

Agricultural Briefs

SACRAMENTO COUNTY

1977 - SAMPLE COSTS TO PRODUCE SUGAR BEETS

SOIL REQUIREMENTS: Deep, fertile, well-drained soils of organic or mineral type. Texture can range from sandy loam to clay. Avoid hardpan and claypan.

PLANTING DATES: February, March, April; During May in over-wintered areas.

HARVEST DATES: September - November; March - May if over-wintered.

VARIETIES: New disease-resistant hybrids, furnished by contracting sugar company.

SEEDING RATE: Mechanical thinning: Plant 2 inches apart. Thin mechanically 100 - 150 beets per 100 feet of row, not more than 20% multiples of three or more plants. Synchronous thinner: plant 2-3/4 inches apart. Final Stand: Should end up with plants 6 - 7 inches apart.

WEED CONTROL: Roneet or Tillam are available for preplant weed control. Do not use prior to March 1. Poor control results under cool conditions. Betanex® is available for control of pigweed post-emergence. Betanal® is available for post-emergence weed control of broadleaf weed species except for pigweed. The combination of Betanal® + Betanex® has resulted in the best control. Nortron is a new herbicide. When used in combination with Betanal® it has given good results post-emergence on hard to control broadleaves: such as knotweed.

FERTILIZER REQUIREMENTS: 100 - 200 lbs/acre Nitrogen preplant, 25 - 30 gallons 6-24-6 under the seed at planting. Plants should run out of nitrogen 1 month prior to harvest.

IRRIGATION: 2-1/2 to 3-1/2 acre feet needed. On peat, sprinkling or sub-irrigation; on mineral soil, sprinkling or furrow irrigation. Do not permit wilting.

ROTATION: Four years between beet crops for good soil management, and to control sugar beet nematode, and sclerotium root rot.

SPECIAL PROBLEMS AND CONTROL MEASURES:

Mildew: 40 lbs/acre Sulfur when mildew first appears.

Salts: Irrigate every other row or plant on slanted beds.

Yellows: Beet free period plus elimination of carrier plants; control of green peach aphid; plant in May in over-wintered areas.

Sugar beet nematode: Rotation; fumigation second choice.

Insects: Army worms, cutworms, and darkling ground beetles - insecticides.

Poor stand: Maintain seedbed moisture, avoid severe wireworm and damping off areas, use only treated seed.

Inadequate Irrigation: Resulting in excessive wilting- better management.

Late-emerging weeds: Which reduce yield, cause harvest problems, and infest soil with weed seed, better management. Hoe out or use Betanal®+Betanex® combined.

Very late spring harvest: Due to wet spring which ties up land, causes harvest problems, produces beet seed causing volunteer problem, and possibly lowers sugar yield - better luck.

NEW DEVELOPMENTS: Yellows Control by resistant varieties and use of aphicides.
Complete Mechanization by planting to stand and mechanical thinning.

"The University of California's Cooperative Extension Programs are available to all, without regard to race, color, sex, religion, or national origin."

4145 Branch Center Road, Sacramento, California 95827 • Telephone 480-5271 366-2013

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS, Division of Agricultural Sciences,
University of California, U.S. Department of Agriculture and County of Sacramento cooperating

1977 - SAMPLE COSTS TO PRODUCE SUGAR BEETS

OPERATION	HOURS/ ACRE	LABOR	FUEL & REPAIRS	MATERIALS KIND AND QUANTITY	TOTAL COSTS/ACRE
<u>CULTURAL</u>					
Disc 2x	0.50	1.75	2.44		4.19
Plow	0.40	1.40	1.89		3.29
Disc 2x	0.50	1.75	2.44		4.19
Landplane 2x	0.66	2.32	3.48		5.80
Rip 2x	1.32	4.62	6.00		10.62
Spring tooth-float- ringroller	0.10	0.35	1.22		1.57
Bed up and N applic.	0.25	0.87	1.55	+ \$2 150 lb/ac N @ 25¢ = 37.50	41.92
Plant-herbicide-fert. (2 men)	0.40	2.80	1.89	Tillam 6 lb/ac. Bed top applic. \$8.90, seed @ 5 lb/ac \$6.67, starter fert. 30 gal/ac 4-10-10 \$23.55 \$43.81	48.50
Post herbicide applic.	0.25	0.87	1.09	Betenal 1.3E (\$32.48/gal)+ Nortron 1.5E (\$35.88/gal); 1.0+3.5 lb a.i./ac (spray 6"-1/5 of area) \$5.16+9.56 \$14.62	16.68
Thin mechanically	0.40	1.40	1.37		2.77
Hand hoe 2x		25.00 (ea. time)			50.00
Layby herbicide (Lilliston 2x)	0.2	0.70	2.25	Treflan 2 pt/ac. \$8	10.95
Cultivate 2x	0.6	2.00	2.74		4.74
Sidedress nitrogen	0.3	1.00	1.37	30 lbs/ac N @ 25¢ \$7.50	9.87
Irrigation 7x				\$34.65 labor, \$24 water, \$4.30 power, \$8/ac.ft, 3 ac/ft required.	62.95
Ditch open & close 3x					1.27
Pest control				Sevin bait for cutworm + air applic. \$12 +\$3 Metasystox for aphids+air applic \$5.40+\$3 Sulfur 40 lbs/ac dust+air applic \$2.66+\$3	15.00 8.40 5.66
TOTAL CULTURAL COSTS					\$308.37
<u>HARVEST</u>					
Top & dig	1.50/ton				36.00
Haul	1.50/ton				36.00
TOTAL HARVEST COSTS					\$ 72.00
<u>CASH OVERHEAD</u>					
Taxes on equipment				\$422.08 x 0.93 = \$390.53 390.53 x 25% = \$ 97.63 97.63 x 0.13 = \$ 12.69	12.69
Misc. office					1.00
Rent 1/4 gross				25 tons/ac x \$26/ton x 14 = \$162.50	162.50
Workman's Comp. & Soc. Sec.					3.50
TOTAL CASH OVERHEAD					\$179.69

Cont'd