaking are common defects improper planting periods or adverse weather.

SOILS AND IRRIGATION: Cauliflower performs well on medium to medium-heavy soils provided there is adequate drainage. On sandy soils, extreme care must be taken not to stress the plants for water or premature heading may occur. Open pollinated cauliflower of the Snowball Y class requires more water than the vigorous blue-green hybrids. Cauliflower is normally sprinkler irrigated for seedling emergence and then converted to furrow irrigation.

FERTILIZER: A 400-500 pound broadcast application of 11-52-0 before listing is normal practice. Some cauliflower varieties require more nitrogen than do others. The standard practice is to apply 200 pounds or more actual nitrogen per acre during the growing season to promote vegetative growth of the outer jacket leaves in order to protect the curds from solar yellowing.

INSECT, DISEASES AND MISCELLANEOUS PROBLEMS: Cabbage loopers, armyworms, sugarbeet cyst nematodes, flea beetles and aphids must be controlled. Birds such as horned larks are an early season problem. Wind whip causes girdling and perhaps death of small seedlings. Mice may be a problem near harvest. Sooty mold is a surface curd contaminant which frequently occurs near harvest. Downy mildew and bacterial black rot need to be carefully monitored. For the latest information on pest control, consult your local farm advisor or PCA.

HARVESTING: Fields are harvested 2-3 times or more depending upon the market. Mature curds six inches or larger are hand harvested and trimmed. The curds are placed on field harvesting machines to be film wrapped and place-packed according to size. Nines (9's), 12's, 16's, and 20's are used, but shippers pack mostly 12's. Currently, all cauliflower is field packed; there are no sheds.

GUIDELINES TO PRODUCTION COSTS AND PRACTICES
IMPERIAL COUNTY CROPS, CIRCULAR 104
 1989 - 1990

CUSTOM RATE CHARGES

HEAVY TRACTOR WORK

	<u>PRICE/ACRE</u>
Plow	\$ 24.75
Subsoil 2nd Gear	29.25
Disc, Regular	9.50
Disc, Stubble	18.25
Float	8.25
Triplane	8.75
List, Regular	11.50
List, and Rerun 80" Melon Beds	22.00
Reshape 80" Melon Beds	10.00
Landplane	10.00
Chisel	20.75

PLANTING AND CULTIVATING

Plant and Shape Melon Beds	16.75
Precision Plant 42" Beds	14.50
Plant Carrots	13.75
Plant Onions	16.75
Cultivate 4-Row 42" Beds	10.75
Cultivate Melon Beds	14.00
Spike and Furrow Out (2 row)	10.50
Lilliston	9.50
Furrow out alone	8.00
Move N-Side 80" Beds for Irrigation	9.50

INCORPORATING, BORDER AND BED WORK

Power Incorporate herbicides	20.25
Border, Cross checks and Break Borders	15.00
Bust Melon Beds	9.00
Roll Beds	5.00

FERTILIZER APPLICATION

Broadcast Fertilizer	6.00
Inject Fertilizer (Flat)	9.00
Fertilize and Furrow Out 42" Beds	10.50
Fertilize and Furrow Out 80" Beds	10.50

IRRIGATION

Custom Sprinkle	135.00-145.00
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MISCELLANEOUS

Motor Grader/Hour	42.75
Chop Broccoli, Corn Stalks, Etc.	10.00
Water truck/Hour	34.00
Cultipacker	6.00
Ground Spray Pesticides (4 Row)	7.00
Aerial Spray 5 Gal. (Insecticides)	4.50
Aerial Spray 10 Gal. (Fungicides)	5.00