



DRYLAND GRAIN SORGHUM (No-till)

Farm Enterprise Budget Series - North West NSW

Summer 2011-2012

1. GROSS MARGIN BUDGET:

INCOME:

2.00 tonnes/ha at \$180.00 /tonne (on farm).....

Standard Budget \$/ha	Your Budget \$/ha
\$360.00	

Cartage costs will vary with distance, so have not been included. The on-farm price is after cartage.

Crop prices were correct at the time of writing (Sep 2011), world market volatility makes estimation of future pricing impractical.

A. TOTAL INCOME \$/ha:

\$360.00	
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VARIABLE COSTS:

see following page for details

Sowing.....	\$35.07	
Fertiliser & application.....	\$0.00	
Herbicide & application.....	\$116.18	
Insecticide & application.....	\$0.00	
Harvesting.....	\$66.20	
Levies and insurance.....	\$16.03	

B. TOTAL VARIABLE COSTS \$/ha:

\$233.48	
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C. GROSS MARGIN (A-B) \$/ha:

\$126.52	
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2. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER HECTARE:

SENSITIVITY TABLE

YIELD tonnes/ha	On Farm Price						
	\$140 /t	\$160 /t	\$180 /t	\$200 /t	\$220 /t	\$240 /t	\$260 /t
1.00	-\$90	-\$70	-\$50	-\$30	-\$11	\$9	\$29
1.50	-\$21	\$8	\$38	\$68	\$98	\$127	\$157
1.75	\$13	\$48	\$82	\$117	\$152	\$186	\$221
2.00	\$47	\$87	\$127	\$166	\$206	\$245	\$285
2.30	\$88	\$134	\$180	\$225	\$271	\$316	\$362
2.60	\$129	\$180	\$232	\$283	\$334	\$386	\$437
3.00	\$179	\$239	\$298	\$358	\$417	\$476	\$536

DRYLAND GRAIN SORGHUM (No-till)

Farm Enterprise Budget Series - North West NSW

Summer 2011-2012

CALENDAR OF OPERATIONS:		Machinery			Inputs			Total
Operation	Month	Cost		Rate/ha	Cost		Total	Total Cost \$/ha
		hrs /ha	\$/hour		\$/ha	\$		
Herbicide - glyphosate CT	Dec	contract	ground spray	10.00	1.5 L	4.42	6.63	16.63
Herbicide - 2,4-D i.p.a. 300 g/L	Dec	with above			0.66 L	4.20	2.77	2.77
Wetter - non-ionic surfactant	Dec	with above			0.2 L	6.45	1.29	1.29
Herbicide - glyphosate CT	Jan	contract	ground spray	10.00	1.2 L	4.42	5.30	15.30
Herbicide - triclopyr	Jan	with above			0.08 L	19.00	1.52	1.52
Wetter - non-ionic surfactant	Jan	with above			0.2 L	6.45	1.29	1.29
Herbicide - glyphosate CT	Mar	contract	ground spray	10.00	1.2 L	4.42	5.30	15.30
Wetter - non-ionic surfactant	Mar	with above			0.2 L	6.45	1.29	1.29
Herbicide - glyphosate CT	May	contract	ground spray	10.00	1.2 L	4.42	5.30	15.30
Herbicide - 2,4-D i.p.a. 300 g/L	May	with above			0.66 L	4.20	2.77	2.77
Wetter - non-ionic surfactant	May	with above			0.2 L	6.45	1.29	1.29
Herbicide (residual) - atrazine #	Sep	contract	ground spray	10.00	2 kg	10.20	20.40	30.40
Herbicide - glyphosate CT	Sep	with above			1.2 L	4.42	5.30	5.30
Wetter - non-ionic surfactant	Sep	with above			0.2 L	6.45	1.29	1.29
Adjuvant - ammonium sulphate 417 g/L	Sep	with above			2.0 L	2.21	4.42	4.42
Sowing - thiamethoxam treated seed	Oct	0.12	85.89	10.31	2.00 kg	12.38	24.76	35.07
Crop insurance *	Jan			2.60%				9.36
Harvest	Mar	contract		66.20	per ha incl fuel			66.20
Grains Research Levy				1.020%	of farm gate value			3.67
GrainCorp Levy \$/t				\$1.50	per tonne			3.00

AGRONOMIC NOTES:

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

Herbicides: # High water rates for atrazine application will increase efficacy, 100 L/ha water assumed.

