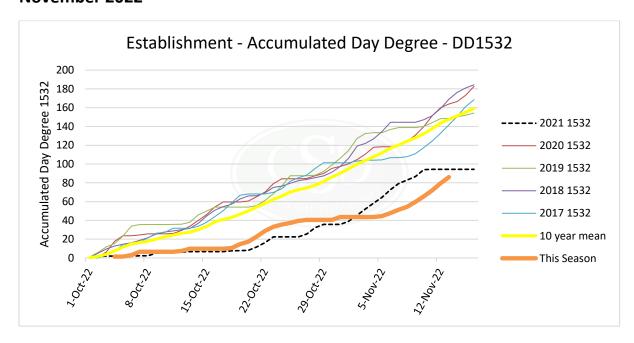
# the cotton tale

#### November 2022



A very tough start to the 2022 season. Cold and very wet. Major flooding with record rainfall for October and the wettest year on record with the yearly record past at the end of October.

It was anticipated that around 85,000 ha was to be planted in the south and with late planting finishing last week we may get to approximately 50,000 ha in the ground.

Looking at the above graph day degrees have tracked very similar to last season and reflecting on last season, growth and development was well behind by late December. The











season was then consistent through January, February and March and average to good yields were achieved. Mr Blue sky needed.

(67) Alex the Astronaut covers Electric Light Orchestra 'Mr. Blue Sky' for Like A Version - YouTube

#### **Grower groups**



Last seasons pilot grower groups have expanded to four locations with the groups to meet for the first time this season next week. These groups are open to any grower who would like to get involved.

The group will catch up four-five times at critical growth stages to discuss crop management. While these meetings are not exclusive, they require a commitment from the grower to attend the majority of the meetings. Once these groups have been formed, they will be closed to promote the sharing of information between growers. Theses catch ups will also complete the CSD C-CROP benchmarking report. This means each grower will be required to collect their own individual crop data to be collated and scored against the group at the end of the season.

Last season we had a few of the growers in the Coly and Whitton groups make it into the top 5 out of 105 crops benchmarked across the industry, let's see if we can increase those numbers with the new groups this season!

The first catch up will include a crop establishment check, chat about timing to first flower and provide an introduction to the group & CSD C-CROP benchmarking report. In these first discussion groups I will explain how the Richard Williams Initiative disease action group is being started in the south.











Whitton 8am - 10 am Tuesday 22<sup>nd</sup> November

Coleambally 2 -4 pm Tuesday 22<sup>nd</sup> November

Jerilderie 8 am – 10 am Wednesday 23<sup>rd</sup> November

Hay 2-4 pm Wednesday 23<sup>rd</sup> November

If you are interested in participating or have any questions, please get in touch with Ella Arnold <a href="mailto:earnold@csd.net.au">earnold@csd.net.au</a> 0428 950 033 or

Kieran O'Keeffe kieran.okeeffe@cottoninfo.net.au 0427 207 406

### Richard Williams Initiative – Disease Action Groups

This initiative will be supported via Cotton Seed Distributors (CSD) Richard Williams' Commercial Research Initiative with additional support from the Cotton Research Development Corporation (CRDC) and Crown Analytical Services (CAS). The initiative will run for 3 years and uses participatory action research. This approach allows for input, decision making and ownership by participants, who are most affected by the outcomes.

A need was highlighted for further disease work around management practices that occur on farm. Many growers and consultants are proactive in trying various management practices on farm and this is an opportunity to create a platform that will capture and validate these practices across the industry. Utilising Crown Analytical Services, certain disease-causing inoculum can be measured. In particular, this project will be investigating Black Root Rot and Verticillium dahliae.

As lead research organisation, Crown Analytical Services (CAS) are responsible for inoculum testing across a wide range of farms in the industry. They will work closely with growers to collect data and diagnose in-field disease issues. The disease monitoring capabilities by CAS are essential in determining the effectiveness of disease management practices on farm.

#### **Project Goals**

- To identify which practices can assist with on farm disease management
- Provide the catalyst for further industry research
- Provide the mechanism to test and validate findings from research
- To assess the value and cost of alternative practices across different farming production systems and environments
- Provide a regionally specific platform for research outcomes in relation to disease management











- Closely link with other industry research investment and pass on any management practices identified that may be a catalyst for further investigation

#### **Grower Commitments & Data Governance**

The participation and commitment of growers is essential to success of this initiative. There will be instances where farm access is required, for example CAS undertaking testing or CottonInfo and CSD showcasing trial sites. Gathering historical data will also be crucial to accurately assess on farm trials and growers will be asked to produce this information related to their fields/crops. For example, yield data, NDVI imagery or rotation history. This information will be collated and analysed anonymously and used to promote positive management practices to the industry. Over the life of this project third party advisors may be sought out to assist in analysing and overlaying spatial data from grower fields.

To ensure the confidentiality of collected data, growers will be required to sign an agreement upon commencement of this project via CSD's Trials Agreement. This will protect both participants and CSD; and ensure that confidentiality and anonymity are recognised and held in high priority.

### Water productivity survey

The Australian irrigated cotton industry has doubled its water productivity over the last 25 years – lifting productivity from 0.60 bales/ML in 1997 to 1.22 bales/ML in 2021. Determining this improvement has only occurred because of the generous contributions of time and data by cotton growers.

