4th March 2018

Bug Check - Moree
- One Solonopsis Mealybug found in Gurley/Bellata district.
- SLW adults and nymphs still present, generally no change in numbers this week.
- Parasitism is evident in SLWF populations, levels vary.
- Admiral has worked well.
- Mirids still persistent in anything squaring/young bolls
- Beneficials ok

What the consultants are saying:
“SLWF still present but not exploding – so OK for now, but prior to the rain I thought some crops would need a follow up knockdown... parasitism is evident in SLWF populations”.
“SLW numbers seem to be holding since admiral spray, not decreasing much but definitely not increasing, not seeing any real honeydew as yet”.
“SLW numbers decreased and very low where admiral applied 3 weeks ago. Still around but lowering where admiral sprayed 2 weeks ago. Non existant in dryland at the moment. Has not has admiral”
“SLW numbers are low - both Adults and Nymphs. Admiral has worked well”
“SLW adults are very active, numbers are static, no knock down sprayed as yet, very low levels of SLW parasitism evident”
“Mirids still persistent in anything squaring/young bolls”

Crop Check - Moree
- Last irrigations mostly on or due in the next 5 -10 days

What the consultants are saying:
“Last irrigation starting in the next few days, defoliation second week of April “
“Last irrigation happening around rainfall event predicted. Early fields on last water now and later planted cotton over next 2 weeks”
“748 maturing slower than 746”
“Some fields finished Irrigation (10%), most require 1 more (50%-60%), and 30-40% require 2 more. Rain on Sunday/Monday will change this”
“Last irrigation done, defoliation to start in about 10 days”
Bug Check - Mungindi
- SLW adults and nymphs still present, but not increasing
- SLW Nymphs parasitism is evident

What the consultants are saying:
“Whitefly numbers remain quiet and certainly haven’t been building. Admiral in some fields has been slow and taken up to 3½ - 4 weeks to actually work whereas other fields have dropped off after on 2-3 weeks. Has reinforced in my mind the need to apply in early to mid-January so that it is working during February”.
“Pegasus has given excellent knock down this year and worked well”

Crop Check - Mungindi
- Last irrigations mostly in the next 5 days
- Defoliation to start on most fields in next 12 – 24 days

What the consultants are saying:
“Generally holding off applying the last irrigation to any fields that may need it to see how much rain eventuates. Majority of fields are due to be defoliated within the next 12-24 days.
“A couple of early fields have been defoliated and look good though rain will cause regrowth problems”

Solenopsis Mealybug Confirmed in Gurley/Bellata District
With Solenopsis mealybug widespread throughout Queensland and confirmed in WA, NT and VIC, and mostly recently in the Macintyre valley, it was only a matter of time until Mealybug was to turn up in the Gwydir Valley. It has been confirmed on a dryland farm in the Gurley/Bellata District. Growers and consultants are encouraged to remain vigilant in monitoring for this pest and please report any sightings to Janelle Montgomery, CottonInfo REO Gwydir, Mungindi so we can monitor movement within our valley.

What to look for: Growers and consultants are encouraged to keep an eye out for mealybug and mealybug hot spots. Solenopsis mealybug adults are 3-4 mm long and have 6 characteristic dark spots along the abdomen tough they often look like 2 larger bare dark spots. They also have another two dark spots on the thorax. Mealybugs will build up in very large numbers on the tops of a small group of plants and form a “hot spot” of dead or dying plants. Mealybug are more likely to be prevalent in crops that are stressed, so particular attention should be paid to these areas (eg tail drains, lighter soil). As well as looking in crops, it is worthwhile scouting any volunteers, or hosts (eg pigweed or fleabane) that are near cropping areas. Mealybug have a very wide host range, so it may be useful to look in surrounding vegetation including gardens, to give an indication if they are in the area.
Management:

- **Beneficial insects are highly effective in keeping mealybug populations in check;** chemical insecticides should be used to support control as a last resort if beneficials are absent or at very low densities and population is growing.

- **DO NOT USE BROAD SPECTRUM PRODUCTS FOR MANAGEMENT OF OTHER PESTS AS THIS IS LIKELY TO FLARE MEALYBUG**

- There is currently a permit for Transform (sulfoxaflor) PERMIT NUMBER – 85052 and for NSW, an emergency permit for APPLAUD (plus other registered containing Buprofezin 440g/L as their only active constituent) PERMIT NUMBER – PER84127. Refer to and follow permit instructions.
  - Good coverage and the use of appropriate adjuvants (as per label and research recommendations) is critical for effective control with chemical insecticides; depending on plant size, higher water volumes, up to 250-300L/ha will increase efficacy.

