

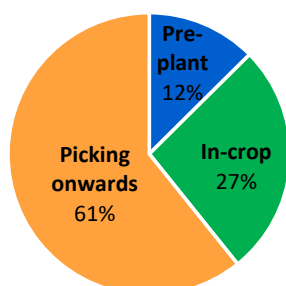
Gross Margin Budget: Northern Australia Raingrown Cotton

Bollgard3®, Roundup Ready Flex®

INCOME:				Example Budget \$/ha	Your Budget \$/ha
5.0	bales/ha* @	Cotton lint	\$569 /bale (at gin)	\$2,845	
		(less discount)	-\$13 /bale (at gin)	-\$63	
		Cotton seed	\$70 /bale (at gin)	\$350	
			\$627 /bale (at gin)		
		A. TOTAL GROSS INCOME \$/ha:		\$3,133	

VARIABLE COSTS:

See pg 2 for details



Ground preparation	\$33
Nutrition	\$524
Planting & in-crop farming	\$56
Crop protection, application & licence fee	\$349
Defoliation	\$70
Picking, cartage & ginning	\$1,519
Farming: Post-crop	\$79
B. TOTAL VARIABLE COSTS \$/ha:	\$2,629

C. GROSS MARGIN (A-B) \$/ha: \$504

Breakeven Yield (bales/ha) based on lint & seed prices above: **3.7 bales/ha**

Breakeven Price (\$/bale incl. seed and discounts) based on 5 bales/ha: **\$526 /bale**

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

SENSITIVITY TABLE

		(Gross Margin \$/Ha)				
		PRICE (\$/bale incl. of seed & discounts)				
		527	577	627	677	727
227kg lint bales/ha	\$504					
	3.5	-414	-239	-64	111	286
	4.0	-275	-75	125	325	525
	4.5	-136	89	314	539	764
	5.0	4	254	504	754	1004
	5.5	143	418	693	968	1243
	6.0	283	583	883	1183	1483
6.5	422	747	1072	1397	1722	

This budget is designed to give an indication of operations and costs required to grow a northern Australia rainfed 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			Total
			Total \$/ha	Rate /ha	Unit	Cost \$/unit	Cost \$/ha	Cost \$/ha
Ground preparation (cover crop destruction)								
Dec	Insecticide:	Dimethoate (400g/L), broad knock down	Self Propelled	1.50	0.50 L	16.80	8.40	10
Dec	Herbicide:	Glyphosate (450g/L)	with above		2.00 L	6.30	12.60	13
Dec	Farming:	Cultivation (depending on vegetative matter present)	295 eng/HP	10.50				11
Nutrition								
Dec	Fertiliser:	DAP - spread	295 eng/HP	5.00	250 kg	1.17	292.50	298
Feb	Fertiliser:	SOP - spread	295 eng/HP	5.00	50 kg	1.17	58.25	63
Feb	Fertiliser:	Urea - with above	295 eng/HP		150 kg	1.09	163.20	163
Planting & in-crop farming								
Dec	Planting:	Precision planter	295 eng/HP	10.50				11
Dec	Planting:	Seed: Roundup Ready Flex® Bollgard3®	with above		6.5 kg	7.00	45.50	46
Crop protection, application & licence fee								
Jan	Insecticide:	Indoxocarb (200 g/L), target: mirids	Self Propelled	1.50	0.40 L	67.20	26.88	28
Mar	Insecticide:	Clothianidin (200 g/L), target: shield bugs	Self Propelled	1.50	0.25 L	73.50	18.38	20
Apr	Insecticide:	Acetamiprid (218g/L), Emamectin (32.5g/L) target for above product: SLW, aphids, GVB	Aerial	16.00	0.35 L	61.95	21.68	38
Jan	Growth regulant:	Mepiquat (38g/L), growth regulator	Self Propelled	1.50	0.25 L	3.15	0.79	2
Feb	Growth regulant:	Mepiquat (38g/L), growth regulator	Self Propelled	1.50	0.25 L	3.15	0.79	2
Mar	Growth regulant:	Mepiquat (38g/L), growth regulator	Self Propelled	1.50	0.25 L	3.15	0.79	2
Jan	Herbicide:	Roundup Ready® Plantshield® (690g/kg Glyphosate)	Self Propelled	1.50	1.20 kg	11.55	13.86	15
Feb	Herbicide:	Roundup Ready® Plantshield® (690g/kg Glyphosate)	Self Propelled	1.50	1.20 kg	11.55	13.86	15
Mar	Herbicide:	Roundup Ready® Plantshield® (690g/kg Glyphosate)	Self Propelled	1.50	1.20 kg	11.55	13.86	15
May	Licence:	Bollgard 3® stacked RRF Licence Fee, (end point royalty) Northern Australia Development allowance					32.50 / lint bale	163
Jun	Other:	Consultant	Contractor	35.00				35
Jun	Refuge:	Refuge crop: Conventional cotton 5%, see page 3						12
Defoliation								
Apr	Defoliation:	Thidiazuron (500g/L)	Self Propelled	3.00	0.15 L	54.60	8.19	11
Apr	Defoliation:	Ethephon (900g/L)	with above		0.50 L	11.55	5.78	6
Apr	Defoliation:	Crop oil	with above		1.00 L	6.30	6.30	6
May	Defoliation:	Thidiazuron (500g/L)	Self Propelled	3.00	0.15 L	54.60	8.19	11
May	Defoliation:	Ethephon (720g/L)	with above		2.50 L	11.55	28.88	29
May	Defoliation:	Crop oil	with above		1.00 L	6.30	6.30	6
Picking, cartage & ginning								
May	Picking	Contract: Round baler incl. stacking at end of field	CS690	420.00 per ha			84 / lint bale	420
May	Picking	plus fuel		27.50 L/ha @	0.84 \$/L		5 / lint bale	23
May	Picking	plus wrap		51.00 / round bale			12 / lint bale	60
May	Cartage:	Freight (incl. lift) 2755 km from gin	costs related to	550.00 / round bale			129 / lint bale	647
May	Ginning:	Fibre processing	yield	70.00 / lint bale			70 / lint bale	350
Jun	Levies:	Research levy & Cotton Australia levy		3.75 / lint bale			4 / lint bale	19
Post-crop								
Jun	Farming:	Mulcher (check bt licence cultivation requirements)	Contractor	35.00				35
Jul	Herbicide:	Ratoon / volunteer management. 2,4-D (700g/L)	Self Propelled	1.50	1.00 L	6.30	6.30	8
Jul	Herbicide:	Fluroxypyr (400g/L) with above	with above		1.00 L	35.70	35.70	36
Other								
Jun	Crop insurance:						Premium depends on various factors	0
B. TOTAL VARIABLE COSTS \$/ha:								2629



