



FIELD CROP NOTES

COST OF PRODUCTION WORKSHEET - COTTON

Stephanie R. Johnson, Farm Advisor

1986

This sample cost sheet is a **GUIDE ONLY**. It should assist growers in determining production costs and aid in analyzing cost and procedures which may increase efficiency. The figures shown are based on good management practices and do not represent industry averages. Production costs vary greatly throughout the county. Tractor size, tillage operations, applications, material, and rates will differ for various growers.

Yield

Yield is the most important variable affecting both cost of lint per pound and profit per acre. The cost of production per pound of lint is greatly reduced as the yield of lint per acre increases.

Fertility

Fertilizer costs will vary throughout the county depending on soil conditions, material used, and the timing and method of application. One application of NH₃ is reflected in this cost sheet. Applications of Urea (water run) or Manure are optional.

Irrigation

Sample cost for water is based on \$20/acre foot. This cost will vary depending on irrigation district, portion of water supplied from wells, depth of pumping, time of day the water is pumped, and type of irrigation system.

Irrigation labor costs will vary with number of irrigations per season, hourly wage rates, type of irrigation system, and other factors. Laser leveling of furrow irrigated fields can also have a significant impact on irrigation costs.

Pest Management

Insect management costs will vary with location, year, and degree of control expected. This cost sheet includes one mite spray, and one mid-season insect spray. A systemic insecticide treatment at planting is not included.

Weed control cost will vary greatly depending on methods used, and the magnitude of the weed problem. The cost sheet includes one preplant application of a dinitroaniline herbicide, one hand weeding operation, three cultivations, and a layby application of a herbicide.

Nematode control is occasionally required on medium to coarse textured soils and therefore is included as an option.

Land Cost

Land cost is related to rental cost rather than interest on market value. Rents will vary considerably throughout the valley, and will be affected by such factors as water availability and price, yield history, soil quality and length of time covered by the rental agreement.

Price Received

The estimated price received by growers assumes that they participate in the 1986 cotton program. A base of 400 acres and a total of 300 planted acres was used in the calculations. It is assumed that there was only one partnership (i.e. \$50,000 was the maximum ARP payment), and that the grower sold his cotton for \$0.48/lb. The ASCS yield was 1000 lbs/ac and actual yields were estimated to be 1100 lbs of lint/ac.

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Cooperative Extension Work in Agriculture and Home Economics, U.S. Department of Agriculture, University of California, Tulare County Cooperating

SAMPLE COSTS TO PRODUCE COTTON
TULARE COUNTY, 1986
Stephanie R. Johnson, Farm Advisor

I. COST DATA ENTRY SECTION

A.	LABOR	UNIT	COST
	FIELD	\$/hr	5.00
	EQUIP. OPER.	\$/hr	5.50
B.	EQUIPMENT COST		
	80 HP TRACTOR	\$/hr	10.00
	130 HP TRACTOR	\$/hr	15.00
C.	YIELD	lbs/ac	1100
D.	6IN TURNOUT	%	33.00
E.	ESTIMATED PRICE	\$/lbs	.70
F.	SEED TO LINT RATIO		1.70
G.	INTEREST RATE	%	11.50
H.	CREDIT FOR SEED	\$/ton	100.00

ACTIVITY	UNIT COST	UNIT	RATE	UNIT	SAMPLE COSTS		GROWERS COST	
					COST/ACRE	COST/LBS	COST/ACRE	COST/LBS

II PRE-HARVEST COST

A.	Land Preparation							
	Labor	5.50	\$/hr	3.0	hr/ac	16.50		
	130 HP Tractor	15.00	\$/hr	1.0	hr/ac	15.00		
	80 HP Tractor	10.00	\$/hr	2.0	hr/ac	20.00		
B.	Nematode Control if needed	66.00	\$/ac	0	x/ac	.00		
C.	Preplant Herbicide							
	Material	5.25	\$/ac	1.0	ac	5.25		
	Application	6.00	\$/ac	1.0	ac	6.00		
	Incorporation							
	Labor	5.50	\$/hr	.5	hr/ac	2.75		
	80 HP Tractor	10.00	\$/hr	.5	hr/ac	5.00		
D.	Planting							
	Seed	.60	\$/lbs	14.0	lbs/ac	8.40		
	Labor	5.50	\$/hr	.3	hr/ac	1.65		
	80 HP Tractor	10.00	\$/hr	.3	hr/ac	3.00		
E.	Fertilizer							
	Material (NH3)	.17	\$/lbs	100.0	lbs/ac	17.00		
	Application							
	Custom	7.00	\$/ac	.0	x/ac	7.00		