Fertiliser: Fertiliser may be necessary where nutrient deficiencies are known to exist.

Insects: Insecticides are not generally used, only apply if necessary.

Planting time: Planting sorghum after the end of December significantly increases the chances of sorghum ergot, which can cause a substantial decline in yields and unsaleable grain.

Insurance: * Varies with local government area and postcode, check with your insurer.

For further information refer to the NSW DPI "Summer Crop Production Guide 2011-12"

Harvest costs based on \$64.94 (including \$4.94/ha fuel) /ha for a crop up to 2.5 t/ha.

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.

LABOUR REQUIREMENTS: - labour is not costed in this budget. If labour costs \$21.00 /hr, total labour cost would be \$3.15, reducing the gross margin to \$123 /ha.

MACHINERY ASSUMPTIONS:

Tractor: 201 KW PTO (269 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

This budget should be used as a GUIDE ONLY and should be changed by the grower to take account of movements in crop and input prices, changes in seasonal conditions and individual farm characteristics. Estimated prices are GST exclusive.



DRYLAND SUNFLOWERS (No-till, mono-unsaturated)

Farm Enterprise Budget Series - North West NSW

Summer 2011-2012

1. GROSS MARGIN BUDGET:

INCOME:

1.00 tonnes/ha at \$563.00 /tonne (on farm).....

Standard Budget \$/ha	Your Budget \$/ha
\$563.00	

Cartage costs will vary with distance, so have not been included. The on-farm price is after cartage.

Crop prices were correct at the time of writing (Sep 2011), world market volatility makes estimation of future pricing impractical.

A. TOTAL INCOME \$/ha:

\$563.00	
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VARIABLE COSTS:

see following page for details

Sowing.....	\$48.63	
Fertiliser & application.....	\$54.00	
Herbicide & application.....	\$89.59	
Insecticide & application.....	\$24.84	
Harvesting.....	\$66.20	
Levies and insurance.....	\$20.38	

B. TOTAL VARIABLE COSTS \$/ha:

\$303.64	
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C. GROSS MARGIN (A-B) \$/ha:

\$259.36	
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2. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER HECTARE:

SENSITIVITY TABLE

YIELD tonnes/ha	On Farm Price						
	\$493 /t	\$513 /t	\$538 /t	\$563 /t	\$603 /t	\$643 /t	\$683 /t
0.40	-\$103	-\$95	-\$85	-\$75	-\$59	-\$43	-\$27
0.60	-\$5	\$7	\$22	\$36	\$60	\$84	\$108
0.80	\$92	\$108	\$128	\$148	\$180	\$211	\$243
1.00	\$190	\$210	\$235	\$259	\$299	\$339	\$378
1.25	\$312	\$337	\$368	\$399	\$448	\$498	\$547
1.50	\$434	\$464	\$501	\$538	\$597	\$657	\$716
1.90	\$629	\$667	\$714	\$761	\$836	\$911	\$987

DRYLAND SUNFLOWERS (No-till, mono-unsaturated)

