NSW GOVERNMENT Primary Industries

Flood Irrigated Conventional OP Canola

Central Zone — Winter 2012

1. GROSS MARGIN BUDGET:

	Standard Budget $/ha	Your Budget $/ha
INCOME:		
2.50 tonnes/ha @ $460.00 /tonne (on farm)	$1,150.00	
A. TOTAL INCOME $/ha:	**$1,150.00**	
VARIABLE COSTS:		
See opposite page for detail		
Cultivation	$43.14	
Sowing	$56.00	
Fertiliser	$234.27	
Herbicide	$50.61	
Insecticide	$26.45	
Irrigation	$55.98	
Contract windrowing and harvesting	$135.00	
Levies	$15.42	
Crop Insurance	$41.26	
Cartage, grading & bagging	$0.00	
B. TOTAL VARIABLE COSTS $/ha:	**$658.13**	
C. GROSS MARGIN (A-B) $/ha:	**$491.87**	
D. GROSS MARGIN FOR ALTERNATIVE DRYLAND CROP (SF CANOLA)	**$546.67**	
E. EXTRA GROSS MARGIN DUE TO IRRIGATION (C-D)	**-$54.80**	
F. GROSS MARGIN /ML (E÷ML WATER APPLIED)*	**-$18.27**	

* See agronomic notes on irrigation

2. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER HECTARE:

YIELD tonnes/ha	ON FARM PRICE ($/tonne) $420 /t	$440 /t	**$460 /t**	$480 /t	$500 /t
1.60	$47	$78	$108	$139	$169
1.90	$167	$203	$239	$276	$312
2.20	$283	$325	$367	$409	$451
2.50	$396	$444	**$492**	$540	$587 ←
2.80	$510	$564	$617	$670	$724
3.10	$624	$683	$742	$801	$861
3.40	$738	$803	$867	$932	$997

Gross Margin ($/ha)

3. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER ML:

YIELD tonnes/ha	ON FARM PRICE ($/tonne) $420 /t	$440 /t	**$460 /t**	$480 /t	$500 /t
1.60	- $166	- $156	- $146	- $136	- $126
1.90	- $127	- $114	- $102	- $90	- $78
2.20	- $88	- $74	- $60	- $46	- $32
2.50	- $50	- $34	**- $18**	- $2	$14 ←
2.80	- $12	$6	$23	$41	$59
3.10	$26	$45	$65	$85	$105
3.40	$64	$85	$107	$129	$150

Gross Margin ($/ML)

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CALENDAR OF OPERATIONS:

Operation	Month	Machinery hrs /ha	Machinery Cost $/hour	Machinery Total $/ha	Inputs rate/ha	Inputs Cost $	Inputs Total $/ha	Total Cost $/ha
Off-set disc	Jan	0.35	60.82	**$21.12**				**$21.12**
Chisel plough	Feb	0.22	54.87	**$12.25**				**$12.25**
Gypsum (Sulfur)	Mar	contract		**$7.50**	0.3 t	$30.00 /t	**$9.00**	**$16.50**
Light Cultivation	Mar	0.17	57.07	**$9.77**				**$9.77**
Pre- irrigation	Mar				1.50 ML	$18.66/ML	**$27.99**	**$27.99**
Weed control eg: glyphosate 540 g/L (Roundup PowerMAX®)	Apr	0.05	53.40	**$2.88**	1.50 L	$8.67/L	**$13.01**	**$15.88**
Nitrogen fertiliser eg: Urea	May	0.17	57.07	**$9.77**	150 kg	$0.70/kg	**$105.00**	**$114.77**
Weed control eg: glyphosate 540 g/L (Roundup PowerMAX®)	May	0.05	53.40	**$2.88**	1.50 L	$8.67/L	**$13.01**	**$15.88**
Sowing	May	0.17	74.40	**$12.50**	3.00 kg	$14.50/kg	**$43.50**	**$56.00**
Starter fertiliser eg: MAP	May	with above			100 kg	$1.03/kg	**$103.00**	**$103.00**
Insecticide eg: omethoate 290 g/L (Le-mat®)	May	0.05	53.40	**$2.88**	0.10 L	$30.00/L	**$3.00**	**$5.88**
Broadleaf weed control eg: Clopyralid (Lontrel®)	Jun	0.05	53.40	**$2.88**	0.30 L	$32.86/L	**$9.86**	**$12.73**
Grass weed control eg:haloxyfop-R (Verdict®520)	Jun	with above	0.00	**$0.00**	0.10 L	$61.09/L	**$6.11**	**$6.11**
Irrigation	Aug				1.50 ML	$18.66/ML	**$27.99**	**$27.99**
Heliothis control eg: alpha-cypermethrin (Fastac Duo®)	Sept	Aerial applic		**$18.15**	0.30 L	$8.07/L	**$2.42**	**$20.57**
Contract Windrow		contract		**$75.00**				**$75.00**
Contract-harvest		contract		**$60.00**				**$60.00**
Crop Levies						$1.50/tonne + 1.03% of on-farm value		**$15.42**
Crop Insurance					3.59%	of on-farm value		**$41.26**

