THE ARGUS

AUSTRALIAN COTTON INDUSTRY AWARDS

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Landmark Year For Cotton Awards

It's been a year of firsts for the Australian Cotton Industry Awards. We welcomed a new sponsor on board in crop protection specialists, ADAMA, who threw their support behind the next generation of cotton leaders by sponsoring the Chris Lehmann Trust Young Cotton Achiever Awards. The awards enjoyed the recommitment of sponsors in all other categories, Monsanto, Agririsk, IPF and Cotton Seed Distributors. We also decided to bring the glamour of the Gold Coast to Griffith, hosting a sit down dinner awards night in the heart of the burgeoning southern cotton industry to celebrate a new frontier of growers. It was certainly a great start to the year and the momentum has only continued to build.

In March the highly anticipated Monsanto Grower of the Year Field Day was attended by Deputy Prime Minister, Barnaby Joyce, who congratulated the 2016 winners Ian, Marilyn and Harry Carter, before applauding the work of the Australian Cotton Industry Awards more broadly. The Carter family hosted the field day on their property "Connamara" near Quirindi on the Liverpool Plains, NSW, demonstrating innovative approaches including the use of water injection at the time of planting and complex machinery adaptations.

"To the Carter family, the property is a credit to you and you're being rewarded for your effort and management expertise," the Deputy Prime Minister said. "In a nation that has some of the highest quality cotton in the world winning this award is a spectacular achievement." Mr Joyce went on to talk about the strength of agriculture more broadly. "As of December 2016 growth of agriculture was at 23.7%, which is about four to five times above any other sector. No other sector contributed more to the GDP for the last quarter than agriculture... we are, in a very large way, carrying the country."

In May the judging panel visited six outstanding grower finalists covering 2000 kilometres across QLD and NSW. From Gunnedah to Wee Waa to Miles to Mungindi to Warren and finally to Griffith, the calibre of the cotton farming operations visited was incredible. Innovative, productive, efficient, professional and clean farms employing best management practices (BMP) wherever possible. The growers and their families showed wonderful hospitality in welcoming the judging tour on farm, showing them the inner workings of their operation, and often providing refreshments. The contributions the grower finalists are making to industry was evident on the tour, making the task of judging all the more difficult.

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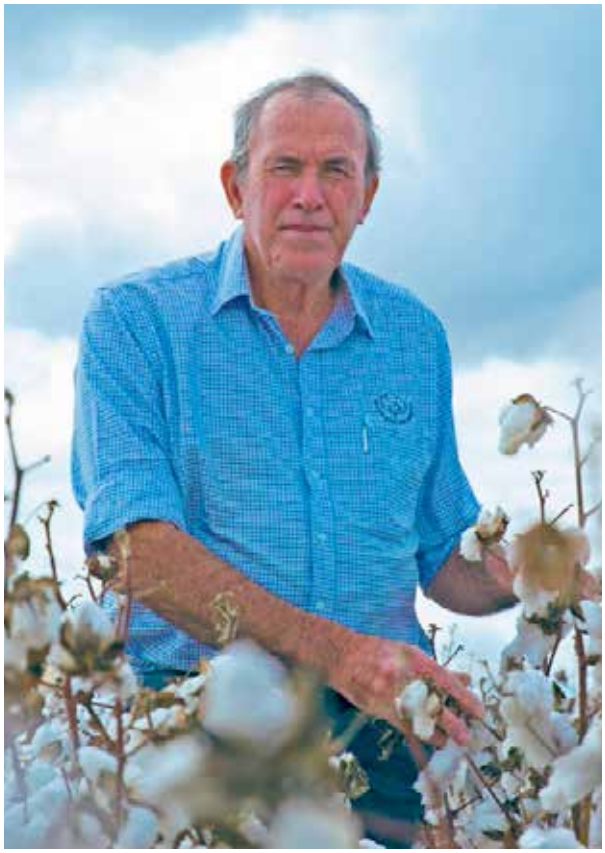
COLLECTIVE PROGRAM SUMMARY

DAY ONE	SESSION
8.00 – 8.40am	Registration | Tea and coffee on arrival
8.40–8.50am	Welcome: Simon Corish, Chairman of Cotton Australia
8.50–9.30am	Agriculture towards 2030
9.30–10.45am	Technology for change
10.45–11.15am	Morning Tea
11.15 –11.30am	AWARDS FINALIST – Monsanto Grower of the Year
11.30am–12.30pm	Connected agriculture for smarter farms
12.30–1.10pm	Happy workforce, productive farms
1.10–2.00pm	Lunch | Award Finalists - Cotton Seed Distributors Researcher of the Year & ADAMA Chris Lehmann Trust Young Achiever of the Year | WinCott AGM
2.00–2.40pm	The great march south
2.40–2.55pm	Awards Finalist – AgriRisk High Achiever of the Year
2.55–3.40pm	Australian Cotton in a Global Market
3.40–4.00pm	Afternoon Tea
4.00–5.00pm	Challenges for agricultural chemistries
5.00–5.30pm	Cotton Australia AGM
DAY TWO	**SESSION**
8.30–9am	Registration | Tea and coffee on arrival
9am–12.30pm	New products and technologies
12.30–1.30pm	Lunch
1.30-4.30pm	Cotton 101

IPF SERVICE TO INDUSTRY

John Marshall, Cotton Seed Distributors, Dalby, QLD
2016 Recipient



John Marshall has been an enthusiastic, knowledgeable and passionate member of the cotton industry. His 40 year long, highly distinguished career came to a close in 2016. Initially, John spent 20 years with Queensland Department of Primary Industries (QDPI) as a Soil Conservation Officer, before moving into more cotton specific work. His first taste of cotton was as a cotton extension officer with QDPI in Dalby from 1992-96. Here he was heavily involved in a Cotton Research Cooperative (CRC) dryland farming systems trial conducted at Jeff and Marilyn Bidstrup's farm at Warra. Data from this agronomic trial kick started grower confidence in dryland cotton production.

