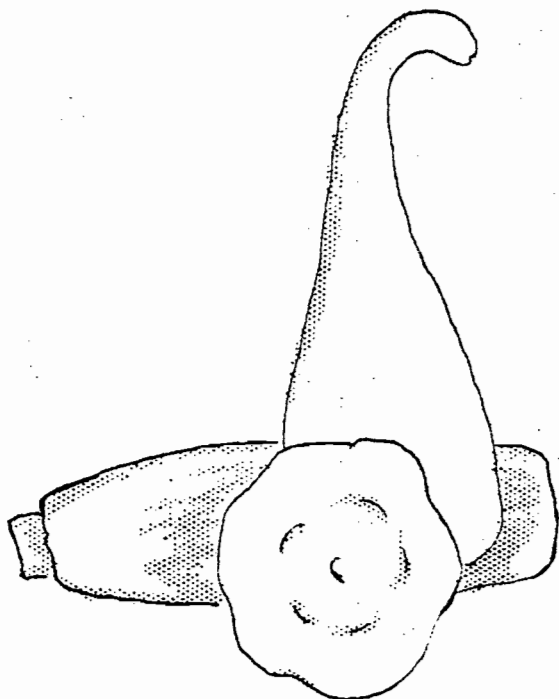


OPEN GROWN
SUMMER SQUASH
SAMPLE COSTS
AND
PRODUCTION



Cooperative Extension
University of California
Imperial County
Court House, El Centro

Cost Data Sheet No. 20

UC Cooperative Extension

OPEN GROWN SUMMER SQUASH--PROJECTED PRODUCTION COSTS--1982-1983

Mechanical operations at custom rates. Hand labor at \$5.50 per hour (\$4.30 plus Social Security, unemployment insurance, transportation, supervision and fringe benefits).

Yield--500 18+lb. cartons/acre (4.5) tons.)[†] 70 days to maturity.

OPERATION	Custom Rate	Type	MATERIALS		HAND LABOR		SAMPLE COSTS Per Acre
				Cost	Hours	Dollars	
LAND PREPARATION							
Disc 2x	8.00						\$ 16.00
Border, cross check & break borders	12.00						12.00
Flood	7.50/ac ft						
		Water $\frac{3}{4}$ ac/ft	5.63	1	5.50		11.13
Fertilize	6.00	250# 11-48-0	32.50				38.50
Disc 2x	8.00						16.00
List, flat beds	26.00						26.00
TOTAL LAND PREPARATION							\$ 119.63
GROWING PERIOD							
Plant & shape beds	14.00	Hybrid seed 2# @ 16.00/lb.	32.00				\$ 46.00
Pollination		Hives 1 @ 18.00					18.00
Thin				8	44.00		44.00
Cultivate 2x	14.00						28.00
Fertilize & furrow out 1x	12.00	80# N @ 34¢	27.20				39.20
Weed 1x				6	33.00		33.00
Irrigate 10x,		Water 4 ac/ft	30.00	9	49.50		79.50
Pest control, 4x	4.00	Pesticides, fungicides	45.00				61.00
TOTAL GROWING PERIOD							\$ 348.70
GROWING PERIOD & LAND PREPARATION COSTS							\$ 468.33
Land Rent (net acres)							175.00
Cash Overhead--10% of preharvest costs & land rent							64.33
TOTAL PREHARVEST COSTS							\$ 707.66
HARVEST							
Pick, haul, grade, pack & sell 500 cartons @ \$2.75							\$1375.00
TOTAL ALL COSTS							\$2082.66

Cost per carton = \$4.17 @ 500 ctn/ac
Cost per carton = \$3.47 @ 600 ctn/ac

YEAR	ACRES	YIELD/ACRE (20# CARTONS)	VALUE/TON
1977	580	631*	\$ 246
1978	536	466	375
1979	418	632	418
1980	722	585	367
1981	718	357	508

PLANTING DATES: Fall plantings are seeded in late August and September. Spring plantings are made in late December and early January for brushed plantings. Open grown spring squash is planted in January, February, and March.

VARIETIES: Dark green zucchini is the predominant type produced. Open pollinated squash seed sells for \$4.50/lb. Hybrid seed sells for \$14-18 per lb. Planting rates vary from 1½ lbs. seed/acre for hand planting with hill drops on 60" beds to 6 lbs. for the double row 80" machine planted fall crop. Scallop (summer) and yellow crookneck are also grown.

SOIL: Squash is produced on a wide variety of soils depending upon location. The earliest production usually occurs in warmer areas where sandy or gravelly soils predominate. Salinity may be a problem in shallow soils.

* Includes all squash (summer, banana and mediterranean)

IRRIGATION

After planting, the beds are subbed past the seedline. Following emergence, irrigation may be used sparingly until flowering to maintain soil warmth and promote early production. Once fruit formation has started, the beds are kept moist. FERTILIZERS--Two hundred and fifty pounds of 11-48-0 should be applied before listing the beds. Up to 100 lbs. of nitrogen may be sidedressed. Growers vary in fertilizer practices. Water-run applications of nitrogen fertilizers are often used. Some growers apply animal manures to supplement their fertilizer programs. If manures are used, pre-irrigation should follow the application. Seeding then can be done in a mulch, or on dry beds. PESTS AND DISEASES The most serious problems affecting summer squash production are two viruses. Squash leaf curl, a close relative to cotton leaf crumple, has become a problem in recent years. Spread by the sweetpotato whitefly, this virus affects fall plantings. Yellow crookneck and straight-neck, as well as scallop varieties, are more severely affected than the zucchinis. Watermelon mosaic has been a problem traditionally in the spring, following green peach aphid feeding.

All three types of squash are equally affected. There are currently no control measures for these viruses. Ultimately, the development of resistant varieties will be necessary to control the problem. Powdery mildew may also be a problem. Insect pests include; leafminer, aphids, crickets, whitefly, ground beetles, leafhoppers, mites, and cutworms. Insect control expenses vary with growers. The usual range is \$30 - \$70 per acre. Rodents are often a problem in newly seeded fields. The rodents dig up the squash seed before it has a chance to germinate. HARVESTING--Squash is hand harvested. Zucchini fruits are selected when they are 8-10" in length. Fruits which grow too large are in lower demand and therefore, sell at lower prices. The squash is hauled in picking boxes to local sheds where the fruits are graded to size and quality and then packed in 18-22 lb cartons. Normal grades include extra fancy, fancy, medium, large, and choice, depending on demand at harvest time. SPRING SQUASH--South sloped 4 or 7 foot beds are frequently used for spring squash plantings. Brown craft paper is used to form a wind barrier and heat trap. It is fixed upright on the south shoulder of beds running east and west, with stakes, wire and arrow weed (brush).

BOXES PER ACRE	INCOME ABOVE COST PER ACRE				
	Price/Box				
	\$ 3.00	5.00	7.00	9.00	11.00
400	-608	+ 192	+ 992	+1792	+2592
600	-558	+ 642	+1842	+3042	+4242
800	-508	+1092	+2692	+4292	+5892
1000	-458	+1542	+3542	+5542	+7542
1200	-408	+1992	+4392	+6792	+9192

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