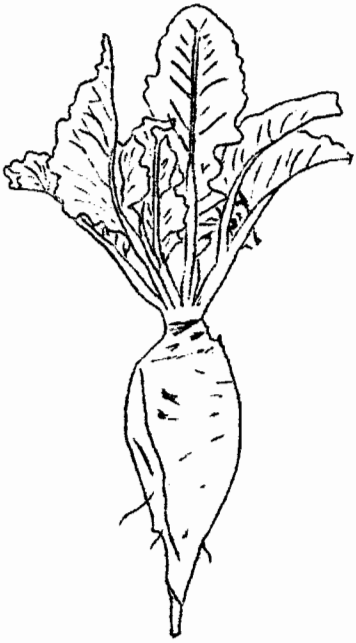
sugar beets

sample costs and production



University of California
Agricultural Extension Service
Imperial County
Court House, El Centro

Fact Sheet No. 31

SUGAR BEETS--SAMPLE COSTS AND PRODUCTION*

ITEMS	SAMPLE COSTS Per Acre	Per Ton
LAND PREPARATION (Labor & Power)		
Plow. subsoil or chisel	$ 8.50	
Break borders 2x @ 50¢	1.00	
Disc 3x @ $2.00	6.00	
Border	.75	
Irrigate	.75	
Float	1.75	
List	3.00	
TOTAL LAND PREPARATION	$ 21.75	$ 1.03
CULTURAL LABOR AND POWER		
Shape and plant beds	3.00	
Fertilize 3x @ $1.75	5.25	
Thin 1x @	17.00**	
Hoe 2x @	17.00**	
Cultivate 4x @	8.00	
Irrigate 12x	9.00	
Ditch and Irrigation Preparation	1.00	
Apply Insecticides 3x	5.00	
TOTAL CULTURAL POWER	$ 65.25**	$ 3.11
MATERIALS		
Irrigation Water - 41/2	9.00	
Seed 5# @ 75¢ (N)	3.75	
Fertilizer 200#, 100# P_2O_5	26.00	
Insecticides 3x	15.20	
TOTAL MATERIALS	$ ~~43.75~~	$ 2.09
HARVEST		
Dig and Haul - net weight	45.36	2.16
TOTAL HARVEST	$ 45.36	$ 2.16
CASH OVERHEAD (10% of above)	$ 17.61	$ .84
LAND RENT (1/5 share)	$ 58.42	$ 2.78
TOTAL ALL COSTS	$ ~~252.14~~	$ ~~12.84~~

VARIETIES

The varieties available for 1961 plantings, their resistance to disease, and performance compared to U.S. 75 are listed below. †

VARIETY	PARENTAGE	RESISTANCE TO		PERFORMANCE IN % OF U.S. 75	
		Curly Top	Bolting	% Sugar	Gr. Sugar
U.S. 75	Open Pollinated	Very Good	Very Good	100	100
H.C.-1	Open Pollinated	Very Good	Excellent	101	101
U.S. H_2	3x Hybrid	Good	Good	103	118
U.S. H_3	3x Hybrid	Good	Good	105	105
U.S. H_4	3x Hybrid	Good	Good	107	110
U.S. 56/2	Open Pollinated	Fair	Good	104	97
H.H. 3	3x Hybrid	Excellent	Good	102	113
H.H. 4	3x Hybrid Monogerm	Good	Good	106	109

† Information supplied by plant breeders.

SEEDING RATES

Approximate lbs/acre required for six seeds per foot of row.

Row Spacing Inches	Lin. Ft. Per Acre	(Lbs/Acre) Single Row		Double Row	
		Multigerm	Monogerm	Multigerm	Monogerm
30	17,424	3.0	2.3		
34	15,557	2.6	2.1		
32	16,753	2.8	2.2		
36	14,520	2.5	1.9		
38	13,756	2.3	1.8		
40	13,068	2.2	1.7	4.5	3.4
42	12,446	2.1	1.6	4.2	3.2

* Costs based on yield of 21 tons/acre @ 15.5% sugar. Conditionsl payment $2.25, net selling price $7.40/ton.
** Costs will vary depending upon degree of mechanical thinning and weed control.

If closer, or wider, row spacings are desired, seeding rates should be adjusted accordingly.

A slightly greater amount of seed is generally used in early plantings due to difficulty in getting stands in the extremely hot weather.

YIELDS

Yields will vary from 14 to 30 tons per acre. However, the county average for the past five years is about 21 tons per acre.

PLANTING DATES

Growers will begin to plant beets in mid to late August and continue through October. Most growers will irrigate the beets up so they will emerge in early September.

IRRIGATION

Irrigation is by furrows. The crop is "irrigated up" initially and may require "watering back" within four or five days to get a stand. Never allow the crop to wilt or suffer from shortage of water. 12 to 20 irrigations may be required. Three to four weeks, depending on crop and

soil conditions, will be required following the final irrigation before harvesting.

HARVESTING

Harvesting is completely mechanized. Arrangements should be made with a number of custom operators. Dates of harvest and delivery of beets is determined in your contract with the sugar company.

PESTS AND DISEASES

A number of insects may be a problem during the growing season. Contact your Farm Advisor's Office for specific insect recommendations.

The sugar beet nematode is becoming a more important pest each year. Growers should clean all machinery moving from field to field to reduce the possibility of spreading this pest.

FERTILIZATION

Phosphate-Apply 100# P_2O_5 per acre broadcast, then list beds.

Nitrogen-Needed in large amounts for best yields. Apply pre-list with P_2O_5, after thinning, and before cold weather. Tissue tests should be used to make sure Nitrogen supply is ample through March.

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July 1961

Co-operative Extension work in Agriculture and Home Economics, College of Agriculture, University of California, and United States Department of Agriculture co-operating.