

the cotton thread

Border Rivers, St George and Dirranbandi

March 2021



A sample of plants from a **Retention demonstration** in St George. In the above photos, the fruit from the first ten fruiting branches was removed around first flower. Photo on left was taken just after first flower, the one on right at late boll fill/cracked boll. There are several other treatments. These demonstrations are designed to mimic trial work done by Paul Grundy in which it was found that in even in the case of severe fruit loss (as per above), the plant was able to compensate and there was no significant impact on yield or quality compared to control plots and the rest of the commercial field.

There will be a field walk of the demonstration site in late April – date TBA.

Season Update

Crops in the Balonne region are progressing well with the bulk of crops approaching defoliation. The earliest crops are defoliated and some picking has commenced. The restarted crops are well behind with picking expected to be around June. Recent weather (cloudy and humid, if not wet) has seen some boll rot and tight lock start to show up and continuation of the wilt like disease in a sprinkling of fields. Widespread rain across the catchment has seen Beardmore dam fill and a water harvest announcement commenced on Monday the 22nd for the lower Balonne. Upstream flows suggest this







opportunity may run for a couple of weeks. Pressure on the pest and weed front is low and it is unclear yet what impact the rain has had on the mice population.

The MacIntyre region has received significant rainfall that has led to inflows into their supply dams, Glenlyon and Pindari. Both have risen from below 15% to the high 40% range and the MacIntyre River in Goondiwindi peaked at near 130,000ML/day on Friday the 26th. Crops are around the late flowering to early boll open stage with defoliation likely to commence for most crops during the second week of April. Pest and weeds are under control while disease is a bit more prevalent this season, and recent conditions have sparked some boll rot in crops.

Both regions continue to track roughly in line with the 10 year average for day degree accumulation despite the hot period in the second half of November generating rapid day degree accumulation.

The recent [CottonInfo Moisture Manager](#) shows models backing off on support for above normal outlook for rain in the coming months. I expect there is a sigh of relief as well, after predictions of wetter conditions on the back of a La Nina event for some time now!



Source	Temp Forecast	Precipitation outlook				
		Emerald	Sth Q'ld	N-NSW	C-NSW	S-NSW
ACCESS-S 	Cooler	Above normal Apr/May/Jun	Above normal Apr/May/Jun	Above normal Apr/May/Jun	Normal	Normal
UK Met 	Normal	Normal	Normal	Above normal Apr/May/Jun	Above normal Apr/May/Jun	Above normal Apr/May/Jun
IRI NMME 	Normal	Above normal Apr/May/Jun	Above normal Apr/May/Jun	Above normal Apr/May/Jun	Above normal Apr/May/Jun	Above normal Apr/May/Jun
ECMWF 	Cooler	Normal	Normal	Normal	Normal	Normal
CMCC 	Normal	Above normal Apr/May/Jun	Above normal Apr/May/Jun	Above normal Apr/May/Jun	Normal	Normal
JMA 	Normal	Above normal Apr/May/Jun	Above normal Apr/May/Jun	Above normal Apr/May/Jun	Above normal Apr/May/Jun	Above normal Apr/May/Jun



St George CGA Awards Dinner



Left: The Historic Anchorage Homestead was the venue for the awards dinner; Right: Guest speakers Joan and Malcolm Armstrong.

More than 130 people gathered in the stunning Anchorage Homestead gardens for the annual Awards Dinner on Friday, March 5. CGA St George President, Geoffrey Todd said the Awards, covering the 2019-2020 season, were all about celebrating local success stories.

Rob and Louise Jakins, "Illawarra", won the 2020 **'Cotton Grower of the Year'** for the highest yielding crop, and Adam McGowan accepted the thousand dollar cheque and trophy on their behalf.

The Jakins agronomist, *John Mulholland*, won his third consecutive **'Agronomist of the Year Award'**.

The **'Grower Service to Industry Award'** was a very popular win, with *Ian Todd* recognised for his years of work mentoring others in the industry. Currently a second term Balonne Shire Councillor, Ian Todd is a respected and effective advocate on the political scene, representing the industry and community on many boards and committees.