In 1996, John joined the CSD Extension team as a technical expert in the field, based in the newly opened "Cotton House" in Dalby. Around this time, John remembers being pleased with his irrigated trial yield outcome of 4.37 b/ac and dryland of 2.86 b/ac. Today, he is astounded and thrilled that irrigated yields are now 3 b/ac higher and dryland are 2 b/ac higher.

The phenomenal increase in Australian cotton yields is due, in part, to the development of ever improving varieties through the CSIRO and CSD joint venture. John played a significant role in the regional testing and extension part of the process of introducing new varieties. His outstanding knowledge and enduring commitment means John has been sought out by growers the length and breadth of the Sunshine State. He has worked with growers from the Darling Downs, Balonne, South Burnett, Dawson – Callide, Burdekin and Central Queensland regions.

He has analyzed the performance of cotton across these regions, in both irrigated and dryland systems, with both conventional and transgenic varieties, across various row configurations. His data has formed the basis for testing various planting rates, row configurations and the ways of using plant growth regulators.

Working with CSIRO, his ongoing research effort on Fusarium wilt has included the execution of countless Frank trials and farming system experiments. John was critical in the rapid formulation and delivery of a Silver Leaf Whitefly management strategy in the Central Highlands which prevented significant damage to crops during the 13/14 season. He, along with Greg Kauter, organised a study tour to the United States for 12 growers, research staff and consultants to see their management of the pest and bought this home to Australia.

John is a wealth of knowledge and support for growers, including helping Central Queensland growers with management options following the January 2011 floods. Taking a long-term view, he continued to monitor the impact of applied management and developed explanations on what occurred, for future reference.One of the key tools that John effectively uses in his extension practice is to identify growers who are doing things well, and unique situations that arise during various seasons, and share these experiences with other growers. He does this effectively through forums such as "Web on Wednesday" and "Facts on Friday", as well as in group situations. It would be fair to say that there would not be a cotton grower in Queensland that has not attended a field day hosted by John Marshall. He is an important link between industry and the R&D community, conducting field days in each valley in Queensland throughout the season.

John's ability to maintain excellent working relationships with researchers and consultant's, means he has been able to bring about industry- wide agronomic improvement over the course of his career. Above all John could be rated as one of the industry's most significant quiet achievers and his industry participation in the future, will be sorely missed.

MONSANTO GROWER OF THE YEAR FINALIST

Tony, Joyce, Matt & Daisy Toscan, Cavaso Farming

Cavaso Farming has achieved impressive results since they began farming cotton just seven years ago. On the 4200 hectare enterprise the Toscan family grow 1100 hectares of cotton, along with other crops like Durum wheat, popcorn, maize and prunes. They use siphon and bankless irrigation on a cotton, wheat rotation, employing minimum till and controlled traffic approaches. They are now achieving average yields of 12 bales per hectare. "We're focused on always going on to fallow paddocks or fallowed after wheat," Matt Toscan explains. "We think that gives us a better shot at a top yield, it also gives us a disease break, repairs the soil and any compaction damage, and that's what why we think the program and this rotation has given us the biggest advantage."

They are currently transitioning from a maize and cotton rotation, working to streamline and standardise their operation by reducing the number of crop varieties. The introduction of cotton has seen some major changes to their property, including transitioning from farming on 1.8 metre beds to 90cm hills, converting from 8-row to 12-row and the use of different types of equipment such as front-linkage on tractors to run passes at the same time. Matt has adapted planters, cultivators and attached rollers to the front of planters to allow rolling and planting to occur at the same time, cutting down on labour and diesel. "With our row crop equipment, we've tried to stick with standard size bars for the planters, cultivators, so we can interchange tooling and it sort of future proofs the equipment," Matt explains. "If something becomes redundant down the track you can use the bar for something else. We've been pretty picky about what equipment we buy."

The irrigation allocation for Cavaso farming is made up of ground water, river water and water sourced from the Coleambally Irrigation Co operative. Irrigation channels are controlled remotely by an automated system. "It's a constant amount of water flowing into the crop," Matt says. "You can start and stop, change your flow rates within 2 hours notice and it saves water, there's no wastage, you can cut off at exactly the right time and you don't have to be there. It just saves a lot of travelling and a lot of time." Improvements in water efficiency have also come from improvements in yields, a big jump resulted from the release of new cotton varieties. Integrated Pest Management (IPM) helps encourage beneficial insects and protect bees, while weeds have been a huge focus in recent years resulting in a much cleaner property. Having Murrumbidgee river frontage has also meant the Toscan's have focused on environmental improvements including fencing off riparian zones, installing water troughs. "Biosecurity is really important for us because it's a new cotton area and you're starting off clean, without any weed or disease and the only way to keep them out is biosecurity," Matt says. "So that's why we do everything inhouse - we pick our own cotton, we do all our own spraying. We probably look like we've over capitalised with some things, like picking equipment, but we can only keep the advantage of being clean as long as we can keep the disease out."

The Toscan family believe cotton has helped improve the profitability of their operation, which has allowed them to make beneficial changes to the farm overall. "It looks really good on your balance sheet and it's been yielding a lot higher returns than the crops we were growing previously," Matt explains. "I want to be in enterprises that are profitable enough that we can afford to keep updated equipment and cutting edge technology, which is going to encourage the next generation to come back because they take an interest in it because they can see the advances in technology. That's one of the reasons we went to cotton, so we could keep up with it and not fall behind."

