

## IV ECONOMIC ANALYSIS

### A *Canola Pricing System*

Grade	Green Seed (%)	Total Damaged & Green Seed Allowed (%)	\$/bu
# 1	0 - 2.0	3.0	7.00
# 2	2.1 - 6.0	10.0	6.73
# 3A	6.1 - 10.0	15.0	6.43
# 3B	10.1 - 20.0	20.0	5.87
Sample	Over 20.0	Over 20.0	4.87

**Note 1:** *The damaged and green, includes all frost, brown and green seed. This was determined by using a 500 seed crush strip test done on each sample from every treatment within a particular trial.*

**Note 2:** *High erucic acid varieties (eg. MilleniUM 03) were assigned a premium of \$1.15/bu.*

**Note 3:** *Specialty oil varieties were assigned a premium as follows:*

- IMC 105, IMC 207, IMC 302 = **\$0.69/bu**

- IMC 106RR, IMC 206RR = **\$0.59/bu**

- Nex 705, Nex 710, Nex 715, Nex 720 = **\$0.45/bu**

### B. *Cost Calculations & Assumptions*

The following costs were used in calculating economic returns for the various trials and treatments. Fertilizer and crop protection product prices were obtained from various dealers throughout the region. Prices reflect the western Canadian average for spring 2001. Equipment costs were obtained from agronomists with the Royal Bank and are actual equipment variable costs from producers across Western Canada. There has been no value allocated for capital and fixed costs.

<b>CANOLA ARGENTINE VARIETY SEED COSTS</b>					
<i>B. napus</i>	<b>\$/lb</b>	<b>Distributor</b>	<i>B. napus</i>	<b>\$/lb</b>	<b>Distributor</b>
45A51	2.89	Proven Seed	InVigor 2663	4.50	Aventis CropScience
45A55	3.39	Proven Seed	InVigor 2733	5.25	Aventis CropScience
45A77	N/A	Proven Seed	Kelsey	3.49	Agricore
46A76	3.29	Proven Seed	LBD 449RR	3.12	Brett-Young Seeds Ltd.
A98-13NR	3.49	Agricore	LBD 561RR	3.12	Brett-Young Seeds Ltd.
AC Excel	1.15	Hetland Seeds	LBD 799RR - S	3.75	Brett-Young Seeds Ltd.
Admire RR	3.95	SK Wheat Pool	MilleniUM 03	2.20	CanAmera Foods / SK Wheat Pool
Conquest RR	2.99	SK Wheat Pool / Agricore	Nex 500	2.25	Dow AgroSciences
DKL34-55	3.40	Monsanto Canada Seeds Inc.	Nex 705	3.63	Dow AgroSciences
Hyola 440	N/A	Advanta Seeds	Nex 710	3.63	Dow AgroSciences
IMC 105	2.19	Cargill	Nex 715	3.98	Dow AgroSciences
IMC 106 RR	2.49	Cargill	Nex 720	3.98	Dow AgroSciences
IMC 206 RR	2.49	Cargill	Prairie 499 RR	4.99	Prairie Seeds
IMC 207	2.19	Cargill	Q2	2.49	SK Wheat Pool / Agricore
IMC 302	2.19	Cargill	Renegade	2.49	SK Wheat Pool
InVigor 2153	3.75	Aventis CropScience	SP Armada	1.99	SK Wheat Pool
InVigor 2573	4.50	Aventis CropScience			

Note: ca - case, N/A - not available at time of publication

Seed cost may vary from location to location.

The above seed prices reflect prices available in July, 2001. Actual seed prices will depend upon the time of year the seed is purchased and discounts or incentives that may be available. Please check with your local retailer to get current prices for specific seed varieties.

<b>OTHER PRODUCT COSTS</b>		
<b>Product/Process</b>	<b>\$/Unit</b>	<b>Distributor</b>
Corn Cob Grit	35.00/22kg	North Star Seeds
Precise CS	0.50/lb	Taurus Technology Inc.
Roundup Technology Fee	15.00/ac	Monsanto Canada Inc.
Seed Priming	N/A	Kamterter II L. L. C.

<b>PRODUCT INFORMATION</b>			
<b>Product</b>	<b>Common Name</b>	<b>Manufacturer/ Distributor</b>	<b>\$/Unit Cost</b>
Absolute	imazamox+imazethapyr+clopyralid	BASF Canada Inc.	29.95/ac
Assure II	quizalofop ethyl	DuPont Canada Inc.	660.00/ca
Compas	bromoxynil	Aventis CropScience	330.00/jug
Counter 5G	terbufos	BASF Canada Inc.	73.20/20kg
Decis 5EC	deltamethrin	Aventis CropScience	168.00/2.0L
Eclipse	glyphosate+clopyralid	Dow AgroSciences Canada Inc.	159.00/6.2L
Edge	ethalfuralin	Dow AgroSciences Canada Inc.	51.00/25kg
Foundation	iprodione+thiram+lindane	Aventis Seed Treatment	0.55/lb
Foundation Lite	iprodione+thiram	Aventis Seed Treatment	0.45/lb
Foundation Premium	iprodione+thiram+acetomiprid (low rate)	Aventis Seed Treatment	N/A
Foundation Premium Plus	iprodione+thiram+acetomiprid (high rate)	Aventis Seed Treatment	N/A
Fusion	fenoxaprop-p-ethyl + fluazifop-p-butyl	Aventis CropScience	239.00/ca
Gaicho Canola System	imidacloprid + carbathiin + thiram + metalaxyl	Gustafson	1.08/lb
Gaicho Platinum	imidacloprid + carbathiin + thiram + metalaxyl	Gustafson	2.17/lb
Helix	fludioxonil+metalaxyl+ difenoconazole+thiamethoxam	Syngenta	1.22/lb
Helix XTra	fludioxonil+metalaxyl+ difenoconazole+thiamethoxam	Syngenta	2.25/lb
Liberty (1 <sup>st</sup> application)	glufosinate ammonium	Aventis CropScience	18.50/ac
Liberty (2 <sup>nd</sup> application)	glufosinate ammonium	Aventis CropScience	11.45/ac
Lontrel 360	clopyralid	Dow AgroSciences Canada Inc.	620.00/4.51L
Muster	ethametsulfuron methyl	DuPont Canada Inc.	638.00/ca
Muster Gold II (40 rate)	ethametsulfuron methyl + quizalofop-p-ethyl	DuPont Canada Inc.	806.00/ca
Odyssey	imazamox + imazethapyr	BASF Canada Inc.	1,026.80/ca
Poast Ultra	sethoxydim	BASF Canada Inc.	583.66/ca
Ronilan EG	vinclozolin	BASF Canada Inc.	751.31/ca
Rovral Flo	iprodione	Aventis CropScience	209.00/8.4L
Roundup Original	glyphosate	Monsanto Canada Inc.	8.99/L
Roundup Transorb	glyphosate	Monsanto Canada Inc.	9.79/L
Select	clethodim	Aventis CropScience	630.00/ca
Titan FL	clothianidin + vitavax + thiram + metalaxyl	Gustafson	N/A
Vantage Plus	glyphosate	Dow AgroSciences Canada Inc.	97.90/10L

