

IV ECONOMIC ANALYSIS

A *Canola Pricing System*

Grade	Green Seed (%)	Total Damaged & Green Seed Allowed (%)	\$/bu
# 1	0 - 2.0	3.0	9.25
# 2	2.1 - 6.0	10.0	8.96
# 3A	6.1 - 10.0	15.0	8.55
# 3B	10.1 - 20.0	20.0	7.91
Sample	Over 20.0	Over 20.0	6.70

Note 1: *The damaged and green includes all frozen, 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 (includes trucking).*

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

- *IMC 109RR, IMC 208RR, IMC 304RR = \$0.86/bu*
- *Nex 705, Nex 715, Nex 720 = \$1.00/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 2002. Equipment costs were obtained from agrologists 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.

CANOLA ARGENTINE VARIETY SEED COSTS

<i>B. napus</i>	\$/lb	Distributor	<i>B. napus</i>	\$/lb	Distributor
45A51	4.79/lb	Agricore United	Canterra 1812 RR	4.43/lb	Canterra Seeds
45A77	5.49/lb	Agricore United	Canterra 1841 RR*	5.85/lb	Canterra Seeds
45H21	5.90/lb	Agricore United	IMC 109 RR	2.80/lb	Cargill Specialty Canola Oils
ACS C7 (<i>B. rapa</i>)	2.70/lb	Agriculture Canada	IMC 304 RR	2.80/lb	Cargill Specialty Canola Oils
AC Sunbeam (<i>B. rapa</i>)	1.69/lb	Agriculture Canada	IMC 208 RR	2.80/lb	Cargill Specialty Canola Oils
InVigor 2573	5.15/lb	Bayer CropScience	Nex 705	3.63/lb	Dow AgroSciences
InVigor 2663	5.15/lb	Bayer CropScience	Nex 715	3.98/lb	Dow AgroSciences
InVigor 2733	5.90/lb	Bayer CropScience	Nex 720	3.98/lb	Dow AgroSciences
LBD 449 RR	3.82/lb	Brett Young Seeds Ltd.	DKL 35-85	4.00/lb	Monsanto Canada
LBD 612 RR	3.89/lb	Brett Young Seeds Ltd.	DKL34-55 RR	3.90/lb	Monsanto Canada
LBD 2393 LL	3.89/lb	Brett Young Seeds Ltd.	Field King 811	3.90/lb	Pineland Co-op
Prairie 499 RR	5.60/lb	Brett Young Seeds Ltd.	SW Razor RR	4.29/lb	Promark Seeds
MilleniUM 03	2.99/lb	CanAmera Foods	SP Admirable RR	4.25/lb	SK Wheat Pool / AgPro
Canterra 1604 CL	4.00/lb	Canterra Seeds	Q2	2.75/lb	SK Wheat Pool / AgPro

Note: Seed cost may vary from location to location.

The above seed prices reflect prices available in July 2002. Actual seed prices will depend upon the time of year the seed is purchased, discounts or incentives and seed treatments that may be available. Please check with your local retailer to get current prices for specific seed varieties.

*Proposed 2002 SRP, variety was not commercially available in 2002.

OTHER PRODUCT COSTS

Product/Process	\$/Unit	Distributor
Corn Cob Grit	\$ 35.00/22 kg	North Star Seeds
Bortrac	\$ 9/70/L	Phosyn pic
Accuseed	\$ 0.35/lb	Tiger Industries
Roundup Technology Fee	\$ 15.00/ac	Monsanto Canada Inc.
Seed Priming*	\$ 1.71/lb	Kamterter II L. L. C.
Sulphur F3000	\$ 4.90/L	Phosyn pic

* Seed priming \$/Unit cost is an estimated/projected price for 2002 only.

