



## 2012 Australian Cotton Industry Awards

It's not too early to start thinking about nominations for the 2012 Australian Cotton Industry Awards which will be held as part of the Australian Cotton Conference on the Gold Coast 14-16 August 2012.

For more information:  
Brooke Summers  
Step Communication  
Ph (0418) 962 942  
E: brooke@stepcommunication.com

liffa@liffa.com.au www.liffaandviffa.com.au



**See inside for the stories  
on all our finalists  
and winners**

**Learn from the industry's  
best growers, researchers,  
young achievers, leaders**



MONSANTO



Bayer CropScience



With an industry recovery well underway, the timing is perfect for an event like the Australian Cotton Industry Awards to get people smiling and to reward those who've stuck with it through an extended drought period.

In looking at all of our finalists and the winners this year, one thing seems to be a common thread, and that is that they are all great industry collaborators. Whether it be a young Rose Brodrick getting out to talk about her row configuration research at multiple field days, or the open door policy of our Farm of the Year at Bullamon Plains, all of our finalists are willing to share their knowledge and expertise for the good of the whole industry.

As the CEO of Cotton Australia I deal with people every day on many levels, and one thing about this industry really shines through – there are not many who, if they've struck upon something that will improve our industry in any way, won't tell the rest of us about it. And that's one of the things that makes us so strong.

This Awards booklet is also about sharing. Sharing the work, achievements, research findings and the practical solutions of our finalists who are being recognised by their industry as having achieved something great.

I hope you enjoy their stories as much as I have. Congratulations to all 12 finalists and especially our winners. I'm looking forward to an even bigger Awards as part of the 2012 Australian Cotton Conference next year, so start thinking about your entries now.

Finally, a special thanks to our sponsors – AgriRisk, Monsanto, Bayer CropScience, Cotton Seed Distributors and the Chris Lehmann Trust – you have stuck with us through a tough period and for that we are truly grateful.

*Adam Kay*

**ADAM KAY**  
Chief Executive Officer  
Cotton Australia

## A WORD FROM OUR VALUED SPONSORS



MONSANTO



This is the eighth year of the Grower of the Year Award and Monsanto Australia proudly maintains its longstanding close relationship with the Australian cotton industry's prestigious recognition program. This award recognises the enormous contributions that our world-leading growers make to this industry and it is their effort, their commitment and their talent which makes cotton an ongoing success story.

While the challenges faced by growers seem to be never-ending and increasingly complex, it is a testament to their capacity that the challenges are managed; they just get on with the business of farming.

The Monsanto Grower of the Year Award is a fitting way to turn the spotlight onto some exceptional individuals to recognise and share their achievements. Congratulations to all the finalists for 2011.

**PETER O'KEEFFE**  
Country Lead  
Monsanto Australia



Innovation comes from thinking outside the box, finding solutions to problems and being able to put those solutions into practical action. Our growers are asked to solve problems every day, and I'm constantly amazed at the innovations I see on farm as I travel around as part of my work. Many of these innovations go unnoticed, but some have gone on to become industry best practice.

This year our innovations came from a wide range of fields from a stand-out business model, a clever irrigation system and finally a grower finding solutions to the social problems encountered after the floods. These stories are inspiring and need to be shared with the industry.

AgriRisk is delighted to again sponsor the Innovative Grower of the Year Award and it's a pleasure to be able to recognise the contribution these innovators are making to our dynamic industry.

**JOHN VAN DER VEGT**  
Managing Director  
AgriRisk Services



Bayer CropScience

Bayer CropScience in Australia is proud to be the sponsor of the 2011 Chris Lehmann Trust Young Achiever of the Year Award. This award recognises the significant contribution made by young people to the cotton industry. These people, whilst they may be just starting their professional careers in this industry, show commitment to – and have a vision for – the future of the cotton industry. Together, we must strive to bring innovative solutions to the value chain to ensure healthier crops can be grown more efficiently and more sustainably and to maintain our position as a premier agricultural industry. On behalf of Bayer CropScience in Australia, I would like to thank those who were nominated for this award, showing just how important the recognition of our young achievers is.

**JOERG ELLMANNS**  
Managing Director  
Bayer CropScience Pty Ltd



Cotton Seed Distributors (CSD) is proud to continue its long term industry support with the 2011 CSD Researcher of the Year Award. As a grower owned and controlled organisation, CSD strongly supports and invests in focused research and development which supports the long term needs of Australian cotton growers. Our industry's success continues to be driven by the powerful combination of great cotton genetics, novel technologies and most importantly innovative and adaptive crop management. These critical factors deliver growers the potential of higher yields, better fibre quality and of equal importance a better and more sustainable productive cotton farming system.

The CSD Researcher of the Year Award recognises the important contributions of the research community as it remains the foundation to our industry's continued success. This award is about celebrating the innovation and dedication of our talented research community and it also provides a great formal opportunity for the industry, as one, to express its thanks for those contributions.

It is for these reasons that Cotton Seed Distributors is delighted to be a sponsor of the 2011 Australian Cotton Industry Awards.

**STEPHEN AINSWORTH**  
General Manager  
Cotton Seed Distributors Limited



Joanne has represented the industry in many of its major policy forums, donating countless hours of her own time for the betterment of the industry.

## WINNER

JOANNE GRAINGER, COTTON GROWER, MUNGINDI, QLD

**WITH ALMOST THREE DECADES IN THE COTTON INDUSTRY, JOANNE GRAINGER HAS REPRESENTED THE INDUSTRY IN MANY OF ITS MAJOR POLICY FORUMS, DONATING COUNTLESS HOURS OF HER OWN TIME FOR THE BETTERMENT OF THE INDUSTRY.**

Joanne is a Partner in Price and Grainger Enterprises Pty Limited, an irrigated cotton and mixed farming enterprise, with farms located on the Queensland and New South Wales border at Mungindi and St George in Queensland. Her practical knowledge of agriculture and the cotton industry has given Joanne a sound platform from which to advocate on growers' behalf. She has been closely involved in policy development and advocacy for the cotton industry at state and national levels, as well as developing industry research direction and stewardship.

From 2007 to 2010, Joanne was the Chair of Cotton Australia (she joined the Board in 2002), where she oversaw the merger of the organisation with the Australian Cotton Growers Research Association. This paved the way for a new industry structure that reduced duplication and streamlined the advocacy efforts of the industry across all major policy areas.

