

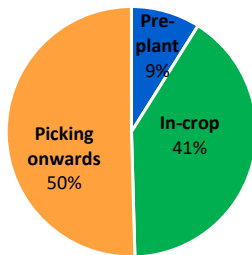
## Gross Margin Budget: Dryland Cotton

Bollgard3®, Roundup Ready Flex®

INCOME:				Single Skip	Double Skip	Your Budget
	Yield *			\$/ha	\$/ha	\$/ha
Single Skip	3.6 bales/ha @	Cotton lint	\$569 /bale (at gin)	\$2,048	\$1,821	
Double Skip	3.2	Cotton seed	\$70 /bale (at gin)	\$252	\$224	
		(less discount)	-\$25 /bale (at gin)	-\$90	-\$80	
			\$614 /bale (at gin)			
<b>A. TOTAL GROSS INCOME \$/ha:</b>				<b>\$2,210</b>	<b>\$1,965</b>	

### VARIABLE COSTS:

See pg 2 for details



Graph based on 'Double skip' row configuration

	Single Skip	Double Skip	Your Budget
	\$/ha	\$/ha	\$/ha
Fallow management	\$64	\$64	
Nutrition	\$62	\$51	
Planting & in-crop farming	\$74	\$52	
Insurance	\$66	\$58	
Crop protection, application & licence fee	\$368	\$344	
Defoliation	\$97	\$70	
Picking, cartage & ginning	\$626	\$583	
Farming: Post-crop	\$68	\$68	
<b>B. TOTAL VARIABLE COSTS \$/ha:</b>	<b>\$1,424</b>	<b>\$1,290</b>	

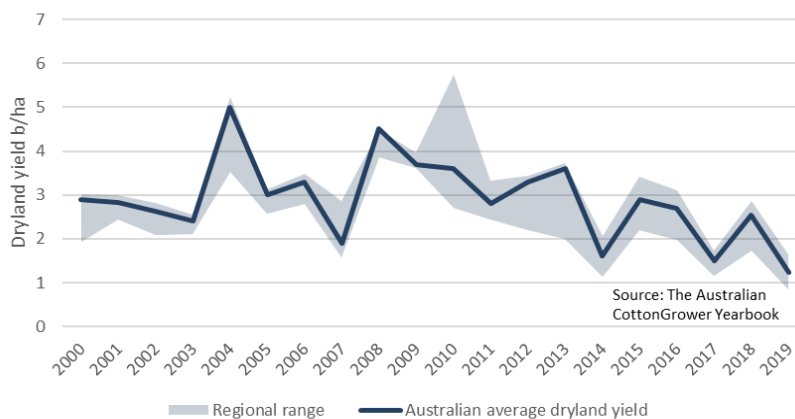
**C. GROSS MARGIN (A-B) \$/ha: \$787 \$675**

Approximate Breakeven Yield (bales/ha) based on lint & seed prices above:	1.80	1.60	bales/ha
Approximate Breakeven Price (\$/bale) based on 3.6 bales/ha:	\$395	\$403	/bale
<i>Note that break even yield &amp; price is for variable costs only, overhead costs and labour are NOT considered</i>			

### SENSITIVITY TABLE (Single Skip)

227kg lint bales/ha	PRICE (\$/bale incl. of seed & discounts)					
	\$787	514	564	614	664	714
0.6	-579	-549	-519	-489	-459	
1.6	-243	-163	-83	-3	77	
2.6	92	222	352	482	612	
3.6	427	607	787	967	1147	
4.6	762	992	1222	1452	1682	
5.6	1098	1378	1658	1938	2218	
6.6	1433	1763	2093	2423	2753	

### Dryland cotton average yield variation



This budget is designed to give an indication of operations and costs required to grow a dryland cotton crop. Prices are estimates only. A grower should alter this budget to take account of individual field management plans, movements in crop and input prices and changes in seasonal conditions. In all instances, operations should be tailored to the requirements of individual paddocks. For a complete guide to cotton management, see the **Australian Cotton Production Manual**.