MONSANTO GROWER OF THE YEAR FINALIST

Ross Uebergang, Uebergang Agriculuture

Ross Uebergang farms 400 hectares of irrigated cotton yielding up to 13 bales per hectare in recent years. 'Tinobah' totals 2200 hectares, with 650 hectares irrigation country comprising a mix of flood and centre pivots. Dryland farming makes up 400 hectares while the remainder of the operation is cattle including 80 hectares of irrigated pastures and a small backgrounding feedlot. Manure from the feedlot operation is used to fertilise crops. The operation relies on water allocations from the Chinchilla Weir, flood harvesting and overland flow. Treated water from nearby coal seam gas operations currently accounts for 40-50% of the farm's overall water allocation. Uebergang Agriculture employs two full time employees and one part time employee.

During the past decade Ross has introduced the use of centre pivots into the irrigation scheme to improve water efficiency in areas where topography makes flood irrigation unsuitable. Centre pivots now make up 75% of irrigation scheme and achieve both greater water use efficiency and labour savings. Over the past three years he has improved irrigation management by tightening watering intervals and watering more often, which he says has drastically reduced stress on the bush and lifted yields by 30-40%. The centre pivots also save on seed bed preparation operations as there is no tilling required. "Since I came home we've really pushed the centre pivots," Ross explains. "I did a case study while on placement at university and really saw the benefits pivots had in that business and I could see a real fit in our area. Laterals and other overhead systems wouldn't work here, purely because of the topography of the land plus the cost per hectare is a lot higher than centre pivot. I'm really happy with the way the system is working."

Cotton is the pillar crop in a varied rotation system including cover crops and cereals. Attention to cover cropping and stubble retention has greatly aided in storing more moisture and limiting irrigation runoff. Ross works with smaller field sizes, averaging approximately 40 hectares and aims to streamline operations. "Focusing on a single crop of high yielding cotton allows us to gain efficiencies with machinery, labour and irrigation resources as we aren't swapping operations constantly and trying to juggle several crops throughout the season."

MONSANTO

Ross is proactive in environmental protection, fencing the river to reduce erosion, conducting aerial shoots to control pigs and retaining wildlife corridors which double as wind breaks to limit spray drift. The weed management program on Tinobah involves a strict pre-emergent program, beginning before a field goes into fallow and ending approximately six weeks before planting. "This allows for good control of hard-to-kill weeds and limits the use of knock down chemicals," Ross explains. "We aim to only use roundup "in crop" as that is where it gives us the most benefit. We have also started using a shielded sprayer recently giving us the use of several more chemicals for hard to kill weeds in crop. We use a wide variety of chemicals to prevent resistance and for insects we always wait until we hit threshold. Once a spray is necessary we always use a product which is "soft" on beneficial insects."

Constantly looking for new ways to better utilise water and land is a key feature of Ross' management style. Earthworks are currently underway to construct a new ring tank with deeper and larger storage to reduce water lost to evaporation. "I love my job, I really enjoy growing cotton and I love a good harvest every year," he says. "You always want to do the best job possible. Every day we're trying to achieve better water efficiencies, we've spent a lot of time on levelling country to get the best flow off water, the best infiltration and the best crop. Obviously if your farm's really profitable then you can really build on that and you've got the money to invest in it. I'm really proud that someone has thought that our enterprise is good enough to be at this level."

MONSANTO GROWER OF THE YEAR FINALIST

Simon Corish & Maurice Pearce, Corish Management P/L

'Yattlewondi' covers approximately 5500 hectares and has reliable access to water from the Weir and Barwon River, which flows into 14000 megalitres of storage on farm. During his time managing the property, Maurice Pearce has achieved significant increases in productivity, efficiency and yields, as well as increasing the total farm production area. With the support of farm owner, Simon Corish, and agronomist, Jim O'Connor, he currently farms 1950 hectares of irrigated cotton and 1220 hectares dryland farming area, using a wheat, barley and chickpea rotation.

Corish Management has implemented a transition from back to back cropping to a "one in one out" field rotation schedule in the irrigation area. This has led to maximised crop returns with minimum water, labour, fertiliser and chemical input. This was a major departure from the previous management style where some fields were farmed for four or five seasons without a break. "The water reliability in this area has always been fairly high and due to that we were growing a lot of back-to-back crops," Simon explains. "Through industry research we know that's not good, yields were decreasing and our inputs were increasing, and so we made a very conscious effort to change that. For the long-term sustainability of the property and the long-term sustainability of our financial records, we moved the farm to a 'one-in-one-out' rotation and we looked at the Healthy Headwaters project and that's really turned this farm around."

The Federal Government's Healthy Headwaters water efficiency initiative played a significant role in the transformation of the property, enabling the implementation of earthworks and bankless channel irrigation, which has resulted in water savings of 5-10% and increased bales per hectare. Overall average yields have increased from 10 to 15 bales per hectare, whilst improving the long term sustainability of the farm through better soil health. "By virtue of the fact that we're growing our primary irrigated crop, which is cotton, on fallow each year we're able to use a little bit less fertiliser because we're naturally mineralising some urea over the fallow period," explains Yattlewondi agronomist, Jim O'Connor. "It's giving us the opportunity to grow the crop over some country that's in really good condition, so we get a really good efficiency of the inputs that we do apply. Our fertiliser numbers have improved and all your numbers look a lot better when you put the same amount of inputs in, but grow a higher yield. When we were using water, the same amount of water 2 or 3 years ago and growing 10 bales, now we're growing 12, 13 maybe even 14 bales for the same amount of water, so our efficiency automatically improves and that's the same across so many of our other inputs."

