

sorghums (grain)

sample costs

and

production



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

Cost Data Sheet No. 6

1974

SORGHUMS (GRAIN) -- SAMPLE PRODUCTION COSTS

Mechanical operations at custom rates. Labor at \$3.00 per hour (\$2.53 plus Social Security, unemployment insurance, and fringe benefits).

Yield - 2.5 tons per acre.

OPERATION	Custom Rate	MATERIALS		HAND LABOR		SAMPLE COSTS Per Acre
		Type	Cost	Hours	Dollars	
LAND PREPARATION						
Disc 2x	\$ 3.50					\$ 7.00
Fertilize	3.00	190# N	23.00			26.00
Float 2x	3.50					7.00
List	4.50					4.50
TOTAL LAND PREPARATION						\$ 44.50
GROWING PERIOD						
Planting	4.00	15# seed @ 30¢	4.50			8.50
Herbicides	3.50		4.00			7.50
Insecticide 1x	2.50		3.50			6.00
Irrigation 8x		Water 4 ac ft	10.50	3.5	10.50	21.00
GROWING PERIOD						\$ 43.00
GROWING PERIOD & LAND PREP COSTS						\$ 87.50
Land Rent						75.00
Cash Overhead - 15% of preharvest costs and land rent						24.38
TOTAL PREHARVEST COSTS						\$186.88
HARVESTING COSTS						
Combine	10.00	per acre plus .25 cwt over 1 ton				17.50
Hauling	2.50	ton				7.50
TOTAL ALL COSTS						\$211.88

Cost per ton = \$84.75

GENERAL INFORMATION

The average yields for sorghum during the last 2 years have ranged from 2.0 to 2.5 tons per acre with an average selling price of from \$50.00⁺ to \$140.00⁺ per ton.

Excellent yields of grain sorghums have been obtained on both sandy and heavy soils. The open-pollinated sorghum varieties tend to be more salt tolerant than many of the hybrids. This is particularly true in the late plantings when air temperatures are higher and periods of stress are more frequent.

PLANTING DATES, RATES AND DEPTH

Grain sorghums may be planted from March through July. The necessary ingredient for a successful earlier planting is warm weather so that a healthy stand is obtained. Test results have shown yields to be lower in planting after April 15th with all grain sorghum varieties. Ryer types are especially subject to lower yields when planted after mid-April. The open-pollinated types and some of the hybrids have produced satisfactory yields when planted as late as July 15th.

The Ryer types should be flat-planted with grain drill at approximately 30 to 40 pounds of seed per acre. Row spacings with these varieties should be 7 to 14 inches. All other varieties and hybrids should be planted at about 12 to 18 pounds of seed per acre in double row 40 to 42 inch beds, or flat drilled in 14 to 21 inch rows.

The depth of planting will be dependent upon planting technique. Ryer types planted early in a moist mulch should be placed to a greater depth (1-2") than the open-pollinated or hybrid types planted on a bed and silted up (3/4-1").

VARIETIES

There are more than 30 grain sorghum varieties available to the grower in the Imperial Valley. These include both hybrids and open-pollinated types. Many of these sorghums are well-adapted to the Imperial Valley and will produce satisfactory yields. For the latest varietal testing information, consult the Farm Advisor's Office.

FERTILIZATION

Nitrogen is recommended in amounts varying from 80 to 200 pounds of nitrogen per acre. The amount needed varies with soil type and the previous cropping history. Grain sorghum planted after a vegetable crop such as lettuce, may require only 60 to 80 pounds of nitrogen. However, sorghum planted after a heavy stubble crop of cotton, grain sorghum or barley may require as high as 200 pounds of nitrogen. In

heavier soils, the fertilizer may be applied preplant or at planting time in one application. In sandy soils, sidedress applications will be necessary.

IRRIGATION

Grain sorghum may be planted in a moist soil, or irrigated up. It should be irrigated often enough to prevent curling of leaves. After the grain has reached the stiff dough stage, no further irrigations are required.

WEED CONTROL

Weed control chemicals are commonly used as either preemergence or post-emergence treatments. For latest information consult Weed Control Recommendations - Imperial County.

INSECT CONTROL

Stink bugs, sorghum greenbug, and desert flea beetle are occasional pests. For latest insect control recommendations contact the Farm Advisor's Office.

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Revised August 1974

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California Agricultural Extension.