

THINK COTTON



NAMOI



Bayer, in collaboration
with Cotton Seed Distributors
(CSD), through the Acres of
Opportunity program would
like to take the opportunity
to invite you to
Think Cotton.

There are many reasons to consider cotton, including:

- Rewarding gross margins
- Simplified weed and pest control, through biotechnology
- Greater flexibility
- Marketing options

We have created this booklet containing some key information about cotton, relevant to your area – Central Queensland, including:

- The top performing varieties from the past 5 seasons, including their yield, as measured on grower farms through CSD's variety trial program
- New grower testimonial from around your area in the past 5 years
- Survey results from your region showing how growers are managing key weed species on their farm
- An overview of the 2020/21 season cotton programs available to you when you grow Bollgard® 3/Roundup Ready Flex® cotton, including Cotton Choices™, Roundup Ready PLUS®, Better Farming Grants and the CSD Industry Support Program
- Resource links

COTTON AIDING WEED CONTROL ON BELLATA COUNTRY

The introduction of cotton as a dryland summer crop option has helped control Johnson grass on the Lowien property, east of Bellata in northern NSW.



Grant Lowien of Bellata NSW, has turned to cotton as a summer crop option to control grass weeds on the property.

Grant Lowien, who farms with brother Andrew and mother Karen, said approximately two-thirds of the country each year was planted to winter crops including wheat, chickpeas, canola, faba beans and barley.

The summer crop has traditionally been sorghum but weed issues made it a challenging option in recent years.

“We were growing sorghum and we were getting a lot of Johnson grass,” Mr Lowien said. “We would just about get it under control and then we would be back to a summer crop. You can’t control Johnson grass in sorghum and it would get away again and you would be fighting it for the next four or five years.”

Cotton provided the opportunity for applications of Roundup Ready® herbicide with PLANTSHIELD® to control a range of weeds.

“Roundup Ready® herbicide has definitely got some goodies in it because it knocks down a lot of hard to kill weeds,” Mr Lowien said. “The main reason we use it is to clean everything up

“We have summer rain and the grasses do get away if you don’t get on top of them. We needed the break and cotton seems to work so far.”

He said when they first looked at cotton as an alternative summer crop option they found it an excellent crop to be involved with.

“Getting back into the industry, I’d have to say, ticks all the boxes. A lot of people are more than willing to share information so it pays to take notice of people who have been growing cotton.”

Mr Lowien said while weed control was the key factor in growing cotton, the new resistance management plan for Bollgard® 3 was also attractive.

“Once Bollgard 3 came out, we thought that was a great option for us because in this undulating country we were worried about having to pupae-bust,” he said.

“With Bollgard 3 we don’t have to work it, if you defoliate before the 31st of March. We only have to mulch it so we still have all our soil non-disturbed.”

The major considerations with cotton on the property were planting dates and row configurations and both have been looked at in the initial years of the crop.

“We’ve been playing around with different row spacings to see what our best option is for growing it on this shallower country,” Mr Lowien said.

The Lowien’s cotton is predominantly grown on 1.5 metre solid rows and they are trialing single skip 1.5 metre configurations.

“We’ve got a group of fairly young farmers around here so we are all trying to have a go and everyone is growing different configurations. We all talk about it and we try and nut out what the best one is.”

While the advantages in weed control were the main driver towards growing cotton, profitability was also a key factor.

The first crop of cotton was harvested in the autumn of 2017 and produced an average yield of 2.25 bales per hectare in a very dry year.

Mr Lowien said at that yield the crop was profitable and gave them enough confidence to plant again.

2019 RESEARCH FROM BAYER HIGHLIGHTS THE IMPORTANCE OF INTEGRATED WEED MANAGEMENT (IWM) IN COTTON FIELDS

Research from Bayer revealed 85 per cent of growers surveyed in 2019 suspect they have glyphosate-resistant weeds on their farm, an increase of over 10 per cent since 2016.

The success of glyphosate in Australian agricultural systems has driven this increasing pressure on the chemistry, resulting in increased glyphosate resistance.

Despite increasing levels of resistance, glyphosate continues to perform well in the Roundup Ready Flex® system, with 93 per cent of growers rating the level of weed control achieved as Excellent or Good.

