



## SPRAY IRRIGATED MUNGBEANS (no-till)

Farm Enterprise Budget Series - Northern Zone

Summer 2012-2013

### 1. GROSS MARGIN BUDGET:

#### INCOME:

Yield	1.50 tonnes/ha		Sample Budget \$/ha	Your Budget \$/ha
1.32 tonnes/ha at	\$850.00 /tonne (clean seed, processing grade).....		\$1,122.00	
0.18 tonnes/ha at	\$160.00 /tonne (gradings).....		\$28.80	

A grading percentage of 12% is assumed, but it will vary according to crop and harvest conditions.

#### A. TOTAL INCOME \$/ha:

**\$1,150.80**

#### VARIABLE COSTS: see following page(s) for details

Sowing.....	\$61.91
Fertiliser & application.....	\$53.80
Herbicide & application.....	\$62.27
Insecticide & application.....	\$26.43
Irrigation.....	\$152.96
Harvesting.....	\$76.24
Levies and insurance.....	\$61.68
Grading & bagging.....	\$135.00

#### B. TOTAL VARIABLE COSTS \$/ha:

**\$630.28**

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

**\$520.52**

#### D. GROSS MARGIN \$/ML:

**\$347.01**

### SENSITIVITY TABLES

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

YIELD t/ha.		\$140 /t	\$150 /t	\$160 /t	\$165 /t	\$170 /t	\$175 /t
gradings	clean seed	\$710 /t	\$780 /t	<b>\$850 /t</b>	\$890 /t	\$930 /t	\$970 /t
0.14	1.06	\$171	\$245	\$320	\$362	\$405	\$447
0.16	1.14	\$225	\$306	\$387	\$433	\$479	\$525
0.17	1.23	\$280	\$367	\$454	\$503	\$553	\$602
<b>0.18</b>	<b>1.32</b>	\$334	\$427	<b>\$521</b>	\$574	\$627	\$680
0.20	1.45	\$416	\$518	\$621	\$679	\$738	\$796
0.22	1.58	\$498	\$609	\$721	\$785	\$849	\$913
0.24	1.76	\$607	\$731	\$855	\$926	\$997	\$1,068

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

YIELD t/ha.		\$140 /t	\$150 /t	\$160 /t	\$165 /t	\$170 /t	\$175 /t
gradings	clean seed	\$710 /t	\$780 /t	<b>\$850 /t</b>	\$890 /t	\$930 /t	\$970 /t
0.14	1.06	\$114	\$163	\$213	\$241	\$270	\$298
0.16	1.14	\$150	\$204	\$258	\$288	\$319	\$350
0.17	1.23	\$186	\$244	\$302	\$335	\$369	\$402
<b>0.18</b>	<b>1.32</b>	\$223	\$285	<b>\$347</b>	\$382	\$418	\$453
0.20	1.45	\$277	\$346	\$414	\$453	\$492	\$531
0.22	1.58	\$332	\$406	\$481	\$523	\$566	\$608
0.24	1.76	\$404	\$487	\$570	\$617	\$665	\$712

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(spray irrigated from river-regulated)

