

IRRIGATED CEREAL GRAIN
WESTERN RIVERSIDE COUNTY - 1973
SAMPLE COSTS OF PRODUCTION

Based on a wheat yield of 4500#/acre. Tractor labor @ \$2.50/hour, field labor @ \$2.25/hour, including social security and workmen's compensation. 65 hp wheel diesel tractor @ \$1.60/hour, 30 hp wheel gas tractor @ 85¢/hour.

Operations	Hrs/ Acre	Labor Cost	Equip. Cost	Materials Kind	Amount	Cost/ Acre	Total Cost Acre
Pre-irrigate	0.9	\$2.03	\$	Water	¼ acre'	\$3.75	\$ 5.78
Plow 1X	0.5	1.25	3.21				4.46
Disc 2X (light)	0.6	1.50	2.04				3.54
Harrow 1X (spike)	0.33	0.82	1.14				1.96
Plant & fertilize 1X	0.26	0.65	0.77	Seed	75#	3.75)	
				Nitrogen	60#	4.80)	9.97
Irrigate 2X	1.8	4.05		Water	¾ acre'	11.25	15.30
Weed Control (Contract, Material + Application)							2.50
TOTAL CULTURAL COSTS							\$43.51
Combine - Bulk - Contract							\$10.38
Haul, Contract (5 mi) @ \$2/ton, 2.25 tons							2.50
TOTAL HARVEST COST							\$12.88
Cash overhead (office, phone, auto, insurance, etc.)							\$ 7.00
County taxes (on equipment only)							5.32
Cash rent ½ year basis							15.00
TOTAL CASH OVERHEAD AND RENT							\$27.32

	Investment /Acre	Depreciation	Interest on Equipment 7% of ½ Cost	
Buildings	\$ 10.00	\$ 4.00	\$0.35	
Sprinkler System (½ yr)	75.00	5.00	2.28	
Tractor & Field Equipment	24.50	2.45	0.86	
	<u>\$109.50</u>	<u>\$11.45</u>	<u>\$3.49</u>	
TOTAL DEPRECIATION & INTEREST ON INVESTMENT				\$14.94
TOTAL COST PER ACRE				\$98.65
COST PER CWT (at yield of 4500 lbs)				\$ 2.19

Prices per cut during the five-year period of 1968-1972, as reported by the Agricultural Commissioner's office, have ranged as follows:

	Low	High
Wheat	\$2.40 (1968)	\$2.97 (1971)
Barley	2.20 (1968)	3.00 (1971)
Oats	2.90 (1965)	4.99* (1971)

*Includes a large but not precisely known sale of oats for seed.

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UC Cooperative Extension

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IRRIGATED CEREAL GRAIN PRODUCTION
WESTERN RIVERSIDE COUNTY

The small grains - barley, wheat, and oats - are flexible crops which will grow on nearly any soil or under any situation suitable for most other crops. They are used in rotation with vegetables as "clean-up" crops. Barley, especially California Mariout barley and related cultivars, is somewhat tolerant to alkali soils.

Yields vary widely, depending on management and soil. Over 4,000 pounds of barley per acre have been secured on better soils with good fertility and adequate irrigation. Recent introductions of Mexican wheat varieties indicate potential yields of 4,500 or more pounds per acre under good management.

VARIETIES

Barley: California Mariout has been one of the more popular irrigated varieties, but recent local experiments have shown a superior yielder to be CM-67, (a related cultivar resistant to Barley-Yellow-Dwarf disease). Arivat is gradually being replaced by Briggs and Numar barley.

Wheat: Several new Mexican wheat varieties are replacing formerly popular Ramona 50 and White Federation 38. Most commonly planted of the new Mexican varieties is Siete Cerros 66. Recent experiments at the UC Moreno station and elsewhere in California have shown even higher yields from the variety Anza. Inia 66R, though yielding less than Siete Cerros and Anza, is a milling wheat and may command a premium price.

Oats: Kanota has been the most popular variety but Montezuma, a new variety, has shown equal to superior yields and quality in recent tests.

PLANTING DATES: Several years of late frosts over the past decade occurring at flowering time have resulted in frost damage on plantings before December. Whereas, at one time November 15 plantings were common, growers are trending toward December and early January plantings. However, plantings later than January 15 are likely to result in lowered yields.

FERTILIZATION: Except when following a heavily fertilized row crop (or in some cases a legume crop such as alfalfa), Western Riverside County soils do not have sufficient nitrogen for maximum yields. A barley crop following a grain crop may require 60 to 80 pounds additional nitrogen per acre. Experiments with Mexican wheat varieties indicate increased yields with up to 100 to 120 pounds of available nitrogen. Phosphate is lacking in some soils but this element is generally best applied to higher value crops in the rotation. Where heavy manure applications are applied either to the grain or other crops in the rotation, phosphorous should be adequate.

IRRIGATION: The amount of applied water required depends both on the total amount of winter rainfall as well as its seasonal distribution. In any event, grain should be well supplied with water from the "boot" stage through heading and filling. A shortage of water at any of these growth stages may severely affect yield.

WEED AND PEST CONTROL: Most common broad-leaved winter annuals can be controlled with carefully timed applications of 2,4-D. Aphids occasionally build up to damaging populations. Consult the Agricultural Extension office for the latest University of California recommendations for weed and pest control in grain.