'Service to Industry by a Service Provider' went to *Glenn Lyons* of GL Water Services. Over the last 20 years, Glenn Lyons has become one of the foremost authorities on bankless irrigation, which has put the Balonne Shire on the cutting-edge of irrigation innovation.

The **'Young Achiever of the Year Award'** went to the dedicated *Tessa Diamond*, whose passion for agriculture saw her juggling fulltime work, with external studies, to become an agronomist.

Guest speakers on the night, Mal and Joan Armstrong, had the everyone enthralled as they shared stories from the early 70s when they first began growing cotton.

Geoffrey Todd said plans are underway for next year's awards night which will officially commemorate 50 years of growing cotton in the district.

"We're looking forward to celebrating the journey that has seen cotton become a major player in the prosperity of our region."

Big thanks to all the sponsors for a fantastic night. Special thanks to Johnelle Rogan, (Images by Johnelle), who has generously shared photos from the evening [here](#).

Defoliation preparation

There are a lot of factors to consider to get a good defoliation result.

A few key points to consider are:

1. The preparation starts earlier on in the season to run down Nitrogen levels and soil water. This may be a challenge with the recent weather conditions.
2. Spend time in the crop assessing maturity through all methods (boll cutting, percentage open and NACB). Starting the defoliation process before the crop is ready may result in lower micronaire.
3. Adjust rates and products with weather conditions. A good summary from a survey of consultants about their defoliation practises can be found [here](#).
4. Coverage is key but minimise spray drift and hit the target. Be aware of sensitive crops, buffer zones and native vegetation. Guidelines for some of the products used in defoliation and crop preparation for harvest can be found [here](#).

Cotton Tracka™ (Patent Pending)

Cotton Tracka™ is a new online digital tool developed through the CSD Ambassador Program. It will soon be available to CSD Members to track cotton crop progress and compare it to known crop metrics throughout the season. It also shows day degrees and full climate data for each crop and it is linked back to BARRY™ (Biometric Agronomy for Realising Representative Yield) to get ongoing yield estimates throughout the season.

The following images show what Cotton Tracka™ will do to help you manage your crops to their full potential. Current season weather information is supplied, and this is compared to a longer-term average. Crop information is collected in field and then entered into the different modules within Cotton Tracka™. Cotton Tracka™ is the latest online Digital Tool developed by CSD and it joins other tools such as BARRY™, STEFF™ and the Day Degree Calculator.

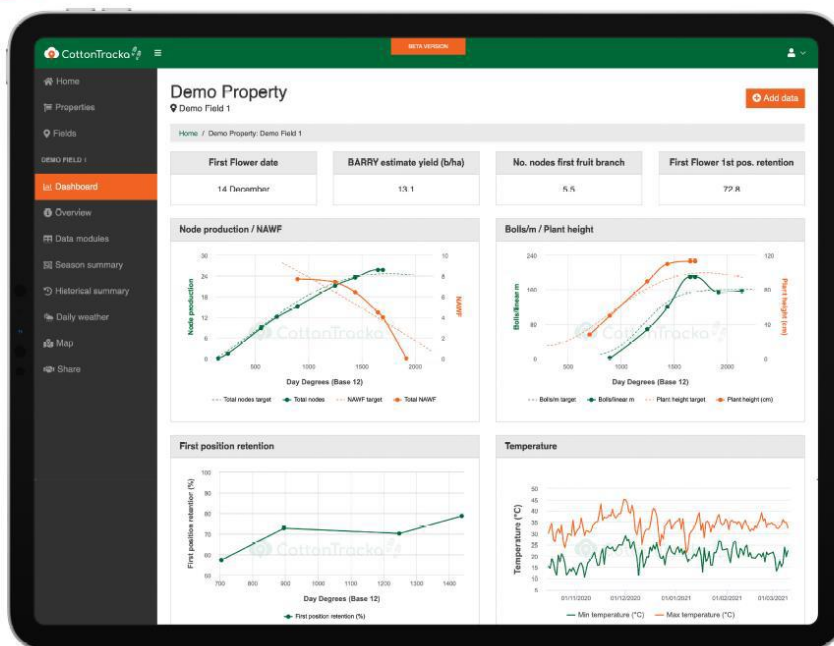
The following images are screen shots taken from the Cotton Tracka (patent pending) tool. In the first picture there are four graphs. The top left is showing Nodes production and Nodes Above White flower (NAWF) charted against day degrees; top right is plant height and bolls/m against day degrees; bottom left is first position retention against day degrees; and bottom right is min and max temperature charted through the season.