Farm Enterprise Budget Series - North West NSW

Summer 2011-2012

CALENDAR OF OPERATIONS:		Machinery			Inputs			Total
Operation	Month	hrs /ha	Cost	Total	Rate/ha	Cost	Total	Total Cost \$/ha
			\$/hour	\$/ha		\$	\$/ha	
Herbicide - glyphosate CT	Dec	contract ground spray	10.00		1.5 L	4.42	6.63	16.63
Herbicide - 2,4-D i.p.a. 300g/L	Dec	with above			0.66 L	4.20	2.77	2.77
Wetter - non-ionic surfactant	Dec	with above			0.2 L	6.45	1.29	1.29
Herbicide - glyphosate CT	Mar	contract ground spray	10.00		1.2 L	4.42	5.30	15.30
Herbicide - triclopyr	Mar	with above			0.08 L	19.00	1.52	1.52
Wetter - non-ionic surfactant	Mar	with above			0.2 L	6.45	1.29	1.29
Herbicide - glyphosate CT	May	contract ground spray	10.00		1.2 L	4.42	5.30	15.30
Herbicide - 2,4-D i.p.a. 300 g/L	May	with above			0.66 L	4.20	2.77	2.77
Wetter - non-ionic surfactant	May	with above			0.2 L	6.45	1.29	1.29
Herbicide - glyphosate CT	Jul	contract ground spray	10.00		1.0 L	4.42	4.42	14.42
Wetter - non-ionic surfactant	Jul	with above			0.2 L	6.45	1.29	1.29
Herbicide - glyphosate CT	Aug	contract ground spray	10.00		1.0 L	4.42	4.42	14.42
Wetter - non-ionic surfactant	Aug	with above			0.2 L	6.45	1.29	1.29
Sowing - sunflower seed	Sep	0.12	85.89	10.31	2.0 kg	19.16	38.32	48.63
Fertiliser - Granulock SuPreme Z	Sep	with above			50 kg	1.08	54.00	54.00
Insecticide - alpha-cypermethrin 100 g/L EC	Oct	aerial spray	15.00		0.4 L	9.20	3.68	18.68
Insecticide - alpha-cypermethrin 100 g/L EC (1 yr in 3)	Dec	aerial spray	15.00		0.4 L	9.20	3.68	6.16
Crop insurance *	Jan			2.60%				14.64
Harvest #	Mar	contract		66.20	per ha incl fuel			66.20
Grains Research Levy				1.02%	of farm gate value			5.74

AGRONOMIC NOTES:

Sowing: Early spring sowing allows the crop to flower before high temperatures cause heat stress (mid-late Aug)

Do not sow poly-unsaturated sunflowers in spring as low quality oil is unacceptable to margarine manufacturers.

Insects: 1st insect spray assumed applied at late bud stage to control Rutherglen bug; 2nd spray applied if necessary normally 1 in 3 years at around mid flowering stage (heliathis and Rutherglen bug)

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

Fertiliser: Fertiliser requirements should be based on paddock records and soil tests.

Nitrogen fertiliser may be required where deficiencies are known to exist.

Insurance: * Varies with local government area and postcode, check with your insurer.

Harvest costs based on \$64.94 (including \$4.94/ha fuel) /ha for a crop up to 2.5 t/ha.

For further information refer to NSW Department of Primary Industries "Summer Crop Production Guide 2011-12"

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.

LABOUR REQUIREMENTS: - labour is not costed in this budget. If labour costs \$21.00 /hr, total labour cost would be \$3.15, reducing the gross margin to \$256 /ha.

MACHINERY ASSUMPTIONS:

Tractor: 201 KW PTO (269 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



DRYLAND COTTON (Roundup Ready Flex® Bollgard II® - Double skip)
Farm Enterprise Budget Series - North West NSW
Summer 2011-2012

1. GROSS MARGIN BUDGET:

INCOME:

Lint:	2.70	bales/ha at	\$520.00	*/bale (at gin).....
Seed:	0.97	tonnes/ha at	\$215.00	/tonne (at gin).....

Standard Budget \$/ha	Your Budget \$/ha
\$1,404.00	
\$208.98	

* \$20/bale reduction assumed due to quality reduction compared to irrigated cotton

Crop prices were correct at the time of writing (Sep 2011), world market volatility makes estimation of future pricing impractical.

