



Information when you need it



the gwydir grower

11th February 2019

Crop/Bug Check (week ending 7th February) – Moree

Crop Stage

- Irrigated: 24 nodes to 26 nodes, mostly cut-out (2-4 NAWF) and short irrigation waters (1 or more irrigations than planned)
- Early planted dryland cut-out and later plant flowering but too much heat. Waiting for significant rainfall

Insects/Beneficial's

- Silverleaf white fly (SLW) on raising plane and up to 70% of crops have received a Pyriproxyfen spray.
- Seeing nymphs but very little parasitism
- Mirids and GVB (close to riparian areas) numbers up again this week
- Dryland Mirids around 1/m but not spraying because of spider numbers and current crop conditions.
- Few mites

Disease

- Vert present where we normally see it, but not bad.
- Fusarium seen at start but crop seems to have grown through it and looking ok
- Vert worse in fields that were chickpeas previously

What the consultants are saying:

"Our irrigated cotton is cutout, 24-26 nodes, 2-4 NAWF, it's had constant mirid pressure, significant increase in SLW last Thursday, have applied Admiral to 70% of our crops, haven't seen a lot of parasitism. Dryland Early Plant, 22 nodes and well and truly cut-out. Later Plant 18 nodes and just starting to flower"

"Irrigated at 5-6 NAWF, but we will be running out of water next week. Used Transform on mirids, no admiral to date. The later plant dryland is doing better than early plant"

"The dryland has been struggling for the last 8 weeks, it's trying to fill bolls, opening prematurely with both top and bottom bolls opening"

"Very late planted cotton, 10-12 vegetative branches before squaring and shedding squares on what's left"

“Our irrigated cotton is 24-25 nodes, 5-7 NAWF, possibly 1 irrigation short. It had one insecticide spray and SLW starting to increase, but no spray for SLW yet. Dryland starting to cut-out”

“Haven’t sprayed for SLW yet and hope to not have to. Some mirid pressure, especially next to sorghum crops. Only 1 mirid spray to date. GVB in some areas, can be a major problem and difficult to get a soft option for control. Crops cutting out, 24-25 nodes, 3-6 NAWF”

“Early planted dryland “cooked”, Later planted dryland hanging in there, keeping in vegetative stage, need rain”

Crop/Bug Check (week ending 25th January) – Mungindi

Crop Stage

- Irrigated: 18 – 24 nodes and cutting out.
- Most fields 1-2 irrigations short.
- Dryland variable, some just sitting there, 7NAWF, enduring the heat!

Insects/Beneficial's

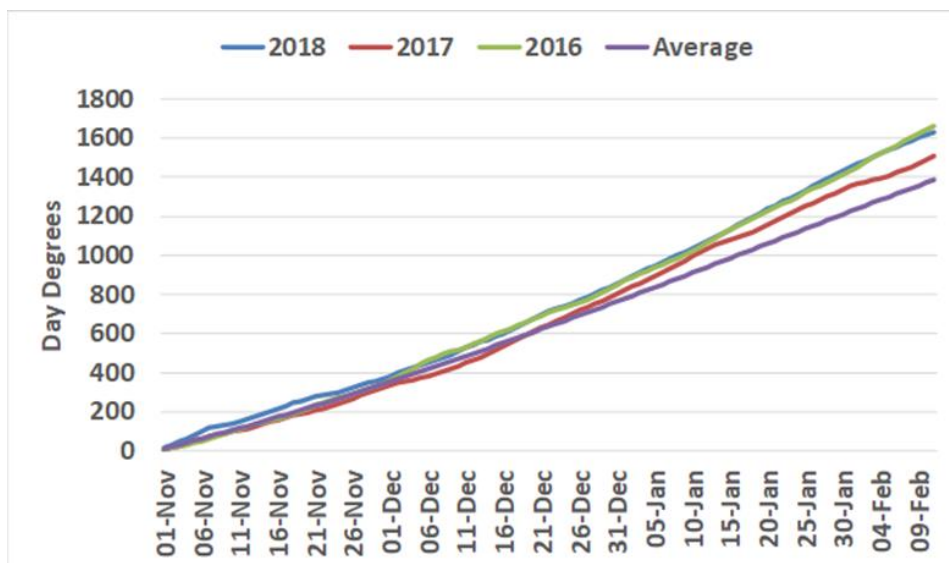
- Increased mirid activity, 2nd spray.
- SLW low levels but increasing, keeping a close eye on it.
- Better predation and higher numbers beneficials.
- Some fields have received a Pyriproxyfen spray.

Please note, that all agronomic decisions should be based around your crop and the pests found in it. This is a summary of responses from 8 consultants based in the Gwydir/Mungindi districts.

