



the gwydir grower

29th May 2023

Picking Update

It has been great to have a dry pick this season with around 75% of the irrigated fields and 60% of the dryland picked to date. Early crops defoliated well, however, the cooler weather and some frosts on the late crops have since slowed down defoliation. In general, most consultants very happy with the way defoliation has gone this year.

Irrigated yields vary from 8-10b/ha, through to 16+b/ha, with the majority in the 12-14b/ha range. The lower yielding fields generally had poor bed prep with a quick turn around last year, flood impacted, some have had disease (Verticillium) impacts and/or spray drift. I've have heard a farm average just over 15b/ha which is fantastic. Sometimes the ducks line up...and excellent management!!

Dryland yields range from 1.7 to 6.5 b/ha, largely dependent upon planting date and time of rainfall. The majority of the dryland is yielding between 2.5-3.5 b/ha.

Ginning Update

Our local gins report that ginning is progressing well, and without any break in the weather yards are filling quickly. Quality is excellent 11-1, 11-2, 21-1, 21-2. Great turn outs 42% - 44% both dryland and irrigated. Some reports for shorter staple length for dryland, but colour very good. Everyone very pleased with how things are progressing and very happy with quality to date.

Lint Turn Out Percentage (LTO%)

The LTO% is a simple measurement of the weight ratio of lint to seed cotton in any particular module, field or gin run. For example, if the lint percentage is 40%, 50% may be seed and the remaining 10% trash mainly composed of hulls, sticks, dust, leaf, and a small percentage of motes (cotton fibres attached with immature or broken seeds).

Check out the latest CottonInfo Factsheet which describes how LTO% is calculated and factors affecting it. [Turn Out | CottonInfo](#).

Cotton Marketing, Pricing and Fibre Quality Vidcasts

CottonInfo has four informative vidcasts on cotton classing, fibre quality and marketing available [here](#). Featuring Jon Hurford, Rene van der Sluijs, Angus Marshall and Pete Johnson.

~~CSD Cotton Management Tour~~ “Growing Better Cotton Series”

CSD are changing things up! Very excited to present the 'Growing Better Series' - a series of information sessions, forums and field days focused on providing you with the information you need, when you need it. They include:

- 1) **Seed and Sales Information Sessions which start THIS week!**
- 2) Growing Better Mastering Cotton Forums – August 2023
- 3) Growing Better Field Days held during the 2023/24 cotton season.

CSD’s first Growing Better Series event is the **Seed and Sales Information Sessions**. These sessions have been designed to provide CSD agents, and interested growers, with information on variety availability, pricing, seed treatments, timelines, and agent requirements.

Location Time/Dates

Goondiwindi Wednesday 31st May 2023, 11am, Victoria Hotel

St George Wednesday 31st May, 4pm, 2023 Australian Hotel

Mungindi Thursday 1st June 2023, 11am, 2-Mile Hotel

Moree Tuesday 6th June 2023, 4pm, Town and Country Club

These meetings are expected to run for 1.5hrs max.

[RSVP HERE](#)

Variety trial information will not be available at these meetings. To find the latest information on CSD Variety Trials please go to <https://csd.net.au/variety-trials>. This site continues to be updated as the 2022/23 data becomes available.

Later in the year, we will hold the **Growing Better Mastering Cotton Forums**

These forums will be held across the cotton growing regions of Australia and will provide an opportunity for growers, agronomists, agents, and all members of the industry to gain access to variety trial data, the latest nutrition and disease information, insight into the future of precision ag, plus much more.



Sicot 606B3F, Planted 13/11/2022



Sicot 746B3F, Planted 7/11/2022, 30”

Effect of residual herbicides applied at camera spray rates during fallow on the subsequent cotton crop.



Graham Charles, Eric Koetz & Jeff Werth NSW DPI & QDAF
Work supported by CRDC.

Camera sprayers have increased in popularity with overall big reductions in chemical use in fallow fields. High chemical rates can be applied to individual weeds when a number of nozzles fire. This can have residual chemical carryover effects on the following cotton crop.

Herbicide	Active	Group	Rate
Balance	isoxaflutole	27	100g/ha
Sharpen	safufenacil	14	34g/ha
Starane Advanced	Fluroxypyr	4	900ml/ha
Valor	flumioxazin	14	140g/ha
2,4-D amine	2,4-D amine	4	1.6 L/ha
Voraxor	safufenacil + trifludimoxazin	14	240 ml/ha

All herbicides were applied at 1X, 2X, 4X and 8X rates on 30 Jul 2021.
 Cotton planted 7 Oct 2021, Sicot 714B3F.

Seedling damage assessment 3rd November 2021

Herbicide	Plant stand	Plant size
Balance 4X & 8X	Reduced at 8X	Reduced
Sharpen 4X & 8X	Reduced at 8X	Reduced
Starane Advanced 4X & 8X	Reduced	Reduced
Valor – all rates	-	-
2,4-D amine	-	-
Voraxor	Reduced at 2,4,8 X	Reduced

Yield and Maturity

Herbicide	Yield	Maturity
Balance 4X & 8X	Reduced at 8X	delayed
Sharpen 4X & 8X	Reduced at 8X	delayed
Starane 4X & 8X	Reduced at 8X	delayed
Valor – all rates	-	delayed
2,4-D amine	-	-
Voraxor – all rates	Reduced at 2,4,8 X	delayed

Take home message:

- Be conservative with residual herbicides, especially at high (camera sprayer) rates.
 - Often when two or more nozzles fire the rates are considerably higher than the already high permit rate.
- Be wary of combinations of herbicides, they may have reduced safety margins.
- The more herbicides, the more chances for damage.
- Be aware of potential additive effects when using residuals in summer crop after applying residual herbicides in the winter phase and vice versa.
 - Some interactions can linger longer in the soil.

