

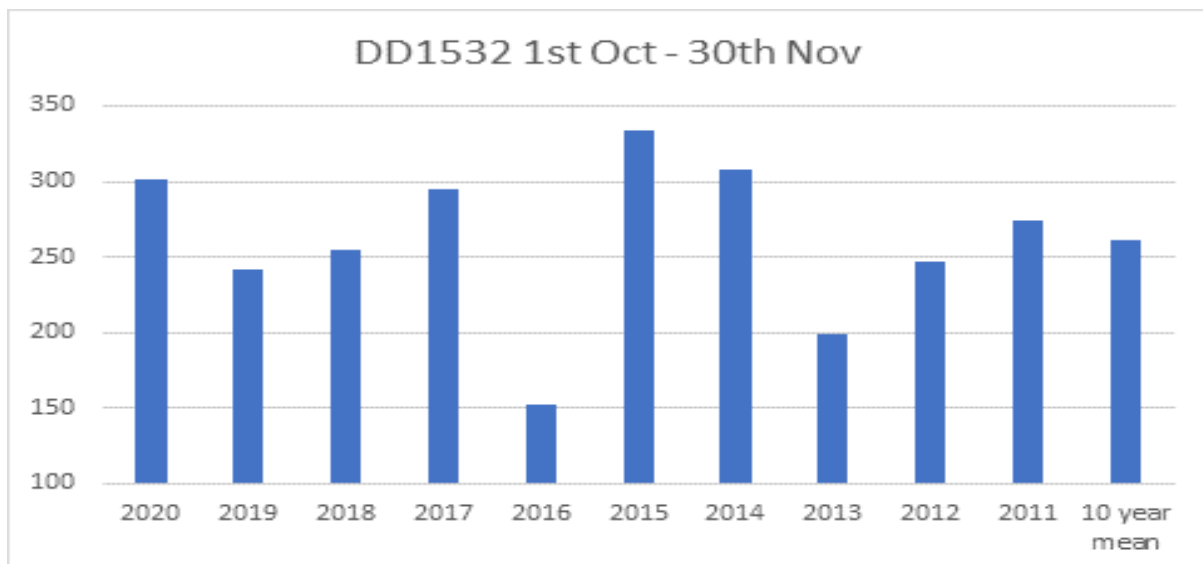


the **cotton tale**

July 2021

The past season

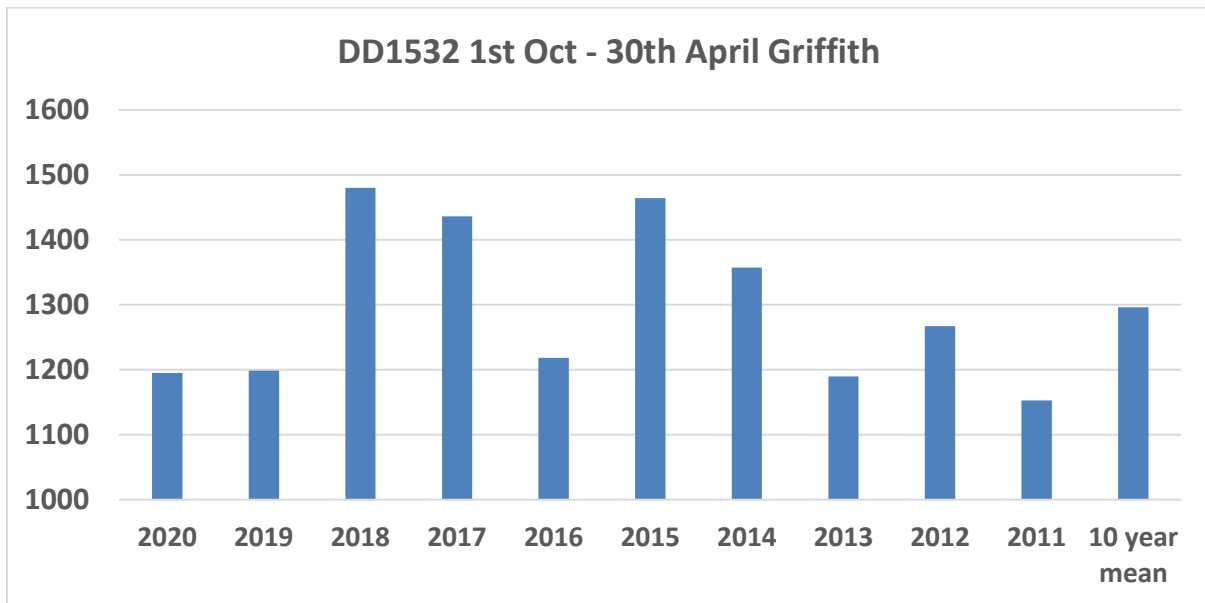
The 2020/21 growing season will be remembered as a very mild season. What was interesting was that it was one of the better starts in the last ten years (Graph 1).



