NSW DEPARTMENT OF **PRIMARY INDUSTRIES**

CANOLA: (Furrow Irrigated - Beds)

Irrigated Winter - 2009 **Murrumbidgee Valley**

1.GROSS MARGIN BUDGET:

		Standard Budget $/ha	Your Budget $/ha
INCOME:			
3.00 tonnes/ha @	$500 /t (on farm, 42% oil)	$1,500	
A. TOTAL INCOME $/ha:		**$1,500**	
VARIABLE COSTS:			
See following page for detail			
Cultivation		$44	
Sowing		$49	
Fertiliser		$379	
Herbicide		$48	
Insecticide		$23	
Contract windrowing		$30	
Contract harvesting		$12	
Levies		$20	
Crop insurance		$49	
Irrigation		$129	
B. TOTAL VARIABLE COSTS $/ha:		**$783**	
C. GROSS MARGIN (A-B) $/ha:		**$717**	
D. GROSS MARGIN $/ML*:		**$205**	

* Note. The method of calculation of gross margin per ML for the Murrumbidgee budgets varies because of the difficulty of identifying an alternative dryland alternative on specialist flood irrigated land. It is recommended where farmers can identify a dryland alternative that they subtract the gross margin of the dryland alternative from the gro margin of the irrigated crop and then divide by the number of ML. This will give a better indication of the contributio the irrigation water has made to increasing returns.

SENSITIVITY TABLES

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

YIELD	ON FARM PRICE ($/tonne)				
tonnes/ha	$460 /t	$480 /t	**$500 /t**	$520 /t	$540 /t
1.50	-$121	-$93	-$64	-$35	-$7
2.00	$98	$136	$175	$213	$251
2.50	$383	$431	$479	$526	$574
3.00	$602	$660	**$717**	$775	$832
3.50	$822	$889	$956	$1023	$1090
4.00	$1041	$1118	$1194	$1271	$1347
4.50	$1260	$1347	$1433	$1519	$1605

← Gross Margin ($/ha)

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

YIELD	ON FARM PRICE ($/tonne)				
tonnes/ha	$460 /t	$480 /t	**$500 /t**	$520 /t	$540 /t
1.50	-$35	-$26	-$18	-$10	-$2
2.00	$28	$39	$50	$61	$72
2.50	$109	$123	$137	$150	$164
3.00	$172	$188	**$205**	$221	$238
3.50	$235	$254	$273	$292	$311
4.00	$297	$319	$341	$363	$385
4.50	$360	$385	$409	$434	$459

← Gross Margin ($/ML)