The critical period for weed control in cotton (CPWC).

Graham Charles, NSW DPI Weed scientist, has conducted extensive mimic weed trials from 2004 to 2015 using millet as a substitute for grass weeds and sunflower as a substitute for large broadleaf weeds.

He concluded that where grass weeds are present at densities of 10 per m⁻² or more, and/or large broadleaf weeds are present, a high level of weed control must be maintained throughout the first half of the cropping season (or longer) in high-yielding cotton to ensure crop losses do not exceed the cost of weed control.

This research has shown that high-yielding cotton crops are very sensitive to competition from grasses and large broadleaf weeds, but the CPWC had not been defined for smaller broadleaf weeds in Australian cotton.

Field studies were conducted over five seasons from 2003 to 2015 to determine the CPWC for smaller broadleaf weeds, using mungbean as a mimic weed. Mungbean was planted at densities of 1, 3, 6, 15, 30, and 60 plants/m² with or after cotton emergence and added and removed at approximately 0, 150, 300, 450, 600, 750, and 900 degree days of crop growth (GDD).

Mungbean competed strongly with cotton, with season-long interference; 60 mungbean plants/ m² resulted in an 84% reduction in cotton yield.



Growers need to include residual herbicides in fields with high weed numbers and not rely on glyphosate alone. As a rule of thumb, if weed numbers are increasing over seasons or mid-season exceed 10 weeds m² (as in this field), growers need to be including additional residual herbicides in their system.

The researchers concluded that a high level of weed control must be maintained throughout the cropping season in high-yielding cotton where broadleaf weeds are present at densities of 1 or more plants/m² to ensure crop losses do not exceed the cost of weed control.

Weeds present at lower densities will still need to be controlled before they set seed, to protect lint quality, to avoid difficulties at harvest, and to manage herbicide resistance by greatly reducing the number of seeds in the weed seedbank over time.

Cotton growers will need to adopt a more integrated approach to weed control, replacing glyphosate with alternative control tools, especially where glyphosate-tolerant and -resistant weeds are present.

These tools might include applications of residual herbicides such as diuron, metolachlor, pendimethalin, prometryn, and trifluralin, as well as POST applications of clethodim and haloxyfop. Dicamba and glufosinate could also be used POST emergence on cotton varieties that include the resistance genes for these chemistries (XtendFlex), and flumioxazin and paraquat may be used as in-crop shielded applications.

In addition, cotton growers should be using spot spraying, interrow cultivation, and hand hoeing to ensure weed escapes are removed before they set seed.

What's important is that we continue to use a range of tools.

Upcoming XtendFlex Cotton Spray Applicator Training Sessions

As part of Bayer's commitment to whole of system stewardship, the spray applicator training will be a requirement for:

- Technology User Agreement (TUA) signers;
- All on-farm staff responsible for spray applications (including mixing/handling); and
- Any spray contractor that applies XtendFlex Cotton System products over-the-top (OTT) of XtendFlex cotton varieties, once approved by the APVMA.



Each training session covers theory and practical topics. Local courses are listed below. For a full list of course locations and dates, please see the [Bayer website](#). Participants need to register for workshops and can do so from the Bayer website or by clicking [here](#).

Mungindi: Thursday 30th July 2023

Moree: Thursday 10th August 2023

Moree: Wednesday 13th September 2023

Dates for the diary

- 31 May: CSD Growing Better – Seed and Sales information session Goondiwindi 11am
31 May: CSD Growing Better – Seed and Sales Information session St George 4pm
1 June: CSD Growing Better – Seed and Sales Information session Mungindi 11am
6 June: CSD Growing Better – Seed and Sales Information session Moree 4pm
7 June: [Farms of the Future](#), Moree NSW
14&15 June: [2023 River Reflections Conference](#) Narrabri NSW
19 July: [GRDC Grains Research Update, Bellata, NSW](#)
25 July: [CCA Young Member Workshop](#), Narrabri NSW
26-27 July: [CCA Cropping Solutions Seminar](#), Narrabri NSW
28 July: CottonInfo Biosecurity Workshop, Moree NSW
1-3 August: [WeedSmart Week](#), Dubbo NSW
2-3 August: Cotton Collective, Toowoomba Qld
8 August: [GRDC Grains Research Update](#), North Star NSW
23 August: Growing Better – Mastering Cotton Forum, St George
24 August: Growing Better – Mastering cotton Forum, Goondiwindi
24 August: Growing Better – Mastering cotton Forum, Mungindi
30 August: [CCA Regional Technical Workshop](#), Goondiwindi Qld
5-7 September: [AACS Cotton Research Conference](#), Toowoomba QLD
15 September: Growing Better – Mastering cotton Forum, Moree



As part of the Richard Williams Initiative – Disease Project Crown Analytical Services have measured Verticillium inoculum levels in a number of fields in the Gwydir Valley (48 fields across the Australian industry). This provides a baseline and from here we can gauge the change in inoculum levels with various rotations that the growers may implement. I've been taking stem cuts in some of these fields to look at Verticillium incidence in low, medium and high inoculum level areas taken from the Verticillium Maps.

Regards

Janelle

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