In the second picture, there is a table of the data collected during the season at specific growth stages compared to some target values for the measured value.



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CottonTrack BETA VERSION

Demo Property
Demo Field 1

Home / Demo Property: Demo Field 1

Field information

Farm	Field	Region	Silo location
Demo Property	Demo Field 1	Balonne	St George Airport
Variety	Cultivation	Row configuration	Seed imbibed date
Scot 74883F	Irrigated	Solid 1m	15 October, 2020

Data summary

Module	Date	Day degrees		Total nodes		Bolls		Retention (%)	NAWF		Plant height (cm)	
		Base 12	1032	Result	Target	linear m ³	linear m		Result	Target	Result	Target
Establishment	28/10/2020	152.0	98.6	0.0	0.6							
Establishment	05/11/2020	243.7	156.1	1.5	2.4							
Establishment	25/11/2020	558.0	358.1	8.9	9.4							
Mid Square	02/12/2020	704.8	451.7	12.1	12.7			57.4			27.9	35.6
First Flower	14/12/2020	895.4	574.0	15.2	16.0	1.0	1.0	72.8	7.7	0.5	50.1	52.0
Flowering Progression	05/01/2021	1247.5	816.4	21.2	22.0	60.0	60.0	70.3	7.4	0.4	89.5	81.6
Flowering Progression	19/01/2021	1438.5	946.0	23.5	23.7	120.0	120.0	78.7	6.4	5.3	110.2	92.3
Flowering	01/02/2021	1590.1	1009.5	25.8	24.5	130.0	130.0		4.37	3.9	112.9	85.6



MacIntyre Valley Cotton Field Day



Tom Dowling from Goanna Ag presenting to the attendees of the field day

The MacIntyre Valley cotton field day was held on March 17 in an altered format after wet weather forced the field component, at Brooklyn Farms “Mobandilla”, to be abandoned. Presentations and a machinery display were held at Riddles oval, Goondiwindi. Attendees heard presentations on:

- Defoliation – updates from CSIRO, QDAF and CSD
- Collaborative Farm Management – Agworld
- Roundup Ready Xtend Cropping system and Roundup Ready Plus update – Bayer
- Trapview, an automated pest network – ADAMA
- Fast Start program update – Syngenta
- Integrated Sensor monitoring on farm – Goanna Ag
- Using Precision Ag to understand constraints to production – PCT
- and inspirational guest speaker, Sam Bailey.

Congratulations to Cameron Derbridge and the MVFD team for their persistence and efforts to stage the day.

Roundup Ready Xtend Spray App and Crop System Training

A reminder that the training program for the Xtend crop system has commenced with a workshop recently in Goondiwindi (March 26th), future workshops in St George (April 1st and June 8th) and Goondiwindi (June 7th). Please visit [Xtend Flex](#) to register for future workshops.

To support the Roundup Ready Xtend Crop System in the US, Bayer has developed and published the RRXtend Spray App.

The RRXtend Spray App is a convenient and easy-to-use digital tool that provides growers and applicators with location-specific weather forecasts, digital record keeping capabilities, and educational resources related to the XtendiMax® with VaporGrip® Technology herbicide, used over-the-top of XtendFlex cotton. The forecast feature helps applicators identify weather conditions and inversion risk as they plan their applications.

The RRXtend Spray App provides location specific, hourly forecasts of temperature, relative humidity, wind and inversion risk; that are developed using publicly available weather data and machine learning (ML) models developed at The Climate Corporation. In the RRXtend Spray App, the inversion risk forecast function indicates the probability (by percentage) of an inversion occurring at a particular location and hour of the day; the forecast function gives applicators an approximate inversion risk reading for the next 100 hours.

In order to train the model for Australia, Bayer require real-time weather station data.