CANOLA: (Furrow Irrigated - Beds) Murrumbidgee Valley Irrigated Winter - 2009

CALENDAR OF OPERATIONS:		Machinery			Inputs			Total Cost
			Cost	Total		Cost	Total	
Operation	Month	hrs/ha	$/hour	$/ha	Rate/ha	$	$/ha	$/ha
Scarify	Jan/Feb	0.17	$45.05	$7.71				**$7.71**
Apply sulphur fertiliser ***(eg. broadcast gypsum)***	Mar	0.26	$46.38	$12.08	300kg/ha	$0.055/kg	$16.50	**$28.58**
Shape beds, fertilise urea		0.26	$46.38	$12.08				**$12.08**
Apply nitrogen fertiliser ***(eg. Urea)***	Mar	with above			125kg/ha	0.734kg/ha	$91.75	**$91.75**
Pre-emergent weed spray ***(eg. trifluralin)***	Apr	contract		$10.00	1.70 L/ha	$8.45/L	$14.37	**$24.37**
Additional bed shape		0.26	$46.38	$12.08				**$12.08**
Sow treated seed	Apr/May	0.17	$62.38	$10.48	4kg/ha	$9.60/kg	$38.40	**$48.88**
Apply phosphorus fertiliser **(eg: MAP)**		with above			150kg/ha	$0.93/kg	$140	**$140.10**
Construct tail drains		0.26	$46.38	$12.08				**$12.08**
Apply earthmite spray ***eg.bifenthrin (Telstar®)***		contract		$10.00	0.075 L/ha	$54.66/L	$4.10	**$14.10**
Broadleaf weed spray ***eg. Chlopyralid (Lontrel®)***	Jun	contract		$10.00	0.30 L/ha	$46.27/L	$13.88	**$23.88**
Apply nitrogen fertiliser ***(eg. urea)***	Jul	contract	$24.46		125kg/ha	$0.734/kg	$91.75	**$118.75**
Apply heliothis spray synthetic pyrethroid ***eg.lambda-cyhalothrin (Karate Z®)***	Sep/Oct	contract	(1 year in 3)	$6.05	0.036 L/ha	$214.88/L	$2.58	**$8.63**
Contract windrowing	Nov	contract		$30.00				**$30.00**
Contract harvest	Nov/Dec	contract		$2.47				**$2.47**
Chaser Bin		0.22	$45.05	$9.91				**$9.91**
Irrigation*					3.5ML/ha	$36.78/ML	$128.71	**$128.71**
Crop Levies			$1.50 /t	+	1.02% of on-farm value			**$19.73**
Crop Insurance					3.27% of on-farm value			**$49.05**

AGRONOMIC NOTES: Use of a particular brand name does NOT imply a recommendation of that brand by NSW DPI. Always read chemical labels and follow directions carefully, as it is your legal responsibility to do so.

Cropcheck	- Monitor and record crop performance. Key checks include establishment, weeds, insects, disease and grain fill.
Varieties	- New varieties available, see *Winter Crop Variety Sowing Guide 2009* and *Canola Variety & Management Guide 2009*
Sowing Time	- Correct sowing time of 20th April to 10th of May is crucial for profitable yields.
Rotation	- Usually follows a winter cereal. Costs are lower if sowing into permanent beds. Check soil pH and lime if less than pH 5.0 ($CaCl_2$).
Oil Content	- An oil bonus/discount of 1.5% of price is applied for every 1% above/below 42% oil content.
	- Irrigated crops require high fertiliser inputs for good yields and quality.
Fertiliser	- Due to canola's high sulphur requirements, gypsum is preferred.
	- Aim to apply 40 - 60% of total nitrogen requirements before sowing.
Weed Control	- Herbicides are boomsprayed in a dry year and aerial sprayed in a wet year. Aerial spray used later in the season. Refer to *Weed Control in Winter Crops 2009* for alternative herbicides.
Pest Control	- Apply synthetic pyrethroid spray before Nov 7 to comply with Heliothis IRM Strategy.
	- Use imidacloprid (eg. Goucho®) treated seed to supress mites and aphids in low pressure situations. See "Insect and Mite Control in Field Crops 2007".
Irrigation	- Schedule spring irrigations according to plant water use.
	- *Budget allows establishment irrigation and two spring waterings.
	-*The budget uses MIA total water costs based on 50% allocation.
	- Irrigation cost includes the variable cost and fixed water costs of $19.18/ML
	- Water costs used in the MIA budgets are based on 2008-09 prices.
	- For prices in other areas and districts, refer to the water prices section.
Windrowing	- Reduces risk of crop loss from shattering and adverse weather conditions.
Bedcropping	- Bed cropping produces high yields but may require additional capital investment in equipment from $2,000 to $20,000.
Machinery	- Machinery costs include variable costs only for the tractor, implements and header.
	- Contract harvesting does not include the cost of fuel.
Labour	- The labour required for machinery operations is 2.00 hr/ha.
	- Using a labour cost of $14/hr, an additional $28/ha can be deducted from the budget.
Economic note:	- These gross margins are only a guide. They do not include overhead costs or GST.
	- Input and crop prices are correct at the time of writing (March 2009). Market uncertainity makes estimation of future pricing impractical.
	- Use your own figures and price assumptions to determine your own gross margin.