CottonInfo **Information** *when you need it*

Darling Downs

November 2023

Welcome to the November Edition

This is the first edition of the new season which to many is a mixed bag so far. A drier than anticipated spring, has increased preplant waterings and moisture is quickly evading some crop roots.
Rainfall in the past week has been kind to some and not to others. Let's hope that the rainfall forecast for this coming week reaches those that have missed out.
Planting is well underway with some dryland planting resuming after the rain.

After the rainfall of last week, can we please all be on the lookout for ratoon cotton and regrowth. Fields have been root cut however it has not been 100% successful in some fields. It is this green bridge that aphids can breed in and cause us a lot of pain later in the season. I am sure I don't need to remind people of the resistance issues that reared its head with aphids last year.

Preparation for next season starts well before you plant the seed

This past season, pest management has been particularly challenging with the increased numbers of aphids in many fields, outbreaks of solenopsis mealybugs on new farms, and silverleaf whitefly making a comeback in some areas. Cotton bunchy top disease (CBT) has also been detected in numerous locations in northern NSW and southern Queensland.
Crop managers now have a critically important responsibility to focus on farm hygiene this winter and prevent a ruinous start to next season by **breaking** the green bridge that would otherwise allow aphids, mealybugs and CBTD to survive.

Effective crop destruction coupled with the removal of cotton volunteers, ratoons and weeds from fields and adjacent farm areas is a highly effective defence against pest and disease carry-over.
On farms where mealybug have been detected it is critical that crop destruction is 100% effective, and that weeds and cotton are controlled during the winter months to destroy overwintering populations and thus prevent new infestations next season. Nearly all hot spots of mealybug in cotton are caused by a ratoon or volunteer cotton plant that provided a green bridge for the outbreak. For mealybug control, it is often as simple as breaking the

bridge to defeat this pest.
For CBT, the abundance of diseased plants (albeit at low levels) in many crops, will have created a reservoir of this disease within the farming system. Coupled with the recent abundance of aphids, a proportion of which are carrying concerning levels of insecticide resistance, there is now a clear risk for widespread CBT disease and aphid insecticide resistance for the coming season.

Ensuring 100% effective crop destruction and control of ratoons in adjacent field areas is your best defence for not only lowering the viral load within your farming system, but importantly also removing potentially resistant aphid vectors. Aphids reproduce asexually, effectively cloning themselves. This means that once resistance becomes entrenched, it is very difficult to overcome.
Whilst it is not feasible to eliminate all potential hosts within the broader farming landscape, controlling weeds and feral cotton within areas directly adjacent to fields greatly limits the opportunity for crop re-infestation the following season. For CBT disease, earlier crop infection equals greater yield impact. Removing green bridges in the immediate cropping area better avoids early crop infestation.

Listen to the podcast from Paul Grundy – CottonInfo Tech Lead for IPM, about Crop hygiene and winter clean-up
https://www.buzzsprout.com/1857956/12739124?fbclid=IwAR3vnTowu9sHb6Mdk-57_eNwn8nb1aR3Vjs4maVFub6SlofiZNClKtFbjOw

Thrips – should we be worried?

Thrips have been making it uncomfortable in the field for a few weeks now. I asked Paul Grundy, CottonInfo IPM Lead if there is any reason for concern with planting well underway in the Downs and cotton seed germinating with thrips present.

Thrips are very common inhabitants of cotton that can be both friend and foe. There are a couple of things you should know:

1) *There are three of species – 1) Tobacco thrips (Thrips tabaci) tends to be prevalent during establishment, but is replaced by 2) Tomato thrip (Frankliniella schultzei) as season progresses and temperatures rise. 3) Western flower thrips (F.occidentalis).*
2) *Western flower thrips (F.occidentalis) are not controlled by current seed treatment, but this species is not normally abundant early season.*
3) *Every western flower thrip tested in Australia since resistance testing commenced has been pyrethroid resistant.*
4) *Neonicotinoid (imidacloprid) resistance has been detected in tobacco thrips.*
5) *Thrip populations will normally decline early December.*
6) *Thrips are a KEY PREDATORS of mite eggs*
7) *Research has shown a cotton plant can sustain significant damage without yield loss - Where 75% of each leaf was removed. With only 25% of the early leaves remaining, final maturity was only delayed by 3-6 days and yield was NOT impacted.*
8) *We have a longer, warmer season on our side in the Gwydir, impacts can potentially be greater Sth NSW*
9) *Sit tight, continue to monitor, threshold is 80% reduction in leaf area from seedling to 6 true leaves PLUS 10 thrips per plant (adult and larvae).*

During crop establishment, thrips can cause major distortion of early leaves which can be so severe at times that any reasonable person would question a plant's ability to recover. So, should you be worried? Check out our e-news http://eepurl.com/iB7SOA.

Map crops on SataCrop to prevent drift damage

All cropping industries are encouraged to play their part in preventing off-target spray drift damage by mapping their fields in SataCrop this season.

