

1984 SAMPLE COSTS TO PRODUCE SUGAR BEETS

SOIL REQUIREMENTS - Deep, fertile, well-drained soil 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.

VARIETIES - Plant disease-resistant hybrids furnished by contracting sugar company.

SEEDING RATES - For mechanical thinning, plant 2 inches apart. Thin mechanically 100 to 150 plants per 100 feet of row, not more than 20 % doubles of three or more plants. For synchronous thinner plant 2.75 inches apart. Final stand should equal 6 to 7 inches between plants.

WEED CONTROL - Roneet or Tillam are available for preplant weed control. Do not use prior to March 1. Poor control results under cool conditions. Betamex is available for control of broadleaf weed species.

Nortron has given good control when used in combination with betanal, post-emergence. Nortron can also be used pre-emergence. Good results have been obtained with the combination of Nortron and Pyramin pre-emergence under fall applications. Antor has given excellent results when applied pre-emergence in the spring. Poast can be used post-emergence for control of escape grasses. Herbicide 273 applied post-emergence will give good control of smartweed.

FERTILIZER - 100 to 200 lbs/ac nitrogen preplant, 25 to 30 gallons 6-24-6 under the seed at planting. Plants should run out of nitrogen 30 days prior to harvest.

IRRIGATION -2.5 to 3.5 acre feet needed. On peat, sprinkler or sub-irrigate or on mineral soils, sprinkle 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. Five years has been suggested for control of cyst nematode.

SPECIAL PROBLEMS AND CONTROL MEASURES

- Mildew: 40 lbs/ac sulfur when mildew first appears.
- Salts: Irrigate every other row or plant on slanted beds.
- Yellows: Beet free periods plus elimination of carrier plants; control of green peach aphid; plant in May in over-wintered areas.
- Nematodes: Rotation first choice: fumigation second choice
- Insects: Armyworms, cutworms, and darkling ground beetles
- Poor Stands: Maintain seedbed moisture, avoid severe wire worm and damping-off areas, use only treated seed.
- Inadquate Irrigation: Resulting in excessive wilting - better management.
- Late-emerging Weeds: Can reduce yield and cause harvest problems. Also, infest soil with weed seed. hoe or use Betanal/Betamex.
- Very Late Spring Harvest: Due to wet spring which ties up land, causes harvest problems, produces bolting and volunteer problems, and lower sugar yield.

SAMPLE COST TO PRODUCE SUGAR BEETS

TYPE OF CROP.....= SUGAR BEETS	NUMBER OF ACRES.....= 500
YIELD PER ACRE....= 26 TONS	MARKET VALUE PER TONS..= 36.67
GROSS INCOME.....= 476,710.00	GROSS INCOME/ACRE.....= 953.42

EXPENSES

TYPE	PER ACRE	TOTAL	CHANGES
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CULTURAL FUEL COSTS			

Chop Stubble	0.57	285.00	-----
Disc 2x	2.20	1,100.00	-----
Plow	2.75	1,375.00	-----
Level Plane 2x	2.72	1,360.00	-----
Chisel 2x	5.00	2,500.00	-----
Disc 1x	1.10	550.00	-----
Spring Tth/Roll	0.75	375.00	-----
Float/Ringroll	0.75	375.00	-----
List beds	1.50	750.00	-----
Plant/Herb Incorp	1.80	900.00	-----
Post-Herb Apply 2x	3.00	1,500.00	-----
Mech. Thinning	1.00	500.00	-----
Cult. 3x/ Side-N	2.40	1,200.00	-----
Open/Close Ditches	0.60	300.00	-----
Apply Layby Herb.	1.40	700.00	-----
Seed (2 lbs/ac)	66.50	33,250.00	-----
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TOTAL ***	94.04	47,020.00	-----
IRRIGATION			

Irrig. 6x (\$12/AF)	32.00	16,000.00	-----
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TOTAL ***	32.00	16,000.00	-----
CHEMICALS			

Herb./Betaaix/gr	5.77	2,885.00	-----
Metaxystox/air	10.56	5,280.00	-----
Herb./Poast/gr	10.33	5,165.00	-----
Herb./Anton/gr	13.67	6,835.00	-----
Pre-N 200 lbs/ac	46.00	23,000.00	-----
Starter/8-24-6 20g	29.90	14,950.00	-----
Sidedress N 30 #/e	6.90	3,450.00	-----
Sulfur/air/40#	11.60	5,800.00	-----
Sevin Bait	20.00	10,000.00	-----
Herb./Layby/Trefla	8.43	4,215.00	-----
Lannate/air	14.00	7,000.00	-----
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TOTAL ***	177.16	88,580.00	-----
HARVEST			

Top and Dig	58.50	29,250.00	-----
Hauling (\$4/ton)	104.00	52,000.00	-----
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TOTAL ***	162.50	81,250.00	-----

LABOR

Cultural (\$5/hr)	28.80	14,400.00
Irrigation (\$4/hr)	32.00	16,000.00
Hand Hoeing	65.00	32,500.00
Shop Mechanic	10.00	5,000.00
TOTAL ***	135.80	67,900.00

DEBT SERVICE

Interest on Equip	9.00	4,500.00
Interest on Loan	19.65	9,825.00
TOTAL ***	28.65	14,325.00

CASH OVERHEAD

Share Rent (20%)	190.68	95,340.00
Office/Mgmt. Exp.	15.00	7,500.00
Taxes on Equip.	2.59	1,295.00
Repairs/Maint.	54.24	27,120.00
Emp. Benefits (30%)	21.30	10,650.00
Mgmt. Sal/Benefits	35.00	17,500.00
TOTAL ***	318.81	159,405.00

TOTAL CASH EXPENSES @	948.96	\$ 474,480.00
NET INCOME @ 26 TONS	4.46	\$ 2,230.00

NON-CASH COSTS

Equip. Depreciation	37.50	18,750.00
Bldg. Depreciation	4.44	2,220.00
Interest on Bldgs.	10.67	5,335.00
TOTAL NON-CASH COSTS @	52.61	\$ 26,305.00

GRAPH OF CROP EXPENSES