During her time at Cotton Australia, Joanne represented the industry on the National Farmers Federation Members Council and the Rural & Related Industries Standing Committee for the Agrifood Industries Skills Council. She initiated and led the Future Cotton Leaders Program in 2007, sat on various committees, was Chair of Cotton Australia's Drought Project Steering Committee and represented cotton growers on an ACSA trade delegation to China.

Joanne was Chair of the Cotton Industry Skills Development Pilot Project Advisory Group in 2006 and 2007, set up to develop and trial a range of training strategies to address industry skills needs. She was a member of the Menindee Lakes Efficiency Taskforce and a member of the Queensland Murray Darling Commission Border Rivers Assessment Panel.

Currently Vice President of Queensland Farmers Federation, Joanne represents the cotton industry on the Members' Council. In 2008 she was appointed to the Queensland Workplace Health and Safety Advisory Board and is currently on the Board of the NFF.

As a result of her time in the teaching profession, Joanne developed a special interest in capacity building in rural industries and communities, and mentors young people in agriculture. She is a current Director of the Primary Industries Education Foundation.

Joanne is the inaugural recipient of the Industry Partnerships Initiative – Corporate Governance for Rural Women and a graduate of the Australian Institute of Company Directors. She was also a graduate of the Murray Darling Basin Leadership Program in 2005.

Always learning, Joanne added to her extensive education portfolio with a 2011 Advanced Diploma of Agriculture from Tocal College.

Joanne has provided years of dedicated unpaid service to the Australian cotton industry. A gifted leader, educator and strategic thinker, Joanne is looking forward to continuing her positive contribution well into the future.

## WINNER

BULLAMON PLAINS PASTORAL COMPANY, ED WILLIS AND VON WARNER, THALLON, QLD



### IN BRIEF

<b>FARM NAME:</b>	Bullamon Plains Pastoral Company
<b>OWNED/MANAGED BY:</b>	The Willis Family, irrigated cropping managed by Von Warner
<b>Location:</b>	Thallon, QLD
<b>Total area:</b>	20,000 hectares
<b>Cotton area:</b>	1,783 hectares
<b>2010/11 Yield:</b>	Provisional 11.4 bales/ha
<b>2010/11 Water:</b>	7.9 ML/ha
<b>Consultant:</b>	Jamie Street
<b>Marketed by:</b>	Queensland Cotton
<b>Ginned by:</b>	Queensland Cotton

**BULLAMON PLAINS IS AN OUTSTANDING FARM ENTERPRISE INCLUDING 20,000 HECTARES OF GRAZING, DRYLAND AND IRRIGATED CROPPING LOCATED AT THALLON, ABOUT 65KM SOUTH OF ST GEORGE IN QUEENSLAND. OWNED BY THE WILLIS', THE FARM HAS BEEN IN THE FAMILY SINCE 1928, WITH FOUR GENERATIONS OF THE FAMILY CURRENTLY LIVING ON THE PROPERTY.**

The three tenets of the business are managed by three dedicated and passionate people: Bill Willis (grazing), Ed Willis (dryland cropping) and Von Warner (irrigated cropping). Local agronomist Jamie Street provides in-season advice and is a respected and key part of the group. Communication and teamwork is critical, something that has been mastered over many years to create an integrated, successful business contributing to the local community and the wider industry.

In the 2010-11 season, Bullamon Plains grew its largest ever cotton crop of 1,432 hectares, with an average yield of 11.4 bales per ha, taking out the local cotton crop competition for the last three years.

The farm is fully BMP accredited and in 2011, Bullamon Plains also won the district Tidy Farm Award, evidenced by an immaculate property with literally no apparent weeds and all machinery kept in top working order. Not only does this look good, it means that weeds and diseases are under control, there's nowhere for pests to harbour and there's a safe working environment for the farm's 10 full and part time employees.

Bullamon Plains is at the leading edge of water use efficiency, with water budgets and timing of irrigations critical to success. Most of the property is under bankless channels of 750m – 800m runs, with four different watering systems being trialled; bankless rooftop, bankless one way rooftop, one way GL bay and the traditional siphon system. The whole farm can now be irrigated in four days, with soil moisture precisely measured using c-probes, push probes and the "soil scratch" test. Each watering is precisely

timed, with all water data entered into the system and used in future decision making. The bankless channel system has seen a labour cost saving of over 90% with equal or better WUE results.

Cotton production at Bullamon Plains is highly scientific. Data is collected for every aspect of the farming operation and overlaid in order to make evidence-based decisions and forward plans. This includes yield mapping, water use efficiency, electro-magnetic surveys and picking data. There is plenty of flexibility in the system to allow changes in-season, and an annual comparative analysis provided by Street Ag Services allows the team to benchmark and monitor progress against others in the district.

The Bullamon Plains team are great industry collaborators and strong believers in sharing their knowledge. CSD variety trials and Incitec trials have been conducted on the property, and the team is hungry for any research or knowledge that will help them improve the operation. More recently, the irrigation systems on Bullamon Plains have had a continual flow visitors, inspecting the bankless channel irrigation, and the farm gate is never closed to anyone wanting to come in and discover more about Bankless Irrigation systems.

The business model strikes a great balance between external advisors (financial advisors, agronomists, water consultants, bank manager, accountant, succession planners) and giving the workers a say in formulating the season's plans. OH&S is well managed, with every worker given a safety kit and regular meetings to identify any potential hazards.

Von's enthusiasm for the cotton industry is contagious. He is thoroughly knowledgeable, committed and a passionate grower who knows every square inch of the farm, every field's attributes and limitations. This passion, combined with extensive experience and great management skills has seen Bullamon Plains become a showcase cotton property in the district, and for the whole industry.



