MORE than 500 cotton growers from across Queensland and NSW flocked to Griffith in late July to discuss issues of importance facing the industry and catch up on the latest developments in farming.

The two-day Cotton Collective Industry Forum covered a huge range of topics, from research and development, connected agriculture and technology, to positioning Australian cotton in the world fibre market.

Cotton Australia CEO Adam Kay says the organisation convenes the event every two years, with this year’s Collective gathering an impressive line-up of expert speakers.

“The 2017 Cotton Collective brought together the whole industry to discuss the most important issues facing growers,” Adam says. “It was also an extremely valuable forum for those in the industry to learn about the latest technology, which is crucial to maintain the industry’s high standards of productivity.”

“This year’s program and speaker line-up was extremely diverse, giving attendees a broad variety of topics covering many issues affecting cotton growers.

“The cotton industry has grown rapidly in southern NSW in recent years, with many farmers becoming cotton growers for the first time, so we were happy to devote a significant portion of the Collective’s agenda to issues important to new growers.”

The Australian Cotton Industry Awards were also held in conjunction with the Cotton Collective (see story page 22).

**Highlights from the 2017 Cotton Collective**

**Technology For Change (Session Chair: Cotton Australia Deputy Chair Hamish McIntyre)**

Professor Tristan Perez, QUT

Technology will create opportunities to collect data and manage crops more effectively, through remote sensing, robotics and data influencing decisions. Digital ag will bring better situational awareness, innovation, decision-making, easier compliance and access to new markets and business models.

Dr Caitlin Cooper, CSIRO

New gene editing tools allow scientists to make modifications to insects in order to improve pest control. But these ‘gene drive’ technologies will need to be extensively tested before release into the wild.

Phil Armitage (CSD) and Dr Warwick Stiller (CSIRO)

A joint investment by CSIRO and CSD in Cotton Breeding Australia (CBA) has reached $70 million, and will reach at least $140 million by 2024. CBA tries to pre-empt issues before they become problems, and is tackling issues including bacterial blight.
GYRAL BELT SPREADER

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- 20 & 6mm coulters with rubber coated drums both sides

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- Hard faced long life planting shoe
- Heavy duty 41/2” x 15” gauge wheel
- All bearings tapered rolled
- Excellent seed to soil contact

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- Superior construction using Bisalloy steel
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- Gassing and fertiliser applications
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cotton leaf curl disease, verticillium wilt, black root rot and spider mites. But it is important to understand there is no ‘silver bullet’ fix for these issues.

Dr Paul Grundy, QDAF
Paul tracked the progression of tactics used by the industry to tackle pests. Management of pests became more sophisticated in the 1990s with more emphasis on IPM and stewardship, followed by the introduction of Bollgard traits. IPM remains the best way to target sucking pests, but they will always be a ‘moving target’.

Agriculture Towards 2030 (Session Chair: John Durham)
Kim Morison, Blue Sky Alternative Investments
Agriculture is faced with the opportunity to integrate supply chains, upgrade facilities and capture growing markets. Aggregation of agriculture properties will likely continue. Challenges include access to capital, and Blue Sky is trying to mobilise Australia’s huge superannuation investment industry to enter the agriculture space. These investors are looking for cash flow, capital growth and transparency, and are seeking to avoid volatility. Partnerships can match skill in agricultural management with investment capital through different structures, such as sale-and-leaseback and private equity, but the industry must be willing to embrace change.

Chris McCormack, Agripath
Chris analysed valley-by-valley Return On Assets Managed (ROAM) for the past five years, demonstrating that water costs have been the most volatile input over the period. ROAM for the southern valleys has been comparable to more established cotton districts, but long-term success will be dependent on water availability and asset value.

Connected Agriculture For Smarter Farms (Session Chair: Cleave Rogan)
Nick Barton, Precision Cropping Technologies
Growers are adopting new technologies to increase productivity, including elevation-enabled GPS sensing, variable-rate growth control and fertiliser application, and GPS land-levelling. But growers should get the basics right before tackling more sophisticated technologies – identify the tools, data and technology required first.

Nick Gillingham, Keytah Farms
Keytah applies technology for everything from people management, data capture, water management and construction of bankless channels. But training staff in new technologies can be challenging. Keytah is investigating or trialling new technologies, such as canopy sensors, automated irrigation, remote pump site control and autonomous irrigation.

Andrew Roberts, Field Solutions Group (FSG)
FSG has a pilot program in Moree and other districts to apply a community-led approach to telecommunications services, co-positioning telecommunications infrastructure on GPS towers, silos and other structures to deploy wireless networks. The intent is to deliver metro-quality telecommunications services to rural areas.