PRODUCT INFORMATION			
Product	Common Name	Manufacturer/ Distributor	\$/Unit Cost
Absolute	imazamox+imazethapyr+clopyralid	BASF Canada Inc.	32.99/ac
Decis 5EC	deltamethrin	Bayer CropScience	173.00/2.0L
Eclipse	glyphosate+clopyralid	Dow AgroSciences Canada Inc.	159.00/6.2L
Edge	ethalfuralin	Dow AgroSciences Canada Inc.	50.00/25kg
Foundation Lite	iprodione+thiram	Bayer CropScience	0.45/lb
Foundation Premium	iprodione+lindane+thiram	Bayer CropScience	N/A
Fusion	fenoxaprop-p-ethyl + fluazifop-p-butyl	Bayer CropScience	239.00/ca
Gaucho CS	imidacloprid + carbathiin + thiram + metalaxyl	Gustafson	N/A
Helix	fludioxonil+metalaxyl+ difenoconazole+thiamethoxam	Syngenta Crop Protection	1.23/lb
Helix XTra	fludioxonil+metalaxyl+ difenoconazole+thiamethoxam	Syngenta Crop Protection	2.27/lb
Liberty (1 st application)	glufosinate ammonium	Bayer CropScience	18.50/ac
Liberty (2 nd application)	glufosinate ammonium	Bayer CropScience	11.45/ac
Lontrel 360	clopyralid	Dow AgroSciences Canada Inc.	635.00/4.45L
Matador	cyhalothrin-lambda	Syngenta Crop Protection	528.53/3.78L
Muster	ethametsulfuron methyl	DuPont Canada Inc.	638.00/ca
Muster Gold II	ethametsulfuron methyl + quizalofop-p-ethyl	DuPont Canada Inc.	822.12/ca
Odyssey	imazamox + imazethapyr	BASF Canada Inc.	967.66/ca
Poast Ultra	sethoxydim	BASF Canada Inc.	639.42/ca
Ronilan EG	vinclozolin	BASF Canada Inc.	766.02/ca
Rovral Flo	iprodione	Bayer CropScience	215.00/8.4L
Roundup Original	glyphosate	Monsanto Canada Inc.	8.99/L
Roundup Transorb	glyphosate	Monsanto Canada Inc.	9.79/L
Select	clethodim	Bayer CropScience	615.00/ca
Sevin	carbaryl	Bayer CropScience	140.00/10L
Titan FL	clothianidin + vitavax+thiram+metalaxyl	Gustafson	N/A
Tribune	fludioxonil+metalaxyl+ difenoconazole	Syngenta Crop Protection	N/A
Vantage Plus	glyphosate	Dow AgroSciences Canada Inc.	9.79/L

Note: ca – case

N/A - not available at time of publication.

Product cost may vary from location to location.

A value of \$21.63 /ac was used for Liberty Link treatments where a Liberty/Select tank mix was applied.

The above product prices reflect prices available in July 2002. 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.

CANOLA FERTILIZER COSTS			
Fertilizer	Analysis	\$/tonne	\$/lb
Anhydrous Ammonia	82-0-0	534	0.30
Ammonium Nitrate	34-0-0	293	0.39
Ammonium Sulphate	21-0-0-24	268	0.24 (S)
Liquid Nitrogen	28-0-0	194	0.31
Liquid Phosphate	10-34-0	317	0.33 (P ₂ O ₅)
Liquid Sulphur	15-0-0-20	199	0.22 (S)
Phosphate	11-52-0	384	0.28 (P ₂ O ₅)
Potash	0-0-60	184	0.14
Urea	46-0-0	309	0.30

Crop and Hail Insurance:

Prices will vary from site to site.

Machinery Cost:

- Conventional tillage: \$ 19.00/ac
- Direct seeding: subtract \$ 6.00/ac
- Straight combining: subtract \$ 2.00/ac

Additional Machinery Costs: (Spraying Application)

- Aerial \$ 4.75/ac
- Ground \$ 3.50/ac

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 4.5% + 1.5%) and charged on crop inputs and machinery operating costs. In 2002, 6% per annum over six months was used.

C. Economic Results Report (example)

Site: Lethbridge Irrigation

Variety and Systems Comparison Trial: Q2

CALCULATION OF VALUE OF PRODUCTION			
Yield (bu/ac)	X	Price (\$/bu)	= Value of Production
43.3		8.96	387.97

CALCULATION OF VARIABLE COSTS (\$/ac)	
Seed	11.00
Fertilizer	57.84
Herbicides/Fungicides	54.83
Insecticides	0.00
Machinery	19.00
Insurance	7.00
Marketing	10.83
Interest/opportunity	5.99
Total Variable Costs	166.49

CALCULATION OF CONTRIBUTION MARGIN			
Value of Production (\$/ac)	-	Variable Costs (\$/ac)	= Contribution Margin (\$/ac)
387.97		166.49	221.48

Contribution Margin (\$/ac)	/	Yield (bu/ac)	= Contribution Margin (\$/bu)
221.48		43.3	5.12

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

D. Contribution Margin Worksheet

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

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

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

Contribution Margin (\$/ac)	/	Yield (bu/ac)	=	Contribution Margin (\$/bu)