Day Degrees - Moree

Accumulated day degrees from planting date of 1 November until 11th February - Moree

- From 1st Nov – 1629
- 2017 – 1507
- 2016 – 1664
- Long Term Average – 1386

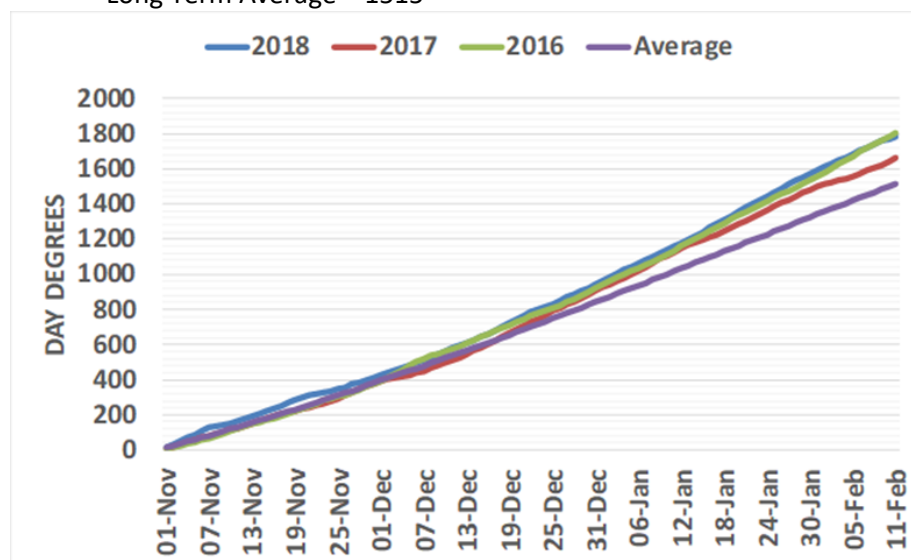


Date	2018	2017	2016	Average
Hot Days	48	40	53	20.5
Cold Shock	2	3	8	4.5

Day Degrees - Mungindi

Accumulated day degrees from planting date of 1 November until 5th January - Mungindi

- From 1st Nov – 1783
- 2017 – 1665
- 2016 – 1805
- Long Term Average – 1515



Date	2018	2017	2016	Average
Hot Days	63	54	69	37.5
Cold Shock	1	2	6	3.1

Silverleaf Whitefly (SLW) Management

The Gwydir and Mungindi windows are:

- Moree: 28th January 2019 – 28th February 2019.
- Mungindi: 25th January 2019 – 25th February 2019.
- Maximum 1 application of Pyriproxyfen per season

Reminder - when controlling SLW populations:

- Avoid disruption to natural enemies when controlling mirids
- All spray decisions should be made based on the SLW matrix in the Cotton Pest Management Guide: <https://www.cottoninfo.com.au/publications/cotton-pest-management-guide> pages 32-36.
- Growers and consultants should check their regional window before applying pyriproxyfen
- Maximum 1 application of Pyriproxyfen per season

The aim of the threshold matrix is to identify when populations are beginning to enter a phase of rapid increase and enact control prior to numbers reaching levels where they might pose a risk of

contaminating opening bolls with honey dew. Other factors that you might consider when approaching a control decision is you are unsure whether you are at threshold is to:

- Examine the lower foliage for signs of honeydew. If you are seeing speckling on the leaves or the development of a honey dew sheen on the lower leaves it is time to consider a control treatment
- Examine the lower main stem leaves adjacent to the first 3-4 fruiting branches. If there are reliable numbers of nymphs present and this coincides with the presence of honeydew it is likely that you are observing an increasing population
- Consider your crop stage. The aim for pyriproxifen usage is to bring whiteflies under control by the time the first bolls open. This means that your control decisions when using a product such as pyriproxifen should be made at least a fortnight before first open boll as the product will take 14-20 days to bring about population decline.
- Ideally use a softer selective product when controlling mirids to reduce any adverse effect on natural enemies (Beneficials). One of the reasons pyriproxifen works so well is that it is highly selective and leaves the majority of SLW natural enemies in place after application. These natural enemies are very effective at “mopping up” any SLW that survive treatment and prolong the chance of any SLW resurgence. Fields that have been disrupted through the use of non-selective products for mirid management are more likely to have SLW numbers rebound 4-6 weeks after pyriproxifen treatment. Also the chance of resistant individuals surviving in disturbed fields is much higher.
- If your numbers are not at threshold but SLW are still present in the crop, continue to monitor the population and keep a look out for signs of honey dew.
- If numbers build up or honey dew starts accumulating after the pyriproxifen window has closed consider the use of a knockdown product to reduce numbers during boll opening.
- If you are worried that control might still be necessary before defoliation, products such as spirotetramat (Movento®), diafenthiruron (Pegasus®), acetamiprid/emamectin (Skope®), cyantraniliprole (Exirel®) or dinotefuran (Starkle) should provide effective control for any late season build-up depending on the situations circumstances.
- Remember that the objective is to limit the opportunity for honey dew contamination of the lint. Even mild honeydew can cause problems.