A. TOTAL INCOME \$/ha:

\$1,612.98	
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VARIABLE COSTS:

see following page(s) for details

Cultivation.....	\$18.46	
Sowing.....	\$40.96	
Crop insurance.....	\$23.95	
Fertiliser & application.....	\$120.60	
Herbicide & application.....	\$295.34	
Insecticide & application.....	\$23.35	
Licence fees.....	\$185.00	
Contract harvesting.....	\$294.53	
Cartage to gin.....	\$31.76	
Ginning charges.....	\$148.50	
CA and Research Levy.....	\$12.15	
Consultant.....	\$60.00	
Unsprayed cotton refuge crop, 10% of area.....	\$33.09	

B. TOTAL VARIABLE COSTS \$/ha:

\$1,287.70	
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C. GROSS MARGIN (A-B) \$/ha:

\$325.28	
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Breakeven yield, bales/ha

2.2	
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2. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER HECTARE:
SENSITIVITY TABLE

		At Gin Price					Lint price Seed price
Lint Yield bales/ha	Seed Yield t/ha	\$460 /bale \$175/t	\$490 /bale \$195/t	\$520 /bale \$215/t	\$550 /bale \$225/t	\$580 /bale \$235/t	
1.70	0.6	-\$324	-\$261	-\$197	-\$140	-\$83	Gross Margin (\$/ha)
1.90	0.7	-\$234	-\$163	-\$93	-\$29	\$35	
2.30	0.8	-\$55	\$31	\$116	\$194	\$271	
2.70	1.0	\$124	\$225	\$325	\$416	\$507	
3.20	1.2	\$349	\$468	\$587	\$694	\$802	
3.70	1.3	\$573	\$710	\$848	\$972	\$1,097	
4.20	1.5	\$797	\$953	\$1,109	\$1,250	\$1,391	
4.70	1.7	\$1,021	\$1,196	\$1,370	\$1,528	\$1,686	

DRYLAND COTTON (Roundup Ready Flex[®] Bollgard II[®] - Double skip)

