



# the Cotton wrap

# January 2020

# What has been happening in the valley?



first of two beneficial bug releases at a CCU held at Andrew Watson's Kilmarnock before Christmas.













Bob Ford presenting Ambassador data to both CCU groups to draw out differences in management and other decisions affecting yield.



The LNCGA were successful in receiving funding through the Grass Roots Grants CRDC program to place 2 more weather stations in areas where there were previously holes in the map. A weather station has been placed at Pilliga and Spring Plains and will be up on the Ozforecast & CSD sites now.











### **Early Season Disease Surveys**

Summary from Duy Le. Over all 45 fields from 31 farms across NSW were visited during the early season disease survey in Nov 2019. Of these, 16 new fields from 14 new farms were for the first time included in this year survey. Black root rot and Rhizoctonia-like rot were still major seedling diseases across NSW. Alternaria leaf spot remained prevalent and the disease damage caused minor concerns in most of the surveyed fields. Seedling death caused by wireworm was also detected in many fields.

Average seedling stand per meter was from 7 to 12.9. Black root rot incidence was between 0 to 75.9% (mean 20.5%); of the infected ones, severity was from 10 to 23% (mean 18%). Rhizoctonia-like rot incidence was from 5 to 83% (mean 29%); severity was from 6 to 18% (mean 16.5%). Only about half of the surveyed fields were detected with Alternaria leaf spot. Leaf spot incidence was from 0.8 to 16% (mean 3.5%) and the severity was from 1 to 10%.

# CSD & LNCGA Research Field Day

CSD & LNCGA will be holding their annual field day this year on February 20<sup>th</sup>. This year's field day will offer a site tour of the new CSD production facilities at 11am for those interested. The field day will then kick off at 2pm at CSD Farms and will take a form in a research update as well as a rundown of CSD's current trial program as well as an update from CSIRO on breeding. See Flyer for more details.

# **New Day Degree Calculator** - Reminder

CSD have launched a new online Day Degree Calculator (DDC).

The Day Degree Calculator is simple to operate, fast to load data and can be used on any device with internet capability. The new website is mobile and tablet responsive, making all pages and tools easy to navigate on the go.

The Day Degree Calculator accumulates day degrees for a chosen site and calculates the following metrics:

- Day degree using base 12 (industry accepted practice).
- New day degree 1532 this formula is the basis of new work carried out by CSIRO and the
  United States Department of Agriculture (supported by the Cotton Research and
  Development Corporation). It is intended that this new approach will:
  - Provide a more accurate estimate of plant development across and expanding cotton growing area in Australia.
  - Prevent excessive day degree accumulation, particularly in hot periods that is unlikely to contribute to plant growth and development.







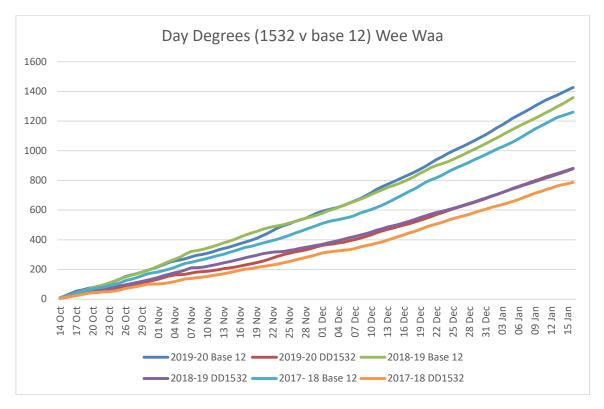




- Remove the need to adjust day degree targets for cold shock.
- Days elapsed this provides the number of days elapsed in chosen date range.
- Cold shock days the number of days with a minimum ≤ 11°C
- Nights above 25°C the number of days with a minimum ≥ 25°C
- Days above 36°C the number of days with maximum ≥ 36°C
- Days above 40°C the number of days with maximum ≥ 40°C

A table of crop development targets for day degrees is included to provide user an indication of cotton development day degree requirements. DD1532 targets will be updated once finalised. CSD is proud to collaborate with CSIRO in developing the DD1532 method, through contributing data to validate the equations across the industry. We envisage enhanced functionality and development of this tool and encourage feedback from industry.

Please see graphs below for an example of comparison numbers over the last three seasons. Visually it may take some getting used to, but it will allow us to have a more accurate indication of effective temperature on crop development.



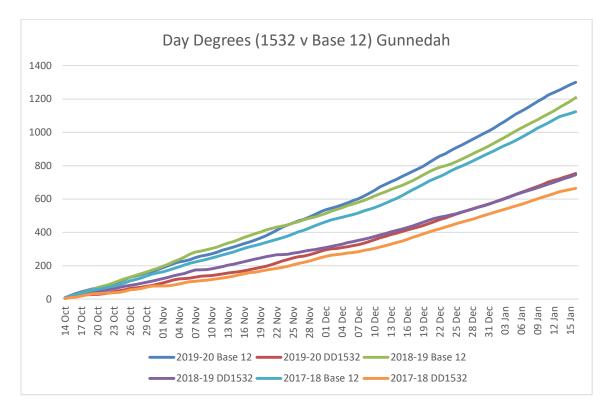












# Lower Namoi CCU Meeting 15/01/2020

# Crop Stage:

- 18-21 nodes
- NAWF 6-8
- 11-18fb
- NAWF 6-10
- Majority of crops 18-23 nodes
- Top 5 retentions 80-95%

#### Water:

- Groundwater pumping variable in some areas
- Bore yields dropping back
- Water budgets are tight
- Very high evaporation levels and transfer losses

# Insect Pests/Beneficial's:

- Some fields have been sprayed for mirids
- Low insect pressure, high beneficial numbers
- Whitefly adults present, not seeing nymphs yet











- Heliothis pressure light
- Low levels of mirids, some have put a light insecticide in with last roundup
- · Oil being used

#### Disease:

• No vert noted yet – may be a different story after latest rainfall

# Upper Namoi CCU Meeting 14/01/2020

#### Crop Stage:

- 17-22 nodes
- 5-8 NAWF
- 19-35 nodes
- 6 NAWF
- 24-26 nodes
- 6 NAWF
- Southern area's slow 16-22nodes, just seeing first flowers (8 NAWF)

#### Water:

- Water budgets hugely variable
- Some have run out and cut out sections of fields
- Others have 5-6 megs left
- Majority have used 5megs with 2-4 left

#### Insect Pests/Beneficial's:

- Mirids coming out of corn
- Whitefly adults around Harparary area
- Mirid pressure generally has been low and inconsistent

#### Disease:

- Have seen some sudden wilt in one field
- Haven't seen much vert yet

#### Comments:

- Pix has gone out to cut crops out who are water short
- Some small amounts have gone out in some areas

Please note, that all agronomic decisions should be based around your crop and the pests found in it. It is a snapshot in time and not representative of the whole valley. Updates were received from 4 agronomists/consultants across the upper and lower Macquarie to pull this Bug/Crop Check together.

#### Cheers,











#### **Elsie Hudson**

Regional Extension Officer Namoi Valley & Walgett M 0456 914 637

E elsie.hudson@cottoninfo.net.au

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.









