



# Gwydir crop check

8<sup>th</sup> January 2024

## Day Degree

**Table 1: Seasonal Information based on 20<sup>th</sup> October planting date (Source: [Cotton Seed Distributors](#))**

MOREE AERO

Download

Date range: 20 October, 2023 to 7 January, 2024 (80 days).

Summary Seasonal comparison

	2023	2022	2021	2020	2019	10 year mean
Base 12	1108.3	815.6 ▼	965.2 ▼	1078.2 ▼	1179.8 ▲	1064.4 ▼
DD1532*	720.6	492.1 ▼	615.4 ▼	696.5 ▼	735.4 ▲	682.3 ▼
Cold shock day ( $\leq 11^{\circ}\text{C}$ )	2	13 ▲	9 ▲	6 ▲	5 ▲	5.6 ▲
Days above 36°C	24	1 ▼	8 ▼	20 ▼	41 ▲	20.0 ▼
Nights above 25°C	1	0 ▼	0 ▼	1	11 ▲	2.6 ▲
Days above 40°C	3	0 ▼	0 ▼	6 ▲	10 ▲	4.1 ▲
Total rainfall (mm)	174.2	283.0 ▲	223.8 ▲	206.4 ▲	40.0 ▼	162.1 ▼
Total radiation (MJ/m <sup>2</sup> )	2079.4	2002.9 ▼	1961.5 ▼	1967.9 ▼	2216.6 ▲	2043.3 ▼
Average temperature (°C)	26.0	21.8 ▼	23.7 ▼	25.3 ▼	26.5 ▲	25.1 ▼

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 on this website or from any errors or omissions on this website.

