

Rec April 1955

GROWING IRRIGATED CEREAL GRAINS
IN THE WESTERN VALLEYS OF RIVERSIDE COUNTY

The small grains - Barley, Wheat and Oats - are flexible crops and will grow on nearly any soil or under any situation suitable for any other type of crop. They are used in rotation with vegetables as "clean-up" crops. Grain is tolerant of alkali soils - especially California Mariout Barley - and, in fact, is often used in early stages of land reclamation.

Yields vary widely, depending on management and soil. Over 4000 pounds of barley per acre has been secured on better soils, with good fertility and adequate irrigation.

Grain can be planted following fall potatoes and previous to Blackeye beans or Hybrid Field Corn for silage. Grain hay can be made and harvested previous to planting Hybrid Field Corn for grain.

VARIETIES: (Slightly different from dry-land recommendations)

Barley: California Mariout, Arivat, and Atlas 46 are recommended.

Wheat: Ramona 50, White Federation 38, Onas 53.

Oats: Kanota oats are recommended. Ventura oats are also used but are not as productive.

PLANTING: Irrigated grain is usually planted starting about November 15. However, Ramona 50 Wheat or California Mariout Barley should not be planted before December 15. California Mariout Barley or Kanota Oats are suggested where plantings must be made after January 15. Where possible, seed should be planted into moist soil. Depths of planting may vary from 1 inch to 2½ inches.

FERTILIZER: Whenever grain follows grain with no legume between crops, 40 to 60 pounds of Nitrogen per acre may be required for maximum yields. (60 to 80 pounds of Nitrogen following Milo or Sudan.) Grain following a heavily fertilized vegetable crop or, with exceptions, Alfalfa may need no fertilizer applications. Phosphate is needed on a few Western Riverside County soils but is generally applied to the higher value crops in rotation with the grain.

IRRIGATION: In Western Riverside County, rainfall is depended upon to supply a part of the water. Irrigation water may be applied before planting, and/or supplemental to the rain in the spring. It is desirable to have a good moisture supply in the soil from heading to maturity. A total of 6 to 12 acre inches may be applied in addition to rainfall.

DISEASES: Seed should be treated with Ceresan M for control of seedling diseases, smut of barley and wheat and stripe of Barley. There is no control for Barley Yellow Dwarf Disease.

WEED CONTROL: Nearly all broadleaved weeds which are troublesome in grain can be controlled with 2-4,D at the rate of 8 to 12 pounds of acid equivalent in 10 to 50 gallons of water per acre - between the time the grain is 6 inches high and before heading. Permits for applying this chemical must be secured from the Agricultural Inspector.

HARVESTING: Direct combining of Barley and Wheat is usual unless there is excessive green weed growth requires wind-rowing previous to threshing. Oats are often wind-rowed previous to threshing.

WHAT DOES IT COST TO GROW IRRIGATED GRAIN
IN THE WESTERN VALLEYS OF RIVERSIDE COUNTY?

Based on 2500# of Wheat Per Acre 1/2 year rental following potatoes.

ITEM	SAMPLE COSTS		YOUR COSTS	
	Per Acre	Per Cwt.	Per Acre	Per Cwt.
<u>Land Preparation & Planting</u>				
Disc 2 x	\$ 3.00			
Furrow for Pre-irrigation	1.00			
Pre-irrigate	1.25			
Spring tooth harrow 1x	1.00			
Planting	1.50			
Apply fertilizer	1.50			
(Add \$4.00 where necessary for plowing)				
TOTAL PREPARATION & PLANT	\$ 9.25	\$.37		
<u>Cultural Labor & Field Power</u>				
Irrigation Labor 2x @ \$1.25	\$ 2.50			
Weed Control with 2-4,D contract	2.50			
TOTAL CULTURAL LABOR & POWER	\$ 5.00	\$.20		
<u>Materials</u>				
Irrigation Water 8 acre inches @ \$13 per acre foot	\$ 9.75			
Fertilizer (300# sulfate of ammonium)	9.00			
Seed 85# @ 5¢	4.25			
TOTAL MATERIALS	\$ 23.00	\$.92		
<u>Cash Overhead</u>				
General Expense @ 5% of above	\$ 1.86			
Taxes (1/2 to grain)	2.80			
Insurance	2.00			
Miscellaneous	2.00			
TOTAL CASH OVERHEAD	\$ 8.66	\$.35		
<u>Harvest & Haul</u>				
Combine Bulk (contract)	\$ 8.00			
Haul @ 10¢ per cwt.	2.50			
TOTAL HARVEST & HAUL	\$ 10.50	\$.42		
TOTAL Except Rent	\$ 56.41	\$ 2.26		
Land Rent (Estimate your own) Sometimes 1/4 crop, sometimes 5% of 1/2 of the land value	\$ 18.75	\$.75		
TOTAL COST FOR GROWING CROP	\$ 75.16	\$ 3.01		

NOTE: The above SAMPLE COSTS are at the contract rate and are in some cases higher than efficient owner-operator costs. To estimate YOUR COSTS, use the columns at the right of the page.

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