### IN BRIEF

**FARM NAME:** "Booligar"  
**OWNED/MANAGED BY:** Donald, Pam, Douglas and Lorraine Crothers  
**LOCATION:** Dirranbandi, QLD  
**TOTAL AREA:** 11,000 hectares  
**COTTON AREA:** 700 hectares  
**2010/11 YIELD:** 11.35 bales/ha  
**2010/11 WATER:** 5.4 ML/ha  
**CONSULTANT:** John Mulholland  
**MARKETED BY:** Crothers Brothers – Mostly sold to QLD Cotton  
**GINNED BY:** Queensland Cotton

## FINALIST

"BOOLIGAR", THE CROTHERS FAMILY, DIRRANBANDI, QLD

#### DONALD AND PAM CROTHERS AND DOUGLAS AND LORRAINE CROTHERS OPERATE A HIGHLY SUCCESSFUL IRRIGATED COTTON AND DRYLAND FARMING AND GRAZING ENTERPRISE AT "BOOLIGAR" DIRRANBANDI IN THE LOWER BALONNE REGION OF QUEENSLAND.

The family has developed 3,150 hectares of cropping land on their 11,000 hectare property, of which 700 hectares has been developed for cotton, with 550 hectares grown in the 2010-11 season. Following years of drought, the most recent season saw a bumper crop and an average yield of 11.35 bales per hectare across the whole farm, an outstanding result.

Due to its location, and very high evaporation rates, when there's water available the Crothers abide by the "use it or lose it" philosophy, occasionally planting back to back cotton if the season allows. As floodplain harvesters, it's difficult to predict when water will be available and so maximum returns on investment must be capitalised in those years there's plenty of water available. Irrigation water supplies are flood harvested from the Narran River and stored in five water storages that have been deepened to minimise evaporative losses.

The farm is irrigated using 2.5 and three inch syphons, with a nine day watering cycle and the use of extensive water monitoring equipment to monitor crop water use. Water efficiency has improved over time, with currently 0.9 ML of water per hectare required on the cotton crop.

As early adopters and leaders in the Best Management Practices program, the Crother's record keeping systems are the best you'll see in the industry. Diaries are cross checked, all data is collected

and written down and the farm is managed with great care and professionalism. Teamwork and excellent communication is required, particularly given various family members have separate roles and responsibilities within the business, including the children. Monthly team meetings are held to discuss any issues and make future plans, and there is frequent consultation within the team and with external experts.

The team are also great industry collaborators, CSD variety trial participants and they continue to contribute heavily to industry and community issues including research and development, the Dirranbandi Cotton Growers Association and irrigation water policy through Smart Rivers.

"Booligar" is an all-round, highly sophisticated farm business with a family friendly approach. The team uses most available industry tools to minimise chemical and fertiliser use (for example soil testing no sprays for heliothis in the 2010-11 season), maximise water use efficiency and improve soil health – all with limited human resources.

## FINALIST

MACINTYRE DOWNS, HAMISH JOHNSTONE, GOONDIWINDI, QLD



### IN BRIEF

**FARM NAME:** Macintyre Downs  
**OWNED/MANAGED BY:** Prime Ag  
**LOCATION:** Goondiwindi, QLD  
**TOTAL AREA:** 5,400 hectares  
**COTTON AREA:** 2,200 hectares  
**2010/11 YIELD:** 12.5-13.5 bales/ha  
**2010/11 WATER:** 8 ML/ha (including useable rain moisture)  
**CONSULTANTS:** Michael Castor and Pablo Vega  
**MARKETED BY:** ICM  
**GINNED BY:** Namoi Cotton

#### "MACINTYRE DOWNS" IS A SUPERB MIXED FARMING ENTERPRISE COMPRISING 2,200 GREEN HECTARES OF IRRIGATION, 550 HECTARES OF DRYLAND CROPPING AND 1,500 HECTARES OF GRAZING COUNTRY ON THE MACINTYRE RIVER NEAR GOONDIWINDI. COTTON, SEED SORGHUM AND WINTER CEREALS ARE THE MAIN CROPS PRODUCED.

The farm is part of the corporate Prime Ag Group holdings, with all operations managed by Hamish Johnstone, who has been involved with "Macintyre Downs" for over 17 years.

The farm's annual objectives are set by a management team that includes the CEO and Chairman of Prime Ag as well as Regional Managers, and are centred on achieving the highest yields possible using the least amount of water.

With clear objectives in mind, the team can work together to focus on those aspects of the farm business that will best deliver them, and this formula has proved successful in significantly increasing yield since Prime Ag was established.

In 2010-11, MacIntyre Downs grew 1,600 hectares of cotton, yielding 12.5 – 13.5 bales/ha. The improved yields can be attributed to not only varietal improvements but also careful in-crop monitoring, timeliness of operations, the nutrition regime and precision irrigation scheduling.

"MacIntyre Downs" is a showcase for Best Management Practices, with full accreditation for all seven BMP modules in the original system, and plans to move to the computer based myBMP in the near future. Hamish also helped to pilot the new computer based myBMP system, which he says makes the program easier to use, particularly when operating across many properties. The natural environment is well looked after, with 37km of riparian vegetation fenced to exclude stock and a huge variety of bird species.

In terms of water, the farm is irrigated using syphons on 600m to 800m runs, each sized differently to suit the row length. Hand and moisture probes and other Cotton CRC tools are used to constantly monitor the soil and irrigation scheduling is adjusted according to the crop's requirement. Irrigation water supplies are based on a river allocation of 4,854 ML per year and high flow flood harvesting with five on-farm storages.

The farm sets very high standards across all aspects of the farm business, with many templates, systems, processes and policies set down by Prime Ag to ensure all records are carefully kept and all operations are closely monitored.

Answering to shareholders, as well as management and field staff, Hamish is a master at getting the best out of his farm and his people and has a very hands on management style. He closely involves all staff in decision making, provides training opportunities and career paths and works to individual's strengths to get the most out of the team, a team that has proved incredibly loyal over many years.

The secrets to this success, which becomes even more important in a labour-constrained market, include setting individual and group KPIs, treating staff as equals, providing flexibility, providing social opportunities such as beer and barbies for families and fostering a sense of ownership and pride in the farm business.



**Warwick now oversees the breeding team for disease resistance and mainstream production area breeding and has met this challenge, ensuring breeding progress has been maintained at pace.**

**WINNER**

**DR WARWICK STILLER, CSIRO PLANT INDUSTRY, NARRABRI, NSW**

**DR WARWICK STILLER IS A COTTON BREEDER WHO JOINED CSIRO PLANT INDUSTRY IN 1995 AS A POST GRADUATE STUDENT, AND HAS DEVELOPED INTO A COMMITTED SCIENTIST AND PLANT BREEDER WHO IS GLOBALLY RECOGNISED FOR HIS WORK.**

Warwick has spent the last 16 years of his life in the cotton breeding scheme that was established to produce varieties for dryland productivity, stress tolerance and water use efficiency and he has played a leading role in delivering new varieties to the Australian cotton industry that deliver exceptional yield and quality and are the envy of our competitors.

