



MILO

as a

CASH CROP

University of California
Agricultural Extension Service
Merced County

MILLO AS A CASH CROP

By

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Milo is gaining in popularity as a cash crop. In the last two years the yields of milo have in many cases compared favorably with ear corn. While prices have been low, there has been a good local market for early milo. This leaflet outlines the general practices for successful milo production. A table of estimated costs is included for your consideration.

SOIL REQUIREMENTS

Heavy soils with good moisture holding qualities are desirable for milo. The better the soil the higher the yield. On the other hand, milo is more tolerant of alkali than cotton so it should do well on any soil that produced good cotton.

LAND PREPARATION

Too often milo is planted on a poorly prepared seedbed. This is especially true of most double crop plantings. Usually it is necessary to pre-irrigate. This is followed by disking or plowing to leave a firm and moist seedbed.

VARIETIES

The big news is the development of hybrid varieties. Field trials for a two year period have shown that yields can be increased from 20 to 40 per cent by using improved varieties.

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PLANTING

A firm seedbed and moist soil will go far in getting a stand. Limited trials on broadcast plantings have been disappointing. The exception might be Norghum which has done well when close drilled. The other varieties generally do better in rows that can be cultivated.

Seeding rate - 10 to 15 pounds per acre

Row spacing - 30 inches

CERTIFIED SEED

Milo is a sorghum and all varieties will cross with Johnson grass or Sudan grass. This makes it doubly important to buy certified seed.

For single crop (early) planting:

RS 610

RS 650

For double crop (late) planting:

Norghum (California certified
seed available)

RS 501

YIELDS

State average - 3248 pounds per acre

Merced County - 2800 pounds per acre

COSTS TO PRODUCE GRAIN SORGHUM (SINGLE CROP) IN MADERA AND MERCED COUNTY - 1961

Based on man labor at \$1.25 per hour; 40 H. P. tractor cash cost per hour \$1.25
Tractor depreciation 70¢ per hour; tractor interest 25¢ per hour

Yield - 2 Tons Per Acre

Operation	Hours Per Acre	Cash and Labor Cost Per Acre			Sample Costs	My Costs
		Labor	Fuel and Repairs Equipment	Materials and Other Costs		
Cultural:						
Land Preparation	2.0	\$2.50	\$2.50		\$5.00	
Plant 4 row - 1 man	.5	.65	.65	Seed: 10 lbs. @ 30¢ \$ 3.00	4.30	
Fertilize	.5	.65	.65	Nitrogen: 100 lbs. @ 12¢ 12.00	13.30	
Irrigate: 1 pre, 3 crop	4.0	5.00	1.00	3.0 Acre ft., tax or power \$3.50 10.50	16.50	
Cultivate: 2 times	1.0	1.25	1.25		2.50	
Taxes	--				6.50	
Miscellaneous	.5	.65	.65	Miscellaneous materials and repairs 1.75 Office, car, operating capital, etc. 3.00	3.05 3.00	
Total Cultural Costs		\$10.70	\$6.70		\$36.75	\$54.15
Harvest:						
Combine				Contract \$ 6.50		
Haul				Contract @ \$2 per ton 4.00		
Total Harvest Costs						\$10.50
Total Cash and Labor Costs						\$64.65
Costs at Varying Yields						
<u>Tons Per Acre</u>	<u>Cost Per Ton</u>	<u>Investment Per Acre</u>	<u>Annual Cost</u>			
			<u>Depreciation</u>	<u>Interest @6%</u>		
1.5	\$74.47	\$550	--	\$33.00		
2.0	56.35	Irrigation System* 50	\$2.50 (20 yrs)	1.50		
2.5	45.48	Buildings* 40	2.00 (20 yrs)	1.20		
3.0	38.23	Tractor* 5.5 Hrs.	3.85	1.40		
		Equipment* 20	2.00 (10 yrs)	.60		
			<u>\$660</u>	<u>\$10.35</u>	<u>\$37.70</u>	
						\$48.05
						\$112.70
						\$ 56.35

(over)

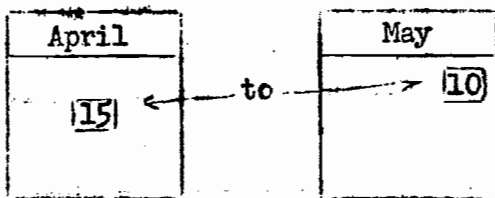
** When grain sorghum is double cropped with small grains, potatoes or oats and vetch, about 1/2 of the annual charge per acre should be used for taxes, depreciation, interest on land, irrigation facilities, and buildings. This will reduce the total cost shown by about \$19.60 per acre or by \$9.80 per ton if the same yield (2 tons) is obtained.

Note: We usually figure a 40% - 60% distribution between winter and summer crops to be a little more equitable, except for potatoes.

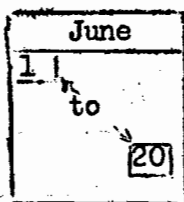
* Interest on investment for irrigation system, buildings, tractor, and equipment is figured on 1/2 original cost.

PLANTING DATE

Single Crop



Double Crop



SEED TREATMENT

Good insurance against seedling disease and kernel smut, use any one of several chemicals:

Caresan M at 1 ounce per 100 pounds of seed.

Arasan at $3\frac{1}{2}$ ounces per 100 pounds of seed.

Phygon XL at 2 ounces per 100 pounds of seed.

Most seed that you buy has been treated, however, make certain by checking the tags. A combination of fungicide for disease and lindane for wireworm is desirable.

(See next page for wireworm control).

FERTILIZER

Contrary to popular opinion milo is not hard on the soil. Any depressed yield of crops following milo can be corrected with an application of nitrogen fertilizer. In fact, milo itself will generally respond well to an application of 80 to 100 pounds of actual nitrogen per acre. Fertilizer should be sidedressed at planting time or before the first irrigation.

IRRIGATION

With a good pre-irrigation, two additional irrigations will usually be enough. Milo will require more irrigations on light soil. Irrigation after heads have appeared is not recommended. This delays maturity and induces suckering.

WEED CONTROL

Cultivation does not conserve moisture except when it controls weeds. One to three cultivations may be required.