Variable costs by operation		Machinery	Total \$/ha	Inputs			Total Cost \$/ha	
				Rate /ha	Unit	Cost \$/unit		Cost \$/ha
Ground preparation								
Dec	Insecticide: Dimethoate (400g/L), broad knock down	Self Propelled	1.50	0.50	L	16.80	8.40	10
Dec	Herbicide: Glyphosate (450g/L)	with above		2.00	L	6.30	12.60	13
Dec	Farming: Cultivation (depending on vegetative matter present)	295 eng/HP	10.50					11
Planting & in-crop farming								
Dec	Planting: Precision planter	295 eng/HP	10.50					11
Dec	Planting: Seed: Roundup Ready Flex®	with above		6.50	kg	7.00	45.50	46
Crop protection, application & licence fee								
Jan	Herbicide: Roundup Ready® Plantshield® (690g/kg Glyphosate)	Self Propelled	1.50	1.20	kg	11.55	13.86	15
Feb	Herbicide: Roundup Ready® Plantshield® (690g/kg Glyphosate)	Self Propelled	1.50	1.20	kg	11.55	13.86	15
Mar	Herbicide: Roundup Ready® Plantshield® (690g/kg Glyphosate)	Self Propelled	1.50	1.20	kg	11.55	13.86	15
Jun	Other: Consultant	Contractor	35.00					35
Defoliation								
Assume yield for refuge cotton does not justify picking (therefore defoliation)								
Picking, cartage & ginning								
Assume yield for refuge cotton does not justify picking.								
Post-crop								
Jun	Farming: Mulcher (check bt licence cultivation requirements)	Contractor	35.00					35
Jul	Herbicide: Ratoon / volunteer management. 2,4-D (700g/L)	Self Propelled	1.50	1.00	L	6.30	6.30	8
Jul	Herbicide: Fluroxypyr (400g/L) with above	with above		1.00	L	35.70	35.70	36
Other								
Jun	Crop insurance:					Premium depends on various factors		0
B. TOTAL VARIABLE COSTS \$/ha:							249	

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

Foot notes

Rotation: This budget assumes the previous crop of sorghum, with 2 t/ha mulch cover retained (Yeates SJ and Poulton PL (2019), *Determining Dryland cotton yield potential in the NT: Preliminary climate assessment and yield simulation*. Report to NTFarmers, Queensland Cotton and the Cotton Research and Development Corporation.)

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.

*** Yield:** Actual yields are a complex result of agronomic and environmental factors. In this budget a yield of 5 bales/ha is based on Douglas Daly/Tipperary raingrown crops of 3–6 bales/ha reported in CRCNA, 2021, Broadacre Cropping in northern Australia Newsletter #2, January 2021.

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

Acknowledgements

We wish to acknowledge the efforts made by industry specialists and management during the development and review of the 2021 Northern Australia cotton gross margin budgets. Assistance was provided by the CottonInfo team, CRDC, CSD, NT DPIR, and a number of individual growers and specialists.

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