

ALFALFA COSTS IN MONTEREY COUNTY

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Alfalfa is an important crop of about 15,000 acres. To furnish growers an opportunity to check and compare costs this sample schedule has been prepared. This was done by discussing methods and costs with growers. Time required and materials used are figured at currently prevailing prices shown below. Costs were calculated as they would occur on a 300 acre farm with adequate equipment at current prices. Consider the cost schedule merely as a sample or guide for good commercial operations and not as a county average.

SAMPLE INPUTS AND COSTS FOR ALFALFA IN MONTEREY COUNTY  
Mature Stand, with An Average Yield of 8 Tons per Acre

	Man Labor	Spec. Mach. Hours	Wheel Tractor per Acre	Pick up	Cost per Acre	Cost per Ton
Irrigate 9 times	13.0			.1	16.40	
Spray by plane, 10 gal. A					3.00	
Total cultural labor	13.0			.1	19.40	2.42
Mowing 6 times, 3 A. hr.	2.0		2.0		5.00	.62
Raking about 9 times 4 A. hr.	2.3		2.3		5.75	.72
Bale - at about 4 tons per hr.	2.0	b. 2.0	2.0	.2	8.30	1.04
Haul and stack contracted at \$2 a ton					16.00	2.00
Total harvesting labor	6.3	2.0	6.3	.2	35.05	4.38
Total labor and field power	19.3	2.0	6.3	.3	54.45	6.80
Irrigation water, power to pump 5 acre ft., at \$3.10					15.50	
Aphicide material					1.70	
Baling wire or twine					8.00	1.00
Total materials				Tenants	25.20	3.15
Total labor and materials				79.65	79.65	9.95
General expense - office, car, etc.				3.98	3.98	
County taxes - land \$9.00			Equipment 1.50	1.50	10.50	
Repairs, additional not covered in rates				2.00	2.00	
Comp. and other insurance				1.50	1.50	
Rent - land and improvements				55.00	--	
Total cash overhead costs				63.98	17.98	2.25
Total cash costs				143.63	97.63	12.20
Investment overhead based on a 300 A. farm with 150 acres of alfalfa	Av. Invest.	6% Int.	Depre- ciation			
	Dollars per Acre					
Land	600.00	36.00	--			
Building for equipment	7.00	.42	.50			
Irrigation system & conc. pipe	85.00	5.10	8.50			
Subtotal real estate, landlord	692.00	41.52	9.00			
Alfalfa stand \$48 ÷ 3	24.00	1.44	16.00			
Pickup and tractors for harvesting	22.00	1.32	3.00			
Mower, rake, and pull-type baler	14.30	.86	2.86			
Portable pipe and miscellaneous	7.00	.42	1.40			
Total tenant's investment	67.30	4.04	23.26			
Total owner operator deprec.	759.30	45.56	32.26	23.26	32.26	4.04
Total cash and depreciation costs				166.89	129.89	16.24
Total interest on investment				4.04	45.56	5.69
Total all costs				170.93	175.45	21.93

Labor costs above are figured at the following hourly rates: Tractor driver \$1.50, Irrigator \$1.25, 20 to 30 hp. wheel tractor \$1.00, Baler \$1.50, and pickup truck \$1.50. These later rates are cash costs for fuel and repairs but not investment overhead shown separately in the lower part of the table. Also, note in the lower part the third from the last column showing a renter's cost per acre.

Alfalfa costs start with planting a new stand. This is shown below to cost about \$48 an acre which is charged as depreciation at \$16 an acre a year for the three years of production shown in the full schedule. Land preparation involves heavy equipment not used later so depreciation and interest on investment are included here.

SAMPLE COSTS OF PLANTING A NEW STAND OF ALFALFA

	Man	TD 6	W 30		Cost
	Labor	Tractor	Tractor	Pickup	per
	Hours per Acre				Acre
Land preparation, disk, plow, disk, level	2.8	2.6		.1	11.11
Make and level borders, harrow, roll	1.0	.6	.3	.1	3.54
Seed by plane					2.00
Roll after seeding	.3		.3		.78
Irrigate once	2.0			.1	2.65
Total labor and field power	6.1	3.2	.6	.3	20.08
Power to pump 1/2 A. ft. water @ 3.10, 125 ft. lift					1.55
Seed 30# @ 28¢					8.40
Total labor and material cost					30.03
Cash overhead costs, general expense, insurance, repairs					4.00
Depreciation, interest on investment on equipment, tractors, etc.					14.00
Total cost of stand					48.03

The above costs are computed at the following hourly rates: Tractor driver \$1.50, irrigator \$1.25, 60 hp tracklayer tractor \$2.60, 30 hp wheel tractor \$1.10, and pickup truck \$1.50.

SUMMARY OF ALFALFA COSTS WITH VARYING YIELDS

Mature Stand, Average Annual Yields

Yield, Tons per Acre	5	6	8	10	
	cut 5 x		(6 cuttings)		
Cultural labor and material costs per acre	33.60	36.60	36.60	36.60	
Mowing and raking per acre	8.80	10.50	10.75	11.00	
Baling including wire	10.50	12.30	16.30	20.40	
Hauling and stacking, contracted at \$2 a ton	10.00	12.00	16.00	20.00	
Total labor and material cost	62.90	71.40	79.65	88.00	
Cash overhead costs	16.50	17.50	17.98	18.70	
Depreciation on facilities and equipment	31.00	32.00	32.26	33.00	
Interest on investment	39.50	45.56	45.56	45.56	
Total all cost per acre	151.90	166.46	175.45	185.26	
Total cost per ton	30.38	27.74	21.93	18.53	
Profit or Income over total costs with value of hay per ton at -					
	\$20.00	-51.90	-46.46	-15.45	14.74
	22.50	-39.40	-31.46	4.55	39.74
	25.00	-26.90	-16.46	24.55	64.74
	27.50	-14.40	-1.46	44.55	89.74
	30.00	-1.90	13.54	64.55	114.75

The above calculation is based on the full schedule of inputs and costs for the 8 ton yield as shown on the other side of this sheet. Costs per acre for the different yields were adjusted somewhat as they would probably occur within the range from 6 to 10 tons from 6 cuttings. The 5 ton yield was assumed to be obtained from 5 cuttings on lower valued land and with slightly lower cultural and water costs. Note that with these costs making a real profit requires a price of \$25 and a yield over 7 tons.