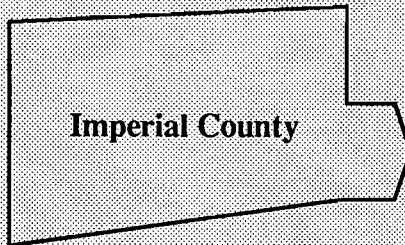


SU-SI-92

Sudangrass Hay

Projected Production Costs

1991-1992



Imperial County

*University of California
Cooperative Extension*

UC COOPERATIVE EXTENSION

SUDANGRASS HAY
PROJECTED PRODUCTION COSTS
1991-1992

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mechanical operations at custom rates. Labor at \$5.75 per hour (\$4.50 plus Social Security, unemployment insurance and fringe benefits).

Yield--5.0 tons per acre.

| OPERATION | CUSTOM RATE | MATERIALS | | HAND LABOR | | COSTS Per Acre |
|---|-------------|-------------------------------------|-------|------------|---------|----------------|
| | | Type | Cost | Hours | Dollars | |
| LAND PREPARATION | | | | | | |
| Disc 2x | 9.50 | | | | | 19.00 |
| Fertilize (Injected) | 10.50 | 100# NH3 @ .15/lb | 15.00 | | | 25.50 |
| Border | 8.50 | | | | | 8.50 |
| Float 2x | 8.25 | | | | | 16.50 |
| TOTAL LAND PREPARATION COSTS | | | | | | 69.50 |
| GROWING PERIOD | | | | | | |
| Plant | 8.50 | Seed 85# @ .60/lb | 51.00 | | | 59.50 |
| Irrigate 8x | | 3.5 ac/ft | 40.25 | 4 | 23.00 | 63.25 |
| Fertilize (water run) | | 100# NH3 @ .15/lb | 15.00 | | | 15.00 |
| TOTAL GROWING PERIOD COSTS | | | | | | 137.75 |
| GROWING PERIOD & LAND PREPARATION COSTS | | | | | | 207.25 |
| Land Rent (net acres) | | | | | | 130.00 |
| Cash Overhead-- | | 12% of preharvest costs & land rent | | | | 40.47 |
| TOTAL PREHARVEST COSTS | | | | | | 377.72 |
| HARVEST COSTS (calculated at 5 tons/acre and 2 cuttings) | | | | | | |
| Swather 2x | 10.00 | | | | | 20.00 |
| Crimper | 5.50 | | | | | 5.50 |
| Rake 2x | 5.00 | | | | | 10.00 |
| Bale (5.0 tons) | 12.00/ton | | | | | 60.00 |
| Haul & Stack | .25/bale @ | 20 bales/ton | | | | 25.00 |
| TOTAL HARVEST COSTS | | | | | | 120.50 |
| TOTAL ALL COSTS | | | | | | 498.22 |

PROJECTED INCOME ABOVE COSTS (PER ACRE)
price/ton

| | | Breakeven | | | | | | |
|------|-----|-----------|------|------|------|------|------|--------|
| | | 40 | 50 | 60 | 70 | 80 | 100 | \$/ton |
| | 3 | -339 | -309 | -279 | -249 | -219 | -159 | 143 |
| tons | 3.5 | -327 | -292 | -257 | -222 | -157 | -117 | 125 |
| per | 4 | -316 | -276 | -236 | -196 | -156 | -76 | 111 |
| acre | 4.5 | -304 | -259 | -214 | -169 | -124 | -34 | 101 |
| | 5 | -293 | -243 | -193 | -143 | -93 | 7 | 93 |

SUDANGRASS CULTURE

1991-1992

| <u>YEAR</u> | <u>ACRES</u> | <u>YIELD/ACRE (TONS)</u> | <u>VALUE/TON</u> |
|-------------|--------------|--------------------------|------------------|
| 1989 | 49,167 | 4.0 | \$85 |
| 1988 | 34,509 | 5.5 | 90 |
| 1987 | 24,914 | 6.8 | 70 |
| 1986 | 13,500 | 5 | 68 |
| 1985 | 15,200 | 5 | 65 |

SOIL PREPARATION: A uniform seed bed is necessary to obtain a good stand of sudangrass. High spots in the field cause uneven irrigation and poor stands result. Low spots in the field will "scald" out, decreasing the stand population and reducing yield.

PLANTING DATES, RATES & VARIETIES: Sudangrass should be planted at 20 to 40 pounds of seed per acre. Sudangrass may be planted from March to June with a drill or broadcaster.

The variety Piper has always performed well in Imperial Valley. There are also a number of commercial varieties available. Consult your farm advisor for more information.

FERTILIZATION: Apply 50 to 100 lbs. of nitrogen as NH_3 preplant. Eighty to 100 lbs. of nitrogen may be applied in the irrigation water if necessary after the first hay crop is cut.

IRRIGATION: Sudangrass requires high soil moisture but will scald out during the hot summer days if standing water is left on a field several hours during mid-day.

PEST CONTROL: Weed control is not normally necessary in sudangrass production. However, 2,4-D gives excellent control of broadleaf plants if required.

HARVESTING: Sudangrass may be harvested 2 to 5 times, between June and November. Pasturing may also be practiced.

GUIDELINES TO PRODUCTION COSTS AND PRACTICES

Imperial County Crops, Circular 104F

1991-1992

CUSTOM RATE CHARGES

| | PRICE/ACRE |
|---|-----------------|
| HEAVY TRACTOR WORK | |
| Plow | \$ 24.75 |
| Subsoil 2nd Gear | 29.25 |
| Disc, Regular | 9.50 |
| Disc, Stubble | 18.25 |
| Float | 8.25 |
| Triplane | 8.75 |
| List, Regular | 11.50 |
| Landplane | 10.00 |
| Chisel | 20.75 |
| PLANTING AND CULTIVATING | |
| Plant and Shape Sugar Beet 40" Beds | 15.50 |
| Precision Plant 40" Beds | 14.50 |
| Plant | 13.75 |
| Cultivate 4-Row 30", 40" Beds | 10.75 |
| Spike and Furrow Out (2 row) | 10.50 |
| Lilliston | 9.50 |
| Furrow out alone | 8.00 |
| INCORPORATING, BORDER AND BED WORK | |
| Power Incorporate | 20.25 |
| Scraper Borders | 12.75 |
| Border, Cross checks and Break Borders | 15.00 |
| Roll Beds | 5.00 |
| FERTILIZER APPLICATION | |
| Broadcast Fertilizer | 6.00 |
| Inject Fertilizer (Flat) | 10.00 |
| Fertilize and Furrow Out 30", 40" Beds | 10.50 |
| IRRIGATION | |
| Custom Sprinkle | \$130.00-140.00 |
| HARVEST | |
| Swather | 7.50 |
| Rake | 4.00 |
| MISCELLANEOUS | |
| Motor Grader/Hour | 42.75 |
| Chop Stalks, Etc. | 11.00 |
| Cultipacker | 6.00 |
| Power Incorporate Herbicides | 20.25 |
| Ground Spray Pesticides (4 Row) | 7.50 |
| Aerial Spray 5 Gal. (Insecticide) | 4.75 |
| Aerial Spray 10 Gal. (Fungicides) | 5.00 |