	Manure (Chicken)					
	(Includes appl.)	28.00	\$/ton	.0 tons/ac		.00
	Urea (water run)	.27	\$/lbs	.0 lbs/ac		.00
F.	Irrigation					
	Water Charge	20.00	\$/acft	3.0 acft/ac		60.00
	Labor (1 pre +					
	5 post irrig.)	5.00	\$/hr	6.0 hr/ac		30.00
G.	Postplant weed control					
	Material	16.00	\$/ac	1.0 ac		16.00
	Application	6.00	\$/ac	1.0 x/ac		6.00
	Hand weeding (1x)	4.00	\$/hr	5.0 hr/ac		20.00
	Cultivation					
	Labor	5.50	\$/hr	1.5 hr/ac		8.25
	80 HP Tractor	10.00	\$/hr	1.5 hr/ac		15.00
H.	Mite Control					
	Material	10.00	\$/ac	1.0 ac		10.00
	Application	6.00	\$/ac	1.0 x/ac		6.00
I.	Insect Control					
	Material	8.00	\$/ac	1.0 ac		8.00
	Application	5.00	\$/ac	1.0 x/ac		5.00
J.	Defoliation					
	Material	7.00	\$/ac	2.0 x/ac		14.00
	Application	5.00	\$/ac	2.0 x/ac		10.00
K.	Land Rent	100.00	\$/ac	1.0 ac		100.00
L.	Non-Tractor Repair	20.00	\$/ac	1.0 ac		20.00
M.	Misc. Labor					
	Labor	5.50	\$/hr	1.0 hr/ac		5.50
	80 HP Tractor	10.00	\$/hr	1.0 hr/ac		10.00
N.	Office Expense	10.00	\$/ac	1.0 ac		10.00
O.	Interest on Production Loan					
	(prod. cost/2)*IR	11.50	\$/250.7	\$/ac		26.52

TOTAL PREHARVEST COST

487.82 .14

III. HARVEST COST

A. Picking and Hauling

1st Pick	90%	3.20\$/cut SC	30.0 cut/ac	96.00
2nd Pick	10%	3.35\$/cut SC	3.3 cut/ac	11.17

B. Ginning (Bags, Ties, etc.)

3.20\$/cut SC	33.3 cut/ac	106.67
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TOTAL HARVEST COST

213.83 .19

IV. MISCELLANEOUS CASH COST

A. C1 Research and

UC Cooperative Extension

1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00

	plus .6% of value	770.00	\$/ac	.6 Percent	4.62
B.	Pink Bollworm	1.75	\$/bale	2.3bales/ac	4.01
C.	National Cotton C.	.45	\$/bale	2.3bales/ac	1.03
D.	West. Cotton G. A.	.03	\$/bale	2.3bales/ac	.07
E.	Classing	1.10	\$/bale	2.3bales/ac	2.52

TOTAL MISCELLANEOUS CASH COST 14.54 .01
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TOTAL CASH COST 716.20 .65
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V. DEPRECIATION

Irrigation System	300.00	\$/ac	16.0	years	18.75
80 HP Tractor	2.58	\$/hr	5.3	hr/yr	13.67
130 HP Tractor	4.75	\$/hr	1.0	hr/yr	4.75
Other Equipment	100.00	\$/ac	10.0	years	10.00

VI. INTEREST ON INVESTMENT

Irrigation System	150.00	\$/ac	11.5	%/\$	17.25
80 HP Tractor	1.94	\$/hr	5.3	hr/yr	10.28
130 HP Tractor	3.56	\$/hr	1.0	hr/yr	3.56
Other Equipment	50.00	\$/ac	11.5	%/\$	5.75

TOTAL NON-CASH COST 84.02 .08

TOTAL CASH COSTS 716.20 .65

TOTAL COST OF PRODUCTION 800.22 .73

NET CASH COST (cash cost - seed credit) 622.70 .57

NET COST OF PRODUCTION (total cost - seed credit) 706.72 .64

RETURNS OVER CASH COST 147.30 .13

RETURNS OVER TOTAL COST 63.28 .06