Variable costs by operation	Machinery		Inputs					Single	Double
		Total \$/ha	Rate /ha	Unit	Band width	Cost \$/unit	Cost \$/ha	Skip \$/ha	Skip \$/ha
<b>Fallow management</b>									
Nov Fallow spray: Glyphosate (450g/L)	Self Propelled	1.50	2.00	L		6.00	12.00	14	14
Nov Fallow spray: Flumioxazin (500g/L)	with above		0.03	kg		150.00	4.50	5	5
Jan Fallow spray: Paraquat (360g/L)	Self Propelled	1.50	2.00	L		6.00	12.00	14	14
Jan Fallow spray: Flumioxazin (500g/L)	with above		0.03	kg		150.00	4.50	5	5
Mar Fallow spray: Glyphosate (450g/L)	Self Propelled	1.50	2.00	L		6.00	12.00	14	14
Mar Fallow spray: Isoxaflutole (750g/kg)	with above		0.10	kg		119.00	11.90	12	12
<b>Nutrition</b>									
Aug Fertiliser: Urea (32kg N) - drilled	295 eng/HP	18.50	70	kg		0.93	65.31	62	51
<b>Planting &amp; in-crop farming</b>									
Oct Planting: Precision planter	295 eng/HP	10.50						11	11
Oct Planting: Seed: Roundup Ready Flex® Bollgard3®	with above		9	kg		7.00	63.00	63	42
<b>Crop protection, application &amp; licence fee</b>									
Dec Insecticide: Sulfoxaflor (500g/kg), target: mirids	Self Propelled	1.50	0.14	kg	30%	346.00	14.53	11	9
Feb Insecticide: Diafenthiuron (500g/L), target: SLW, aphids, mites	Self Propelled	1.50	0.60	L	100%	63.00	37.80	39	39
Oct Herbicide: Pendimethalin (455g/L)	Self Propelled	1.50	2.25	kg	100%	14.00	31.50	33	33
Oct Herbicide: Terbutylazine (875g/L)	with above		1.20	L	100%	11.00	13.20	13	13
Nov Herbicide: Roundup Ready® Plantshield® (690g/kg Glyphosate)	Self Propelled	1.50	1.20	kg	100%	11.00	13.20	15	15
Jan Herbicide: Roundup Ready® Plantshield® (690g/kg Glyphosate)	Self Propelled	1.50	1.20	kg	100%	11.00	13.20	15	15
Jan Herbicide: S-metolachlor OTT (960g/L)	with above		1.00	kg	100%	13.00	13.00	13	13
Mar Licence: Bollgard 3® stacked RRF Licence Fee, (end point royalty)						52.50 / lint bale		189	168
Jun Other: Consultant	Contractor	35.00						35	35
Jun Refuge: Refuge crop: Conventional cotton 5%, see page 3								5	4
<b>Defoliation</b>									
Mar Defoliation: Thidiazuron (500g/L)	Self Propelled	3.00	0.15	L	#	52.00	7.80	11	8
Mar Defoliation: Ethephon (720g/L)	with above		0.50	L		11.00	5.50	6	4
Mar Defoliation: Crop oil	with above		1.00	L		6.00	6.00	6	4
Mar Defoliation: Thidiazuron (500g/L)	Self Propelled	3.00	0.15	L		52.00	7.80	11	8
Mar Defoliation: Ethephon (720g/L)	with above		2.50	L		11.00	27.50	31	21
Mar Defoliation: Crop oil	with above		1.00	L		6.00	6.00	9	6
Apr Defoliation: Paraquat (360g/L)	Self Propelled	3.00	2.00	L		6.00	12.00	15	11
Apr Defoliation: Crop oil	with above		1.00	L		6.00	6.00	9	6
<b>Picking, cartage &amp; ginning</b>									
Apr Stripping: Contract: Round baler incl. stacking at end of field	CS690	220.00 per ha						220	220
Apr Stripping: plus fuel		21.00 L/ha @				0.84 \$/L		18	18
Apr Stripping: plus wrap		51.00 / round bale				16.00 / lint bale		58	51
May Cartage: Freight (incl. lift) 50 km from gin	costs related to	58.00 / round bale				18.20 / lint bale		66	58
May Ginning: Fibre processing	yield	70.00 / lint bale				70.00 / lint bale		252	224
Jun Levies: Research levy & Cotton Australia levy		3.75 / lint bale				3.75 / lint bale		14	12
<b>Farming: Post-crop</b>									
Jun Farming: Mulcher (check bt licence cultivation requirements)	Contractor	55.00						55	55
Jun Farming: Chisel plough plant line (check bt licence requirements)	295 eng/HP	12.50						13	13
<b>Other</b>									
Nov Crop insurance:						Premium depends on various factors		66	58
<b>B. TOTAL VARIABLE COSTS \$/ha:</b>								<b>1,424</b>	<b>1,290</b>



(refugia for Bollgard3® cotton) Includes fallow management

REFUGIA INCOME (if it is picked and ginned)

Single Skip \$/ha Double Skip \$/ha

	Yield <sup>†</sup>							
Single Skip	0.80	bales/ha @	Cotton lint	\$569 /bale (at gin)		\$455	\$398	
Double Skip	0.70		Cotton seed	\$75 /bale (at gin)		\$60	\$53	
			(less discount)	-\$25 /bale (estimate)		-\$20	-\$18	
								\$619 /bale