Glyphosate is a critical herbicide for the cotton industry, and for agriculture in general, so protecting the longevity of the product is important. Over the last 20 years, over-reliance on glyphosate has seen a marked decrease in residual chemistry use within cotton systems and has also been a key contributor to the development of glyphosate resistance.

In 2016, Bayer commenced a program to collect data on glyphosate usage and integrated weed management (IWM) in the cotton industry. Insights gathered from 200 farmers and consultants led to

the development of several programs and initiatives to assist cotton growers in implementing their on-farm Integrated Weed Management (IWM) program and to help protect glyphosate into the future.

Bayer now offers free herbicide resistance testing, the Roundup Ready PLUS® program, which rewards cotton growers who use herbicides sustainably, and the Mix It Up™ website, to help growers manage herbicide resistance.

The latest herbicide tolerant trait in the Bayer pipeline is the Roundup Ready® Xtend Crop System. It is an advanced weed control tool that will help growers manage difficult-to-control weeds in their cotton crop. The system combines Bayer's leading trait technology with over-the-top tolerance to three unique herbicide modes-of-action. The combination of the best traits and chemistry products will give Australian cotton farmers added choice and flexibility in their overall weed management system. More can be found out about the system at xtendflex.com.au

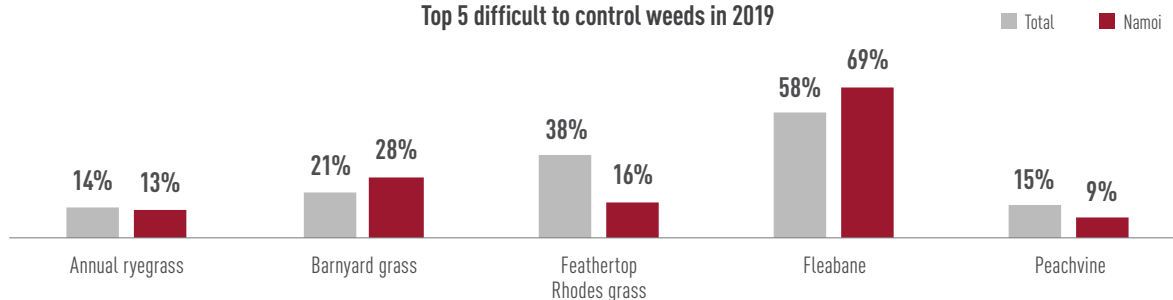
The survey results are shown on the following page, highlighting the top difficult-to-control weeds and grower weed management behavior in your area.



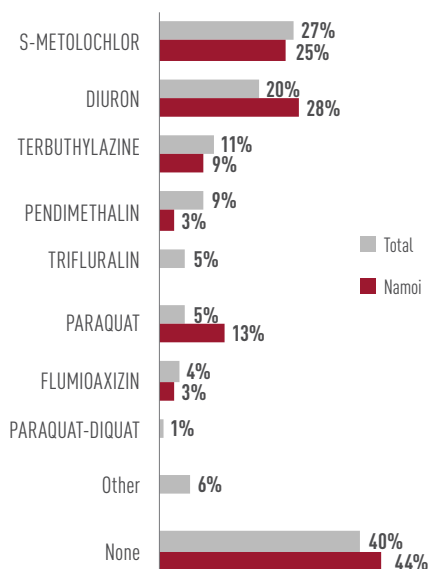
IWM SURVEY RESULTS - NAMOI

Upper Namoi, Lower Namoi

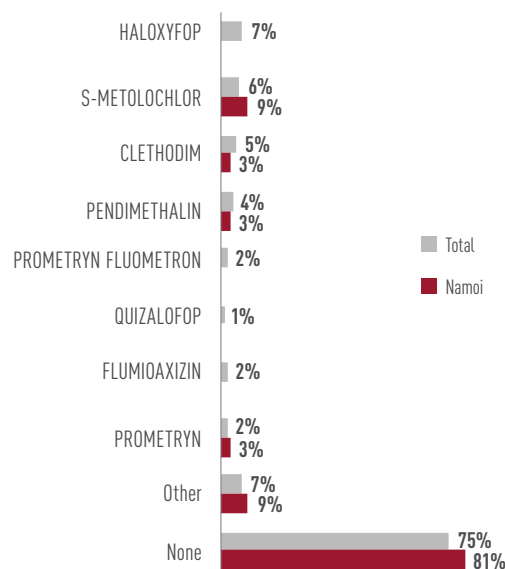
Top 5 difficult to control weeds in 2019