Graph 1. 1532 Day degrees 1st October – 30th November Griffith.

So, a good start does set up good potential yield as there is a good relationship between 1532 Day Degrees accumulated by the end of November and final yield (see Slide 2 in the 2021 season attachment). Most crops had first flower at the start of January (584 15/32 DD). Adding 273 DD to this date has the start of fibre thickening on 3rd Feb running through to 14th March. Any delay in first flower can push the mid-boll fill period later and there is then a higher probability of going into lower temperatures. For micronaire to be above base, the

average temperature through the fibre thickening phase ideally should be well above 22.5 degrees C. Management and variety (genetics) also has a big influence on the final micronaire result and will have more of an impact when the season is line ball for temperatures through the fibre thickening period, like the last two seasons. The season fell away from December to the end of the season for the southern areas with a low accumulation of day degrees. Five out of six climate models did predict in September/October/November that cooler conditions were likely. Overall, the season was very similar to the previous year (see Graph 2).



Graph 2. 1532 DD 1st October -30th April Griffith Airport

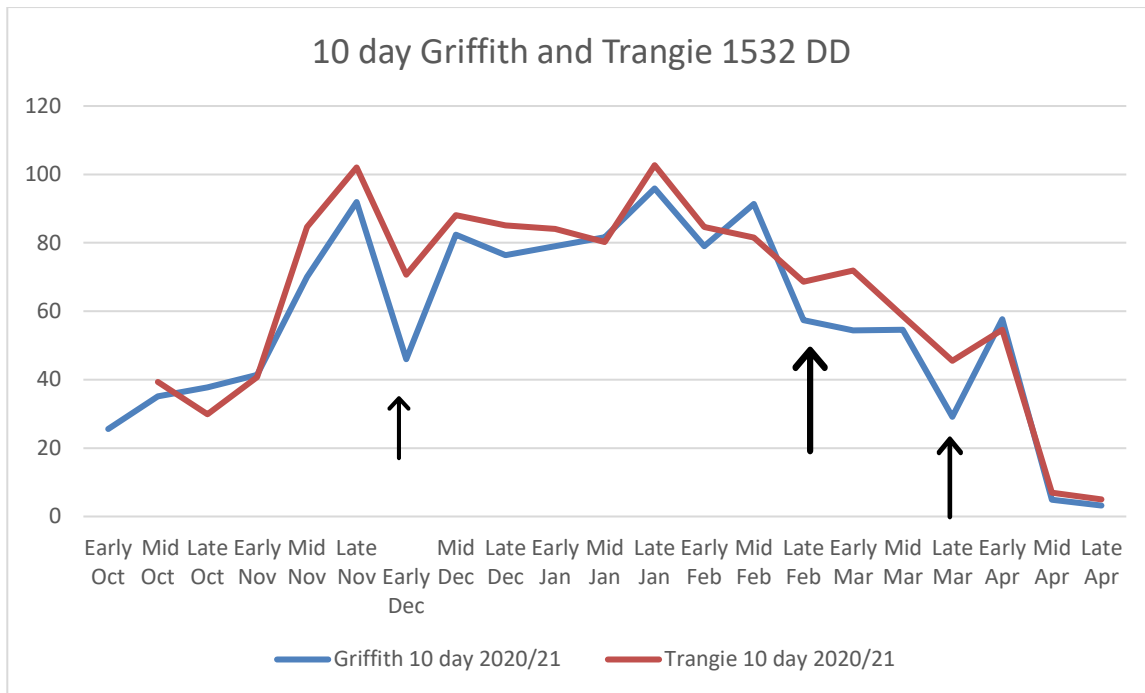
Locations in Southern NSW

The attached excel file compares the season’s Day Degrees for different locations. Comparing Griffith and Trangie shows where the season fell away (Graph 3). Trangie had 115 extra Day Degrees (1532) and had minimal low micronaire.

Most of the locations in both the Lachlan and Murrumbidgee valleys had very similar Day Degree patterns, so you would expect similar quality outcomes. The surveys included in this newsletter will be trying to pinpoint what management factors can help get good quality outcomes.