The team at Yattlewondi are a great example of best practice management and adopting new technologies to run a more efficient farm. "With the cotton industry there's plenty to learn," Maurice says. "I'm always trying new technologies, and the technology in the cotton industry is increasing every year, and you've just got to keep up with it. I look forward to that in a sense." Maurice works with three permanent farmhands and employs up to three additional workers during busy periods. Simon stresses the importance of having hard working staff and low turnover. "I need to reiterate how important it is to have good people, I wouldn't be able to do what I do without them," he says. "Maurice has nearly been with us for 30 years and Jim's been a part of our business for nearly as long and they're worth their weight in gold!"

MONSANTO

AGRIRISK HIGH ACHIEVER OF THE YEAR FINALIST

Andrew Dickson, Marebone

COTTON
- Industry Awards -

Andrew Dickson farms 650 hectares of irrigated cotton on 'Marebone', a 3400 hectare property 50 km north of Warren in Western NSW. Just under half the property has been developed for siphon irrigation and he operates a system based on a cotton, cereal and legume rotation. In recent years, average yields have ranged from 13.8 to 15.5 bales per hectare. "We've manage through our crop rotation, selective tillage options, timing and a real emphasis on establishment and preparation," Andrew explains. "We've developed our soils over the years to equal some of those better soils to the east and we're seeing the returns now. We're getting as good if not better yields than most other areas."

Through improving water efficiency, attention to soil health, promoting beneficial insects and keeping to a simple fertiliser program, Andrew has managed to increase bales produced per megalitre. He believes careful budgeting and forecasting, with an emphasis on yields, helps improve profitability. In the future he hopes to increase water security allowing the production of more consistent, sustainable cotton. "Water efficiency is paramount to our business because nine years out of 10, water is our limiting factor," Andrew says. "Water drives everything we do here so if we can do a little bit more per meg we should be a long way in front in the long run. We also look closely at water timing and infrastructure, making sure we've got the most efficient infrastructure in place and making sure that our water timing for the crops is the best practice."

Keeping a long term view is a key part of Andew's approach to farming, including nitrogen fixing crops in his rotation and experimenting with trials of different legumes. "I think sustainability is paramount because I don't think there's any point in doing something today if you really are risking it for future generations," he explains. "We always look for sustainability in everything we're doing and we're making sure we're not jeopardising any future involvement."
Andrew believes Marebone has strengths in the layout of the property, originally developed and designed by his father. "The layout is particularly good, my father came here with a bit of vision and I think he's seen it through," he says. "His work is paying off now, five years ago we aver aged 11.6 bales a hectare over the whole farm, that was over 400 hectares, and then last year we averaged 15.5 bales a hectare over 270 hectares so in a few years we've increased the yield dramatically." Andrew is also actively involved in his local community and cotton industry bodies. Last season he hosted the highly successful Macquarie Cotton Growers Association Field Day on his farm. Over the years he has also been involved in the MCGA Annual dinner and awards, along with various fundraising events.

AgriRisk

AGRIRISK HIGH ACHIEVER OF THE YEAR FINALIST

Mark Cathcart, CSD Farms

Mark Cathcart has been growing cotton for 35 years and currently farms approximately 280 hectares of irrigated cotton on CSD Farms, near Wee Waa, Northern NSW. CSD Farms is an amalgamation of three farms totalling 1,130 hectares with 650 hectares irrigation. Overhead, siphon and to a smaller extent, drip irrigation is currently in use. The property has access to a reliable river allocation and five groundwater bores from which water is stored in 1,300 mega-litres of onfarm storage. The property is also fully BMP accredited.

At CSD Farms cotton is grown in rotation with winter cereals. The team includes Mark as the full time manager, two permanent employees and casual staff throughout the year. Contractors are employed for the harvest of winter and summer crops, but most other operations are done inhouse. CSD Farms has three principle functions being early generation seed increase, cotton crop research, and variety and technology demonstration. Mark and his team take the breeder seed handed over by CSIRO and over successive years screen and produce volumes of potential varieties, which can then be grown out by commercial seed growing partners. "It's basically like a research farm, but most of our work is seed increase for our company," Mark explains. "When we're growing cotton for seed, we're not always looking for the highest yield; we're looking for evenness of finish so that we can have a more mature, timely crop. We're trying to get the seed picked before we're influenced by any sort of weather, to maximise the quality of the seed. So seed production is our primary role and our lint is our secondary commodity."

Mark and his team are also responsible for conducting a vast array of trials including screening of new varieties for diseases such as Verticillium wilt, crop spacing and row configuration for dryland and irrigated farming systems, irrigation technologies, crop nutrition, seed treatments as well as new biotechnologies.

"In any one year we could have between 20 and 30 different trials going," Mark says. "The trials may be seed, product or technology related, and while we try not to overload ourselves, we do as much as we possibly can. We have six commercial cotton varieties in at the moment. The farm is a really important link in the chain for the whole cotton industry because we'll get a first look at a variety, we'll evaluate it, trial it and see if it's got a fit for the industry."

To achieve the highest possible seed quality as well as commercially acceptable lint yields, Mark undertakes an extensive soil testing program annually to determine soil needs, depletion and remediation. Cereal and pulse rotation cropping is critical in maintaining soil health and seed quality, so retention of crop stubble has enabled him to improve soil health, while also improving water use efficiency. Where possible, he also employs a minimal approach to insecticide application in order to encourage early season beneficial insects. Mark routinely achieves an evenness of maturity across the crop to produce the most consistent, highest quality seed and commercially acceptable lint yields.

