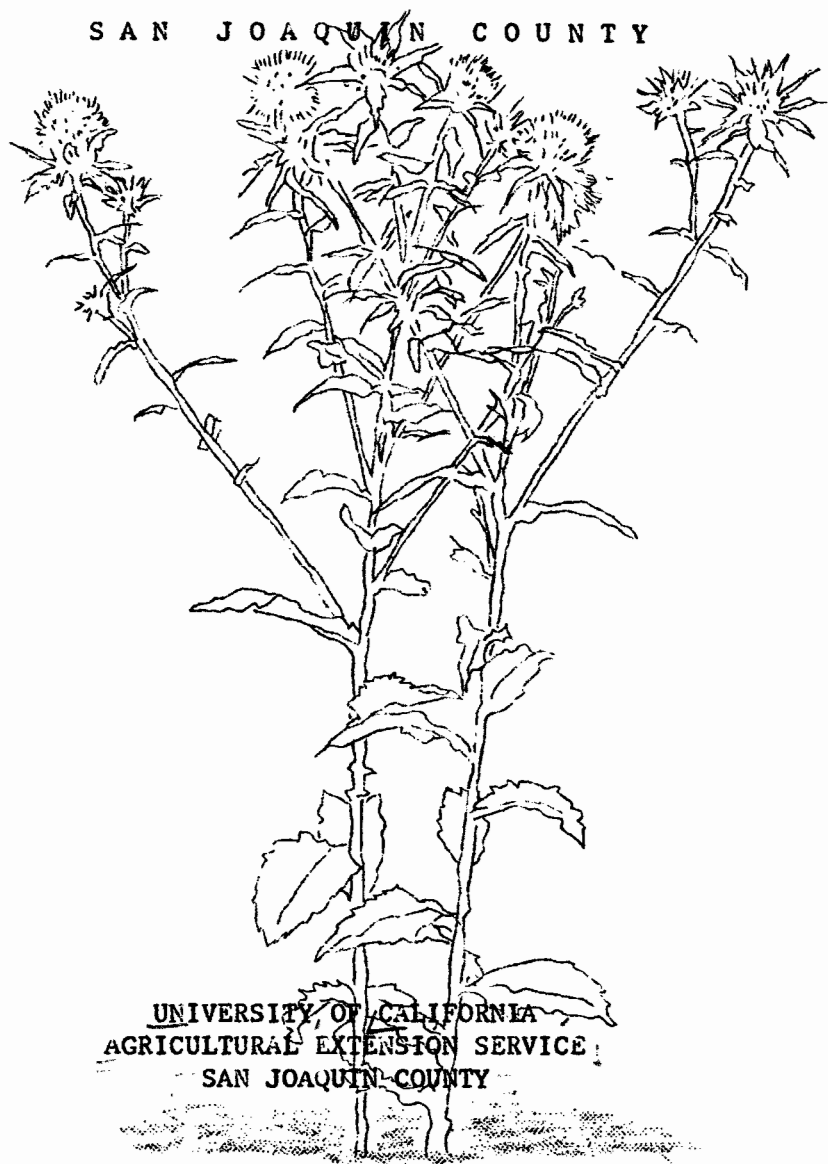


SAMPLE COSTS TO GROW  
SAFFLOWER  
IN  
SAN JOAQUIN COUNTY



UNIVERSITY OF CALIFORNIA  
AGRICULTURAL EXTENSION SERVICE  
SAN JOAQUIN COUNTY

SAMPLE COSTS TO PRODUCE SAFFLOWER IN THE DELTA AREA OF SAN JOAQUIN COUNTY

YIELD: 1½ Tons

Operation	Hours per Acre	Labor	Fuel and Repairs	Description of Materials	Total Materials	Total
Plow	.5	.97	1.23			2.20
Disc 2 x	.5	.97	1.25			2.22
Furrow out for pre-irrigating	.33	.64	.72			1.36
Open & close syphon ditches	.15	.29	.32			.61
Hand ditch work & irrigate	1.0	1.76	-	1/2 A./ft. @ \$3.75	1.87	3.63
Prefertilize	.33	.64	.40	Applicator rent @ 50¢ per acre (85# N. @ .10/lb.)	9.00	10.04
Disc 2 x with harrow behind	.5	.97	1.40			2.37
Plant with 12' grain drill	.5	.97	.75	50# of seed/A. @ 9.40/100 lbs.	4.70	6.42
Harrow for weed control 4 x	.8	1.54	1.26			2.80
<b>TOTAL CULTURAL COSTS</b>		<b>8.75</b>	<b>7.33</b>		<b>24.07</b>	<b>31.65</b>
<b>Harvest Costs:</b>						
Combine				Contract @ \$8.50/T.		12.75
Haul				Contract @ .10/100 lbs.		3.00
<b>TOTAL HARVEST COSTS</b>						<b>15.75</b>
<b>Cash Overhead:</b>						
Misc., Office						2.80
Taxes on equipment						.50
Rent 1/3 of Crop				1/2 ton @ \$85/T.		42.50
<b>TOTAL CASH OVERHEAD</b>						<b>45.80</b>
<b>TOTAL CASH COST</b>						<b>93.20</b>
<b>Management:</b>						
				5% of 1-1/2 Tons @ \$85/T.		6.38
<b>Investment &amp; Equip.:</b>						
				<b>Annual Cost</b>		
				<u>Perannual Use Acre</u>	<u>Depreciation</u>	<u>Interest</u>
				\$98.74	\$10.73	\$2.96
						13.69
<b>TOTAL COST PER ACRE</b>						<b>113.27</b>
Cost per Ton @ 1½ Ton Yield						75.50

