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SUGAR BEETS
in
CALIFORNIA

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SUGAR BEETS IN CALIFORNIA

The sugar beet has a wide climatic adaptation and can be grown successfully in all principal irrigated areas of the state. The growth and development of the plant is favored by days of long light duration and moderate temperatures. The long growing season in California is one of the main reasons why sugar beet yields are higher than elsewhere in the United States.

Advantages of sugar beets as a crop are:

1. Dependable income
2. Easy to grow once established
3. Tolerant to alkali

ESSENTIALS OF PRODUCTION:

- Fairly deep soil (3 to 6 feet)
  - Types range from sandy loams to heavy clays
  - Important considerations:
    - * Water penetration
    - * Drainage
    - * Fertility
    - * Freedom from diseases, weeds
- Dependable source of irrigation water
  - Beets need continuous supply during season
- Land leveled to grade
  - To permit well-controlled furrow irrigation

STEPS IN PRODUCTION:

1. Seed bed preparation
   - Chisel
   - Disk
   - Landplane
   - Disk
   - Form beds
2. Planting
   - Variety - disease resistant, non-bolting
   - Seed treatment - seedling diseases, wireworms
   - 8 lbs. seed per acre
   - Planted 1 to 2" deep
   - Soil crusting a problem
3. Thinning
   - Mostly by hand - some mechanical
   - Plant population per acre desired - 33,000

4. Fertilizing
   - 75 to 125 pounds per acre nitrogen used
   - Few areas need phosphate
   - No potash used in California

5. Irrigation
   - Most crops "irrigated up"
   - Beets should have continuous supply-Not allowed to wilt
   - Need 30 to 36 acre-inches per year

6. Weed Control
   - Chemical control not practical as yet
   - 1 or 2 hand weedings
   - Water grass most important

7. Pests and Diseases
   - Nematode
   - Sclerotium root rot
   - Wireworms
   - Cutworms
   - Root aphid
   - Curly top virus
   - Seedling diseases

8. Harvesting
   - Mostly mechanical

Sugar beets are under a marketing quota program by the United States Department of Agriculture. This can result in acreage allotments. All sugar beets are grown under a participating-type contract with a sugar processing company.

Sample Costs of Producing Sugar Beets in California

	Per acre
Land Preparation (6 hrs. man +heavy tractor)	$ 15.00
Planting (.5 hr. 2 men +tractor, planter rent)	2.50
Seed, 8 lbs. at 57¢, treated	4.56
Thinning plus weeding (contract basis)	20.00
Fertilizer application	.75
Fertilizer (200 lbs. actual nitrogen)	24.00
Hoeing and weeding (2 times)	12.00
Cultivating (5 times, 3 man hrs. with light tractor)	6.90
Irrigation labor (8 times, 12 man hours)	12.00
Water ($4.25 per ac. ft. - 3.5 ac. ft.)	15.00
Miscellaneous labor and materials	5.00
TOTAL Pre-harvest labor and materials	$ 117.71
HARVEST COSTS:	
Harvest ($1.35 per ton)	27.00
Haul (Contract $1.25 per ton)	25.00
TOTAL	52.00
CASH OVERHEAD:	
General Expense (office, phone, car, etc.)	5.85
Insurance, repairs, misc. cash costs	5.00
Taxes (County and Irrigation District)	11.50
TOTAL	22.35
DEPRECIATION:	
Irrigation System (pipe lines, etc.)	4.50
INTEREST ON INVESTMENT:	
Buildings and irrigation facilities	1.50
Land $500 @ 5%	25.00
TOTAL	26.50
TOTAL COST OF PRODUCTION PER ACRE	$ 223.00
Cost per ton	11.15
Price per ton	13.75
NET PROFIT	52.00