*** Input and crop prices are correct at the time of writing (March 2012). Market uncertainty makes estimation of future pricing impractical.

NOTES:

Soil type:
- Suitable for all good fertility wheat soils. Avoid acid soils containing high levels of exchangeable aluminium.

Fertiliser:
- Adequate phosphorus is essential for canola.
- Canola requires more nitrogen than wheat and also has high sulfur requirement. This can be applied as either two separate products (eg gypsum pre-sowing, urea at sowing or top dressed in-crop), or as a combined product at sowing or in-crop (eg, sulfate of ammonia).
- For maximum yield response both nitrogen and sulfur should be applied prior to early budding.

Sowing time:
- Sow canola as early as possible to maximise yield potential, either after pre-irrigation or after the first autumn rains from mid-April.
- There is a 10% yield loss for every weeks delay in sowing after early May.
- Seed price used above is for purchased seed (open pollinated variety). Do not use retained canola seed.

Weed control:
- Trifluralin for grass weed and wireweed/fumitory control can be incorporated by sowing.
- Can use wide range of herbicides for grass control.
- Clopyralid for capeweed and saffron thistle control.
- Rotate herbicide groups and use other non-chemical methods to avoid herbicide resistance developing.

Insect control:
- Earthmite control is essential at establishment.
- Check for insect pests at flowering time.
- Aphids need to be monitored from early budding, when colonies begin to spread control may be needed.
- Monitor for heliothis from flowering onwards.

Windrowing:
- Windrowing is strongly recommended to reduce shattering losses and allow earlier harvest.

Irrigation:
- Pre-irrigation is optional, dependent on stored moisture levels following summer rainfall.
- This budget is applicable for the Central Zone east, a higher water requirement may be required for the central zone/west.
- In-crop irrigation: timing and amount dependent on in-crop winter rainfall; generally one spring irrigation (1.5 ML/ha) is sufficient but must be timed to ensure that there is adequate moisture over the critical flowering period.
- Some of the yield response for irrigated crops is due to stored soil moisture and growing season rainfall which can be sufficient to grow a dryland crop. Thus the gross margin per ML is obtained by (GM/Ha irrigated crop – GM/Ha dryland crop)÷ML of irrigation water applied.
- Cost/ML is calculated based on the management and usage charges for regulated Maquarie river.

Machinery:
- A tractor with 57 kW (77 HP) pto power and 66kW (90 HP) engine power is assumed.
- Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.
- Contract-harvesting does not include the cost of fuel.

Labour:
- The labour required for machinery operations is 1.75 hr/ha
- Using a labour cost of $22/hr, an additional $38.57 can be deducted from the budget

Important notes:
- These gross margins are only a guide. They do not include overhead costs.
- **Use your own figures and price assumptions to estimate your own gross margin.**
- Use of a particular brand name does NOT imply a recommendation of that brand by NSW DPI.