Mark enjoys being at the forefront of the development of new cotton varieties and taking on the challenges of growing for seed. "I find it exciting to be looking at a host of different things all the time," he says. "I'm not a person that goes looking for accolades but I've felt that being part of the Cotton Industry Awards has been good to get me out of my comfort zone. I think that CSD Farms has something to offer to the awards, it's going to show people what we are all about, and show that we're really doing something important for the industry."

AGRIRISK HIGH ACHIEVER OF THE YEAR FINALIST

Rodney Smith, Ruvigne

Rod Smith has significantly improved water and nitrogen efficiencies, soil productivity and minimised chemical applications since he started managing 'Ruvigne' in 2013. With the support of four permanent full time staff he farms 400 hectares of irrigated cotton in rotation with 250 hectares of durum wheat, with over all farming country covering 1700 hectares dryland and 740 hectares irrigated. He also runs 80 head of Wagyu cross Angus cattle on area unsuitable for farming. Rod has focused on morphing the operation into a cotton, durum, fallow rotation with stubble retention to improve soil health which has seen an increase in average yields, achieving 12.5 bales per hectare on irrigation last year.

A variety of nitrogen and water efficiency trials have been hosted on farm in recent years, which has yielded valuable findings able to applied to every day farm management. He introduced soil probes to better manage soil moisture and water application rates, running soil probes to a 70 mm deficit before watering, usually applying 6.8 - 7.2 megalitres per ha. Ruvigne has river and underground water allocations as well as overland flow during heavy rain events. All irrigation occurs under a flood irrigation system. Rod places huge emphasis on timing in his overall management strategy. "Our biggest challenge is probably our short season length so timing is a big factor," he explains. "Watering on time, shortening our water intervals, we get our beds up early, getting our Nitrogen on at the right time, then obviously if there's any insect sprays that need to go on, make sure that they're on at the right time. So, I think it's just, making sure that those are done in a timely fashion."

Routine soil testing has ensured optimal nitrogen application rates, while machine adaptations have improved labour and machinery use efficiencies while also minimising soil disturbance and compaction. While Rod has lifted yields by approximately four bales/hectare in the last four years he aims to increase efficiencies at the same rate. "We're trying to do more with less, that's the way forward so with these bigger yields we do need to lift up water use and adjust nitrogen rates accordingly but the efficiency should run with that," Rod explains.

Rod also contributes to industry bodies, serving as chair of the Upper Namoi Cotton Growers Association Chair for 5 years and involved with Cotton Australian representation for the last six years. "Being involved in those bodies introduces me to a lot of other growers and helps me keep at the forefront of what's happening in the industry," Rod says. "With cropping country worth what it's worth these days it's obviously harder and harder to get in to, so I think the next best is running someone else's for them and hopefully doing it well. It's a great spot to bring kids up. I've been farming since I finished school and I really enjoy doing it."

ADAMA CHRIS LEHMANN TRUST YOUNG COTTON ACHIEVER OF THE YEAR FINALIST

COTTON Industry Awards

Cameron Derbidge

Cameron Derbidge is an agronomist with Total Ag Services in the Macintyre Valley. After starting his career in cotton as a farm hand, Cameron worked his way up to irrigation manager and continued to work in the field while studying agriculture externally. "My first job on an irrigation farm was starting syphons, driving tractors, planting cotton, cultivating and operating cotton pickers which led to managing staff and the crops, working alongside the agronomist before stepping into the next role as an agronomist," Cameron recalls. "Starting at the bottom and working my way through is where I give myself the most credit."

Cameron's leadership skills and keen interest in developing the cotton industry has seen him excel as an agronomist and gain a positive reputation in the industry. "I'm working with farmers and supplying them with advice to the best of my knowledge to grow the best crop," Cameron says. "To be able to convince a grower to grow cotton for the first time in a dryland scenario and pull off a reasonable crop, it's probably the biggest achievement that I get through my job."

Among his many contributions to the industry, Cameron has been actively involved with the Macintyre Valley Cotton Field Day Committee for the past six years and recently served two years as committee president. The committee hosted the Monsanto National Cotton Grower of the Year Field Day at Reardon Farms in March 2016, an event which has been described as the cotton industry's most successful field day attracting more than 300 people to Talwood.

Cameron works hard to showcase the farming industry in the Macintyre Valley. He also feels that field days and crop tours allow him to continually gather new ideas to refine and apply to local situations. "It's good to see the growers coming up from the Gwydir and the Namoi Valleys to see what we're doing as a valley and they then take that information home to their own farms," he says. "Field days are a great way to help facilitate change and adoption. They encourage growers to consider new industry developments by having the opportunity to engage in discussions with both the experts and the growers who are pioneering the adoption and programs, as well as see it visually in the paddock."

Community involvement through the Macintyre Valley Cotton Charity Golf Days saw $77,000 raised for the Goondiwindi State High School bursary over the past 11 years. Cameron has also helped with the Cotton Awards Dinner that attracts 240 guests annually. He heads up the annual Macintyre Valley Cotton Crop Competition in both irrigated and dryland categories with a team of judges from across the industry. This season the competition attracted 31 farms to enter. Cameron is motivated by the pace of the cotton industry's development and hopes to continue the innovation and collaboration. "The sky is the limit; I wouldn't doubt that in another 10 year's time our yields are going to be higher again," he says. "There's so much research and work done with varieties and growth habits that I think anything's possible. It's such a proactive industry."

