

grain sorghums

sample costs

and

production



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

Fact Sheet No. 27

UC Cooperative Extension

GRAIN/SORGHUM--SAMPLE PRODUCTION COSTS

Assume yield of 3000# per acre

ITEMS	SAMPLE COSTS	
	Row Planting	Flat Planting
LAND PREPARATION		
Fertilize 1x	\$ 1.75	1.75
Disc 2x @ \$2.00	4.00	4.00
Border 1x		1.00
Float 1x	1.75	1.75
Irrigate 1x	1.00	1.00
Mulch 1x		2.50
List 1x	3.00	
TOTAL LAND PREPARATION	\$ 11.50	\$ 12.00
CULTURAL LABOR AND POWER		
Cultivate 2x	4.00	
Planting	2.50	2.50
Irrigate 5x @ 1.00	5.00	5.00
TOTAL CULTURE AND POWER	\$ 11.50	\$ 7.50
MATERIALS		
Irrigation water - 2' @ 2.00	4.00	4.00
Seed - 35# @ 12¢ (drilled) - Ryer types		4.20
12# @ 12¢ (row)	1.44	
Fertilizer 100# N @ 8¢	8.00	8.00
Miscellaneous	1.00	1.00
TOTAL MATERIALS	\$ 14.44	\$ 17.20
HARVEST COSTS		
Combine - 6.50/A	6.50	6.50
Hauling - (up to 25 miles)	3.00	3.00
TOTAL HARVEST	\$ 9.50	\$ 9.50
CASH OVERHEAD	4.00	4.00
RENT 1/2 year @ \$15 to \$25/acre	25.00	25.00
TOTAL ALL COSTS	\$ 75.94	\$ 75.20

VARIETIES

In 1960, Ryer 15 and Imperial 40 made up 52% of the grain sorghum planted. Growers have a wide selection of hybrids, along with Ryer 15 and DD38 to choose from in early plantings. Several fields produced 3 tons more per acre.

Ryer 15, Imperial 40, Select Imperial. Head out 50 to 65 days after planting. They are about three weeks earlier than DD38. Kernels are of typical yellow milo type. They do not tiller from the crowns, leaves are few and narrow and are lighter green in color. Seedling growth is very rapid.

Double Dwarf 38. Heads out 60 to 75 days after planting. A yellow seeded milo type 3 to over 4 feet tall, does not lodge easily, a good combine type. Most extensively grown grain sorghum in the state. May be subject to seed-set failure when planted after June 1.

R. S. 610. Heads out 65 to 75 days after planting. Medium early, of combine height, and dry headed. Grain color is light red. Semi-compact heads, about 40" tall.

Dwarf Imperial Kafir. Heads out 75 to 85 days after planting. Medium sized heads, white grain, $3\frac{1}{2}$ ft. to $4\frac{1}{2}$ ft. tall. It was developed at the Imperial Valley Field Station of the University of California. Does

better than some others when planted after June 1.

Amak R-10. Early maturing (65 to 75 days), has light red seed, semi-compact head, about 40" in height. Harvesting characteristics are desirable.

R.S. 608. Medium maturity (65 to 75 days). Has red seed. Should be similar to Amak R-10.

Rocket. Early maturing variety (55 to 65 days), about 10 days earlier than R S 610. Has red seed.

First number in days to heading is for late plantings, second for early plantings.

PLANTING DATES

Grain sorghums may be planted as early as March 1.

Depressed yields are likely to occur in Ryer 15 if planted after mid April.

D.D. 38 and Dwarf Imperial Kafir may be planted from March 1 to July 1, although there is risk of seed-set failure on DD38 when planted after June 1. The exact cause of this failure to set seed is not known, but a combination of climatic conditions seems to be the most likely answer.

There are several hybrids that look promising for late plantings, but more extensive testing is needed.

PLANTING RATES

Ryer 15 planted with a grain drill should be planted flat at about 30 to 35 pounds per acre. Spacings should be 7 to 14 inches.

All other varieties and hybrids should be planted at about 10 to 15 lbs. per acre in single rows on 30 to 42 inch beds, 2 rows on 40 to 42 inch beds, or drilled flat in 14 to 21 inch rows.

SOIL AND SEED BED PREPARATION

Soil capable of producing good crops of alfalfa should be suitable for sorghums. Keep tillage operations at a minimum since returns on grain sorghum are not high. See page 2 for practices usually followed.

IRRIGATION

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

FERTILIZATION

Only nitrogen is recommended and in the amounts of 80 to 160 lbs. of N Fertilizer may be applied pre-plant or at planting time. In sandy soils, split applications are desirable. When planting after lettuce, the lower rate should be used.

HARVESTING

Harvesting of grain sorghums is done by combine.

YIELDS

Excellent yields have been obtained at the Imperial Valley Field Station from both hybrids and open pollinated varieties when planted in April. Many of the varieties made over three tons per acre. One hybrid exceeded 4 tons per ac e. These trends were also true in growers' yields when planted early.

A wide selection of hybrids for April plantings seem to be adapted to Imperial County, along with the familiar varieties. A good yielding hybrid for late plantings may be possible in the near future.

Much of this material is taken from reports compiled by George Worker of the Imperial Valley Field Station

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