# the cotton tale

## October 2020



Cover crop trial Benerembah 27<sup>th</sup> October showing good establishment in all treatments of 11 -12 plants/m (planted at 17 seeds/m)

Establishment of good plant numbers and even stands are common in the south this season. Some up and down temperatures has slowed early growth (see graph below) but as we go into early November it looks like mild spring conditions will continue. There are no hot shocks (above 35 degrees) likely through November and cold shocks are about average so far.

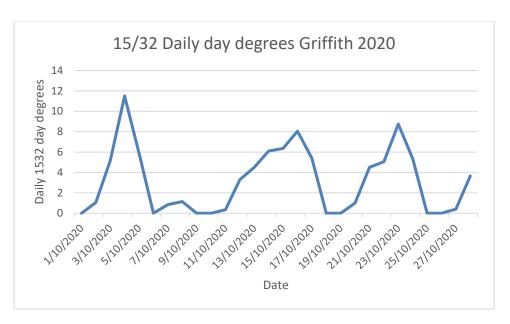












## The up and down nature of the start

Widespread general rain 23rd -24th October has set crops up for possible alternaria leaf infections. The photo above after the rain shows alternaria leaf spot infection on cotyledons but relatively clean first true leaves.

The early season disease surveys are planned to occur during the first week of November.

## New free app - Cotton pop

As part of the FarstStart program between Syngenta and CSD an app is now available for iPhone that helps with plant establishment counts. By utilising the camera built into your phone, the app enables the scanner tool to determine the number of seedlings over a set distance and the gaps between plants by tapping the screen to record a plant. The app also enables users to calculate the average number of plants per hectare.

https://www.csd.net.au/news/32-free-app-streamlines-cotton-population-counts-thanks-to-faststart

# Yield prediction update

There is a reasonable correlation between 15/32 day degrees in October and November and Southern NSW district yields and if the forecast is close to actual temperatures then it could be a good yielding year. Still a lot of seasonal influences after November but it does have a flow on effect to the end result.

See the weather attachment for the new yield forecast. As the saying goes "exercise appropriate scepticism".











#### **Fuscom**

Each year, cotton's pathologists get together with plant breeders, growers, and consultants to share information and coordinate efforts on disease control. This year, thanks to the challenges of COVID-19, the planned face-to-face FUSCOM forum has been replaced by an online event, with the pathologists recording short presentations of their research. A lot of information to take in so revisit these links when you can.

There is a virtual playlist located on the CottonInfo YouTube channel https://www.youtube.com/playlist?list=PLQy8KAPn-DyowbpN32MZJXje6oz2gKWy3

#### The full list with direct URLs is as follows:

Using DNA diagnostics to monitor for disease suppressive cotton farming systems

Jenny Brooks – Crown Analytical Services CRDC Project CAS2101 <a href="https://youtu.be/AuQEUr9ApHo">https://youtu.be/AuQEUr9ApHo</a>

Southern cotton crop protection **Alison Young** – NSW DPI CRDC Project DAN1903 https://youtu.be/QW1JLI5jKm8

Characteristics of disease suppressive cotton farming systems and soils understood **Linda Smith** – CRDC Project DAQ2002 <a href="https://youtu.be/fzp90ouozg">https://youtu.be/fzp90ouozg</a>

ARC Research hub for sustainable crop protection **Professor Neena Mitter** – CRDC Project UQ2001 <a href="https://youtu.be/HD2avfd3zYo">https://youtu.be/HD2avfd3zYo</a>

Biological-based products for improved cotton production **Bruna D. Batista** – Western Sydney University CRDC Project UWS1901 <a href="https://youtu.be/iVNXECrjrGc">https://youtu.be/iVNXECrjrGc</a>

Transformation of Verticillium dahlia, casual agent of Verticillium wilt of cotton, with the GFP gene **Aphrika Gregson** – NSW DPI CRDC Project DAN1809 <a href="https://youtu.be/2TX1eh\_Sqts">https://youtu.be/2TX1eh\_Sqts</a>

Butterfly pea's role in Verticillium dahlia management **Karen Kirkby** – NSW DPI & Innovate Ag <a href="https://youtu.be/NIG83RXQC-0">https://youtu.be/NIG83RXQC-0</a>

Evaluating efficacy of a range of management practices to control Alternaria and black root rot **Duy Le** – NSW DPI CRDC Project DAN2101 (previous project was Innovative solutions to cotton disease – CRDC Project DAN1703) <a href="https://youtu.be/UTKqCJQKEwE">https://youtu.be/UTKqCJQKEwE</a>