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



is a joint initiative of



Best Practice



# Gwydir crop check

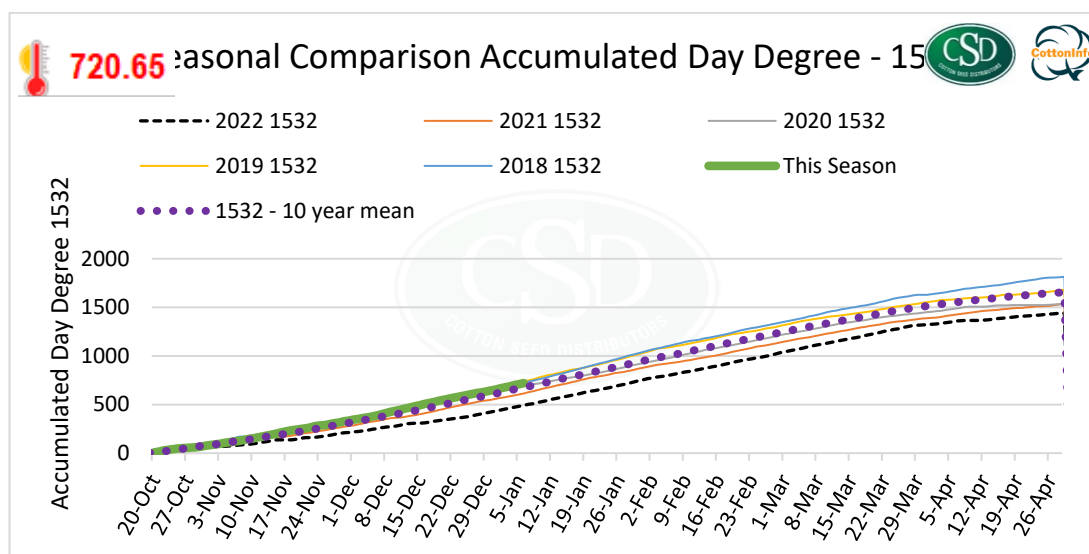


Figure 1: Day Degree comparison using the DD 1532, planting date 20/10/2023

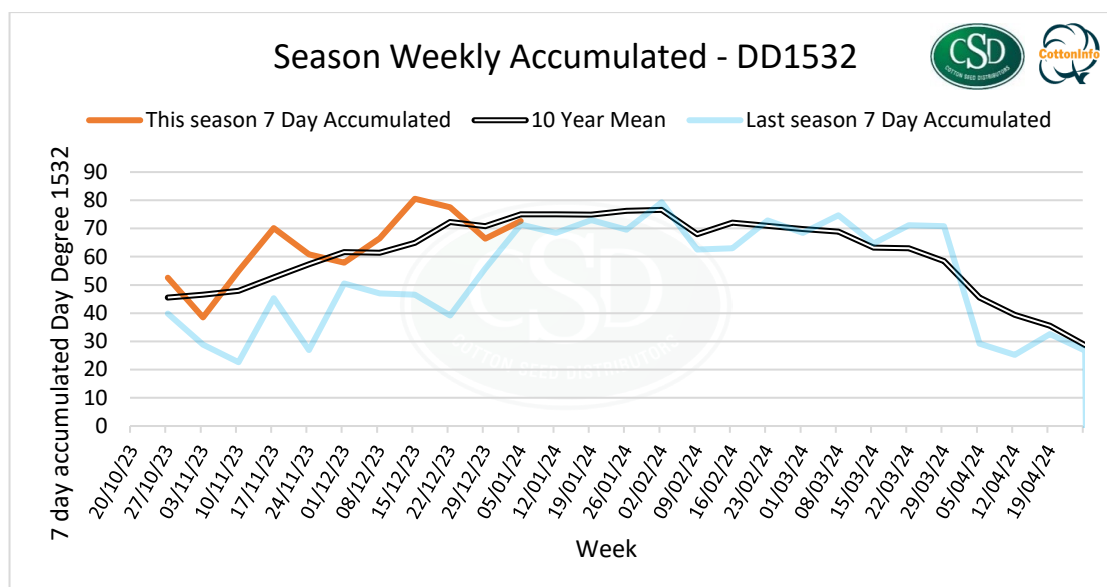


Figure 2: Day Degree comparison using the DD 1532, planting date 20/10/2023

This figure shows that our weekly accumulated DD has been much higher than last season and often higher than





# Gwydir crop check

the 10 year average weekly DD accumulation.

Table 2: Crop check

AREA	Gwydir Valley
Crop Stage	<p><b>Irrigated Cotton:</b></p> <p><b>Planting date &amp; nodes</b></p> <ul style="list-style-type: none"> <li>• Mid Oct plant 20-22 nodes</li> <li>• Late October 15-18 nodes</li> <li>• Mid November 14 nodes</li> <li>• Late December 2-8 leaf stage</li> </ul> <p><b>NAWF</b></p> <ul style="list-style-type: none"> <li>• Ranging from 9 – 4 NAWF. The high retention has led to some varieties (in particular Sicot 606B3F) have NAWF rapidly decreasing. However, growers are comfortable that they can hold Sicot 606B3F at 4-5 NAWF for next few weeks.</li> </ul> <p><b>Nodes to first fruiting branch (NTFFB)</b></p> <ul style="list-style-type: none"> <li>• This has been lower than average this year. Normally expect to change to fruiting branches at 6.5 – 7 nodes, however this year its more like 5. This is supported by the Figure 2, below this table.</li> </ul> <p><b>Dryland:</b></p> <ul style="list-style-type: none"> <li>• With good rain predicted on the 20<sup>th</sup> November, the Gwydir got excited and the dryland plant started the week before and has continued right up until December 31<sup>st</sup>.</li> <li>• Significant hectares have gone in, estimated to be getting up to 100,000ha. This will be confirmed after the January Bayer audit.</li> <li>• Nodes are anywhere from cotyledon to 14 nodes</li> <li>• If you have had some plant back issues, you are not alone. Given the dry year we have had, unfortunately irrigations and rainfall since November has reactivated some herbicides. Graham Charles, NSW DPI Weed Scientist predicted this could be an issue prior to the season. Issues were highlighted at the recent AWM meeting from residuals including Dual (Metolachlor), but also camera sprays of various products and even fallow sprays of 2,4-D. A very experience local grower told me this week he never uses 2,4-D after July if a paddock is going into cotton!</li> </ul>





