

forage sorghums
sample costs
and
production



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

Cost Data Sheet No. 18

Silage

75

FORAGE SORGHUMS--PROJECTED PRODUCTION COSTS

Mechanical operations at custom rates. Labor at \$3.50 per hour (\$3.00 plus Social Security, unemployment insurance, and fringe benefits).

Yield - 45 tons per acre - 2 harvests.

OPERATION	Custom Rate	MATERIALS		HAND LABOR		SAMPLE COSTS
		Type	Costs	Hours	Dollars	Per Acre
LAND PREPARATION						
Disc 2x	\$ 4.50					\$ 9.00
Float 2x	4.50					9.00
Fertilize	3.00	200# N-NH ₃	\$26.00			29.00
List	5.00					5.00
TOTAL LAND PREPARATION						\$ 52.00

GROWING PERIOD

Plant	5.00	15# seed @ 50¢	7.50			12.50
Weed Control	3.50	herbicide	4.50			8.00
Fertilize	3.00	100# N-NH ₃	13.00			16.00
Fertilize		water run 50# N (2x)	13.00			13.00
Irrigate 15x		water (7.5 ac ft)	26.25	7.5	26.25	52.50
GROWING PERIOD						\$ 102.00

GROWING PERIOD AND LAND PREPARATION COSTS \$ 154.00

Land Rent						100.00
Cash Overhead - 15% of preharvest costs and land rent						38.10
TOTAL PREHARVEST COSTS						\$ 292.10

HARVEST COSTS

Chop	1.55 ton (2 cuttings)					69.75
Haul	1.30 ton					58.50
Pack & seal	24.60					24.60
TOTAL ALL COSTS						444.95

Cost per green ton = \$9.89

GENERAL INFORMATION:

The average yields for sorghum forage during the last 5 years have ranged from 22.00 to 26.00 tons per acre for a single harvest. The average value has ranged from \$5.00 to 7.50 per ton.

SOIL PREPARATION:

Soils suited to good alfalfa production should produce forage sorghums well.

PLANTING RATES & DATES:

When soil temperature reaches 65F, plant 10 to 20 pounds seed per acre on 30 to 36 inch beds. Irrigate up.

For double cropping, plant March 15 to April 1. For a single crop, plant March 15 to July 1.

VARIETIES:

There are a number of commercial varieties available. Varieties developed for sorghum silage produce the best ensilage, however, sorghum-Sudangrass crosses and Sudangrass can be used for good silage.

FERTILIZATION

Only nitrogen is recommended. Phosphorus requirement is fulfilled by phosphorus fertilizers applied to previous crops. A single crop uses 150 to 200 pounds of actual nitrogen per acre. If double cropped, at least another 100 pounds of nitrogen should be applied after the first cutting. On sandy soils, the same amounts should be used in split applications.

WEED CONTROL

Weed control chemicals are recommended for either preemergence or post-emergence use. Consult Weed Control Recommendations - Imperial County.

INSECT PESTS

Several species of insects attack sorghum in the Imperial Valley. The following have been found to occur; however, their presence is not necessarily an indication of the need for control. These pests include seed corn maggot, aphids, cutworms, flea beetles, armyworms, lesser corn stalk borer, corn earworms, white flies, and spider mites. If infestations arise consult your Pest Control Recommendations - Imperial County.

HARVESTING

Maximum dry matter yields per acre are important to silage production. For best results harvest sorghum when grain is in the soft to medium dough stage and the best ensilage from corn will be obtained when corn kernels are in the late dough stage.

SUMMARY

Top quality silage and the greatest returns will be realized if (1) adapted varieties are planted, (2) harvested at the proper stage of maturity, and (3) properly packed when storing.

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