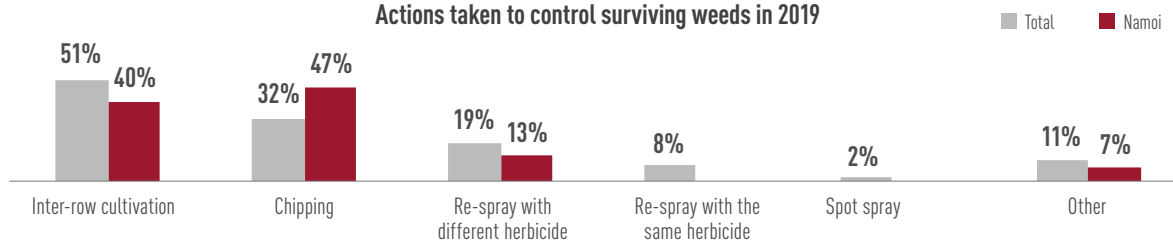
Use of pre-emergent herbicides



Use of post-emergent herbicides



Actions taken to control surviving weeds in 2019



Source: Bayer IWM Survey, 2019 and Bayer Weed control trials, Moree and Narrabri.

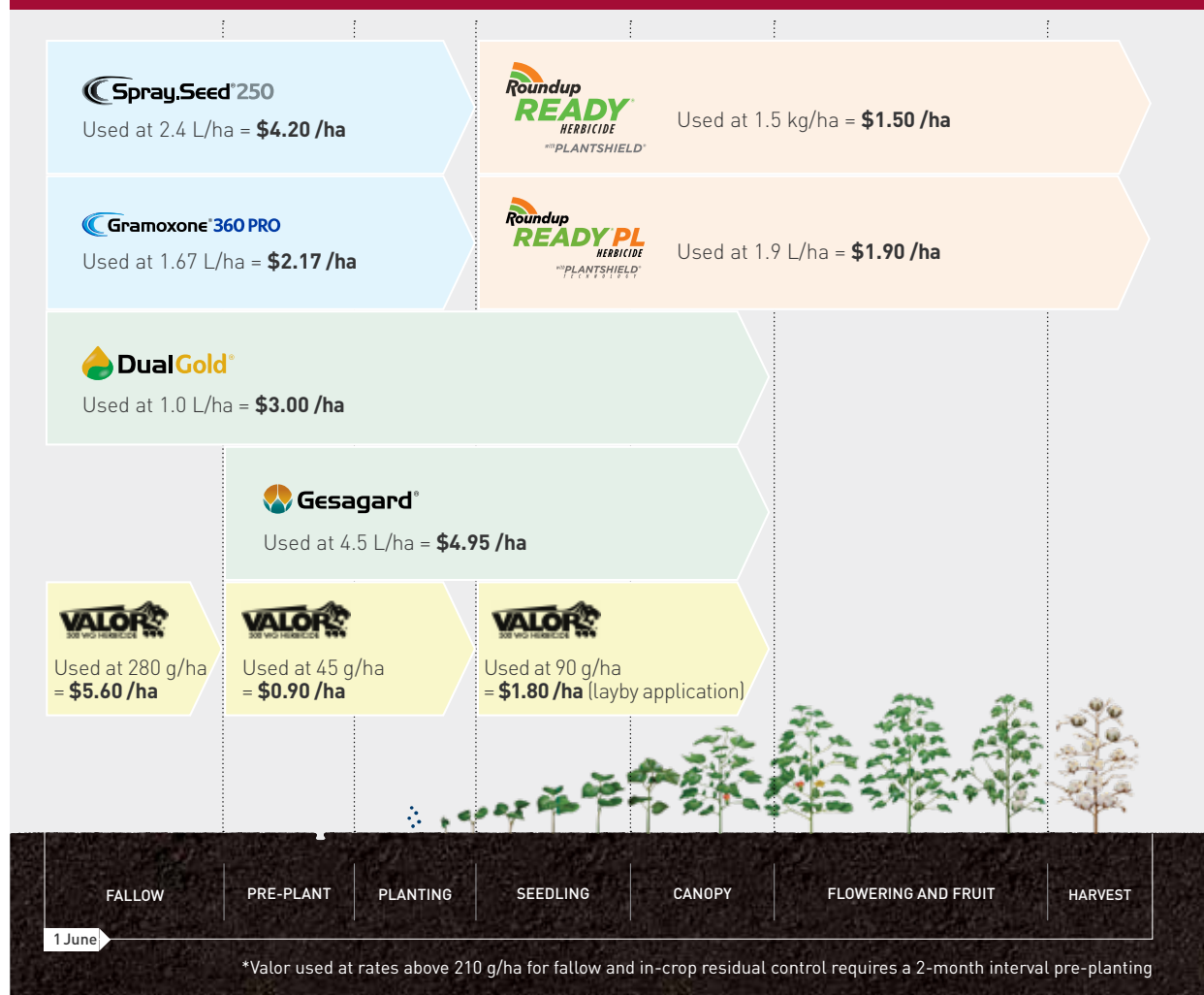
THE 2020/21 ROUNDUP READY PLUS® PROGRAM

In the 2018/19 season Bayer, in conjunction with Syngenta, launched the Roundup Ready PLUS program to cotton growers. The Roundup Ready PLUS program is designed to protect the longevity of glyphosate and the Roundup Ready Flex trait by rewarding cotton growers who use herbicides sustainably. The program encourages growers to use a range of weed control practices through product recommendations, educational tools and financial rebates.

In 2019/20, Bayer also partnered with Sumitomo, and the program was expanded to include financial rebates for Sumitomo's Valor®.

For the 2020/21 season, cotton growers will be offered rebates for using participating products sprayed on Roundup Ready Flex cotton fields between 1 June 2020 and 30 April 2021.*

COTTON PRODUCTS AND APPLICATION WINDOWS



Find out more at roundupreadyplus.com.au

Growers should consult the Technology User Agreement (TUA) for full terms and conditions.



Check your potential rebate via the calculator available at roundupreadyplus.com.au



COTTON SEED DISTRIBUTORS

Cotton Seed Distributors (CSD) supply cotton planting seed to the Australian cotton industry and are a major investor in cotton breeding, research and development, in partnership with the CSIRO Cotton Breeding Program.