## COMMENTS ON THE SAFFLOWER COST STUDY

1. This cost study is based on an assumed 600 acre operation, which includes vegetable row and field crops, of which about 100 acres are in safflower, and the equipment needed in such an operation.
2. In allocating the equipment cost per acre in the equipment list, the following calculations were made: (a) "new cost" of equipment is the actual new cost. (b) "per acre annual use" is the new cost divided by the number of acres the equipment will be used on. (c) "Depreciation" is based on the "per acre annual use" divided by the expected life of the equipment. (c) "Interest" on investment is figured on one-half the new cost per acre multiplied by 6%.
3. Miscellaneous expenses have been found to be about 5% of the total cultural and harvest costs. They include such costs as preparing roadways, general weed control, office, bookkeeping, interest on operating money, etc.
4. Labor costs are based on the following hourly rates: (1) Tractor driver \$1.93 (2) Irrigator \$1.76 and (3) Common labor \$1.65. Included are cash wages, compensation insurance, social security and other benefits that the employer must pay.
5. Equipment operating costs are listed under fuel and repair. Included is the cost of fuel, maintenance, replacement parts, tires, etc. Tractor charges per hour are: 75 H.P. crawler diesel, \$2.00; 50 H.P. wheel-gas, \$1.20; 65 H.P. wheel diesel, \$1.40.
6. Management (what the growers' decision making is worth) is figured at 5% of the market value of the crop.
7. Other operations or expenses may be encountered in raising a crop of safflower. Some growers count on using a herbicide and the possibility of needing an insecticide application must not be overlooked.
8. In San Joaquin County safflower is commonly grown under contract for a minimum price to which the contracting company can add a bonus if this seems appropriate.

EQUIPMENT LIST

Item	Original Cost		Years Life	Annual Use (Acres)	Non-Cash Overhead	
	Total	Per Acre Annual Use			Depre- ciation	Interest at 6%
1 Crawler Tractor 75 H.P. - D	22,000	44.00	10	500	4.40	1.32
1 Wheel Tractor 40 H.P. - G	4,500	11.25	10	400	1.13	.34
1 Landplane	3,600	9.00	10	400	.90	.27
1 Disc - 12 feet	1,400	2.80	10	500	.28	.08
2 Harrows	300	.75	10	400	.08	.02
Siphons	600	1.20	10	500	.12	.04
1 Flatbed Trailer	2,000	5.00	10	400	.50	.15
1 Ditcher	400	1.00	10	400	.10	.03
1 Tool Carrier	1,500	3.00	10	500	.30	.09
1 Plow - 4 bottom	900	4.50	10	200	.45	.14
1 Pick-up	2,400	4.00	5	600	.80	.12
1 Pick-up	1,200	2.00	3	600	.67	.06
1 Grain Drill 12'	1,000	6.66	10	150	.67	.20
1 Cultivator + tool bars & seeders	1,333	3.33	10	400	.33	.10
<b>TOTALS</b>	<b>43,133</b>	<b>98.74</b>			<b>10.73</b>	<b>2.96</b>

GROWER RETURN UNDER VARIOUS YIELDS AND PRICES FOR SAFFLOWER

		Price per ton					
Yields lbs./A.		75	80	85	90	95	100
1500	Gross Income	56.25	60.00	63.75	67.50	71.25	75.00
	Cost	<u>78.08</u>	<u>79.47</u>	<u>80.93</u>	<u>82.40</u>	<u>83.70</u>	<u>85.25</u>
	Net Return	-21.83	-19.47	-17.18	-14.90	-12.45	-10.25
2000	Gross Income	75.00	80.00	85.00	90.00	95.00	100.00
	Cost	<u>87.89</u>	<u>89.74</u>	<u>91.69</u>	<u>93.64</u>	<u>95.49</u>	<u>97.47</u>
	Net Return	-12.89	- 9.74	- 6.69	- 3.64	- .49	+ 2.53
2500	Gross Income	93.75	100.00	106.25	112.50	118.75	125.00
	Cost	<u>97.46</u>	<u>99.77</u>	<u>102.03</u>	<u>104.64</u>	<u>106.96</u>	<u>109.40</u>
	Net Return	- 3.71	+ .23	+ 4.22	+ 7.86	+11.79	+15.60
3000	Gross Income	112.50	120.00	127.50	135.00	142.50	150.00
	Cost	<u>107.51</u>	<u>110.29</u>	<u>113.27</u>	<u>116.14</u>	<u>118.91</u>	<u>121.84</u>
	Net Return	+ 5.99	+ 9.71	+14.23	+18.86	+23.59	+28.16
3500	Gross Income	131.25	140.00	148.75	157.50	166.25	175.00
	Cost	<u>117.33</u>	<u>120.57</u>	<u>122.99</u>	<u>127.40</u>	<u>130.63</u>	<u>134.04</u>
	Net Return	+13.92	+19.43	+25.76	+30.10	+35.62	+40.96
4000	Gross Income	150.00	160.00	170.00	180.00	190.00	200.00
	Cost	<u>127.14</u>	<u>130.84</u>	<u>134.74</u>	<u>138.64</u>	<u>142.34</u>	<u>146.24</u>
	Net Return	+22.86	+29.16	+35.26	+41.36	+47.66	+53.76

Costs include both fixed costs and those that vary depending on the yield. Only rent and management costs have been varied in this table to reflect the appropriate price per ton and yield.

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