# Gwydir crop check

	<ul style="list-style-type: none"> <li>There has been a lot of back to back cotton put in this season with high numbers of volunteers. Those with XtendFlex® varieties have taken advantage of being able to use Glufosinate OTT with a great result.</li> </ul> <p><b>Grower and consultant comments:</b>  <i>"Crop is some variability in the crop due to the establishment"</i>  <i>"Low insect pressure has led to high retentions, &gt;95%, almost too good"</i>  <i>"Little concerned about my background nutrition, especially in the back to back cotton, in particular potassium and phosphorus"</i>  <i>"Comfortable with the crop at the moment"</i>  <i>"Hail around Mallowa and west in the last fortnight"</i>  <i>"While crop looking good now, I am concerned long term back to back will hit the wall if its a bad vert year"</i></p>
Irrigation	<ul style="list-style-type: none"> <li>2<sup>nd</sup> water complete and onto their 3<sup>rd</sup>. 7-8 day turn around has begun. Some farms on 12 day cycle. Some farms completed 3<sup>rd</sup> water.</li> </ul>
Insects/Beneficial	<ul style="list-style-type: none"> <li>Despite early season thrip pressure, and some concern for mites current retentions are very high.</li> <li>Pest pressure has been very low, with reports of mirids only just reaching threshold, with a spray just going on. Still farms below threshold and no sprays to date.</li> <li>Just seeing the 1<sup>st</sup> silverleaf whitefly, very low at the moment.</li> <li>Reports of stink beetles and brown shield bugs in crop, but no sprays yet.</li> <li>Mites very low, if at all.</li> <li>Beneficials numbers ok, high numbers Red-Blue beetles and lady beetles.</li> <li>Crop capsules containing the parasitic wasps for SLW management currently being considered for release on some fields.</li> </ul> <p>The Gwydir Pyriproxyfen (Admiral®) Window will be between 18<sup>th</sup> January – 18<sup>th</sup> February. Please continue to keep Stuart McFadyen, your local extension agronomist informed of any Pyriproxyfen sprays.</p> <p><b>Grower and consultant comments:</b>  <i>"Mirid have been below threshold which is great as I've never not sprayed for Mirids before 5<sup>th</sup> January!"</i>  <i>"Saw my first SLW this week, literally 2 of them!"</i></p>



# Gwydir crop check

<b>Weeds</b>	<ul style="list-style-type: none"> <li>Barn Yard Grass, Peach vine</li> </ul>
<b>Spray Drift</b>	<ul style="list-style-type: none"> <li>WAND Inversion towers for identifying “Hazardous Inversions” are up and running <a href="https://app.wand.com.au/">https://app.wand.com.au/</a></li> <li>Satacrop to identify sensitive crops areas <a href="https://satacrop.com.au">https://satacrop.com.au</a> Make sure your recently planted dryland fields are on this map so your neighbors know there are sensitive crops nearby when spraying.</li> </ul>
<b>Disease</b>	<ul style="list-style-type: none"> <li>Verticillium starting to show up in some fields</li> <li>Some concern with Vert levels this season given this moister weather pattern</li> </ul>

## Gwydir Area Wide Management Meetings

Gwydir AWM Meetings were held at Midkin and Moreton Plain last week. Thanks to AFF for hosting these meetings. A good turn out and useful discussion amongst the groups. Stuart McFayden, CSD presented the latest data from his CSD variety trials.