CALENDAR OF OPERATIONS:		Machinery			Inputs			Total
Operation	Month	hrs /ha	Cost	Total	Rate/ha	Cost	Total	Total Cost \$/ha
			\$/hour	\$/ha		\$	\$/ha	
Herbicide - ground spray, 450 g/L glyphc	Jan	0.05	51.87	2.59	1.6 L	4.50	7.20	<b>9.79</b>
Herbicide - 2,4-D i.p.a. 300 g/L	Jan	with above			0.66 L	4.20	2.77	<b>2.77</b>
Wetter - non-ionic surfactant	Jan	with above			0.2 L	6.72	1.34	<b>1.34</b>
Herbicide - ground spray, 450 g/L glyphc	Mar	0.05	51.87	2.59	1.2 L	4.50	5.40	<b>7.99</b>
Wetter - non-ionic surfactant	Mar	with above			0.2 L	6.72	1.34	<b>1.34</b>
Herbicide - ground spray, 450 g/L glyphc	May	0.05	51.87	2.59	1.0 L	4.50	4.50	<b>7.09</b>
Wetter - non-ionic surfactant	May	with above			0.2 L	6.72	1.34	<b>1.34</b>
Herbicide - ground spray, 450 g/L glyphc	Sep	0.05	51.87	2.59	1.2 L	4.50	5.40	<b>7.99</b>
Wetter - non-ionic surfactant	Sep	with above			0.2 L	6.72	1.34	<b>1.34</b>
Fertiliser - single super (+ Mo)	Nov	0.12	74.99	9.00	80 kg	0.56	44.80	<b>53.80</b>
Herbicide - glyphosate CT	Nov	0.03	56.38	1.69	1.5 L		0.00	<b>1.69</b>
Wetter - non-ionic surfactant	Nov	with above			0.2 L	6.72	1.34	<b>1.34</b>
Sowing: Seed + inoculum	Dec	0.12	78.38	9.41	25 kg	2.10	52.50	<b>61.91</b>
Irrigation	Jan				0.5 ML	101.97	50.99	<b>50.99</b>
Crop insurance **	Jan			4.34%				<b>49.94</b>
Irrigation	Feb				0.5 ML	101.97	50.99	<b>50.99</b>
Irrigation	Feb				0.5 ML	101.97	50.99	<b>50.99</b>
Insecticide - deltamethrin 27.5 g/L	Feb	aerial spray		20.00	0.5 L	12.85	6.43	<b>26.43</b>
Desiccant- <i>check current permits</i>	Mar	0.05	51.87	2.59	2.0 L	7.81	15.62	<b>18.21</b>
Harvest	Mar	contract		76.24	per ha incl fuel			<b>76.24</b>
Grains Research Levy				1.02%	of farm gate value			<b>11.74</b>
Grading & bagging	May	contract		\$90 /t.				<b>135.00</b>

## AGRONOMIC NOTES:

A good way to grow irrigated mungbeans is to no-till after harvesting winter cereal crops. In this case, weed control is achieved with post-emergent herbicide applications. Good weed control is essential.

To reduce the likelihood of herbicide resistance, rotate herbicide groups and weed management techniques.

Winter crop stubble should be left intact if possible.

**Pests:** Closely monitor crops for thrips and mirids at budding and flowering.

Heliothis (*H. armigera*) are now resistant to many insecticides. Consult an agronomist to find out resistance levels in your area. Deltamethrin is used for green vegetable bug control in this budget.

**Fertiliser:** If applying phosphate fertiliser, use a fertiliser that contains good levels of sulfur as well, e.g. single superphosphate.

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

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

**Insurance:** \*\* Varies with Local Government Area and postcode, check with your insurer.

**PRICE:** - The price given is for processing grade mungbeans at the time of writing.

**Consult marketing sources for more up to date price information.**

**Marketing:** Mungbeans sown in spring and harvested in February are more likely to achieve good prices.

The Asian harvest starts in March/April and this can cause downward pressure on prices.

Consult your local trader or Bean Growers Australia Phone 07-4162 1100

**Harvest:** use air assist headers to reduce losses at harvest

For further information, refer to the NSW DPI "Summer Crop Production Guide 2012-13"

**LABOUR REQUIREMENTS:** - labour is not costed in this budget. If labour costs \$21.70 /hr, total labour cost would be \$14.11, reducing the gross margin to \$506 /ha. This does not include labour required to irrigate.

## MACHINERY ASSUMPTIONS:

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

Machinery costs refer to variable costs of: fuel, oil, filters, tyres, batteries and repairs.

You may need to add overhead costs as well, please refer to the Tractor and Implement Costs Guide

**IRRIGATION:** Estimated water usage charge of \$31.75/ ML assumed, your charges may be different.

Water pumping costs are calculated using a spray system with diesel powered pumping from surface supply.

Water requirements 1.50 ML is sufficient to adequately irrigate mungbeans 4 out of 5 years.