Bayer has installed five weather towers across cotton growing regions that measure: temperature at multiple heights, wind speed, relative humidity, solar intensity and rainfall. Data from these towers will be used to test and train the existing model for Australia, with plans to launch an Australian version of the RRXtend Spray App. Underpin and improve the Herbicide Resistance Management Strategy and put in place guidelines and protocols for the stewardship and management of new herbicide tolerance traits in cotton. This is important to prolong the efficacy and use pattern of glyphosate in the Australian cotton farming system. Monitor and identify herbicide resistance and put in place tactics to manage emerging issues.

For more information on the app, visit the following website:

[Successful Application Starts Right Here | RRXtend Spray App \(roundupreadyxtend.com\)](https://roundupreadyxtend.com)

Spray application training for the Roundup Ready Xtend crop system starts in March. Bayer has released training dates with those for the Balonne and MacIntyre listed in the “What’s On” Section at the end of this newsletter. Contact your local Bayer representative Michael.fing@bayer.com for more information.

CottonInfo Blog

[2021 sustainability focus - March: Maximising our precious water resource](#)

Water efficiency is a key sustainability target for the Australian Cotton industry. While the water required to produce a bale of cotton has reduced by 48% from 1992 to 2019, the future draft targets see efficiency improving by further 12.5% by 2024 and the same again by 2029. See the above link for more detail on this key area of sustainability targets for the industry.

CSD Update



The recent publication of **FACTS ON FRIDAY** covers the topic of Flood damaged and Waterlogged Cotton. While not a lot can be done, there is some useful information on how growers might assess the yield impact from flooding and links to other information sources. Publications from earlier in March looked at the performance data for the Ambassador crop network and the yield potential of these crops using the CSD yield estimate tool BARRY, and some End of Season Considerations relating to defoliation, picking, ginning and marketing. The above "Facts on Friday" is a hyperlink however only members of CSD will be able to access the publications.



The March publication of the **COTTON YARN** covers a range of topics and news including:

- Career opportunities at CSD – see below
- Keep defoliation on target
- CSD and Lower Namoi Field day on March 2nd was a success with 90 people attending.
- Season updates for the production regions – these provide a brief snapshot into crop progress across the cotton production areas of Australia

CSD members can access this publication from [here](#).

Career Opportunities: CSD is currently seeking to fill the positions of "Digital and Data manager" and "Extension and Market Development Lead". For more information follow this [link](#) or contact Cotton Seed Distributors in Wee Waa.



CRDC news

News from CRDC includes:

- The Autumn edition of the [Spotlight](#) magazine is out.
- Demi Sargent announced [winner of the ABARES Science and Innovation award for 2021](#) – her work has discovered potential for improved photosynthesis in cotton under increasing temperature – potentially shielding the industry from one of the impacts of climate change.
- CRDC celebrated the role of women in the Australian Cotton industry on International Womens Day (March 8)
- CRDC supporting the inaugural climate and emissions reduction forum for agriculture
- Crop Consultants Australia [survey report](#) available covering the 2019-20 cotton season.

For more details on these, click [here](#).

COTTON AUSTRALIA CORNER

[Cotton Matters](#) – key points

- CA visits Far NQ growers
- myBMP workshop held for Far NQ growers
- Cotton Collective set for August 25-26 in Toowoomba, due to cancellation of the cotton conference.
- Pre-season virtual transport forum to be held on March 31st.
- Bankless irrigation systems in SW QLD helping with water efficiency.
- Bonds highlight Aussie Cotton in new advertising campaign.
- N-drip irrigation system boosting water efficiency.
- CA presents to primary and secondary students at Ag Connect – a one day event organised by AgForce for QLD school children.
- Darling Downs Grower Howard Rother attains myBMP certification.
- Growers urged to become more informed in industrial relations changes with CA members able to access an independent advice service.

News from Cotton Australia is largely covered in the Cotton Matter topics above.

- For further information click [here](#).

What's On:

- 31 March:** AgTech Mungindi – **POSTPONED**, future date TBA
Cotton Australia Pre-season Virtual Transport Forum - online
- 1 April:** Bayer Roundup Ready Extend Flex Crop System spray application training, St George
- 21 April:** Teach the teacher event, Mungindi
- 24 April:** Cubbie Cotton Community day, Dirranbandi

- 7 June:** Bayer Roundup Ready Extend Flex Crop System spray application training, Goondiwindi.
- 8 June:** Bayer Roundup Ready Extend Flex Crop System spray application training, St George

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