



**DRYLAND FABABEANS (no till)**

**Farm Enterprise Budget Series - North West NSW**

**Winter 2009**

**1. GROSS MARGIN BUDGET:**

<b>INCOME:</b>		1.80 tonnes/ha	
Large grain	0%	0.00 tonnes/ha@	/tonne (on farm)
Small grain	100%	1.80 tonnes/ha@	\$300.00 /tonne (on farm)

Sample Budget \$/ha	Your Budget \$/ha
\$0.00	
\$540.00	

Crop prices were correct at the time of writing (Mar 17 2009), world market volatility makes estimation of future pricing impractical.

**VARIABLE COSTS:**  
See next page for detail

**A. TOTAL INCOME \$/ha:** **\$540.00**

Cultivation.....	\$0.00	
Sowing.....	\$95.27	
Fertiliser.....	\$28.75	
Herbicide.....	\$99.84	
Insecticides.....	\$18.10	
Fungicides.....	\$40.61	
Contract harvesting.....	\$79.72	
Levies.....	\$5.51	
Insurance.....	\$8.32	

**B. TOTAL VARIABLE COSTS \$/ha:** **\$376.11**

**C. GROSS MARGIN (A-B) \$/ha:** **\$163.89**

Water use efficiency example

Growing season rainfall (ie in-crop): mm	253	
Stored fallow moisture: mm (25% of rainfall in fallow period)	60	
Early crop water use: mm	130	
Total crop water use mm	183	
Gross margin per mm	<b>\$0.90</b>	
kg of grain per mm	9.8	

Please refer to the "Water Use Efficiency in Northern NSW Winter Crop Enterprise Budgets" summary for more information on water use efficiency assumptions used at right.

\* A yield range of 7-15kg/mm could be expected depending on suitable management, fallow efficiency and rainfall received.

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)				
	\$250 /t	\$275 /t	\$300 /t	\$350 /t	\$400 /t
1.00	-\$119	-\$94	-\$70	-\$21	\$27
1.20	-\$70	-\$41	-\$12	\$47	\$105
1.60	\$27	\$66	\$105	\$183	\$261
<b>1.80</b>	\$76	\$120	<b>\$164</b>	\$252	\$339
2.00	\$125	\$174	\$222	\$320	\$417
2.40	\$222	\$281	\$339	\$456	\$573
2.60	\$271	\$334	\$398	\$524	\$651

Gross margin is zero when income is reduced by 30%  
or variable costs are increased by 44%

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CALENDAR OF OPERATIONS:		Machinery			Inputs			Total Cost \$/ha
Operation	Month	hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
harvest previous crop	Nov							
broadleaf and grass weed control eg: glyphosate 450	Dec	0.03	45.23	1.36	1.2 L	7.43/L	8.92	<b>10.27</b>
broadleaf weed control eg 2,4-D amine 300g/L	Dec	with above			1.80 L	4.23/L	7.61	<b>7.61</b>
wetter - non-ionic surfactant	Dec	with above			0.04 L	6.86/L	0.27	<b>0.27</b>
broadleaf and grass weed control eg: glyphosate 450	Jan	0.03	45.23	1.36	1.0 L	7.43/L	7.43	<b>8.79</b>
broadleaf weed control eg triclopyr 600g	Jan	with above			0.12 L	43.63/L	5.24	<b>5.24</b>
wetter - non-ionic surfactant	Jan	with above			0.04 L	6.86/L	0.27	<b>0.27</b>
broadleaf and grass weed control eg: glyphosate 450	Feb	0.03	45.23	1.36	1.0 L	7.43/L	7.43	<b>8.79</b>
broadleaf weed control eg 2,4-D amine 300g/L	Feb	with above			1.2 L	4.23/L	5.08	<b>5.08</b>
wetter - non-ionic surfactant	Feb	with above			0.04 L	6.86/L	0.27	<b>0.27</b>
broadleaf and grass weed control eg paraquat+diquat	Apr	0.03	45.23	1.36	2.0 L	12.25/L	24.50	<b>25.86</b>
wetter - non-ionic surfactant	Apr	with above			0.12 L	6.86/L	0.82	<b>0.82</b>
broadleaf and grass weed control eg. simazine	May	0.03	45.23	1.36	1.50 L	7.99/L	11.99	<b>13.34</b>
sowing	May	0.12	67.23	8.07				<b>8.07</b>
fertiliser (Starter Z)	May	with above			25 kg	1.15/kg	28.75	<b>28.75</b>
seed	May	with above			80 kg	1.09/kg	87.20	<b>87.20</b>
grass weed control eg haloxyfop-R 520g	Jun	0.03	45.23	1.36	0.06 L	163.59/L	9.82	<b>11.17</b>
crop oil	Jun	with above			0.50 L	4.10/kg	2.05	<b>2.05</b>
fungus control eg.mancozeb	Jul	0.03	45.23	1.36	1 kg	8.25/kg	8.25	<b>9.61</b>
fungus control eg.mancozeb	Aug	aerial spray		14.50	2 kg	8.25/kg	16.50	<b>31.00</b>
insect control eg. lambda-cyhalothrin	Sep	aerial spray		14.50	0.024 L	150.05/L	3.60	<b>18.10</b>
harvest (contract)	Nov			79.72				<b>79.72</b>
crop levies						1.02% of on-farm value		<b>5.51</b>
crop insurance				1.540%		of on-farm value		<b>8.32</b>

Input prices were correct at the time of writing (Mar 17 2009). Current fertiliser and chemical market uncertainty makes estimation of future pricing impractical.

## AGRONOMIC REQUIREMENTS:

Growers should assess soil moisture profiles and soil fertility levels to assist with yield estimates.

- Soils:** Must be grown on the better clay loam and heavy self mulching clay soils. All soils must be well drained although more tolerant than chickpeas.
- Rotation place:** Useful as a break crop in cereal rotations for disease control, weed control and nitrogen benefits for following cereal crops. Crop rotation is essential to minimise loss of yield due to disease. Nutrient requirements should be assessed with soil tests and strip trial results.
- Inoculation:** With group E inoculum is essential.
- Seed:** Seed price used above is for purchased seed; if using retained seed adjust budget accordingly.
- Insects:** Heliothis must be monitored from flowering through to podding.
- Herbicides:** Fababeans are sensitive to sulfonyl urea herbicide residues. To reduce the likelihood of herbicide resistance, rotate herbicide groups and weed management techniques. Refer to the NSW DPI booklet "Weed Control in Winter Crops 2009" for options.

## Fungicide:

Used to control chocolate spot and rust. See Fababeans agnote and Agfact "Fababeans 2009- Management strategies for the Northern Region" for disease management strategies. Check current permits & registrations prior to using fungicides. Number of applications will depend on the season

**- Always read chemical labels and follow directions, as it is your legal responsibility to do so.**

Use of a particular brand name does NOT imply a recommendation of that brand by NSW DPI.

## MACHINERY ASSUMPTIONS:

Tractor: 170 KW PTO (230 HP) and 200 KW engine (265 HP)

- Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.
- Contract harvesting does not include the cost of fuel.

## LABOUR REQUIREMENTS: - labour is not costed in this budget.

According to the above operations, labour required is 0.24hrs/ha. Then multiplying this by 1.25 to allow for machinery repair time etc, and using a labour cost of \$19/hr, the cost of labour is \$5.55/ha, reducing the gross margin to \$158.34/ha.