SataCrop is an all-of-agriculture online mapping platform for growers to use. Growers simply log-on to SataCrop and map their fields over satellite imagery. Crops are colour coded, which helps inform other growers about where sensitive crops are planted when planning their spraying activities.

If you have used SataCrop previously, all you need to do this season is re-colour code your fields, depending on what you have planted where.

SataCrop can be used to map all crop types, and growers can change the crop type within fields to reflect the different planting seasons.

It is vitally important growers do all they can to prevent off-target spray drift from occurring, and by using SataCrop, you'll be doing your bit to help yourself and your neighbours not be impacted by off-target spray drift.

A new addition to the platform is enhanced functionality to allow apiarists to map their hive locations. Growers will be alerted if they are within 10km of the hive location.

By sharing knowledge and being transparent about what crops are planted where, we can collectively help address this issue and ensure our crops remain healthy.

Other spray drift mitigation advice for growers includes:

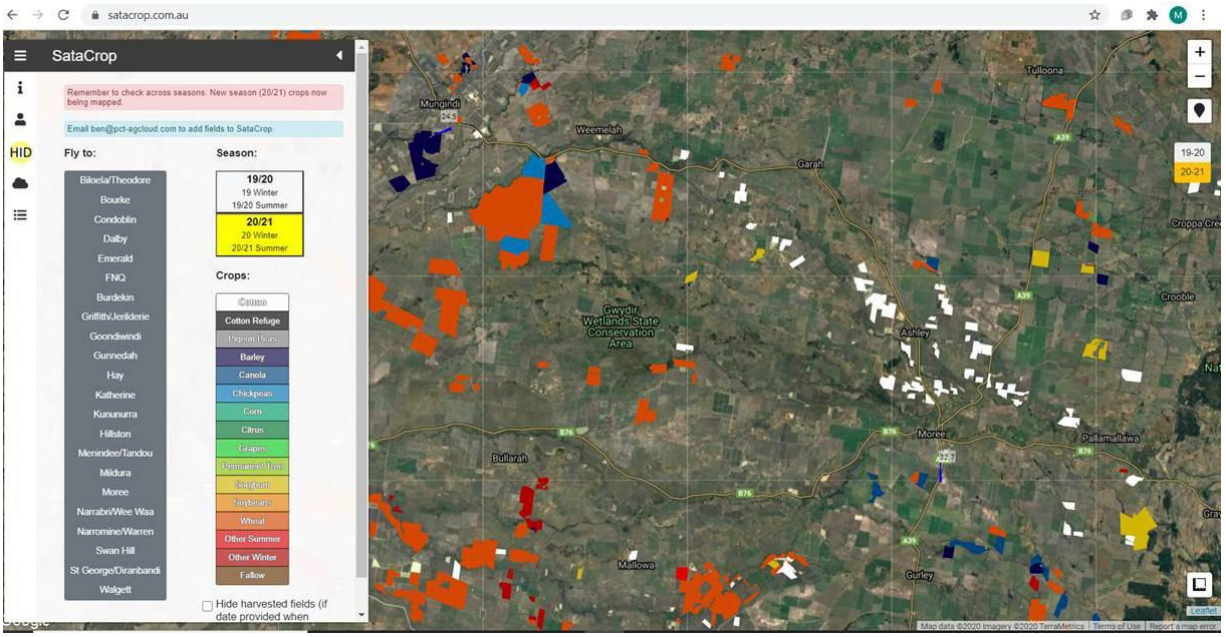
1. Reading and following spray label instructions. Ensuring you are up to date with the APVMA label changes to 2,4-D products.

2. Check the current and forecast conditions before spraying. Do not spray when there is a surface temperature inversion.

Growers can access SataCrop by visiting https://satacrop.com.au/

Watch this video to discover how to add and modify fields in SataCrop - https://www.youtube.com/watch?v=ZGcvfpwV33E

For more information on spray drift go to:
https://www.cottoninfo.com.au/index.php/pesticide-input-efficiency
https://grdc.com.au/resources-and-publications/resources/spray-drift
https://cottonaustralia.com.au/spraydrift-and-satacrop



Season snapshot to date

DALBY AIRPORT

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Date range: 10 October, 2023 to 25 November, 2023 (47 days).

Summary | Seasonal comparison

	2023	2022	2021	2020	2019	10 year mean
Base 12	517.8	384.6 ▼	467.9 ▼	518.4 ▲	537.9 ▲	494.9 ▼
DD1532*	308.1	184.9 ▼	283.6 ▼	312.0 ▲	305.9 ▼	289.2 ▼
Cold shock day (≤ 11°C)	11	19 ▲	7 ▼	8 ▼	12 ▲	9.2 ▼
Days above 36°C	7	0 ▼	0 ▼	7	7	4.2 ▼
Nights above 25°C	0	0	0	0	0	0.0
Days above 40°C	0	0	0	0	0	0.1 ▲
Total rainfall (mm)	99.6	77.6 ▼	268.0 ▲	51.8 ▼	8.6 ▼	81.7 ▼
Total radiation (MJ/m^2)	1099.2	1050.8 ▼	1020.8 ▼	1113.6 ▲	1240.2 ▲	1005.8 ▼
Average temperature (°C)	22.7	19.5 ▼	21.7 ▼	22.8 ▲	22.9 ▲	22.2 ▼

Climate observations and data are obtained via the State of Queensland SILO patched point dataset.