An independent assessment in 2004 showed the Net Present Value of new varieties was \$5 billion, and Warwick has been a strong contributor to that result. An analysis in 2010 showed dryland cotton yields are increasing at exactly the same rate as irrigated yields, confirming that Warwick's own breeding efforts have been substantial.

Additionally, Warwick has developed varieties for dryland production systems, irrigated central regions and for disease resistance. His collaborative research efforts have seen the investigation of modern molecular tools for speeding up selection, collecting exotic cotton germplasm to ensure genetic diversity in breeding and discovering new sources of resistance to Fusarium wilt and black root rot.

Recently, Warwick's area of responsibility significantly broadened with the retirement of Peter Reid, which were large shoes to fill given Peter's many years of experience. Warwick now oversees the breeding team for disease resistance and mainstream production area breeding and has met this challenge, ensuring breeding progress has been maintained at pace.

Although a quiet achiever, Warwick is not one to sit back if he sees an opportunity, and has developed new research areas with potential significant payoff for industry such as novel and exciting material with Fusarium and insect resistance that will be released to the industry in future. It is also important to recognise that Warwick has made other valuable contributions. An example is his project on plant resistance to insects. Warwick observed in the glasshouse some apparent differences between cotton genotypes in susceptibility to pests – with some plants virtually immune while others susceptible. From this he conceived a project to both understand the mechanism of resistance, evaluate if there was also resistance to other key pests and to begin introgression into commercial lines. This has potentially significant benefits to the industry in terms of reduced pesticide use and reduced selection for resistance to pesticides.

Warwick is the link between biotechnology and breeding and must try to produce varieties that meet the needs of both growers and Australia's spinning customers. This area of research is seen as a new frontier, for example using molecular markers. Through Warwick's efforts he is helping to facilitate this complex science so that it will return dividends to the industry and many molecular biologists in Canberra are using material provided by him for their research.

There are very few people in the cotton research community that are more committed to ensuring that the industry is successful and the communities in which cotton resides are vibrant. He did his PhD in the cotton industry, lives in Narrabri and he and his family have been active in the community since 1995. He has also recognised the need to attract and develop future researchers to the industry and currently mentors a number of Post Doctoral Fellows.



**FINALIST**

**DR SHARON DOWNES, CSIRO ECOSYSTEM SCIENCES, NARRABRI, NSW**



**Under Sharon's careful and committed leadership, the number of samples collected for testing has drastically increased, providing better and more robust data on which to base the industry's Resistance Management Plan (RMP).**

**DR SHARON DOWNES IS A SENIOR RESEARCH SCIENTIST WITH THE CSIRO, BASED AT THE AUSTRALIAN COTTON RESEARCH INSTITUTE IN NARRABRI NSW. SINCE JOINING THE TEAM IN 2004, SHE HAS MADE AN OUTSTANDING CONTRIBUTION IN A RELATIVELY SHORT PERIOD TO THE MONITORING OF RESISTANCE TO THE CRY PROTEINS IN BOLLGARD II.**

Under Sharon's careful and committed leadership, the number of samples collected for testing has drastically increased, providing better and more robust data on which to base the industry's Resistance Management Plan (RMP). Outcomes of Sharon's research have shaped the discussion that the industry has had, via REFCOM, on the current RMP and its effectiveness.

The high grower uptake of Bollgard II speaks volumes for the value of this technology to industry. This has included better control of *Helicoverpa* spp. and some other minor Lepidopteran pests, reduced insecticide use, a dramatically improved public perception of the cotton industry and better lifestyle. This is all at risk if *Helicoverpa* develop resistance to one or more of the cry proteins and Sharon's research has been absolutely critical in evaluating changes in resistance frequencies and alerting the industry ahead of time.

Sharon has also made important scientific contributions that have added significant extra value to this research. For instance, in association with colleague Rod Mahon, Sharon discovered two new tests (the F2 and more recently F1 tests) which are far more sensitive to changes in resistance frequencies than the traditional F0 tests. This allows the industry to make far more educated decisions about the effectiveness of the Bollgard II Resistance Management Plan and the need for any changes.

Sharon is outstanding in her ability to convey the complexities of the genetics, the F1 and F2 testing strategies and the results and their implications to all levels of industry and to scientific audiences. This has meant that industry has a far better appreciation of the results, what they mean and implications for the future of Bollgard II.

Her findings have also re-invigorated other areas of research, especially in re-examining migration from inland areas, re-evaluating the ecology and resistance risk in *H. punctigera* and re-examining the effectiveness of refuges. In any conversation with researchers from other countries that have access to the Bt-cotton technologies it is clear that our resistance monitoring program is a true standout in terms of rigour, consistency, logic and outcomes and much of this is due to Sharon's efforts.

Sharon plays a significant role as a group and project leader at the Australian Cotton Research Institute, providing support and mentoring for other entomologists and PhD students. She is a widely published and peer reviewed research scientist, a strong industry participant and community member and in 2006 won the Science and Innovation Award for Young People in Agriculture, Fisheries and Forestry.



## COTTON SEED DISTRIBUTORS RESEARCHER OF THE YEAR AWARD



Kristen has brought her technical and people skills together to lead a program that compares favourably with resistance monitoring programs anywhere in the world.

### FINALIST

KRISTEN KNIGHT, MONSANTO RESEARCH LABORATORIES, TOOWOOMBA, QLD

#### KRISTEN KNIGHT TIRELESSLY LEADS THE MONSANTO AUSTRALIA INSECT RESISTANCE MANAGEMENT PROGRAM, IN ADDITION TO MANAGING THE COMPANY'S RESEARCH EFFORTS INTO ALLELE FREQUENCY, FIELD SURVIVAL ON BOLLGARD II COTTON, ALTERNATIVE REFUGES AND THE ENTOMOLOGICAL ASSESSMENT OF NEW TRAITS.