Priming of cotton defence against fusarium wilt and reniform nematodes using silicon **Dinesh Kafle, Linda Smith, Linda Scheikowski** – ABARES Award ABA1901 <u>https://youtu.be/UffHHexhW3c</u>











Ready to use soil test to manage black root rot risk **Dr Maria Manjarrez** – Microbiology Laboratories Australia CRDC Project MLAB1901 <a href="https://youtu.be/M8TxgA3-LFA">https://youtu.be/M8TxgA3-LFA</a>

CSD cotton management tour disease scoring update **Bob Ford** – Cotton Seed Distributors <a href="https://youtu.be/uK0tpblfeQY">https://youtu.be/uK0tpblfeQY</a>

Biosecurity Reporting **Leonie Martin** – NSW DPI Plant Biosecurity Officer https://youtu.be/rQ7SMnks Ow

#### Satacrop

A Reminder to make sure your cotton crops get listed on the SataCrop website! It is so important this map gets completed so ALL susceptible crops, not only cotton, are marked out easily for spray applicators and all growers to see. A short video on how to add crops is here <a href="https://www.youtube.com/watch?v=r6GwBWmjWpc">https://www.youtube.com/watch?v=r6GwBWmjWpc</a>

SATACROP - <a href="https://satacrop.com.au/">https://satacrop.com.au/</a>



## **Moth Busting with Magnet**

It is great to see that the use of Magnet will be in place this season as an alternative to mechanical pupae busting. Fields that are targeted for a winter crop should be prioritised. As the product goes out every 72 m in a narrow band with three applications a week apart from the 10<sup>th</sup> February to the 1<sup>st</sup> March growers could work with nearby growers to reduce application costs.

A few questions on the protocol have come through and the attached information sheet should help answer these questions.











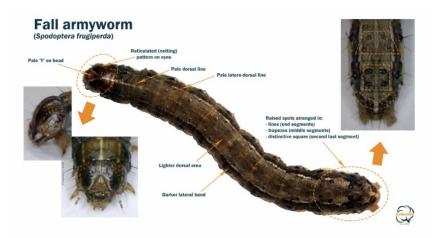
### Keep an eye out for fall armyworm.

With fall armyworm (FAW) detections throughout Queensland and well into NSW, many agronomists are taking a closer look at the caterpillars they come across in different crops.

Importantly, please note that FAW have not been detected in in any cotton crops (either Bollgard® 3 or unsprayed non-Bt cotton refuges) grown over the last 7 months in Northern Australia. Host preference field studies conducted by Dr Brian Thistleton and his team at the Department of Primary Industries and Resources in the NT also found no evidence for FAW moth laying eggs in in field grown cotton plots, however their study did show that FAW could feed and develop on conventional cotton when confined within containers in the lab without alternate host choices.

The incursion of FAW in Australia is still very new and therefore it is too early to definitively rule particular scenarios in and out. However, at this stage field observations and studies suggest that cotton is not a preferred host for egg laying FAW moths. Given that >90 per cent of the crop grown is Bollgard® 3, people are unlikely to encounter this pest on cotton during the coming season. For cotton crop managers the clear message is be alert not alarmed.

If you find or suspect that larvae of this pest are present in your cotton fields (on either Bollgard or non-Bt cotton refuges) please notify your local <u>CottonInfo REO</u> or the industry's IPM Technical Lead (<u>Paul Grundy</u>) so that steps can be taken to verify an identification. This is important as many researchers are currently trying to understand the pest status and host range for FAW. Fall armyworm can be very difficult to distinguish from Helicoverpa spp. when they are small (<15mm) in size, becoming easier to identify as they become larger. Some of the key characteristics are depicted on the larval image below and this <u>YouTube</u> video.













## **CSD Membership**

It would be great if cotton growers and industry stakeholders could sign up to become members of CSD. So far only about 10 percent of those involved in the south have become members. If you join you will get great member benefits with access to a range of helpful tools and critical information for successful cotton production. An example here of the benefits of being a member in this video <a href="https://www.csd.net.au/videos/22-csd-ambassador--andrew-watson-kilmarnock-boggabri-nsw">https://www.csd.net.au/videos/22-csd-ambassador--andrew-watson-kilmarnock-boggabri-nsw</a>

The cost is only \$20 a year so it just makes sense to join up now at this link https://www.csd.net.au/membership



October quiz – Name this plant?



## September quiz answer:

Where is this in NSW?

Answer: Yeoval, a tribute to Banjo Patterson

# **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