CSD's objective is to deliver elite varieties that are specifically bred and adapted to suit local growing conditions by delivering yield and quality outcomes to keep the Australian cotton industry at the premium end of the global fibre market.

CSD conducts large scale replicated trials focussed on new varieties, technologies and techniques to assess performance across diverse environmental conditions; and provides industry wide extension services focused on cotton production and agronomy via the CSD Extension and Development Agronomy team and CottonInfo joint venture, in partnership with CRDC and Cotton Australia.

VARIETY COMPARISON

CSD has compared the two main varieties for Lower and Upper Namoi cotton production, using up to five years of variety trials in the region. Basic yield and quality metrics are reported below.

For further information on the characteristics of each variety, please visit www.csd.net.au/variety-guide

For an annual membership fee of \$20, growers also have access to extensive trial data and analysis and an online variety performance comparison tool, amongst other benefits.

LOWER NAMOI	IRRIGATED PRODUCTION			DRYLAND PRODUCTION		
	Sicot 748B3F	Sicot 746B3F	Difference	Sicot 748B3F	Sicot 714B3F	Difference
Yield (b/ha)	12.35	12.34	0.01	2.33	2.02	0.31
Length (decimal)	1.23	1.20	0.03	1.11	1.09	0.02
Micronaire	4.37	4.37	0.00	4.69	4.50	0.19
Strength (g/tex)	32.02	31.97	0.05	29.74	29.04	0.70
Turn out (%)	40.39	42.72	-2.33	40.44	38.43	2.01

Results are from an average of 15 trials over 5 years.