The Monsanto resistance monitoring program provides ongoing data for assessment of the Bollgard II Resistance Management Plan and its efficacy in protecting the sustainability of this critical technology for the Australian cotton industry well into the future.

Since Kristen started leading the team a few years ago it has more than doubled its allele throughput per season, providing an increasingly robust dataset to ensure world-class resistance management is maintained in the Australian cotton industry. This was achieved through well developed protocols and the implementation of coordinated egg collections by independent cotton consultants throughout the season.

Kristen has engaged with the TMS committee and external scientists to understand their concerns and develop data and experiments to provide continued confidence in the longevity of the Bollgard II technology for the Australian industry. Developing these relationships and subsequently implementing an industry-wide approach is a major advance in the field of resistance monitoring and management, and Kristen has been heavily involved.

A great communicator, Kristen has also focused on providing growers with a much better understanding of the biological nature of the protection provided by Bollgard II technology. For example, a better understanding of Bollgard II protein expression and pest

behaviour now means a low level of field survival is not perceived as resistance related and therefore is not treated as a major threat to a crop. This is largely due to a number of novel experiments that Kristen devised and conducted, that showed some late season variation in the expression of the Cry proteins in BGII cotton. Part of this work has also involved understanding the movement of larvae on to the floral parts of the plant that have lower expression of Cry proteins. As a direct outcome of this work, recommendations for increased monitoring of pest populations around peak flowering have been developed, enabling growers to better understand and manage low level of survivors on BGII cotton crops.

Kristen is a great problem solver and is committed to providing research for the Australian cotton industry that is reliable, adaptable and well-respected by key stakeholders. Kristen has brought her technical and people skills together to lead a program that compares favourably with resistance monitoring programs anywhere in the world.



## AGRIRISK INNOVATIVE GROWER OF THE YEAR AWARD

### WINNER

"WAMARA", STUART AND MAXINE ARMITAGE, CECIL PLAINS, QLD



#### IN BRIEF

<b>FARM NAME:</b>	"Wamara"
<b>OWNED/MANAGED BY:</b>	Stuart and Maxine Armitage
<b>LOCATION:</b>	Cecil Plains, QLD
<b>TOTAL AREA:</b>	485 hectares
<b>COTTON AREA:</b>	240 hectares
<b>2010/11 YIELD:</b>	5 bales/ha – severely flood affected
<b>2010/11 WATER:</b>	1.2 ML/ha
<b>CONSULTANT:</b>	Matthew Holding
<b>MARKETED BY:</b>	Self
<b>GINNED BY:</b>	Queensland Cotton

#### BY THE END OF DECEMBER 2010, STUART AND MAXINE ARMITAGE HAD RECEIVED 16 INCHES OF RAIN AND A GOOD PERCENTAGE OF THEIR 240 HECTARES OF COTTON WAS UNDER WATER. AND AS IF THAT WASN'T BAD ENOUGH, THEY HAD JUST PICKED THREE COTTON MODULES WHEN ANOTHER 4 ½ INCHES CAME POURING DOWN, PUTTING A STOP TO HARVEST FOR OVER A MONTH.

It's a season the family was happy to put behind them, but far from falling in a heap, the Armitages have been a tower of strength for their local community, pulling together support and resources and helping their fellow growers push through one of their toughest times yet.

When Stuart isn't involved in wading through a 13,000 page Coal Seam Gas Environmental Impact Statement, or spending countless hours on the phone canvassing the mining issue, he's the President of the industry's largest Cotton Grower Association with 400 members and in his spare time runs the farm. As one judge put it, "there is innovation at every fence post".

In 2011 the Armitage's used their annual Field Day, which uses an innovative approach to grower engagement, to help lift the spirits of the locals. It's an invitation only event with full grower participation, where everyone piles into their utes and tours around a number of the more innovative farms in the district. This year the theme was Flood Recovery, with a barbeque for the families at the end of the day to unwind and address some of the social issues that came with the floods.

With serious concerns for the mental health of some local growers and spirits pretty low in general, the Armitages faced this difficult issue head on, organising a number of support services to help people through. A mental health night was arranged with a psychologist and respected GP that 90 locals attended, and a Relax and Revive night hosted by bush poet Murray Hartin was a great social occasion with 120 attending. Stuart also organised the Government Financial Counselling Service to call every grower on

the CGA's books to offer free financial planning assistance, and is shortly running a series of meetings with motivational psychologists down the valley in association with Beyond Blue. Stuart and Maxine also helped growers with the myriad of paperwork involved in getting government flood assistance.

This close-knit and highly networked community may have put the floods behind them, but they're now turning their attention to the coal seam gas issue, as there are plans for 40,000 bores across the Darling Downs. Stuart has been doing his bit in helping the cause, sitting on the Arrow Energy Intensively Farmed Land Advisory Committee. He spends many long days with mining company officials trying to enlighten their understanding on the issues our industry has with the expectancy that our businesses can co-exist and likewise being aware of their intentions so they "can't pull the wool over our eyes."

The Armitage's are not only upstanding community members and a great support to their fellow growers, they're pretty handy cotton farmers too and the first to trial Bollgard II in the area. On his small family farm, Stuart has implemented many cutting edge technologies, is BMP accredited and is experimenting with new techniques to improve yield, soil health and water use efficiency. One example is the use of human waste (or bio-solids) as fertiliser, a long term investment in soil health that can yield results for up to 50 years. In 2006/07, "Wamara" averaged 14 bales/hectare, a district record and apart from this year, the farm consistently produces high yields. In true collaborative style, "Wamara" participates in just about every industry trial available: CSD variety trials for seven years, Irrimate and bio-solids trials, Monsanto and NuFarm trials.

Stuart says "you shouldn't sit back on your own patch of dirt and let someone else do the work for you", and the Armitage's are certainly living up to this mantra, finding solutions, working with others and innovating at every turn.