Farm Enterprise Budget Series - North West NSW

Summer 2011-2012

CALENDAR OF OPERATIONS:			Machinery			Inputs			Total	
Operation	Month		Cost	Total	Rate/ha	Band	Cost	Total	Total Cost \$/ha	
			hrs /ha	\$/hour		\$/ha	Width	\$		\$/ha
Herbicide - glyphosate CT	Dec	contract ground spray		10.00		1.5 L	100%	4.42	4.42	14.42
Herbicide - 2,4-D i.p.a. 300g/L	Dec	with above				0.66 L	100%	4.20	4.20	4.20
Wetter - non-ionic surfactant	Dec	with above				0.2 L	100%	6.45	6.45	6.45
Herbicide - glyphosate CT	Mar	contract ground spray		10.00		1.2 L	100%	4.42	4.42	14.42
Herbicide - triclopyr	Mar	with above				0.08 L	100%	19.00	19.00	19.00
Wetter - non-ionic surfactant	Mar	with above				0.2 L	100%	6.45	6.45	6.45
Herbicide - glyphosate CT	May	contract ground spray		10.00		1.2 L	100%	4.42	4.42	14.42
Herbicide - 2,4-D i.p.a. 300 g/L	May	with above				0.66 L	100%	6.45	6.45	6.45
Wetter - non-ionic surfactant	May	with above				0.2 L	100%	4.42	4.42	4.42
Herbicide - glyphosate CT	Jul	contract ground spray		10.00		1.0 L	100%	4.20	4.20	14.20
Wetter - non-ionic surfactant	Jul	with above				0.2 L	100%	6.45	6.45	6.45
Herbicide - glyphosate CT ground spray	Aug	0.03	55.78	1.67		0.7 L	100%	4.42	3.09	4.77
Wetter - non-ionic surfactant	Aug	with above				0.2 L	100%	6.45	1.29	1.29
Fertiliser - MAP plus potassium blend	Aug	0.15	61.53	9.23		50 kg	100%	1.01	50.50	59.73
Herbicide - trifluralin ground spray	Sep	with above				2.1 L	100%	5.87	12.33	12.33
Planting - precision planter	Sep	0.14	64.02	8.96						8.96
Planting- Roundup Ready Flex [®]										
Bollgard II [®]	Sep	with above				8 kg	50%	8.00	32.00	32.00
Urea application	Sep	with above	40 kg N			87 kg	100%	0.70	60.87	60.87
Herbicide - fluometuron+prometryn (440 & 400 g/L)	Sep	with above				2.9 kg	50%	18.18	26.36	26.36
Crop insurance	Sep									23.95
Herbicide - Roundup Ready [®]	Oct	0.03	55.78	1.67		1.5 kg	100%	8.00	12.00	13.67
Herbicide - Roundup Ready [®]	Oct	0.03	55.78	1.67		1.5 kg	100%	8.00	12.00	13.67
Cultivation - interrow	Nov	0.15	61.53	9.23			100%			9.23
Insecticide - # fipronil 200 g/L	Nov	0.03	55.78	1.67		0.06 L	50%	349.35	11.00	11.00
Cultivation - interrow	Nov	0.15	61.53	9.23			100%			9.23
Herbicide - diuron (900 g/kg)	Dec	0.03	55.78	1.67		1.5 kg	50%	12.60	9.45	11.12
Herbicide - prometryn (500 g/L)	Dec	with above				2.20 L	50%	14.48	15.93	15.93
Insecticide - fipronil (200 g/L)	Jan	0.03	55.78	1.67		0.06 L	50%	349.35	7.26	8.94
Insecticide - dimethoate (400 g/L)	Feb	0.03	55.78	1.67		0.5 L	50%	10.49	1.73	3.40
Bollgard II stacked with Roundup Ready Flex [®] Licence fee *	Feb						50%	370.00	185.00	185.00
Defoliant - thidiazuron	Apr	aerial spray		20.00		0.25 L	100%	132.00	33.00	53.00
Defoliant - crop oil	Apr	with above				2.0 L	100%	3.91	7.82	7.82
Defoliant - salt defoliant-aerial	Apr	aerial spray		20.00		2.0 L	100%	2.25	4.50	24.50
Contract picking and module building	Apr	contract		\$285	/ha					285.00
Contract Module lifting	May	contract		\$60	/module @ 17 bales per module					9.53
Contract module cartage to gin	May	contract		\$200	/module @ 50km from gin					31.76
Ginning charges	May	contract		\$55	/bale					148.50
Consultant	May	contract								60.00
Levies	May			\$4.50	/bale					12.15
Refuge crop - unsprayed conventional cotton @ 10%										33.09
TOTAL COSTS:									1,288	

This budget should be used as a GUIDE ONLY and should be changed by the grower to take account of movements in crop and input prices, changes in seasonal conditions and individual farm characteristics. Estimated prices are GST-exclusive.

NOTES:

Insects: Various insecticides are available for early season pest control (e.g. thrips, wireworms) but not included here, since they are not always required.

fipronil applied for mirid control

The selection of insecticides is highly dependent on the insect spectrum, growers should be aware this is a generic program and selection of products should be made with IPM strategies in mind. Refer to the "Integrated Pest Management Guidelines for Australian Cotton". Rotation of insecticides should be followed as per industry strategy, which changes each year due to changes in insect resistance to chemicals from season to season.

For more detailed information, see the Cotton CRC "Cotton Pest Management Guide 2011-12" at www.cottoncrc.org.au

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.

Management: This budget is for a long fallow following a winter cereal crop. Skip row configuration allows significant cost savings to be made during the growing season and at harvest, but there is a yield trade-off.

Seed: Seed costs per kg will vary with the time of ordering and the seed treatment chosen.

Fertiliser: Fertiliser requirements should be based on paddock records and soil tests.

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

Price: Dryland cotton sometimes receives a price discount due to staple length and trash content. An average discount of \$20/bale has been used in this budget.