Results are from an average of 8 trials over 5 years.

UPPER NAMOI	IRRIGATED PRODUCTION			DRYLAND PRODUCTION		
	Sicot 746B3F	Sicot 714B3F	Difference	Sicot 746B3F	Sicot 714B3F	Difference
Yield (b/ha)	10.27	10.14	0.13	2.97	3.08	-0.11
Length (decimal)	1.18	1.18	0.00	1.08	1.09	-0.01
Micronaire	4.18	4.22	-0.04	4.20	4.06	0.14
Strength (g/tex)	31.18	31.09	0.09	27.79	27.99	-0.20
Turn out (%)	42.61	40.28	2.33	43.17	40.47	2.70

Results are from an average of 17 trials over 5 years.

Results are from an average of 7 trials over 5 years.

Visit www.csd.net.au/membership for details.

Disclaimer: General guide only; not comprehensive or specific technical advice. Circumstances vary from farm to farm. To the fullest extent permitted by law, CSD expressly disclaims all liability for any loss or damage arising from reliance upon any information, statement or opinion on this website or from any errors or omissions on this website.

COTTON CHOICES™

FLEXIBILITY IN EVERY FIELD

Cotton Choices™ gives you the flexibility to choose how to pay your technology fees based on what's likely to give you the best return.

Cotton Choices™ and Roundup Ready Flex® and Bollgard® technology fees.

In 2020/21, the Cotton Choices program will continue to provide growers with consistency and flexibility to choose how they pay for their technology fees. Growers can opt for:

COTTON CHOICES™ 1 - PRICE DISCOUNT

You can choose an upfront price discount on technology fees for your selected fields or refuge crops.

The applicable payment date for Cotton Choices™ 1: Price Discount and technology fees after discount are shown below.


Product	Price/Hectare (ex. GST)	Payment Date
Bollgard® 3 / Roundup Ready Flex®	\$390	
Bollgard II® / Roundup Ready Flex	\$370	
Bollgard II	\$315	
Roundup Ready Flex	\$75	

Notes: Price excludes GST. Discount does not apply to Roundup Ready Flex unsprayed cotton refuges over 10% of the Bollgard II area or 5% of the Bollgard 3 area (as per trait's RMP requirements), or to sprayed Roundup Ready Flex, as nominated in the planting audit. Late Crop Removal is not available under this offer.



COTTON CHOICES™ 2 - LATE CROP REMOVAL AND EXTENDED TERMS


By selecting Late Crop Removal (LCR) and Extended Terms, your technology fee is waived if your crop is removed due to hail, drought, or other adverse conditions or events. Extended payment terms are until the end of July.

Product	Price/Hectare (ex. GST)	Payment Date
Bollgard 3 / Roundup Ready Flex	\$420	
Bollgard II / Roundup Ready Flex	\$401	
Bollgard II	\$332	
Roundup Ready Flex	\$79	

Notes: Price excludes GST. If for any reason your crop fails (hail, flood, sand storm, drought, herbicide drift etc) and is removed on or before **16 April 2021**, Bayer will waive 100% of the technology fee on the affected hectares. This offer does not apply to Roundup Ready Flex unsprayed cotton refuges over 10% of the Bollgard II planting area or 5% of the Bollgard 3 area (as per the trait's RMP requirements), or to sprayed Roundup Ready Flex, as nominated in the planting audit.

COTTON CHOICES™ 3 - END POINT ROYALTY

You can choose to pay an End Point Royalty (EPR) per bale after ginning to assist in managing production and cashflow risk.

Product	Price/Bale† (ex. GST)	Payment Date
Bollgard 3 / Roundup Ready Flex	\$52.50	
Bollgard II / Roundup Ready Flex		
Bollgard II	\$50	
Roundup Ready Flex		

Notes: Price excludes GST. ^Payment date is 30 days after the end of the month of the invoice date (ie. the date on the invoice given to your TSP). † Standard 227 kg bale of cotton lint. This offer does not apply to Roundup Ready Flex unsprayed cotton refuges over 10% of the Bollgard II planting area or 5% of the Bollgard 3 area (as per the trait's RMP requirements), or to sprayed Roundup Ready Flex, as nominated in the planting audit. Bales determined via reconciliation of ginning reports received by Bayer.