CottonInfo publication: [Avoid a sticky situation](#) and [Managing silverleaf whitefly in Australian cotton](#)

2018/19 Crop Competition

It's that time of year again, so please put in your nominations for the 2018/19 cotton crop competition.

- Crop Competition entry form attached
- Entry forms due Friday 25th February 2018 with judging to commence shortly after.
- Email completed forms to janelle.montgomery@cottoninfo.net.au

In case you missed it....

Siphon-less Irrigation Field Day, Deer Park

North West Irrigation Australia (IAL) Regional Committee joined forces with GVIA and CottonInfo last Wednesday and held a field day to look at the range of Siphon-less irrigation systems in place in the Northern cotton valleys. Thanks to the Cush family for hosting the event and show casing their new siphon-less developments. Over 140 people attended the day. We heard from growers Harry & Tom Cush, Richard Wright and Brett Corish, Designers Bernie Martin, Peter Leeson and Glenn Lyons,

Reserachers Joe Foley, USQ and Sam North, NSW DPI. Phil Alchin, C&W Accountants also provided some great information on investment decision when considering a system change.

Some of the key messages out of the day were:

- Soil type and slope will drive your design.
- While there are 3 main designs used in the north, each one is unique to the farm, there will be differences in design depending on soil type, field slope, infiltration characteristic, flow rate.
- Growers who have adopted siphon-less irrigation are seeing labour savings and machinery efficiencies, some have reduced tail waters and all have a better lifestyle
- The questions surrounding these systems are about irrigation performance. It hasn't been measured, we don't understand properly the uniformity of application and what the losses are.
- Most believe there isn't a significant change in water use or yield.
- Flat designs – potential for drainage issues during wet periods.
- There is definitely less control of water compared to a siphon system
- Structures are costly
- Generally reduce green area (although the % reported by growers varies).
- Complexity of the system means it pays to work with a designer.

NWIAL are working on a document to summarise all the findings from the field day.

A field day booklet was produced and is available at [here](#) on the GVIA website. GVIA also provides a great wrap-up about the day.

The Moree Champion also feature a story with some great photos [here](#).

What are the researchers up to in our district?

Dr Brajesh Singh, University of Western Sydney are currently carrying out a proof-of-concept project developing novel indicators (using both satellite imagery/data and DNA-based genomics analysis of soil biology) of soil health and productivity.

What does that mean? They want to develop some measures to assess plant and soil health which are less labour intensive and cost and time effective. Then use these indicators to get information about your field and crop. Such as, how good is it at fighting off pathogens, how does it respond following moisture stress. These indicators may also help develop information on the time of irrigation, fertiliser, disease control to minimise disease incidence. This 3 year project is funded by CRDC.

His team were in Moree last week (Dr Juntao Wang, Simranjit Kaur and Bronwen Roy) and spent 2 days collecting soil samples and plant samples from various farms in the Gwydir to examine the microbiology of the soils and disease levels in plants.



Dates for the Diary

AWM Meetings this week

- **Gwydir West AWM**
 - Date: Wednesday 27th February 2019
 - Time: 4:00pm
 - Location: **Mallawa Racecourse, Mallawa.**
 - Directions: <https://goo.gl/maps/3JQ1Q7z14vH2>
 - Refreshments sponsored by Syngenta (Andrew Dayas)

- **Gwydir North East AWM**
 - Date: Thursday 28th February 2019
 - Time: **4:00pm**
 - Location: Auscott, Midkin Office
 - Refreshments sponsored by Adama (Rob Lomman)

- **Lower Namoi Cotton Growers Association Field Day**
 - Date: Wednesday 20th Feb 2019
 - Time: 12.30pm
 - Location: Starts at CSD Head Office, travelling to:
 - 'Havana' - bankless channel
 - 'Pindari' - PTB set-up
 - 'Auscott' - limited water trial
 - CSIRO - damage recovery trial
 - Locharba Research Station (Bayer) XtendFlexTM trial
 - Flyer attached
 - RSVP Bob Ford, M. 0428 950 015 E.bford@csd.net.au

- **CSD Field Day**
 - Date: Wednesday 20th February 2019
 - Time: 4:00pm
 - Location: Little Mollee @ CSD farms
 - Flyer attached
 - RSVP Bob Ford, M. 0428 950 015 E.bford@csd.net.au

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