LICENCE FEES: * This examples uses Monsanto Cotton Choices™ Option 1 which provides a discount on the technology licence fees for 2011-12. However you should choose the option which best suits your farming operation.

DEFOLIANT: Good conditions are required to get the best performance. The choice of defoliant and rate used depends on the moisture status of the plant and seasonal conditions.

LABOUR REQUIREMENTS:

- labour is not costed in this budget. If labour costs \$21.00 /hr, total labour cost would be \$9.98/ha, reducing the gross margin to \$1,603 /ha.

MACHINERY ASSUMPTIONS:

Tractor: 165-170 KW PTO (225-230 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



COTTON (Roundup Ready Flex® - Refuge for Bollgard II®)

Farm Enterprise Budget Series - North West NSW

Summer 2011-2012

GROSS MARGIN BUDGET:

INCOME:

Lint: 0.00 bales/ha at */bale (at gin).....
Seed: 0.0 tonnes/ha at /tonne (at gin).....

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

A. TOTAL INCOME \$/ha:

\$0.00	
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VARIABLE COSTS:

see Calendar of Operations below for details

Cultivation.....	\$43.02	
Sowing.....	\$48.96	
Crop insurance.....	\$0.00	
Fertiliser & application.....	\$71.29	
Herbicide & application.....	\$118.13	
Licence fees.....	\$49.50	

B. TOTAL VARIABLE COSTS \$/ha:

\$330.91	
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C. GROSS MARGIN (A-B) \$/ha:

(\$330.91)	
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CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha	
		hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Band Width	Cost \$		Total \$/ha
Herbicide - glyphosate CT	Jul	0.03	55.78	1.67	1.0 L	100%	4.42	4.42	6.09
Wetter - non-ionic surfactant	Jul	with above			0.2 L	100%	6.45	1.29	1.29
Herbicide - trifluralin (480 g/L)	Aug	0.03	55.78	1.67	2.8 L	100%	5.87	16.44	18.11
Plus incorporation	Aug	0.15	61.53	9.23		100%			9.23
Urea incorporation	Aug	0.17	61.28	10.42	87 kg	50%	0.70	60.87	71.29
Cultivation - scarifier	Sep	0.17	61.28	10.42					10.42
Herbicide - trifluralin (480 g/L)	Sep	with above			3.2 L	100%	5.87	18.78	18.78
Planting - precision planter	Oct	0.14	64.02	8.96					8.96
Planting - seed	Oct	with above			10 kg	50%	8.00	40.00	40.00
Herbicide - fluometuron+prometryn (440 & 400 g/L)	Oct	with above			3.5 L	100%	18.18	63.63	63.63
Cultivation - inter-row	Nov	0.15	61.53	9.23					9.23
Herbicide - shielded sprayer	Dec	0.09	64.53	5.81					5.81
Herbicide - glyphosate (450 g/L)	Dec	with above			2.0 L	50%	4.42	4.42	4.42
Roundup Ready Flex® Licence fee *	Dec					66%		75.00	49.50
Slashing	Apr	0.20	70.73	14.15					14.15
TOTAL COSTS \$/HA:								331	
TOTAL COSTS for 10% hectare:								33.09	

AGRONOMIC NOTES:

MANAGEMENT:- Each grower is required to grow a refuge crop as part of the resistance management plan for the Roundup Ready Flex® Bollgard II® cotton varieties.

* The discounted technology licence fee is \$75/ha for Roundup Ready Flex® (GST-exclusive).

This examples uses Monsanto Cotton Choices™ Option 1 which provides a discount on the technology licence fees for 2011-12.

For the purposes of this example, we have used unsprayed (ie no insecticides) conventional cotton at 10% of the RR Bollgard II® area.

Please refer to the Monsanto Bollgard II® Resistance Management Plan for more information on refuge crops and minimum requirements.

This budget should be used as a GUIDE ONLY and should be changed by the grower to take account of movements in crop and input prices, changes in seasonal conditions and individual farm characteristics. Estimated prices are GST-exclusive.