### IN BRIEF

**FARM NAME:** Merrilong Pastoral Company  
**OWNED/MANAGED BY:** David and Gordon Brownhill  
**LOCATION:** Spring Ridge, NSW  
**TOTAL AREA:** 4,735 hectares  
**COTTON AREA:** 150ha irrigated  
 370ha dryland  
**2010/11 YIELD:** 11.5 bales/ha irrigated  
 5.2 bales/ha dryland  
**2010/11 WATER:** 2.5 ML/ha + 4 ML/ha rain  
**AGRONOMIST:** Greg Giblet  
**MARKETED BY:** Kevin Schwagger  
**GINNED BY:** Caroll Cotton

## FINALIST

MERRILONG PASTORAL COMPANY, DAVID AND GORDON BROWNHILL, SPRING RIDGE, NSW

**THEY MIGHT BE FIRST TIME COTTON GROWERS, BUT THE BROWNHILL BROTHERS AT SPRING RIDGE IN NSW NOT ONLY TOOK OUT THE UPPER NAMOI CROP COMPETITION IN 2010, THEY HAVE SET UP AN INNOVATIVE BUSINESS STRUCTURE THAT WILL SEE THEM GROWING COTTON FOR MANY YEARS TO COME.**

As leading broadacre farmers in their region, David and Gordon Brownhill know a thing or two about dryland and irrigated cropping. Merrilong Pastoral Company includes 3,000 hectares of dryland, 900 ha of irrigation country and 835 ha for grazing and farm forestry. Sorghum has traditionally been the mainstay of the business, with wheat, barley, chick peas, corn and seed crops also produced in rotation on a no-till, 9m controlled traffic system since 1995.

Irrigation water is sourced from underground bores, with a 1,750 megalitre annual licence, and is applied with centre pivot overhead sprinklers that have doubled water use efficiency.

Since the late 1950s, the family has slowly acquired parcels of the tightly held black soil country in the district, also investing in real estate and other off-farm income streams. A conservative approach to farming led to their eventual entry into the cotton industry. Land has increased in value from 22 pounds per acre in 1959 to around \$3,000 today.

With prices reaching \$500 a bale last season, the Brownhills decided to make the leap to cotton in the 2010-11 season. This followed careful benchmarking around the performance of various crops in the district and a thorough analysis of costs per hectare, with a strong emphasis on keeping machinery costs below \$150/ha.

The Brownhills have set up a company structure with a Board of Directors including two external directors who oversee the business and guide its strategic direction. To manage risk, the business has a diverse range of interests including a unique shareholding in the AMPS Agribusiness Group. There is a strong emphasis on research through Amps Research, which is involved in trials specific to the local farming community. Tired of seeing no real scientific advances in the grains industry, the Brownhills joined with 23 other farming partners to fund their own private research. The AMPS Agribusiness group now turns over \$20 million annually.

The Brownhills are sold on cotton. Although the season wasn't without its difficulties (picking was jokingly labelled '40 days of hell'), the crop is likely to yield 11.5 bales per hectare irrigated and 5.2 bales/ha dryland. The purchase of a round bale picker will see the irrigated cotton area at Merrilong grow from 150 to 480 hectares next season, and cotton is fortunate to have such an innovative farming business joining the industry.

## FINALIST

SAUNDERS FARMING PTY LTD, CRAIG AND SHARRON SAUNDERS, ST GEORGE, QLD



### IN BRIEF

**FARM NAME:** Saunders Farming Pty Ltd  
**OWNED/MANAGED BY:** Craig and Sharron Saunders  
**LOCATION:** St George, QLD  
**TOTAL AREA:** 3,000 hectares  
**COTTON AREA:** 647 hectares  
**2010/11 YIELD:** 11.25 bales/ha whole farm average  
**2010/11 WATER:** 7.2 ML/ha  
**CONSULTANT:** Justin Schultz (WaterBiz), previously Sarah Hood (SIS)  
**MARKETED BY:** Namoi Cotton  
**GINNED BY:** Namoi Cotton

**SAUNDERS FARMING IS AN IRRIGATED COTTON, DRYLAND WHEAT AND GRAZING ENTERPRISE ON THREE PROPERTIES IN THE ST GEORGE IRRIGATION AREA.**

While through-the-bank (TTB) channel irrigation systems have started to appear in the industry, Saunders Farming has taken this concept one step further in an innovative approach and a first for the Australian cotton industry. In partnership with WaterBiz consultancy, the Saunders' designed and constructed an automated surface irrigation system that added a variable-rates-of-flow function into a syphon-less watering set up. The variable system has meant cotton fields could be watered according to the crop's specific requirement at the time, with rates adjusted during the watering based on extensive moisture probe data (flumes, Irrimate, C-Probes and the new SISCO tool).

The results to date have been remarkable. A 25% water saving, a 20% increase in yield and a 50% reduction in labour requirements, along with the less tangible benefit of a far better work-life balance on the farm. In addition, extensive evaluation has found:

- Uniformity (infiltration amount along the field length), 90% or better
- Application Efficiency (total water onto the field versus total water infiltrated), 85% or better
- Requirement Efficiency (% or deficit to be filled), 100%
- Average run time, eight hours

The quest for optimisation of surface irrigation started over seven years ago. The Irrimate tools confirmed that the only real option for efficient watering, due to soil types and run lengths, was to run the system with high flow rates.

But higher flow rates meant more siphons and an increase in labour, the opposite of what the Saunders' wanted to achieve. And so, the brief for this innovation was clear: to retrofit existing irrigation infrastructure in a way that was easy to maintain, gave consistent results across the farm and that would reduce labour and increase water use efficiency.

In 2009, the existing farm set up started to see the replacement of three inch siphons set every metre, with through-the-bank pipes. The pipes are made from recycled milk bottles, set at 12 metre spacing's and water 11 furrows each. Water moves from the head ditch through the bank and directly onto the field. Each pipe is fitted with an adjustable valve, or a "lid" that can be set at three different points allowing three different flow rates. During an irrigation, the water pools at one end of the field and then starts to slowly trickle down the furrows and when it's finished, the "lid" is simply closed. Field lengths vary from 500 metres to 1.7km, with the rates adjusted accordingly.

Extensive trials quickly showed the potential of the system, and now three quarters of the farm has been fitted with automated surface irrigation. What used to take a team of people 18-20 hours (and a whole lot of sweat starting syphons) to water just one 1.5km long field now takes one person a day to water the whole farm. The need for night time work is almost nil, the pipes are very easy to start and require far less work in the heat of summer.

But the innovation doesn't stop here. Future plans are for a fully automated, infinitely variable system linked to telemetry and soil moisture data that can be run from the farm office.