A. TOTAL GROSS INCOME \$/ha: \$495 \$433

Variable costs by operation	Machinery	Total \$/ha	Inputs				Single Skip \$/ha	Double Skip \$/ha
			Rate /ha	Unit	Band width	Cost \$/unit		
<b>Fallow management</b>								
Nov Fallow spray: Glyphosate (450g/L)	Self Propelled	1.50	2.00	L		6.00	12.00	14
Nov Fallow spray: Flumioxazin (500g/L)	with above		0.03	L		150.00	4.50	5
Jan Fallow spray: Paraquat (360g/L)	Self Propelled	1.50	2.00	L		6.00	12.00	14
Jan Fallow spray: Flumioxazin (500g/L)	with above		0.03	L		150.00	4.50	5
Mar Fallow spray: Glyphosate (450g/L)	Self Propelled	1.50	2.00	L		6.00	12.00	14
Mar Fallow spray: Isoxaflutole (750g/kg)	with above		0.10	kg		119.00	11.90	12
<b>Planting &amp; in-crop farming</b>								
Oct Planting: Precision planter	295 eng/HP	10.50						11
Oct Planting: Seed: Sicut812 Roundup Ready Flex®	with above		9	kg		7.00	63.00	42
<b>Crop protection, application &amp; licence fee</b>								
Oct Herbicide: Pendimethalin (455g/L)	Self Propelled	1.50	2.20	kg	100%	14.00	30.80	32
Nov Herbicide: Roundup Ready® Plantshield® (690g/kg Glyphosate)	Self Propelled	1.50	1.20	kg	100%	11.00	13.20	15
Jan Herbicide: Roundup Ready® Plantshield® (690g/kg Glyphosate)	Self Propelled	1.50	1.20	kg	100%	11.00	13.20	15
<b>Defoliation</b>								
Mar Defoliation: Thidiazuron (500g/L)	Self Propelled	3.00	0.15	L	#	52.00	7.80	11
Mar Defoliation: Ethephon (720g/L)	with above		0.75	L		11.00	8.25	8
Mar Defoliation: Crop oil	with above		1.00	L		6.00	6.00	6
Mar Defoliation: Thidiazuron (500g/L)	Self Propelled	3.00	0.15	L		52.00	7.80	11
Mar Defoliation: Ethephon (720g/L)	with above		2.00	L		11.00	22.00	22
Mar Defoliation: Crop oil	with above		1.00	L		6.00	6.00	6
Apr Defoliation: Paraquat (360g/L)	Self Propelled	3.00	2.00	L		6.00	12.00	15
Apr Defoliation: Crop oil	with above		1.00	L		6.00	6.00	6
<b>Picking, cartage &amp; ginning</b>								
Apr Stripping: Contract: round baler (variable costs only incl. fuel)	CS690	220.00	per ha			per ha (solid plant dryland)		220
Apr Stripping: plus fuel		21.00	L/ha @			0.84 \$/L		18
Apr Stripping: plus wrap		51.00	/ round bale			12.00 / lint bale		10
May Cartage: Freight (incl. lift) 50 km from gin	costs related to	58.00	/ round bale			13.65 / lint bale		11
May Ginning: Fibre processing	yield	70.00	/ lint bale			70.00 / lint bale		56
Jun Levies: Research Levy & Cotton Australia Levy		3.75	/ lint bale			3.75 / lint bale		3
<b>Farming: Post-crop</b>								
Jun Farming: Mulcher	Contractor	55.00						55
Jun Farming: Chisel plough (check bt licence requirements)	295 eng/HP	10.50						11

B. TOTAL VARIABLE COSTS \$/ha: \$643 \$595

REFUGIA GROSS MARGIN (A-B) \$/ha: (\$147) (\$162) †

Approximate Breakeven Yield (bales/ha) based on lint & seed prices above: 1.08 1.01 bales/ha  
 Approximate Breakeven Price (\$/bale) based on yields above: \$803 \$851 \$/bale

Note that break even yield & price is for variable costs only, overhead costs and labour are NOT considered

2021-22 Cotton Gross Margins, brought to you by the cotton industry's joint extension program, CottonInfo.

Footnotes

**Machinery costs:** The cost of each farming pass reflects variable costs only (fuel, repairs and maintenance), labour and depreciation are considered overhead costs, so are not included in this budget. Contractor rates encompass these costs and are outlined in a separate budget.

**Rotation:** This budget assumes the previous crop was wheat, followed by a long fallow.

\* **Yield:** Actual yields are a complex result of agronomic and environmental factors. In this budget, yield assumptions for each row configuration are based on Ozcott modelling of the Darling Downs Region, see the *Australian Cotton Production Manual 2021* p.18, Bange. Yields will vary between regions and row configurations depending on environmental conditions.

# **Defoliation:** Taking into account estimated yields and associated vegetative matter, the band width for defoliation of single skip cotton is 100% and double skip 70%.

† **Gross margin:** Based on the published yields and prices, the refugia gross margin results in a loss. It is still justified to pick the crop as the projected refuge income (\$495 single skip) is greater than the projected stripping, cartage and ginning costs (\$317/ha). In the event that projected refuge income is not able to cover these costs, the overall gross margin would be maximised if the crop was destroyed (mulched) without being picked.

See the **Gross Margin Notes** for further details on assumptions.

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