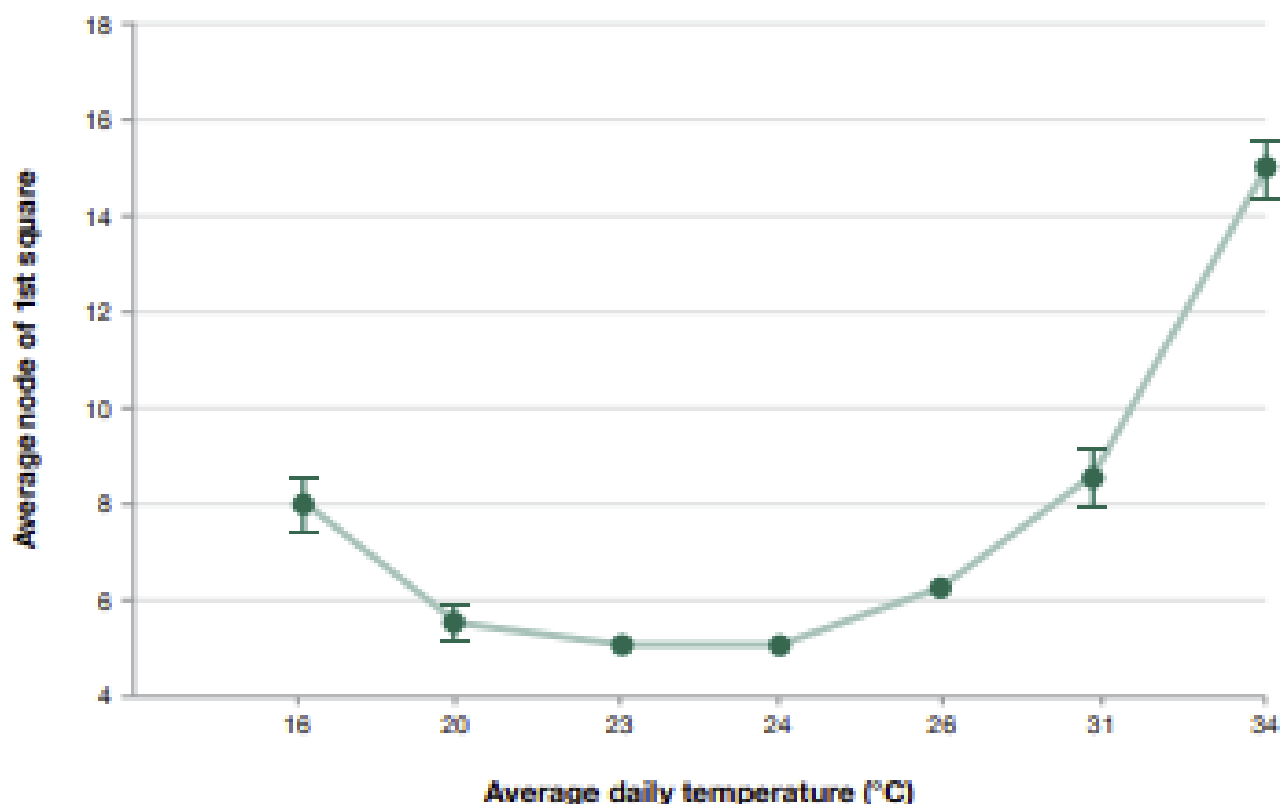
Nodes to first fruiting branch (NTFFB): This season NTFFB has been lower than normal with NTFFB often at 5 this season. Usually its 6-7 NTFFB. This is driven by temperature and in table 3 below you can see the average temperatures for mid, early and late monthly times. This season the average temperature has been between around 25-26 degrees which is near the “sweet spot: on Figure 4 which shows the relationship between the number of nodes to first fruiting branch and average daily temperature.

**Table 3: Average daily temperature for Moree**

	Average temperature					
Planting date	2023/24	2022/23	2021/22	2020/21	2019/20	10 yr mean
17-Sep	24.4	20.3	21.9	23.9	24.8	23.5
1-Oct	24.9	20.9	22.8	24.8	25.6	24.3
15-Oct	25.5	21.5	23.4	25.3	26.4	24.9
29-Oct	26.2	21.8	24.0	26.1	26.9	25.6
12-Nov	27.0	22.6	24.3	27.2	28.1	26.3
26-Nov	27.5	23.2	25.2	26.8	29.0	26.9



