

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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## 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 - 3024 pounds per acre.

Merced County - double crop 3000 pounds  
per acre.

Merced County - single crop 4000 to 6000  
pounds per acre.

SAMPLE COSTS TO PRODUCE GRAIN SORGHUM (SINGLE CROP) IN MERCED COUNTY

Yield - 2 Tons Per Acre

Operation	Hours Per Acre	Cash and Labor Cost Per Acre			Total	Your Costs
		Labor	Fuel and Repairs-Equip.	Material & Other Costs		
<b>Cultural:</b>						
Land Preparation	2.0	\$2.00	\$2.20		\$ 4.20	
Fertilize (broadcast)	.5	.50	.65	80# N @ 12¢ \$9.60	10.75	
Plant (broadcast)	.5	.50	.65	15# Seed @ 25¢ 3.75	4.90	
Disk to cover seed	.5	.50	.65		1.15	
Irrigate: 1 pre., 2 crop	3.0	3.00		3.0 Acre ft., tax & power 6.00	9.00	
Miscellaneous		.60	.65	Miscellaneous .75	2.00	
Taxes				6.00	6.00	
<b>Total Cultural Costs</b>		<b>\$7.10</b>	<b>\$4.80</b>	<b>\$26.10</b>	<b>\$38.00</b>	
<b>Harvest:</b>						
Combine				Contract 6.00		
Haul				Contract 4.00		
<b>Total Harvest Costs</b>				<b>\$10.00</b>	<b>\$10.00</b>	
<b>Total Cash and Labor Costs</b>		<b>\$7.10</b>	<b>\$4.80</b>	<b>\$36.10</b>	<b>\$48.00</b>	
<b>INVESTMENT</b>						
	<b>Per Acre</b>		<b>Annual Cost</b>			
			<b>Depreciation</b>	<b>Interest @ 6%</b>		
Land	\$400		—	\$ 24.00		
Irrigation System	40		2.00 (20 yrs.)	1.20		
Buildings	40		2.00 (20 yrs.)	1.20		
Tractor & Truck	30		3.00 (10 yrs.)	.90		
Equipment	20		2.00 (10 yrs.)	.60		
	<u>\$530</u>		<u>\$9.00</u>	<u>\$ 27.90</u>		
				<b>Total Cost Per Acre *</b>	<b>\$84.90</b>	
				<b>Cost Per Tbn @ 2 Ton Yield</b>	<b>\$42.45</b>	

\* When grain sorghum is double cropped with small grains, potatoes or oats or vetch, about 1/2 of the annual charge per acre should be used for taxes and depreciation and interest on land, irrigation facilities, and buildings. This will reduce the total cost shown by about \$18.45 per acre or by \$9.22 per ton.

## PLANTING

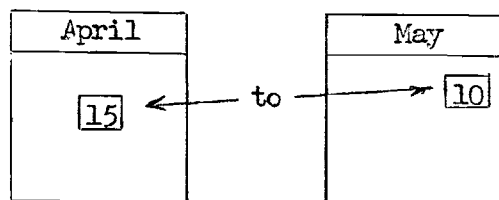
A firm seedbed and moist soil will go far in getting a stand. Limited trials on broadcast plantings have been disappointing. The exception might be Norghum which has done well when close drilled. The other varieties generally do better in rows that can be cultivated.

Seeding rate - 10 to 15 pounds per acre

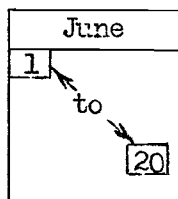
Row spacing - 30 inches

### PLANTING DATE

#### Single Crop



#### Double Crop



## SEED TREATMENT

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

Ceresan 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.

## INSECTS

Cutworms or Army worms: Dust or spray the rows with 2 pounds of actual DDT per acre.

Wireworms: Treat seed with Lindane, 4 ounces 25% Lindane per 100 pounds of seed, or 1-1/3 ounces 75% Lindane per 100 pounds of seed. This also controls seed corn maggot and can be combined with the chemical treatment for kernel smut.

Aphids: An occasional late season pest. Chemicals are available to control aphids, but control is usually not practical.

## HARVESTING

Use a regular grain combine but avoid excessive cylinder speeds to prevent cracked grain. Often the moisture of the grain is too high for safe storage. It should be dried artificially if it is above 13% moisture for bulk storage.

The stover or stalks and leaves left after harvesting can be pastured. There is always some danger of prussic acid poisoning.

## DRYING AND STORAGE

Information is available at the Farm Advisor Office (Agricultural Extension Service, County Agricultural Building, 22nd and N Streets, Merced) on forced air drying of milo with unheated air.

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