Field Crops
Barley

DRY-FARMED (SUMMER FALLOWED) BARLEY IN WESTERN RIVERSIDE COUNTY - 1962

SAMPLE COSTS OF PRODUCTION

Based on a yield of 1,500 pounds per acre.

	LABOR & EQUIPMENT COST/Acre	MATERIALS KIND & COST/Acre	TOTAL COST/Acre
After harvest:			
Light discing	$ 1.50		$ 1.50
Spring:			
Chisel or plow-1x	3.50		3.50
Spring to early summer:			
Disc	1.50		1.50
Rod weed-3x	3.00		3.00
Fall pre-planting & planting:			
Springtooth harrow	1.00		1.00
Drill seed	1.00	80 lbs seed $3.20	4.20
TOTAL LAND PREPARATION AND PLANTING			$ 14.70
Apply 2,4-D			$ 2.00
TOTAL CULTURAL COST (Land preparation, planting, plus growing period)			$ 16.70
Rent			$ 10.00
Cash overhead (office, car, phone, insurance, etc.)			.84
TOTAL CASH OVERHEAD			$ 10.84
TOTAL CASH PREHARVEST COST			$ 27.54
Harvest			
Combine			$ 4.00
Haul			1.50
TOTAL HARVEST COST			$ 5.50
TOTAL ALL COSTS			$ 33.04
TOTAL COST PER CWT	$2.20		

The above sample costs are based primarily on contract rates which include interest on investment and depreciation on equipment used. Efficient owner-operators will usually perform these operations for less than the above costs.

PRICES: The range in prices per cwt of small grains since 1952 are as follows:

Barley -	Highest, 1952, $3.39	Lowest, 1957, $2.19
Wheat -	Highest, 1952, $3.81	Lowest, 1958, $2.92
Oats -	Highest, 1952, $3.70	Lowest, 1957, $2.45

Agricultural Extension Service, Room 7, Post Office Building, Riverside, Calif.

DRY-FARMED GRAIN PRODUCTION
WESTERN RIVERSIDE COUNTY

For the past ten years, because of drought, grain yields have been low in Riverside County. During average annual rainfall years, yields of 1,000 to 1,500 pounds of barley are produced per acre in the Perris-Hemet plain areas (more in Beaumont). Wheat and oats generally yield lower than barley but command a better price. The total cereal grain acreage in the County (including irrigated) averages about 90,000 acres a year. Nearly all dry-farmed grain is grown under the "summer fallow" rotation system - i.e., a crop is grown on the land every second year.

SOILS: Grain, particularly California Mariout barley, will grow better than most crops in alkali or saline soil. Nevertheless, very high salinity often reduces yields seriously. Sandy loam or finer textured soils are preferred to sands for best yields.

PLANTING: Varieties: Barley - Club Mariout, Atlas 46, and Arivat are the most prominent varieties. Oats - Kanota is the best yielder for grain. Ventura is sometimes used for hay. Wheat - Ramona 44 or 50 and White Federation 38 are used almost exclusively. (Club Mariout barley and Ventura oats should be avoided where barley yellow dwarf disease is prevalent.)

Land Preparation: The typical operation (except where stubble mulch tillage will be used) for summer fallowed grain is to disc to lay down the straw in the fall following harvest the previous summer. Plowing or chiseling is normally done in the spring when the soil is moist. Discing following the plowing and several rod weedings over the summer period are used to eliminate summer growing weeds. Following rains, the ground is harrowed previous to drilling the seed.

Dates: Plantings begin in November, usually following the first good rains and should be completed by mid-December. Avoid planting California Mariout barley or Ramona 44 or 50 wheat before December where late spring frosts are likely to occur. For January or February plantings (not usually recommended), Kanota oats or California Mariout barley do the best.

Planting Rate: Seventy to 85 pounds per acre is the usual range for barley. Sixty to 70 pounds for wheat, and 70 to 85 pounds of oats per acre for grain. Planting two to two and one-half inches deep to moist soil is preferred. When planting in wet soil, the more shallow the planting the better (one to one and one-half inches). All seed should be treated to avoid seedling diseases and smut.

FERTILIZATION: Nitrogen applications following GOOD summer fallow conditions have not given consistent increases in yields except in very wet years. Thirty pounds of actual nitrogen from ammonia sources (i.e., sulfate of ammonia) should be applied to grain following grain two or more years consecutively. Phosphate has increased yields on dry-farmed grain in test plots in some parts of Murrieta and the north slopes of the San Jacinto River Basin. Twenty to thirty pounds of P_2O_5 per acre should suffice on soils where phosphate is needed.

WEED CONTROL: 2,4-D from six to twelve ounces acid equivalent per acre is used between the time the grain tillers and before heading. For tough weeds, the ester form of 2,4-D is used up to eight ounces per acre. Do not use the ester forms, however, if the amine or sodium salt forms will do the job. MCP, though more expensive, is safer than 2,4-D.