Note: ca - case, N/A - not available at time of publication

Product cost may vary from location to location.

The above product prices reflect prices available in July, 2001. Actual product prices will depend upon the time of year the product is purchased and discounts or incentives that may be available. Please check with your local retailer to get current prices.

Numerous references to pesticide applications will be found in this report. We advise everyone to consult with provincial recommendations and product labels for complete instructions.

<b>CANOLA FERTILIZER COSTS</b>			
<b>Fertilizer</b>	<b>Analysis</b>	<b>\$/tonne</b>	<b>\$/lb</b>
Anhydrous Ammonia	82-0-0	732	0.40
Ammonium Nitrate	34-0-0	395	0.53
Ammonium Sulphate	21-0-0-24	258	0.12 (S)
Liquid Nitrogen	28-0-0	271	0.44
Liquid Phosphate	10-34-0	347	0.33 (P <sub>2</sub> O <sub>5</sub> )
Liquid Sulphur	15-0-0-20	211	0.15 (S)
Phosphate	11-52-0	391	0.25 (P <sub>2</sub> O <sub>5</sub> )
Potash	0-0-60	186	0.14
Urea	46-0-0	425	0.42

***Crop and Hail Insurance:***

Prices will vary from site to site.

***Machinery Cost:***

- Conventional tillage: \$17.00/acre
- Direct seeding: subtract \$6.00/acre
- Straight combining: subtract \$2.00/acre

***Additional Machinery Costs:*** (Spraying Application)

- Aerial \$4.00/acre
- Ground \$3.00/acre

Note: Machinery costs reflect the average operating cost (such as fuel, lubrication and repairs) across western Canada (source Royal Bank of Canada).

***Marketing Cost:*** (\$0.25/bu)

This cost was assigned to the variable cost using the Options Marketing System.

***Interest/Opportunity Cost:***

This cost calculation demonstrates the cost of money borrowed (at the prime rate 6.5% + 1.5%) and charged on crop inputs and machinery operating costs. In 2001, 8% per annum over six months was used.

**C. Economic Results Report (example)**

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**Site:** Rycroft, AB

**Systems Comparison Trial:** AC Excel

<b>CALCULATION OF VALUE OF PRODUCTION</b>			
<b>Yield (bu/ac)</b>	<b>X</b>	<b>Price (\$/bu)</b>	<b>= Value of Production</b>
33.1		7.00	231.70

<b>CALCULATION OF VARIABLE COSTS (\$/ac)</b>	
Seed	9.20
Fertilizer	30.84
Herbicides/Fungicides	35.90
Insecticides	5.04
Machinery	27.00
Insurance	0
Marketing	8.28
Interest/opportunity	4.32
<b>Total Variable Costs</b>	<b>120.57</b>

<b>CALCULATION OF CONTRIBUTION MARGIN</b>			
<b>Value of Production (\$/ac)</b>	<b>-</b>	<b>Variable Costs (\$/ac)</b>	<b>= Contribution Margin (\$/ac)</b>
231.70		120.57	111.13

<b>Contribution Margin (\$/ac)</b>	<b>/</b>	<b>Yield (bu/ac)</b>	<b>= Contribution Margin (\$/bu)</b>
111.13		33.1	3.36

This example was developed and prepared with assistance from Royal Bank agrologists.

**D. Contribution Margin Worksheet**

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<b>CALCULATION OF VALUE OF PRODUCTION</b>				
<b>Yield (bu/ac)</b>	<b>X</b>	<b>Price (\$/bu)</b>	<b>=</b>	<b>Value of Production</b>

<b>CALCULATION OF VARIABLE COSTS (\$/ac)</b>	
Seed	
Fertilizer	
Herbicides/Fungicides	
Insecticides	
Machinery	
Insurance	
Marketing	
Interest/opportunity	
<b>Total Variable Costs</b>	

<b>CALCULATION OF CONTRIBUTION MARGIN</b>				
<b>Value of Production (\$/ac)</b>	<b>-</b>	<b>Variable Costs (\$/ac)</b>	<b>=</b>	<b>Contribution Margin (\$/ac)</b>

<b>Contribution Margin (\$/ac)</b>	<b>/</b>	<b>Yield (bu/ac)</b>	<b>=</b>	<b>Contribution Margin (\$/bu)</b>