the cotton wrap

April – May 2020

Season Summary

Picking has begun throughout the Namoi region, with crops yields below originally anticipated due to a dry December and January, followed by late rainfall. Many growers have grown their crops out to capture late season yield. Therefore, many crops are a lot later than originally anticipated, with the bulk of crops about to receive their final defoliation and start picking in the next week. Yields at this stage vary depending on a number of factors; how much fruit was lost through February; whether the crop had enough moisture to finish; and how much verticillium wilt or boll rot was in the field and at what crop stage it came in.

Figure 1 - We are all this happy to finally be wrapping up a long and difficult season

There has been a large yield range in the crops picked so far with many outliers, but the main yield range is between 7-12b/ha thus far.
Only 5% of the crop has been picked across the Namoi so there are little quality results yet.

Widespread rain (including Walgett area) means that winter crop options are looking very promising with a lot of the areas having close to a full profile. There are already large areas of Wheat and Oats out of the ground, with plenty more to go. Lake Keepit currently sits at 13.8% capacity, for more information go to https://realtimedata.waternsw.com.au/water.stm

Cover Cropping

As we head into the potential of a good winter cropping phase it is an opportune time to consider the benefits of cover cropping. Over the last few seasons CottonInfo have done some work in trying to capture the top tips and main benefits of cover cropping across the growing regions.
See link for more information:
https://www.cottoninfo.com.au/publications/cover-cropping-case-studies

Figure 2 - Cover crop near Texas

Water Benchmarking Results… What are they good for?

Many growers have generously given up their time and farming data to help the industry pull this information together. In the current climate our social license is almost as important as our water licence. To be able to tell our story we need accurate, real data, from across the growing regions to be able to measure the significant gains our industry has made over the last 30 years. Click on the link to find out how you can be a part of this project. https://www.cottoninfo.com.au/sites/default/files/documents/Water%20researcher%20case%20studies%20Feb%202020%20-%20Benchmarking%20water%20productivity.pdf

On Farm Storages

In the event that we keep getting rain over the next few months, and have more go into our catchment I have added some helpful links here for growers who will be filling their storages for the first time after prolonged drought conditions. Weeds are a big factor when filling a storage after a long dry period. Studies have shown when you first fill your storage after its been dry, you can lose up to and in excess of 2.5 ML/ha of storage floor. You want to conserve moisture and reduce cracking, therefore, weed control is important. If the storage soil surface can dry and crack, soil evaporation losses increase, and significant amounts of water can be lost running down cracks.

It is also an ideal time to install permanent storage meters, to continuously measure and record storage volume and water surface area. Knowing the exact amount of water you have gives you the opportunity to fine tune your water budgets and asses whether you are having any other unnecessary losses in the system – taking the guess work out.
To avoid potential problems such as erosion and blow outs, dry storages should be filled slowly. If possible, the filling rate should be no more than 300mm of water a day and preferably less than 100mm a day.
Here are some good practical fact sheets and video links on storage management.

- Storage survey for accurate volumes
- Storage maintenance
- Minimising storage evaporation and seepage

- On-farm storages: benefits of a maintenance program https://www.youtube.com/watch?v=kGbReMG51_Y&list=PLQy8KAPn-DyrDdVd--pzHPRBqMFa8Qnrv&index=8
- On-farm storages: surveying to determine accurate volumes https://www.youtube.com/watch?v=sBEl-1jWRXI&list=PLQy8KAPn-DyrDdVd--pzHPRBqMFa8Qnrv&index=6
- On-farm storages: minimising evaporation and seepage losses https://www.youtube.com/watch?v=uOWO4T7iLXI&list=PLQy8KAPn-DyrDdVd--pzHPRBqMFa8Qnrv&index=7

New look for the CSD Cotton Management Tours (CMT)

Due to the ongoing pandemic of Covid-19 CSD is seeking you feedback on how you want to access the important information that is usually delivered in the regional meetings. Here is there media release.

"We plan to hold the CMT again in 2021, but in the meantime we are seeking your feedback to help guide our delivery of information and activities prior to the 2020-21 cotton season. We'll be in touch in the coming weeks and months with details on our information and activity program, based on the survey feedback."
Let them know you preferred method by following this link:
https://www.surveymonkey.com/r/5S67T57
In the interim, CSD advises that it has plenty of cotton seed stock on hand, ready to supply a full industry plant in the 2020-21 season.

Disease in the Namoi this season and going forward…

Again, I would like to extend a big thank you to all growers and industry members who support the disease surveys each year, it is valuable information that benefits the industry and is great to have such a big data set year in year out.

It is no secret that Verticillium Wilt is one of our biggest disease issues in the Namoi Valley, with it rearing its head throughout most of our cotton growing regions this season. We also had large amounts of Boll Rot occurring in earlier crops which had retained their lower fruit, so yields may have been impacted from both ends of the plant. Further Verticillium testing from samples collected this season will distinguish result between the non-defoliating strain and defoliating strain. Although it is important to distinguish which strain you have, non-defoliating strain may still drop leaves and appear to be defoliating – so further testing is imperative if you have concerns.

Like all fungal disease, cold and wet weather favours the verticillium pathogen. Therefore, we saw a spike disease outbreak towards the end of the growing season. With the end of season rain in many area's, which would have otherwise run a short season crop due to water constraints, growing the crop on has lead to higher levels of infection or increased the potential of yield loss in these crops.