# Gwydir crop check



**Figure 4** A cotton seedling's time to first square under differing average temperature regimes. (Bange, CSIRO, 2014).

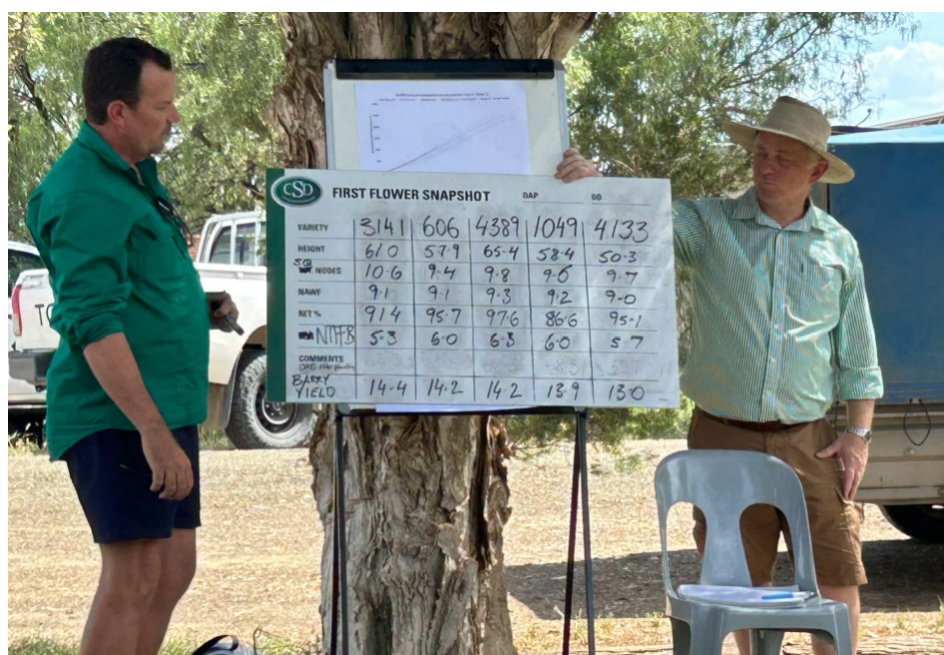
CSD presented the average 1<sup>st</sup> flower assessment for two Gwydir Variety Trials. The CSD tool [BARRY](#) was used to estimate crop yield (see Table 4). BARRY estimates are quite conservative and will get more accurate as you approach defoliation. However, the current yield estimate if conditions remain favorable is looking pretty good for all the varieties.





# Gwydir crop check

Table 4: 1<sup>st</sup> Flower Assessment for 2 CSD Variety trials – MOREE



Variety	1st pos ret	Height	NAWF	NTFFB	Squaring nodes	DD	Estimated BARRY Yield
CSX 3141B3F	91.4	61.0	9.1	5.3	10.6	948.4	14.4
Sicot 606B3F	95.7	57.9	9.1	6.0	9.4	948.4	14.2
CSX 4389B3F	97.6	65.4	9.3	6.3	9.8	948.4	14.2
CSX 5438B3F	87.4	51.4	9.0	5.7	9.0	961.8	14.1
CSX 1049B3F	86.6	58.4	9.2	6.0	9.6	948.4	13.9
CSX 4133B3F	95.9	50.3	9.0	5.7	9.7	961.8	13.0





**Information** when you need it



# Gwydir crop check

CSD have 6 irrigated variety trials across the Moree, Mungindi and Boomi district along with 4 dryland trials. If you are interested in looking at the new XtendFlex® lines please contact your local cotton CSD or CottonInfo extension agronomist. These trials will be highlighted at regional field days in March.



30" Okra Xtendflex line, CSX 4389B3F. Planted 19/10/2023



CSX 3141B3F. Planted 19/10/2023.



Caitlin Langley, AgBitech attended the AWM meetings to discuss options for Magnet, she also toured some of the local variety trials

Oliver Knox, CSD NSW Extension Manager with one of his past students, Emily Young, now Agronomist with B&W Rural inspecting a CSD variety trial







**Information** when you need it



# Gwydir crop check



Thanks to those that could make it to our AWM meetings. The Gwydir AWM meetings are a collaboration between CottonInfo, CSD, Gwydir CGA, CA, CCA & Bayer. All welcome to attend these informative meetings.

*Disclaimer - © Cotton Seed Distributors Ltd 2021. The CottonInfo Crop Check is a summary of cotton crop information gathered from consultants by each CottonInfo Extension Officer (REO) for their valley. This information is collected on a regular basis to share with growers, researchers, and other consultants. The information is just a snapshot in time and does not claim to be a report for each valley; just a summary of comments received.*

*This information is provided as a 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 document or from any errors or omissions in this document.*

*Seasonal Day Degree and historical data is sourced from Cotton Seed Distributors Day Degree Calculator found at [www.csd.net.au/ddc](http://www.csd.net.au/ddc). For more specific day degree and crop management detail for your farm, field and variety check out CottonTracka® at [www.cottontracka.com.au](http://www.cottontracka.com.au)*