SVCGA Awards night postponed

The SVCGA awards night that was to be held on the 7th August has been postponed until 18th March 2022. Nominations are still open through August for the Greg Toole Service to Industry Award with nominations to me via email kieran.okeeffe@cottoninfo.net.au



Graph 3. 10 day comparison Griffith and Trangie 2020-21 season

Cotton season survey

As classing results are still coming through from last season, I have delayed sending out the annual cotton season survey. The link to the survey is now active and even though not all results would be available, your best estimates will do. I would encourage as many of you as possible (growers and agronomists) to spend the 20 minutes to complete the survey. All individual results are kept confidential with feedback in the form of a summary report. The survey will be open through August and the report available in September.

<https://www.surveymonkey.com/r/cottonC2021>

Micronaire survey

With another low micronaire year I am running a separate micronaire survey to see if we can see any trends in low micronaire fields and good micronaire fields. Currently the classed cotton is running at 55% below base micronaire. This shorter survey of 10 questions can also be completed by phone interview if required.

<https://www.surveymonkey.com/r/micronaire>

Setting up on farm trials

While conducting a recent trial on Autumn cover crops, I was able to get some hints on setting up an on farm trial. The advice here to consider is from Nick Barton ([Precision Cropping Technology](#)).

When setting up trials, from our perspective, we suggest the following to growers/agronomists; some of the things in this list might not apply to certain trials (depends on what you are trying to measure)

- Dual EM survey to understand soil variability.
- Elevation layer plus slope/depression layers
- Historical yield data
- Historical vegetative imagery for both winter and summer cropping cycles – want an area that is consistent in both winter and summer cycles.
- Cut and fill data.
- Head ditch height (if using syphons) – watering times might change as you progress along a field, as head changes
- Multiple replicates
- Avoid fields where there have been previous trials that could influence treatment effects.
- Generally, it is easier to manage a trial in a syphon field – bankless (at this stage) generally means the field has been recently developed (this style of irrigation layout is new) so cut-fill issues will certainly arise - syphon fields generally have less issue with cut-fill.
- Trying to put replicates into one bay if using bankless – might make management more difficult, but it is one way to reduce any variability due to cut-fill.
- Make the trial fit all operations i.e., if planter is 8m wide, the replicates probably need to be 24m wide to fit 4 passes of the picker and 3 passes of planter – but be careful if there are spray rigs passes that don't fit into the replicates as compaction can drop yield – 24m replicates generally work since planters fit (8 row or 12 row), pickers fit (either 4 row or 6 row) and spray rigs are generally 24m wide.
- We also do have suggestions for how to pick the trial, but this can be trial specific, depending upon what the treatments and trial layout end up being.

Quantifying the greenhouse gas emission and carbon co-benefits of on-farm irrigation dams



Seeking farm dams in the Murrumbidgee Irrigation Area for new study

- Seeking farmer participants within the MIA! Scientists based in Griffith are looking to sample on-farm waterbodies as part of a new study funded by the AgriFutures Australia Carbon Initiative in partnership with Deakin University.
- The study will investigate whether farm dams, recycle channels, storages, and settling ponds offer a feasible option for carbon storage and emission reduction in irrigated landscapes.
- The survey will consist of spot measurements of underwater sediment, adjacent soil, basic water quality, greenhouse gases, and drone monitoring of riparian vegetation in September 2021 and March 2022.
- We are especially interested in farm dams with a long history (>5 years) of water duration and with trees/uncultivated vegetation around them, but are open to all farm dam types.
- We need farm sites across cotton, rice, wine grapes and horticulture to kick start the study.

To volunteer a site or for more information, contact Dr Jackie Webb (j.webb@deakin.edu.au, 0417634434) or Dr Wendy Quayle (w.quayle@deakin.edu.au, 0417436775)



Best Practice



Insecticide resistance monitoring in Silverleaf whitefly

The attached slides summarises a report from Jamie Hopkinson and Jacob Blazer, Department of Agriculture and Fisheries, QLD of the resistance levels found last season in Silverleaf whitefly populations across different valleys.

CSD Crop management tour presentations

The 2021 CSD Crop management tour meetings are being delivered virtually with short video presentations. A range of topics are available for each location including a weather summary, disease surveys, managing Verticillium wilt, trial results, ambassador network summary, commercial information, seed quality and research and online tools.

Only CSD members will be provided with access to this content. To become a member, visit www.csd.net.au/membership. For further details on any of the presentations, please contact your local [CSD Extension & Development Agronomist](#).

Events coming up

The Crop Consultants of Australia are organising a Regional workshop in Griffith on the 16th September. Please email events@cropconsultants.com.au to ensure you are on the CCA mailing list.

[Members](#) | [Crop Consultants Australia](#)

July quiz. Where is this?



April quiz answer – Seaford, Mornington Peninsula.



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