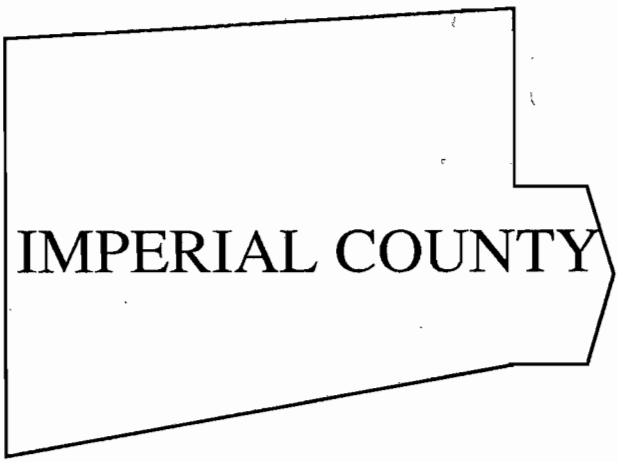
CEREAL CROPS
PROJECTED PRODUCTION COSTS
1991-1992

CE-SI-92



UNIVERSITY OF CALIFORNIA
COOPERTIVE EXTENSION

CEREAL CROPS

PROJECTED PRODUCTION COSTS

1991-1992

Mechanical operations at custom rates. Labor at 5.75 per hour ($4.50 plus Social Security, unemployment insurance and fringe benefits).

Yield--2.7 tons per acre. Days to maturity 90-170 days.

OPERATION	CUSTOM RATE	MATERIALS Type	MATERIALS Cost	HAND LABOR Hours	HAND LABOR Dollars	COST Per Acre
LAND PREPARATION						
Stubble Disc 1x	18.25					18.25
Disc 2x	9.50					19.00
Fertilize (Injected)	10.50	125# N @ .15/lb	18.75			29.25
List Borders-Block	11.00					11.00
Float	8.25					8.25
TOTAL LAND PREPARATION COSTS						85.75
GROWING PERIOD						
Plant	10.00	125# Seed @	18.25			28.25
Irrigate 5-7x		3 ac/ft	34.50	2	11.50	46.00
Fertilize 2x (water)		160# N @ .15/lb	24.00			24.00
Weed control	5.25		28.50			33.75
TOTAL GROWING PERIOD COSTS						132.00
GROWING PERIOD & LAND PREPARATION COSTS						217.75
Land Rent (net acres)						125.00
Cash Overhead--		12% of preharvest costs & land rent				41.13
TOTAL PREHARVEST COSTS						383.88
HARVEST COSTS						
Combime and haul	2.7 tons @	12.00/ ton				32.40
TOTAL ALL COSTS						416.28

PROJECTED INCOME ABOVE COSTS (PER ACRE)

		price/cwt 4.00	5.00	6.00	7.00	8.00	Breakeven $/cwt.
	40	-248	-208	-168	-128	-88	10.20
cwt	50	-214	-164	-114	-64	-14	8.28
per	60	-180	-120	-60	0	60	7.00
acre	70	-146	-76	-6	64	134	6.08
	80	-112	-32	48	128	208	5.40

MULCH PLANTING: Costs that differ from above

OPERATION	CUSTOM RATE	MATERIALS Type	MATERIALS Cost	HAND LABOR Hours	HAND LABOR Dollars	COST Per Acre
Preplant (mulch) irrigation		.5 ac/ft	5.75	.33	1.90	7.65
Harrow	9.50					
Subtract weed control costs						-33.75
Reduce irrigation to 2.5 ac/ft		-.5 ac/ft	-5.75	-.33	-1.90	-7.65
TOTAL MULCH PLANT PREHARVEST COST						-33.75
TOTAL PREHARVEST COSTS						350.13

WHEAT

YIELD/ACRE

YEAR	ACRES	(TONS)	VALUE/TON
1989	99,834	2.7	$126
1988	55,277	2.9	140
1987	68,249	2.6	109
1986	88,316	2.6	115
1985	108,740	3	122

LAND PREPARATION: When grains are planted in a mulch, the practice is disc, fertilize, disc and float. Next, apply the pre-mulch irrigation and when dry enough, mulch and plant.

PLANTING DATES, RATES AND DEPTH: Optimum planting dates for high grain yields of wheat are from December 1 through January 15. Rates of seeding range from 100-150 pounds per acre. Seed should not be planted deeper than 3-4 inches if planted in a mulch. If the crop is to be irrigated up, shallow planting of 1/2-1 inch is best.

VARIETIES: Recommended varieties of wheat include (common wheats) Yecora Rojo; (Durum wheats) Mexicali 75, Aldura, Yavaros, WB 881 and WB Turbo.

The latest barley tests indicate Sunbar 409, Prato, CM 72 and UC Signal produce the best yields.

FERTILIZATION: Imperial Valley soils usually contain sufficient phosphorus for grain production if phosphates have been applied to other crops in the rotation. In a wheat-sorghum rotation, phosphates should be applied to the wheat. Wheat generally needs added nitrogen at rates of 200-300 pounds per acre, depending on the previous crop. For good yield and quality of varieties with a tendency towards yellowberry (low percent hard vitreous kernels), nitrogen should be applied at a rate of 200-300 pounds per acre split into 3 applications -- at preplant, tillering, and boot stage.

IRRIGATION: Pre-mulch irrigations should be heavy. Subsequent irrigations should be sufficient to maintain good growth and avoid stress. Yield can increase with the last irrigation as late as the medium dough stage, but this late irrigation also increases the risk of shattering and lodging.

PEST CONTROL: Weeds should be controlled in wheat to increase yield and to reduce the weed population in following crops. Planting in a mulch can reduce canarygrass problems. Consult your farm advisor for herbicides that are available for use.

Aphids are the only insects that may cause serious damage to wheat. Powdery mildew can be a serious problem on barley. Contact your farm advisor for pesticides that can be used in Imperial Valley.

GUIDELINES TO PRODUCTION COSTS AND PRACTICES
Imperial County Crops, Circular 104F
1991-1992

CUSTOM RATE CHARGES

HEAVY TRACTOR WORK	PRICE/ACRE
Plow	$ 24.75
Subsoil 2nd Gear	29.25
Disc, Regular	9.50
Disc, Stubble	18.25
Float	8.25
Triplane	8.75
List, Regular	11.50
Landplane	10.00
Chisel	20.75
PLANTING AND CULTIVATING	
Plant and Shape Sugar Beet 40" Beds	15.50
Precision Plant 40" Beds	14.50
Plant	13.75
Cultivate 4-Row 30", 40" Beds	10.75
Spike and Furrow Out (2 row)	10.50
Lilliston	9.50
Furrow out alone	8.00
INCORPORATING, BORDER AND BED WORK	
Power Incorporate	20.25
Scraper Borders	12.75
Border, Cross checks and Break Borders	15.00
Roll Beds	5.00
FERTILIZER APPLICATION	
Broadcast Fertilizer	6.00
Inject Fertilizer (Flat)	10.00
Fertilize and Furrow Out 30", 40" Beds	10.50
IRRIGATION	
Custom Sprinkle	$130.00-140.00
HARVEST	
Swather	7.50
Rake	4.00
MISCELLANEOUS	
Motor Grader/Hour	42.75
Chop Stalks, Etc.	11.00
Cultipacker	6.00
Power Incorporate Herbicides	20.25
Ground Spray Pesticides (4 Row)	7.50
Aerial Spray 5 Gal. (Insecticide)	4.75
Aerial Spray 10 Gal. (Fungicides)	5.00