To continue the assessment of water productivity, the Cotton Research & Development Corporation (CRDC), has contracted NSW DPI to collect water and yield information from growers. This information will be used to track the ongoing progress of water productivity improvement across the industry. This is an industry driven initiative about agriculture productivity and efficient use of the water resource.

The types of data we are collecting are the minimum requirements for calculating your farm's

Gross Production Water Use Index (GPWUI, bales/ML). The GPWUI from all participating growers is then aggregated and used to track the progress towards the water productivity and sustainability targets set by the industry. The more growers participating in the benchmarking the more defendable is the value of water productivity produced by the industry.

Our Australian cotton industry is the global leader in water productivity, using less than half the global average amount of water to produce cotton. It is the only Australian agricultural industry that is currently able to show continuous improvement in water productivity, which is determined by this ongoing benchmarking program. This is important to support and maintain our social licence and market access.











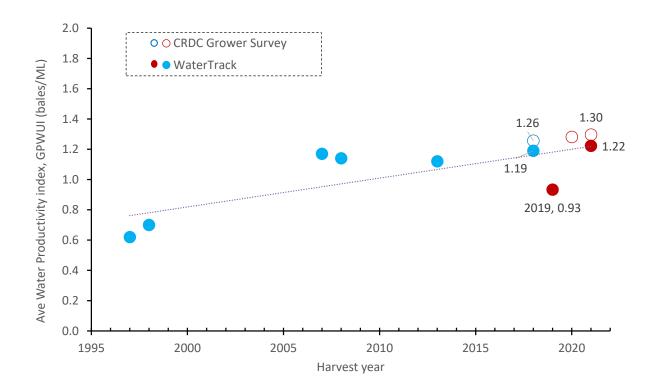
All grower data collected will remain confidential and will only be used within the scope of the benchmarking project. For more information about how data is collected and stored please email Peter Regan: peter.j.regan@dpi.nsw.gov.au, Soil and Water Research Leader (North).

Each year we will send you the GPWUI of your farm. This can provide business insights for your water management decisions and assist with my BMP accreditation. We appreciate your time and participation in this benchmarking project.

Cotton Water Productivity Benchmarking team, NSW Department of Primary Industries : Dr Malem

McLeod (Project Leader), Sarah Dadd, Dr Jasim Uddin, and Ben Crawley Contact: malem.mcleod@dpi.nsw.gov.au ( 0427 936 147), or sarah.dadd@dpi.nsw.gov.au ( 0477 705 114)

The following graph of water productivity over the last twenty-five years shows the improvement that has occurred through more efficient layouts, better yields and precise irrigation management.













### Water Productivity graph over 25 years

A trend of increasing WUE with the 2019 figure showing the impact of climatic conditions. This continued upward trend is getting more difficult, but the more we know the more easily we can target the areas we can improve.

**Red** – survey just finished. **Blue** – history. Open circle grower estimation – without soil moisture data.

The current industry target is to achieve the average GPWUI of 1.32 bales/ML by 2023.

#### **Biocontrol of Fleabane**



Ben Gooden (CSIRO) releasing rust fungus at IREC to control fleabane last week

(66) Flaxleaf fleabane rust fungus | A new weed control tool - YouTube

Flaxleaf fleabane has become a significant weed over the last few years. It is native to South America and is a prolific seed producer and the light seed can be spread significant distances by wind and water. It is difficult to control with herbicides so is a good candidate for control using a biological approach.

The CSIRO are about to release a rust fungus that causes leaf disease in Flaxleaf fleabane. It has undergone extensive studies and is highly specific to only impact flaxleaf fleabane.

Like other successful weed biocontrol programs in the past, it works by reducing the fleabane population but not fully eradicating the weed. The rust is being released in a pilot program this year and will be available for widespread release next year. If you want to register interest in being involved in the biocontrol program contact the Fleabane biocontrol team: <a href="mailto:fleabanebiocontrol@csiro.au">fleabanebiocontrol@csiro.au</a> or Ben Gooden: <a href="mailto:ben.gooden@csiro.au">ben.gooden@csiro.au</a>











## **Events coming up**

### **Nutrition and Soil Health Workshop**

Date: Thursday 1st December

Time: 9am - 1pm

Location: Coleambally Community Club

Come and hear the latest on topics including:

- N cycling in cotton soils and key losses (Ben McDonald/Dio Antille, CSIRO)
- Irrigation and water influence on N / plant N update (Jon Baird, NSW DPI)
- Irrigation system impact on N (Wendy Quayle, Deakin University)
- Monitoring and managing N in-crop (Chris Dowling, Back Paddock Company)
- Soil health (Oliver Knox, UNE)
- Compaction (Blake Palmer, NSQ DPI)

The workshop will conclude with a panel session including local growers and consultants, and lunch.

RSVP is essential and needed by Monday 28<sup>th</sup> November to CottonInfo REO for Southern NSW Kieran O'Keeffe: 0427 207 406 or kieran.okeeffe@cottoninfo.net.au

## November quiz – Where is this?













# October quiz answer - Where is this?

Gilgandra, The COO-EE march memorial. The march started on the  $10^{th}$  October 1915 at Gilgandra with 25 men and ended in Sydney on  $12^{th}$  November with 263 men.



# **Regards Kieran**

#### 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 in this presentation or from any errors or omissions in this document