Tom Dowling, Goanna Telemetry
Tom discussed ‘LoRaWAN’, a long range, low power telemetry system using wifi on-farm.

Happy Workforce, Productive Farms (Session Chair: Cotton Australia Board member, Fleur Anderson)
Gerard Neesham, Clontarf Foundation
Gerard spoke about the history of the Clontarf Foundation and its use of sport and positive male influence to change the lives of Aboriginal boys. The objective is to re-engage the young men in school and then into the workforce in order to break the cycle of disadvantage.

Rebecca Fing, Cotton Australia
Cotton Australia’s current projects include Cotton Gap and AgSkilled.
Cotton Gap connects school leavers seeking a gap year with cotton growers looking for staff. The program is open to growers who can offer 12 months continuous employment, WHS and HR due diligence and accommodation. The program has been a success, with some gap students staying on-farm or confirming their choice of agriculture as a career. Growers appreciate the talent pool the program is building for the industry.
AgSkilled is a joint venture between Cotton Australia, GRDC and the NSW Government. $14.7 million will be allocated for cotton and grains training over the multi-year program, which delivers training aligned to nationally accredited competencies. Courses currently in the pipeline include drone training, women’s professional development focused on WHS and HR, precision agronomy and operator safety training.

Peter Tuohey, grower and Cotton Australia Board member
Peter detailed the success from putting employees through training programs coordinated by Cotton Australia, commenting...
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- Improves planting efficiency
- Does not settle out during storage or application
- Guaranteed analysis
that the investment in staff training is returned more than threefold, with additional benefits in staff retention.

The Great March South (Session chair: Cotton Australia Board member, Peter Tuohey)

Harvey Gaynor, Auscott:
Auscott adapted its experience from managing farms in northern NSW valleys to its southern operations, learning to apply different techniques.

Rob Houghton, Leeton grower
Despite a disappointing first year growing cotton, other growers in the district gave Rob the confidence to persist. He ‘unlearned’ some old habits, concentrating on precision and acknowledging that IPM is critical for success.

Australian Cotton in a Global Market (Session chair: Cliff White)

Brooke Summers, Cotton Australia
The textile industry is evolving fast – brands are adapting to increased consumer demand for responsible, sustainable and ethical fibres. Cotton Australia’s Cotton To Market program is keeping Australian growers in the game by engaging with programs such as the Better Cotton Initiative, Cotton LEADS and Cotton 2040. The Australian industry needs to be mindful of evolving textile business models and how that will impact demand for cotton. What we have learned through our Cotton To Market program reinforces the value of grower participation in myBMP.

Challenges for agricultural chemistries (Session chair: Cotton Australia Policy Officer, Dr Nicola Cottee)

Alastair James, CropLife
CropLife adopts a ‘stewardship first’ approach to crop protection. Its ‘BeeConnected’ app allows registered beekeepers and cotton growers to communicate with each other regarding the location of hives and crop protection activities. BeeConnected can identify both hive and crop locations, allowing spray applicators and beekeepers to take proactive steps to reduce risk for bees and hives.

Jon Welsh, CottonInfo
Cotton Australia’s research panels have identified off-target spray drift as the number one issue requiring the industry’s attention.
Research is underway by CRDC and GRDC to help agriculture better understand the science behind surface temperature inversion conditions, and how it might be applied to predict inversion events. An inversion prediction system is currently being trialled.

John Hemminghaus, and James Neilsen, Monsanto
Work is underway to understand how dicamba might help Australian cotton growers and the stewardship processes required to manage drift and volatility. A launch for dicamba is likely four years away, and efforts in the meantime will focus on understanding best practice for application methods, the stewardship package and training requirements.

Cotton 101

Highlights included:
- The new Acres of Opportunity site (joint venture between CSD and Monsanto); a 10 step plan for new growers; input from Jorian Millyard and Bob Ford, CSD; and, a Q&A session with current growers.
- Insurance options – Deidre McCallam, AgriRisk.
- Quality and how ginning works – Rene Vandersluijs, CSIRO.
- Managing how the plant grows – Steve Buster and Eric Koetz, NSW DPI and advisors.
- Selling your cotton and seed – merchants.

Scholarship recipients
Cotton Australia was proud to sponsor six undergrad uni students who attended the Cotton Collective in Griffith NSW – Ruby Barnes (CSU), Flynn Brosnan (UQ), Jonathan Spain (UQ), Rupert Turner (UQ), Hugh Burrell (UNE) and James Formosa (UQ). This scholarship has been enabled by the Cotton CRC Legacy Fund.