Canola Cost-Return Budget in South Central Kansas

Department of Agricultural Economics — *www.agmanager.info*

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Canola is a crop developed from rapeseed that produces high-quality oil that is low in saturated fat. The interest in canola production has increased significantly in the United States in the last 5 to 10 years. Most of the increased production has occurred in northern states where spring varieties of canola are planted. In Kansas, canola is a winter crop that can provide an alternative to wheat in crop rotations. Currently, canola production in Kansas is still very low primarily due to the lack of varieties that survive the winter. As new varieties are developed, canola offers promise as an alternative crop in Kansas because of its high-quality oil and also because the livestock industry in Kansas provides a good outlet for canola meal.

Income Per Acre

Crop production costs per unit and net returns are highly dependent on yields. The following estimated budget includes three yield levels, which are intended to represent expected yields for land of varying quality for a given level of management. Comparing alternative expected yields can help producers analyze the profitability of crop enterprises on farmland tracts with varying yield potential. Land values and government payments have been adjusted for alternative yield levels in this budget. In customizing a budget to your farm, attention should be given to using land values representative of your farm's productive capacity as well farm-specific government payments.

Price per hundredweight (cwt) represents an expected harvest price, accounting for government marketing loan price support levels. Because canola is a minor crop in south central Kansas the number of buyers will be limited. Thus, it is important that producers consider their marketing options before planting canola. Producers may want to consider forward contracting their canola to ensure they will have a market at harvest time.

Crop insurance was not included as an input expense in this budget because yields reflect an average of all years (good and bad). If crop insurance is included as an input expense,

Table 1. *Production Inputs — Canola*

	Yield Level (lbs)			
Item	1,200	1,500	1,800	
Seed, lbs	5.0	5.0	5.0	$1.50/lb
Fertilizer:				
N (anhydrous)	50	61	72	$0.26/lb
N	15	20	25	$0.35/lb
P	25	32	38	$0.26/lb
K	0	0	0	$0.22/lb
Lime	500	500	500	$0.01/lb
Herbicide				
Treflan	2.0	2.0	2.0	$2.98/pt
Insecticide / Fungicide				

Table 2. *Machinery and Land Resources — Canola*

	Yield Level (lbs)			Custom
Item	1,200	1,500	1,800	Rate
Tillage/Planting/Chemical Applications:				
Chisel	1	1	1	$8.94/a
Disk	1	1	1	$7.98/a
Field cultivate	2	2	2	$7.54/a
Drill	1	1	1	$8.64/a
Anhydrous application	1	1	1	$7.53/a
Fertilizer application	1	1	1	$4.24/a
Herbicide application	1	1	1	$4.51/a
Insecticide / fungicide application	0	0	0	$4.58/a
Harvest				
Base charge	1	1	1	$21.41/a
Extra charge for yields exceeding	720	720	720	$0.002/cwt
Hauling	1,200	1,500	1800	$0.003/cwt
Non-machinery labor	0.90	0.90	0.91	$10.00/hr
Land charge/rent	$28.80	$36.00	$43.20	
Interest on capital				9.0%

then an expected value for indemnity payments should be included in the returns section. Historically, crop insurance indemnity payments have typically exceeded premiums due to government subsidies.

Costs Per Acre

Production costs at the three yield levels are shown on lines 1 through 13. Kansas Custom Rates for specific field operations are used to represent fuel and labor costs as well as machinery repair, depreciation, and interest expenses. Table 1 identifies seed, fertilizer, herbicide, and insecticide requirements (rate and cost/unit) for canola. Herbicide requirements include both pre-crop and in-crop treatments. Table 2 outlines the machinery and land resources used for canola produced in a reduced tillage system.

COST-RETURN PROJECTION — CANOLA — SOUTH CENTRAL KANSAS

	Yield Level (lbs)			Your
	1,200	**1,500**	**1,800**	**Farm**
INCOME PER ACRE				
A. Yield per acre	1,200	1,500	1,800	
B. Price per cwt	$ 8.00	$ 8.00	$ 8.00	
C. Net government payment	$ 14.12	$ 15.35	$ 16.58	
D. Indemnity payments	$	$	$	
E. Miscellaneous income	$	$	$	
F. Returns/acre ((A × B) + C + D + E)	$ 110.12	$ 135.35	$ 160.58	
COSTS PER ACRE				
1. Seed	$ 7.50	$ 7.50	$ 7.50	
2. Herbicide	5.96	5.96	5.96	
3. Insecticide / Fungicide				
4. Fertilizer and Lime	29.97	36.45	42.68	
5. Crop Consulting				
6. Crop Insurance				
7. Drying				
8. Miscellaneous	7.50	7.50	7.50	
9. Custom Hire / Machinery Expense	79.33	79.94	80.54	
10. Non-machinery Labor	8.96	9.03	9.10	
11. Irrigation				
a. Labor				
b. Fuel and Oil				
c. Repairs and Maintenance				
d. Depreciation on Equipment and Well				
e. Interest on Equipment				
12. Land Charge / Rent	28.80	36.00	43.20	
G. SUB TOTAL	$168.02	$182.38	$196.48	
13. Interest on ½ Nonland Costs	6.26	6.59	6.90	
H. TOTAL COSTS	$174.28	$188.97	$203.38	
I. RETURNS OVER COSTS (F - H)	$–64.16	$-53.62	$–42.80	
J. TOTAL COSTS/CWT ((H ÷ A) × 100)	$ 14.52	$ 12.60	$ 11.30	
K. RETURN TO ANNUAL COST (I + 13) ÷ G	–34.46%	–25.79%	–18.27%	

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