His vision for the next five to ten years is for cotton growers nationwide to be effectively and appropriately using some form of satellite imagery or drone technologies combined with soil and moisture monitoring equipment. He also hopes to improve cotton's water efficiency and nutrition. Cameron believes agronomists can work with ADAMA to push for industry improvements. "They're definitely one of our preferred companies to work with. They do a lot of research and bring a lot of data with their new products," he explains. "I think in the cotton industry their chemical portfolio is probably the biggest and they've got new products coming through all the time."

ADAMA

ADAMA CHRIS LEHMANN TRUST YOUNG COTTON ACHIEVER OF THE YEAR FINALIST

COTTON Industry Awards

Fiona Norrie

Fiona grew up on a mixed farming operation near Narrabri, Northern NSW, and was attracted to cotton operations from a young age. Fiona started out spending her summers bug checking while studying a Bachelor of Rural Science at UNE. She now works as an agronomist with Integrated Crop Management Services in Moree, helping many local growers improve yields, sustainability and business performance. Day-to-day she drives from farm to farm, inspecting crops for weeds and insects, assisting with water decisions and monitoring for disease. She has now been working as an agronomist for seven years. "I try to take a scientific approach, communicating with researchers all the time about different topics," she says. "It's about trying to be that step ahead and coming up with slight increases in yield or productivity or sustainability, giving that back to our growers, which in turn helps the valley."

Fiona is also committed to improving support networks in agriculture, becoming the inaugural Young Aggies Committee Chairperson in 2016. The Young Aggies Network has been highly successful, hosting social events, informative workshops and raising much needed funds for suicide prevention services. "We just want to provide that network base for new people to the industry so that we can help keep them engaged and enjoying agriculture," Fiona explains. "Over time we've managed to hold quite a few professional events where we've had that one-on-one contact with experts and industry leaders. Young Aggies has really given me something to focus on, outside of work, and it's something that I'm really passionate about."

In 2016 Fiona was named the Gwydir Valley Cotton Growers Association Young Achiever of the Year recognising the significant contribution she has already made in agriculture. She enjoys working with growers in both corporate and family run environments, and collaborating through trials on property. In recent years Fiona started doing agronomy work further afield and has enjoyed success in varied and challenging growing environments.

"Over the last couple of years we've done some work out at Bourke and down at Hay and it's really fascinating to see the way the crop grows in those different climates and in those different environments, the way the plant behaves," she says. "There are some lessons in the Gwydir that can be applied to those areas and I think that there's some lessons from those areas that we can bring home to our growers here, so it's this exchange of ideas and information and those incremental yield increases which are really satisfying to see when you're looking at a new area. As an industry we're pushing the boundary south and it will be interesting to see where the cotton industry may go next."

In the future Fiona hopes to continue learning about the physiology of the cotton plant and how it adapts to different climates. "The cotton season's not easy, it is hard work but I love it," she says. "I think some of our yield objectives and sustainability objectives that we've managed to achieve over the years have been quite exciting depending on the season. I have been referred to as a bit of a fanatic about the cotton crop, but I think you kind of have to be." She hopes to increase Young Aggies membership and expand their work in the community. "I want to see it go from strength-to-strength. To be honest it has been in its infancy, it's only about two years old, but we formalised our committee this year, so really my drive there is just to keep the momentum up and make sure our members are engaged and enjoying what it is that our committee of volunteers is trying to do for them."

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ADAMA CHRIS LEHMANN TRUST YOUNG COTTON ACHIEVER OF THE YEAR FINALIST

COTTON Industry Awards

Elizabeth Lobsey

Through her work as an agronomist in Southern QLD, Liz has made major contributions to the cotton industry both in the field and in a representative capacity. "We work with growers to make sure they're doing everything that they can be doing to maximise yields," Liz says. "We deliver messages that researchers are trying to get out there and help growers put it into practice. Sometimes I forget how big the job actually is, because it's part and parcel of what I do every day." In 2016 Liz was appointed Director of Crop Consultants Australia, fostering professional development opportunities for younger board members and participating in the critical work of CCA's Helicoverpa resistance monitoring team.

Liz is currently also Chair of the Darling Downs Cotton Growers Inc Field Day Committee, sits on the Executive Committee of Darling Downs Cotton Growers Incorporated and has previously served as Secretary of Central Downs Irrigators. "Being involved in Central Downs Irrigators was a good opportunity for me to get a bit more awareness of what was involved with the irrigation side of it and what restrictions they have on them," Liz explains. "To step away from what I do daily helps me have a broader understanding of what's going on for the grower, so it makes communication a little bit easier." As Chair of the Darling Downs Cotton Growers Inc Field Day Committee, Liz helped organise all aspects of Darling Downs Cotton Grower of the Year field day at "Tinobah" in March 2017. The field day boasted the highest number of grower attendees for at least five years.

Keeping a long term view is a key part of Andew's approach to farming, including nitrogen fixing crops in his rotation and experimenting with trials of different legumes. "I think sustainability is paramount because I don't think there's any point in doing something today if you really are risking it for future generations," he explains. "We always look for sustainability in everything we're doing and we're making sure we're not jeopardising any future involvement."

Andrew believes Marebone has strengths in the layout of the property, originally developed and designed by his father. "The layout is particularly good, my father came here with a bit of vision and I think he's seen it through," he says. "His work is paying off now, five years ago we averaged 11.6 bales a hectare over the whole farm, that was over 400 hectares, and then last year we averaged 15.5 bales a hectare over 270 hectares so in a few years we've increased the yield dramatically." Andrew is also actively involved in his local community and cotton industry bodies. Last season he hosted the highly successful Macquarie Cotton Growers Association Field Day on his farm. Over the years he has also been involved in the MCGA Annual dinner and awards, along with various fundraising events.