Fleur headed up a local flood action group during the March 2010 floods that combined cotton's lobbying efforts with graziers and broadacre growers.

## WINNER

**FLEUR ANDERSON**, PRESIDENT, THEODORE COTTON GROWER ASSOCIATION, THEODORE, QLD

**AT JUST 29 YEARS OF AGE, FLEUR ANDERSON FROM THEODORE IN QUEENSLAND SURE PACKS A PUNCH. BORN INTO A COTTON GROWING FAMILY ON THE DARLING DOWNS, FLEUR HAS BEEN AROUND COTTON ALL HER LIFE, AND WAS THROWN INTO THE THICK OF IT DURING THE RECENT FLOODS THAT DEVASTATED HER SMALL RURAL COMMUNITY FOR THE SECOND YEAR RUNNING.**

Some growers lost the lot, twice in two seasons, and as the President of the Theodore Cotton Growers Association, Fleur stepped up to the plate and supported her growers and community when it couldn't get much tougher.

Fleur and her husband Kirk's family farm was affected too, but undeterred, she set about gathering data across the valley that established the scale of the problem and ultimately helped lead to additional government assistance.

Fleur was the local representative on the local flood recovery committee and on all closed consultation panels with ministers and government officials during the December 2010 floods. She also provided the link between local growers and bodies such as Cotton Australia, Queensland Farmers Federation and QDEEDI, all organisations looking to assist in any way they could. Fleur headed up a local flood action group during the March 2010 floods that combined cotton's lobbying efforts with graziers and broadacre growers and also brought growers together to tackle forward marketing issues, a major concern for the viability of growers in the coming year.

Since taking up the reins as CGA President, Fleur has become a bright and positive face for the cotton industry locally, increasing positive perceptions and raising awareness of cotton's contribution to the region.

Fleur has a keen interest in industry leadership and participated in the first Future Cotton Leaders Program. She has a clear goal of increasing the capacity of family farms like her own and increasing the positive image of the cotton industry by fostering excellent industry stewards. She sees this best done through the myBMP program and has an ambitious vision to get 100% of Dawson Valley cotton growers accredited under the new program.

This local ambition feeds into a broader industry vision, that sees family farms gain the knowledge and support they need to be employers of choice, sustainable, leaders in business and dynamic workplaces that are attractive to future generations.

Fleur is immensely proud of the steps the cotton industry has taken over the last two decades and proud to be a grower in such an innovative and dynamic industry that are leaders in agriculture.

Fleur was a finalist in the 2011 Queensland Rural Woman of the Year Award and was instrumental in Theodore winning the national prize in ABC's Revive and Thrive Challenge, a grant of \$50,000. Her devotion to the cotton industry, agriculture in general and the community of Theodore is second to none.

## FINALIST

**DR ROSE BRODRICK**, CSIRO PLANT INDUSTRY, NARRABRI, NSW



Rose's findings and interaction within the industry has led to clear recommendations on alternative row configurations which have revolutionised the way cotton is planted to maximise water efficiency.

**DR ROSE BRODRICK HAS BEEN INVOLVED WITH THE COTTON INDUSTRY SINCE SHE WAS 23. FOR OVER A DECADE, ROSE HAS BEEN TOTALLY COMMITTED TO COTTON INDUSTRY RESEARCH, STARTING AT CSIRO ENTOMOLOGY AS A FIELD ASSISTANT, TRAVELLING TO FARMS FROM ST GEORGE TO HILLSTON TO COLLECT SAMPLES FOR THE HELICOVERPA BT RESISTANCE MONITORING PROGRAM.**

In 2001, Rose was awarded a Cotton Research & Development Corporation/CSIRO PhD Scholarship with the University of Queensland, titled "The Physiological Determinants of Ultra-Narrow Row Cotton (UNR)". She went on to become a Post-Doctoral Fellow with CSIRO, then a seed quality assurance agronomist for CSD, and is currently a scientist with CSIRO Plant Industry at the Australian Cotton Research Institute in Narrabri.

Rose's research has involved cotton plant physiology and management, firstly with Ultra Narrow Row (UNR) cotton systems, and more recently with plant water relations. She has sought to develop management systems which improve cotton crop water use efficiency, and spends lots of time in the field working with growers and conducting trials. Rose has also collaborated in research to understand differences in the benefits and risks of various skip-row configurations for yield and fibre quality in dryland cotton production.

A great communicator and a people person, Rose's findings and interaction within the industry has led to clear recommendations on alternative row configurations which have revolutionised the way cotton is planted to maximise water efficiency.

This has also proved the stimulus for new collaborative research initiatives into limited water management on skip-row configurations, and an innovative project with the Gwydir Valley Irrigators Association.

With her work widely published and presented throughout the industry and via speaking engagements at many industry field days and meetings, Rose has taken her work off the shelf and made it practical and accessible to many.

Rose continues to forge new collaborations with other researchers in the industry in crop physiology and breeding, and is part of an initiative to strengthen linkages with USA researchers in irrigation research. Despite her years, Rose is a passionate and long-term contributor to cotton industry research, demonstrated by her return to CSIRO to continue her research career in cotton following her time with CSD.

Rose is committed to helping strengthen linkages between research and growers. She is currently a member of the Lower Namoi Cotton Grower's Association, was a founding member of WinCott, was involved in the Future Cotton Leaders Program and is an active participant in CSIRO initiatives that seek to engender women in research.

Rose has strong ideas for the future of cotton research, has been identified as a potential research leader within CSIRO and has started accessing training to support these intentions.





Nick is responsible for management and the strategic direction of all cropping operations at "Keytah" including the management of 30 full time staff.

## FINALIST

NICK GILLINGHAM, NG CONSULTING, MOREE, NSW

**FOR SOMEONE WHO HAS ONLY JUST TURNED 35, IT SEEMS NICK GILLINGHAM HAS BEEN AROUND THE COTTON INDUSTRY FOREVER AND HAS COTTON WISDOM FAR BEYOND HIS YEARS. THAT'S BECAUSE HE'S BEEN DIRECTLY INVOLVED IN THE COTTON INDUSTRY HIS ENTIRE CAREER, JOINING IN 1995. AFTER COMPLETING TERTIARY STUDIES HE WORKED AS AN AGRONOMIST WITH AN INDEPENDENT CROP CONSULTANCY BUSINESS AND THEN WITH A RESELLER AGENCY BEFORE LAUNCHING HIS OWN SUCCESSFUL AGRONOMIC CONSULTANCY.**

When the 25,000 hectare "Keytah" farm asked him to become its General Manager, Nick took on the role with great enthusiasm, proving his worth as both an agronomist and people manager. Part of Sundown Pastoral Company's operations, "Keytah" has a mix of irrigated and dryland cropping, is one of the largest water licence holders in Australia and has a half share in the Wathagar cotton gin. Nick is responsible for management and the strategic direction of all cropping operations at "Keytah" including the management of 30 full time staff.