In 2020/21, Bollgard 3/Roundup Ready Flex pricing under the Cotton Choices program will remain unchanged from the previous season. Please consult cottonchoices.com.au for further details on the Cotton Choices program and technology pricing.



CONSIDERING DRYLAND COTTON THIS SEASON?

Reduce your risk with the CSD Industry Support Program, in partnership with Syngenta.

Register for the free program, and if you don't harvest your crop, we'll provide a dollar for dollar credit toward next season's cotton seed.

PROGRAM DETAILS

The program is available in selected varieties in designated areas - see map.

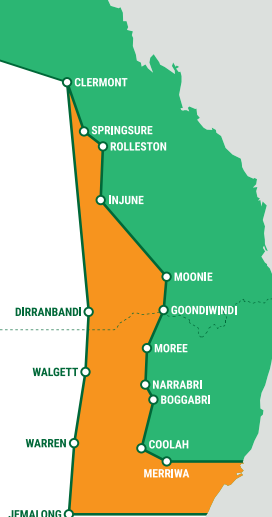
- Sicut 714B3F, Sicut 748B3F and your choice of Roundup Ready Flex® refuge seed.
- Sicut 746B3F, Sicut 714B3F, Sicut 748B3F and your choice of Roundup Ready Flex® refuge seed.



**INDUSTRY
SUPPORT
PROGRAM**



syngenta



- "No pick" means the crop is destroyed (for any reason other than hail) after inspection by a CSD Extension and Development Agronomist.
- Credit is of the same value, purchased in 2020 for next year's seed.
- ISP claims must be lodged by Friday, 19 March 2021.
- All prices must be at Regular Order price.
- Seed needs to be purchased with a Syngenta branded seed insecticide treatment.
- For more terms and conditions visit www.csd.net.au/isp.

Terms and conditions apply, speak to your CSD Agent and visit www.csd.net.au/isp for further details and eligibility.

BETTER FARMING GRANTS FROM BAYER

In a commitment to working with farmers to continue to reduce agriculture's impact on the environment, Bayer will continue to support the Better Farming Grants program, aimed at increasing efficiency and sustainability on cotton farms. Two grants are available under the program - the Bayer *myBMP* certification and *myBMP* bale grants.



***myBMP* certification grants from Bayer**

Bayer will provide a \$2,000 (ex. GST) grant to growers who conduct an on-farm audit and achieve *myBMP* certification prior to 31 December, as confirmed by Cotton Australia.



***myBMP* bale grants from Bayer**

Bayer will pay eligible cotton growers a grant of \$1 per bale (227 kg) for cotton lint that is produced from *myBMP* certified farms and where the grower has opted in to the *myBMP* Bale grant program via Cotton Australia.

Find out more about the program at crop.bayer.com.au

RESOURCES

There are several online resources that you may find useful:

- **Acres of Opportunity** – A consolidated source of up-to-date information and advice on cotton farming in Australia at acresofopportunity.com.au
- **Cotton Choices™** – Match your Cotton Choices™ with your yield by field. Keep up to date with Choice options, important dates and changes at cottonchoices.com.au
- **Bollgard 3** – An easier way to grow cotton. For information on the Bollgard 3 Resistance Management Plan (RMP) visit bollgard3.com.au
- **CottonInfo** – Regional development officers and technical specialists can provide you with the latest research and information on a range of rain-grown cotton topics, also visit cottoninfo.com.au
- **The 2018 Australian Cotton Production Manual** – A one-stop-shop for growers, outlining important on-farm cotton production considerations. Download from cottoninfo.com.au
- **Cotton Australia** is the key representative body for the Australian cotton growing industry. cottonaustralia.com.au
- **myBMP** – a voluntary farm and environmental management system which provides self-assessment mechanisms, practical tools and auditing processes to ensure that Australian cotton is produced according to best practice. Find out more at mybmp.com.au

THINK COTTON



To be able to continue receiving this information, please complete the form via scanning the QR code, going to www.bit.ly/bayer_update_form or by completing the enclosed form, letting us know what you're interested in.

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