ADAMA

CSD RESEARCHER OF THE YEAR FINALIST

Graham Charles

NSW DPI, AUSTRALIAN COTTON RESEARCH INSTITUTE, NARRABRI, NSW

Graham Charles is an applied weeds researcher with 29 years of experience in all aspects of weed management in the Australian cotton industry, covering such areas as the management of specific problem weeds, the effectiveness of the farming system, developing a threshold for weed control in cotton and the identification and management of herbicide damage in cotton. Graham has established himself as an authority on weeds in cotton farming systems both in Australia and internationally. He was the primary author of 'WEEDpak – the integrated weed management guide for cotton', first released in 2002 and has continued to contribute significant content, including the Herbicide Damage Symptoms Guide. "Weed science in Australian cotton took a whole leap when we produced WEEDpak," Graham explains. "Since 2002 I've increased WEEDpak about five-fold in size, primarily bringing in the weed control threshold work and the herbicide damage work. Even things like weed identification, WEEDpak originally had thirty-two weeds, it's now got two hundred weeds in it. That work is pivotal to the industry, it's taken weeds in cotton from being, just something where a grower rings up and asks you a question to now having that huge amount of information at hand on the internet that growers and consultants can go directly to and get the answers."

The development of a multi-species weed threshold for cotton is currently Graham's primary area of research. It would be the only algorithm of its kind enabling advancements in remote sensing and robotic weed control.

"At the end of the day we will need some sort of algorithm which says, this particular weed population is over threshold, this is what we need to be controlling," he says. "It's great to come up with a robot that can control weeds but how many robots do you need? Where do you need them? When do you need them? The algorithm that I'm developing will be that pivotable part of the equation."

Graham has provided considerable technical support to the industry's adoption and stewardship of glyphosate tolerant cotton through his dedication to the TIMS Herbicide Tolerant Crops Technical Panel. His ongoing commitment to this panel is helping to prepare for the next generation of herbicide tolerant traits. Over the last 12 months Graham has also presented at most of the CottonInfo regional herbicide resistance/weed training events, as well as the consultant specific events, imparting his significant knowledge on use of residuals in cotton, weed ecology and herbicide resistance. "Every situation with weeds is different, every field is different, every farm's different, every season's different so rather than giving growers a recipe to say this is what you do, what we've done is to give them all the information so they can make their own recipes to fit their situation," Graham says.

A wealth of experience and knowledge, developed over years of outstanding research, is enabling Graham to ensure that the industry is well positioned to manage the growing issue of herbicide resistance. He is motivated by working to empower growers, inform consultants and get results in weed control. "When I first arrived in the industry twenty-nine years ago there was very little information for growers here and things like nutgrass were a major problem for growers," Graham explains. "I've been able to give them the tools so they can go to the paddock and, with most of the common weeds, be able to look up the information if they're in doubt and find out what the weed is. Herbicide damage, when I started there, there was just no information; growers couldn't even necessarily identify what herbicide had caused damage, and had no idea what the consequences were likely to be of damage, now that information's out there they can look at damage, get a pretty good idea of what's caused it and a pretty good idea of what the consequences are going to be so they can manage that damage. To me that's been a real driver to just be able to get growers those tools they need to be able to manage their situations."

Graham believes continued work on robotic sensing and herbicide damage will be crucial into the future. He is proud to have been named a finalist in the Australian Cotton Industry Awards. "It's a great industry to work in because the growers appreciate the work that's done," he says. "These awards are a thank you from the industry and it's nice to be appreciated."

CSD RESEARCHER OF THE YEAR FINALIST

Dr Paul Grundy | QDAF, TOOWOOMBA, QLD

Dr Stephen Yeates | CSIRO, AYR, QLD

Paul and Steve are dedicated cotton research scientists with over 40 years combined research experience. Both researchers have made significant contributions to the wider cotton industry and mainstream research through their systems analysis and understanding of cotton physiology. By taking the approach of 'learning to think like a plant' they are fundamentally changing the philosophy of cotton production across the cotton industry, whether it be in northern Australia, established cotton production valleys, or the newer southern production systems.

Through rigorously planned and executed trials, and a strong understanding of cotton physiology and agronomy, Paul and Steve teased apart the intricacies of the Central Queensland production system. They analysed temperature, solar radiation, rainfall and the farming system to determine how this could be manipulated to provide better returns and a more sustainable, profitable system for CQ growers. This work has led to yields in this region increasing by up to four bales per hectare with significant improvements in lint quality. Their work is having a profound impact on the profitability of cotton growing in this region. "Through a climate analysis in Emerald we found that there was an opportunity to plant the crop much earlier than what people normally would, during late winter," Paul explains. "What that's enabled us to do is to better coincide boll filling with favourable weather during spring setting the crop up for earlier picking that halves the chances of being affected by monsoonal influences during crop maturation and picking. The result has been a real increase in yield potential over the last couple of years and with Bollgard 3 people are now adopting the early sowing research."

The research pair were also able to develop strategies that optimised the agronomy of early sown crops to overcome constrained canopy development under the cool conditions leading up to flowering. The benefits of planting early when combined with tailored agronomic management in Central Queensland has been demonstrated with the assistance of leading growers who have hosted the commercial scale trial program. This in turn has given other local growers the confidence and understanding needed to adopt the new practices on their own farms. Working on a day to day basis with grower and consultant collaborators to implement an on farm research program has been a successful model for developing a rigorous scientific data set while also providing an opportunity for people to see problem solving and solutions in action. "It's been really rewarding," Paul explains. "To begin with something that was an idea on a page, and move it from initial small plot trials on a farm, through to having growers adopting the findings commercially within a relatively short space of time, has been a really fulfilling experience."