In the 2010-11 cotton season there was water available for the first time in a few years, allowing a crop of 5,260 hectares of irrigated cotton to be planted. Although it wasn't the best seasonal conditions, the cotton yielded well across the farm and the team is looking forward to next year.

Nick sees a major part of his role as getting the most out of his people, and made some structural changes to give each of his managers defined areas with greater responsibility and input into the farm business. This has proved very successful, with staff retention rates significantly improved.

Nick is a willing industry participant and has the capacity and drive to put forward ideas, tackle challenges and lead by example. His involvement in the industry and the level of responsibility he takes on expands each year. He currently holds Office Bearer and Director positions with Crop Consultants Australia, Gwydir Valley Cotton Growers' Association and the Gwydir Valley Irrigators Association, and is involved with CSD variety trials and a federal government Water for the Future project to test four different irrigation systems for water use efficiency.

In his spare time, Nick completed the Australian Future Cotton Leaders Program in 2009/10 and since becoming a director on the CCA Board in 2009 has completely reviewed its membership systems and processes. As a result, membership activities have been streamlined and membership numbers have been increasing. Nick has also been strongly involved in CCA's annual cotton industry survey program and has encouraged new members to become involved in this important industry activity.

Nick has a passion for the cotton industry and believes it must maintain prosperity through innovation and the adoption of the latest farming practices and technology. He feels that research is important and is supportive and involved with many research activities conducted on "Keytah". Nick also sees the benefit of ongoing professional development and believes that it is important for those in the industry to stay up to date and share their findings, experiences and learn from one another.



## FINDING OUR WINNERS

Finalists and winners in the 2011 Australian Cotton Industry Awards have been through a vigorous and transparent judging process, established by the Australian Cotton Industry Awards Taskforce and reviewed each year.

Nominees submit their entries in writing, addressing a set of criteria, and are then shortlisted by expert industry judging panels to decide finalists and winners. In some categories, phone interviews with finalists are conducted, and in the case of the grower categories, on-farm visits with each finalist are held as part of an industry judging tour.

The Taskforce would like to thank the following judges for their time and effort this year:

**CHRIS LEHMANN TRUST YOUNG ACHIEVER OF THE YEAR AWARD, SPONSORED BY BAYER CROPSCIENCE**

- Helen Dugdale, CRDC (convenor)
- Deb Lehmann, Chris Lehmann Trust
- James Houlahan, Cotton Australia
- Scott Ward, Bayer CropScience
- Susan Mass, immediate past winner

**COTTON SEED DISTRIBUTORS RESEARCHER OF THE YEAR AWARD**

- Greg Kauter, Cotton Australia (convenor)
- Lyndon Mulligan, Cotton Australia
- Steve Ainsworth, Cotton Seed Distributors
- Paula Jones, Cotton CRC
- Nilantha Hulagale, immediate past winner

**COTTON AUSTRALIA SERVICE TO INDUSTRY AWARD**

- Adam Kay, Cotton Australia (convenor)
- Phil Armytage, Cotton CRC
- Peter Glennie, immediate past winner

**MONSANTO GROWER OF THE YEAR AWARD AND AGRIRISK INNOVATIVE GROWER OF THE YEAR AWARD**

- Geoff McIntyre, QDEEDI (convenor)
- John Norman and Tony Taylor, 2010 Growers of the Year
- Rob Tuck, 2010 Innovative Grower of the Year
- Michael Fing, Monsanto
- Matt Devine, AgriRisk



## OUR SUPPORTERS



Top: Mr Rugby, Gordon Bray MC'd the 2011 Cotton Awards. Right: Michael Fing, David Brownhill and Rob Tuck. Below: Michael Fing, John Norman and Geoff McIntyre at "Wamara".



Top: Young Achiever Judging Panel – Deb Lehmann, Helen Dugdale and James Houlahan. Below: The On Farm Judging Team – John Norman, Geoff McIntyre, Rob Tuck, Michael Fing, Matt Devine and Tony Taylor.



Left: AgriRisk's Matt Devine. Below left: On Farm Judge and Winner of 2010 Grower of the Year Award, Tony Taylor. Below centre: Von Warner at Bullamon Plains trying to assist the judges!



Left: Young Achiever Judge Scott Ward. Below: Susan Maas, 2010 Young Achiever winner and this year's judge.



# WITH THANKS TO OUR SUPPORTERS

The 2011 Australian Cotton Industry Awards were presented at the Crossing Theatre in Narrabri at a relaxed and fun cocktail party event on the 10th August.

A large team of industry volunteers put in countless hours of their time during the year to help generate entries, participate in the judging process and offer strategic direction through the Australian Cotton Industry Awards Taskforce. This year the Awards were managed by Step Communication, with help from some great friends on the day.

Of course, none of this would be possible without the financial support of our committed sponsors who stand by us year in, year out. A special thanks to AgriRisk, Bayer CropScience, Cotton Seed Distributors and Monsanto Australia.

WE WOULD ALSO LIKE TO ACKNOWLEDGE MEMBERS OF THE AUSTRALIAN COTTON INDUSTRY AWARDS TASKFORCE FOR 2011:

GEOFF MCINTYRE (CHAIR)  
QDEEDI

YVETTE CUNNINGHAM  
Cotton CRC

HELEN DUGDALE  
CRDC

BARB GREY  
WinCott

DEIDRE MCCALLUM  
AgriRisk

SCOTT WARD  
Bayer CropScience

STEVE AINSWORTH  
Cotton Seed Distributors

RACHEL PALUMBO  
Monsanto

DAVID BONE  
Cotton Australia

BROOKE SUMMERS  
Step Communication

MARIA VILLA  
Villa+Villa