BROOKSTEAD POST OFFICE

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Date range: 10 October, 2023 to 25 November, 2023 (47 days).

Summary | Seasonal comparison

	2023	2022	2021	2020	2019	10 year mean
Base 12	490.5	363.3 ▼	436.7 ▼	485.7 ▼	510.7 ▲	467.7 ▼
DD1532*	285.3	165.2 ▼	252.2 ▼	284.3 ▼	289.7 ▲	268.0 ▼
Cold shock day (≤ 11°C)	8	23 ▲	8	7 ▼	14 ▲	9.3 ▲
Days above 36°C	6	0 ▼	0 ▼	4 ▼	6	3.3 ▼
Nights above 25°C	0	0	0	0	0	0.1 ▲
Days above 40°C	0	0	0	0	0	0.1 ▲
Total rainfall (mm)	61.6	142.6 ▲	228.0 ▲	77.6 ▲	21.6 ▼	79.6 ▲
Total radiation (MJ/m^2)	1079.5	1069.5 ▼	991.5 ▼	1115.5 ▲	1231.6 ▲	999.9 ▼
Average temperature (°C)	22.2	19.1 ▼	21.0 ▼	22.1 ▼	22.4 ▲	21.6 ▼

Climate observations and data are obtained via the State of Queensland SILO patched point dataset.

Cotton industry leader to lead CottonInfo into 2024 & beyond

After an extensive recruitment process, Dr Janelle Montgomery has been named as the new Program Lead for the Australian cotton industry's extension program, CottonInfo.

An industry leader in her own right, Janelle is a familiar and trusted face, having been part of the CottonInfo team since its establishment in 2012; first as a Technical Lead for water use efficiency, then taking on the Regional Extension Officer (REO) role in the Gwydir Valley in 2017.

Based in Moree, Janelle has managed the REO team for the past five years, and said she feels incredibly excited by the opportunity to take on the Program Lead position.

"I've built a career on research and development and making sure that growers come on the journey too, by helping them to improve on-farm efficiencies and practices," Janelle said.

"It's been such a privilege to be able to do this over my years with CottonInfo promoting best practice on the ground. Now being able to further promote this by helping to set the strategic direction of CottonInfo is something I'm very much looking forward to," she said.

CottonInfo is a joint partnership between the Cotton Research and Development Corporation (CRDC), Cotton Seed Distributors, and Cotton Australia. The Program Lead role is funded by CRDC.

CRDC Acting Executive Director Allan Williams said Janelle's appointment reflects her incredible mix of research, development and extension experience and genuine passion for the Australian cotton industry.

"The CottonInfo program is something that other cotton growing areas of the world look at with interest and envy, and Janelle has played a significant role in building the program's strong reputation," Allan said.

"Throughout her decade-plus association with CottonInfo, she's worked tirelessly to not just support growers and consultants, but also the three industry partners who jointly facilitate the program," he said.

"To have someone as respected and passionate as Janelle leading CottonInfo into its 12th year is a massive advantage for the cotton industry, and on behalf of CRDC and the CottonInfo Management Committee, I welcome her to the new role."

Janelle will officially start on Monday 4 December, 2023.

BAYER AUSTRALIAN COTTON GROWER OF THE YEAR

FIELD DAY

Bayer and Darling Downs Cotton Growers Incorporated invite you to the Australian Cotton Grower of the Year Field Day at *Tyunga* at Brookstead on the Darling Downs (40kms from Toowoomba).

More details to follow.

SAVE THE DATE

WEDNESDAY 20 MARCH, 2024

Cotton Australia launches new App in the fight against Spray Drift.

Cotton Australia has a new tool for easy reporting of spray drift which helps cotton farmers to photograph and report drift incidents so other growers and industry stakeholders can be alerted as quickly as possible.
The Cotton Australia Snap Send Solve platform is simple to use. Growers first download the App and then sign into the Cotton Australia group. The step-by-step guide is available on the Cotton Australia website and the password/code is Cott123.
Once you are signed in, you can take a photo of spray drift damage or evidence and send it to Cotton Australia for appropriate action. You can also give approval for Cotton Australia to refer the incident to the relevant authority for investigation.
It allows Cotton Australia to provide the relevant authorities real-time mapping of spray drift incidents so that they can take appropriate action to prevent further drift incidences.
Cotton Australia is working with the key state control of use agencies Biosecurity QLD and NSW EPA to highlight best practice and warn about the implications of non-compliance.

Download the app

Apple | Android

Find out more about the app

Dates for the Diary

- Darling Downs CGI Meeting - **4pm Wednesday 6th December - Russell Hotel**
- **Bayer Australian Cotton Grower of the Year Field Day, 20th March 2024 - Brookstead**

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