Paul and Steve agree it's a very rewarding industry to work in. "Throughout our careers we have really enjoyed working with everyday people in the cotton industry. Being able to examine on-farm challenges and play a part in developing solutions that people put place to achieve better outcomes is a privilege," Paul says. "It would be fair to say that Steve and I didn't go into agriculture to enter any sort of competition, but what is really gratifying is to have our work recognised by growers and the industry. It's nice to be appreciated." Steve continues to draw motivation from the beneficiaries of his work. "I enjoy discovering something that's critical to solving a problem and that creates a benefit for the grower," he explains. "I grew up on a small farm so I've always been really interested in plants, how they grow and how we interact with plants to make a living off them."

The researchers acknowledged the role played by the Researcher of the Year sponsor, Cotton Seed Distributors, both in research and the broader cotton industry. "It's great to have a company that does work hand-in-hand with researchers and support the work that they do," Paul added.

CSD RESEARCHER OF THE YEAR FINALIST

Dr Sharon Downes

CSIRO, AUSTRALIAN COTTON RESEARCH INSTITUTE, NARRABRI, NSW

Dr Sharon Downes leads CSIRO Food and Agriculture's IPM and Resistance Evolution research team. She has been located at the Australian Cotton Research Institute since 2004 and has made a significant contribution to the Australian cotton industry through her work on resistance evolution in Helicoverpa to the toxins contained in Bt cotton. This includes resistance monitoring data that allows the industry to judge how to effectively manage and adapt the Bt Resistant Management Plan (RMP) for Bt cotton. "The resistance management plan is specifically designed to try and slow resistance in Helicoverpa," Sharon says. "We know that it's been very good at developing resistance quickly to any chemical sprays the industry has used to try and control it, and by having a plan in place we hope to protect Bt cotton for as long as possible."

Sharon has made a significant contribution to establishing robust and practical strategies for managing resistance in Australia for both Bt cotton and the insecticides used to control all insect pests. "All of the results from our research are linked to strategies to try and control pests," Sharon explains. "The resistance management plan for Bt cotton and IPM guides to control secondary pests are used by the industry to modify what they're currently doing to try and stay one step ahead of the pests."

Collaborative work with researchers across several NSW and QLD based research agencies and universities has formed a large part of Sharon's research. She has also collaborated internationally with researchers from the USA, Brazil, China, India and Spain. She leads a strong research team and invests significantly in developing technical staff and mentoring students and trainees. In 2014 Sharon graduated from the highly regarded Australian Rural Leadership Program. "I would like to see the industry continue to be world leaders in insect and pest management by educating newcomers about the history that has led to the Australian industry being in such a good position today," she says. "We also need to recognise that cotton insect pests sit within a landscape that extends across different commodities in Australia and sometimes globally. We need to consider pest management in that broad context to be prepared for incursions from landscapes where resistance might not be well managed."

Sharon acknowledges the important contributions made in her field of research by Researcher of the Year sponsor, Cotton Seed Distributors. "CSD contribute to CottonInfo which is an extension team that basically take the results from our work and make them understandable by cotton growers," she explains. "This team is at the frontline, so they get the first knowledge of what the priority issues are for growers and consultants, and they feed them back to industry. Those two things are really important for developing research that's effective and also relevant."

Being selected as a finalist for the CSD Researcher of the Year category has reassured Sharon that her work is considered extremely important by industry. "I'm most proud of my commitment to work with various stakeholders through some pretty challenging issues for the industry," she says. "I'm also available to growers and consultants, place a great importance on national and international collaborations, and work in a mentoring capacity to develop other people within my team and the broader industry."

Australian Cotton Industry Awards Night

Dress up Gatsby Style and join us for dinner, dance and drinks. Two top line entertainment duos will also perform. Commencing the evening, the local duo 'Jeff & Dee' will be a veritable feast for your ears, playing in the genres that they love most, a mix of traditional jazz, soul and some old-school R&B. Guitarist, Jeffery Wright is a local boy and has years of experience playing around Australia with countless bands. But you might know him better for his paintings and work up at In The Frame. Deanna Farnell, calls Griffith home although is a relative new-comer. Originally from Adelaide, her life as a professional singer/actress has taken her to live & perform in Sydney and London and across genres: Jazz ,Musical Theatre, Pop, Soul and Gospel. Complete the evening by dancing the night away at the end of formalities with "Duble" – Gavin Rossetto will perform with Linda Pasquetti. Their repertoire spans, 60's 70's 80's 90's and current hits with background music to party dance music.

Meet one of Australias best selling authors of outback humour, Sandy Thorne,

who will Emcee the Australian Cotton Industry Awards evening on the 26th July, 2017. Sandy's first book "I've Met Some Bloody Wags!", about the wild characters she met and worked with on stations in far north Queensland and out back of Bourke, launched her on a 25 year career performing humorous bush yarns and verse at events all over Australia, New Zealand and the U.S. Her humour has also livened up countless television shows, including David Letterman, Larry King and Michael Parkinson. Her 14 books have sold nearly half a million copies in Australia. Sandy lives on a sheep station near Lightning Ridge and although she is a proud woolgrower, she is also – living out in a hot-as-hell region she calls "Planet Mars" - a huge fan of that magical fibre, cotton. As well as entertaining you with hilarious yarns and jokes about outback wags and dags, Sandy will perform a special poem she's composed in tribute to cotton.

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