- Research has shown that sequential applications 14 days apart may be required to achieve a satisfactory level of control using Transform (sulfoxaflor).

- Thorough crop destruction/residue management as well as control of potential weed hosts will help to reduce risk for future seasons.

- Pest control should aim to preserve the natural enemies that include:
  - Predators Common ladybeetles, Cryptolaemus ladybeetle, lacewings, smudge bugs, earwigs.
  - Parasitic wasp – Aenaisus bamabwalei, a parasitoid of Solenopsis mealybug are reasonable wide spread and are effective in suppressing populations.

“If anything drives you to IPM, its Mealybugs” Iain Macpherson, Goondiwindi.

“Don’t stir them up! When they first came to the valley, people sprayed, but they just came back harder. Mealybug will get into every nook and cranny on the plant, just too hard to control. If you do use chemical you’re still going to need your beneficials. They start out on one plant, then just spread out like a crop circle, then spread across whole farms” David Parlato, Emerald.

What to do if you find them:

- Correct identification. While there is a high probability that you have found Solenopsis mealybug, there are other similar looking species that occasionally occur in cotton but rarely cause crop damage. The beat sheet blog link below includes
good photos to help with ID, however if you are unsure email a good photo to either Simone Heimoana, CSIRO Narrabri Simone.Heimoana@csiro.au or Richard Sequeira, QDAF, Emerald, richard.sequeira@daf.qld.gov.au.

- Mark the plants they are on, as they can be difficult to locate when in low numbers. Mealybug colonies can disappear between checks due to predation. Re-checking marked plants will enable you to judge the efficacy of any natural enemies that are present and also provide an indication of the species present when it comes to making future spray decisions and selecting options that best conserve them. Tagged colonies also provide an indication of the potential disruption that a spray decision might have had as mealybug will quickly increase in numbers when natural enemies are removed.
- Look for the presence of natural enemies. It is highly likely that there will be other colonies elsewhere in the same field, and evidence of predation and parasitism and whether or not the Solenopsis colony is growing or dwindling in number will provide you with a picture as to what is occurring in your field at a broader scale.
- Come Clean Go Clean. While mealybug can be transferred by wind or water, people and machinery movement can rapidly expand the rate of spread. Wash down machinery going from heavily invested hot spots to fields without any mealybugs. Clothes may also carry mealy bugs. Aim to visit fields with mealybug last, and brush clothes down before hopping into vehicles. [http://www.cottoninfo.com.au/publications/come-clean-go-clean](http://www.cottoninfo.com.au/publications/come-clean-go-clean)

**For more information:**

CottonInfo Mealybug Webinar: [https://www.youtube.com/watch?v=cvbp5wCHBms](https://www.youtube.com/watch?v=cvbp5wCHBms)

Richard Sequeira, QDAF, has been leading a program of extensive pesticide and ecology research on mealybug and can be contacted on 07 4991 0810 or via richard.sequeira@daf.qld.gov.au if you have concerns.

**Day Degrees - Moree**

Accumulated day degrees from planting date of 15 October until 3 March

- From 15th Oct – 2007
- 2016 – 2119
- Long Term Average – 1820
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<th>Date</th>
<th>2017</th>
<th>2016</th>
<th>Average</th>
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<tr>
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**Day Degrees - Mungindi**

Accumulated day degrees from planting date of 15 October until 3 March

- From 15th Oct – 2194
- 2016 – 2303
- Long Term Average – 1987

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<th>2016</th>
<th>Average</th>
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<tbody>
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<tr>
<td>Cold Shock</td>
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**Dates for the Diary**

2018 CSD Farms Field Day

- Date: Wednesday 7th March 2018
- Time: 3:30 pm CSD Farms, Culgoora Rd, Wee Waa
- All welcome
- Further information, contact Alice Devlin E. adevlin@csd.net.au M. 0418 818 142
Gwydir Valley Cotton Growers Association General Meeting

- Date: Thursday 22\textsuperscript{nd} March 2018
- Time: 1pm
- Place: GVIA Office, 100 Balo St, Moree
- All cotton growers and associated businesses welcome to attend.

Janelle Montgomery
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