Figure 3 - Verticillium Wilt detected in stems cuts at a trial site in Boggabri

In hindsight and thinking about going into the next season its worth remembering the following factors:

- Lower V rank varieties such as Sicot 746B3F and Sicot 748B3F may be more susceptible to late season outbreaks when compared to other varieties such as Sicot 714B3F.
- Whilst excessive nitrogen use may not directly influence the proportion of infection, overuse of nitrogen will extend the crops maturity and provide more time for the disease to colonize and spread.
- Potassium deficient crops will also be at a greater risk of an outbreak of Verticillium wilt.
- Shallower root systems as found under overhead irrigation systems may be more susceptible to Verticillium wilt due to higher concentrations of inoculum closer to the surface.
- Plants with exposure to seedling disease may be more susceptible to other disease such as Verticillium wilt and environmental stresses.

Going forward it is important to monitor/record this seasons outbreaks so you can monitor whether the disease seems to be worsening in coming seasons.

- Destroy and incorporate crop residues as soon as possible post pick to speed up the breakdown of plant residues. Raking and burning or leaving residues on the surface will potentially spread inoculum further.
- Removal of volunteers and alternate hosts.
- Review intended cropping program and check to see the impact this may have on supressing or exacerbating the disease. Refer to the **Cotton rotation chart and tool** that can be found here: https://www.cottoninfo.com.au/cotton-rotation-tool

CSD and myself are working together on over a dozen on farm sites this year looking at Verticillium Management trials which are looking at different plant populations as well as a larger trial which is looking at plant population, variety and planting time. We also have some sights which have been GPS sampled for inoculum levels which we can overlay over the field and allow us compare inoculum levels through our treatments in the field.

We have only picked 3 of these sites so far and will start stem cutting these in the next week. We will hope to have some preliminary results to discuss in next weeks newsletter. There are also the CSD V-Rank trials which go in each season that we will stem cut in the coming weeks. If you have any further questions or comments please contact me.

Collection of Weed Seed for Herbicide Resistance Testing

Just letting you know we can collect some samples of weed seed for herbicide resistance testing. If you have any fields where you have resistance concerns, I can come out and collect some seed. You will be provided with the results from your farm by the NSW DPI Weeds researchers; Eric Koetz & Graham Charles. Your data will be collated anonymously with other data collected as part of the cotton industries herbicide resistance monitoring program.

We are collecting the following mature weed seeds: Barnyard grass, Liverseed grass, Windmill grass, Feathertop Rhodes grass, Annual Ryegrass & Sowthistle. Resistance has been confirmed in all these species. Other species on the radar are Bladder Ketmia and Red Pigweed. The weed seeds are germinated and then tested for Glyphosate and Group A resistance.

There are several reasons why weeds might survive a herbicide treatment but it is increasingly common for herbicide resistance to be the culprit. I can come out on farm and collect the weed seed, or you can collect the seed yourself by getting roughly a cup of mature seed into a paper bag. If collecting Red Pigweed just scrap the top few cm of soil under the plant into bag. Then call me to arrange pick up.

The paper bags should be labelled with:
Date:
Seed:
Collector:
Farm:
Field:
Grower/Agronomist Name, Mobile and Email:

Parthenium Weed

A weed of national significance and a biosecurity risk to NSW, Parthenium Weed, was recently located in the Narrabri Shire. The incursion was detected on the Pilliga Road approximately 12kms from the township of Wee Waa.
Council Weeds Officers are currently inspecting roadsides throughout this area to locate further Parthenium weed infestations. Parthenium weed is prohibited in NSW and has a devastating effect on farmland and is harmful to humans causing severe allergic reactions, asthma attacks and other respiratory problems.

If the spread of Parthenium goes unchecked, then the risk to the environment, the local economy and residents is high. Control measures to identify, eradicate and contain areas of infestation are currently being enforced throughout the Shire.

Containment of this weed is critical. If established, Parthenium can produce a seed bank that can last over fifteen years. Council is asking property owners and residents of the Shire to report any sightings of Parthenium and mark the location. It is essential that you do not remove the plant as this may initiate the plant to drop seed.

To report a potential sighting of Parthenium please contact Narrabri Shire Council Weeds Officers on 02 6799 6866 or the NSW DPI Biosecurity Helpline on 1800 680 244. For additional information about parthenium weed and how to identify the plant at different growth stages please visit NSW DPI Weed Wise

Website: https://weeds.dpi.nsw.gov.au/weeds/partheniumweed

AGSkilled WHS Training

Please find attached flyers for three of the courses Tocal College are offering under Agskilled, specifically designed for those in the Cotton and Grains industry. There are courses for Forklift training, telehandlers and a variety of others which will be handy considering we will finally have the chance for a fruitful winter crop season.

GROW – a women's leadership course covering Personal Effectiveness (time management, communication, difficult conversations etc), WHS & HR. This course is designed for women in business ownership and management roles with 5 years experience in business. 100% of the women who have previously completed GROW suggested they would make significant changes in their lives and business as a result of the course. This program has been a marked success with over 200 women having completed it. Join the GROW Alumni when you are complete!

THRIVE – a personal effectiveness program for men and women covering time management, organisation, networking, communication, dealing with conflict. A great course for those wanting to develop and hone leadership skills to better manage themselves and others.

WHS&HR Fundamentals – the newest of Tocal's offering under the AgSkilled program. This course provides business owners and managers resources, tools, templates and knowledge to improve WHS & HR in their business. Co-delivered with NSW Farmers, it covers WHS, Legally obligations when employing people and the "human side" of managing your team.

The AgSkilled program officially ends in June so this is the very last opportunity to sign up for one of these great courses. **You MUST register before 30th May.**

Please contact Bec Fing on housepaddock@bigpond.com for GROW and WHS/HR or Heidi Smith thrive@tocal.com for THRIVE to register interest. The courses will officially start in June but registration must be received by 30th May.

I encourage you to make the most of AgSkilled while the funding is available to the cotton and grains industry thanks to this great initiative of Cotton Australia and GRDC.

I wish you all the best for cotton picking and winter crop planting.

Cheers,

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