

Summary program

Tuesday 5 September	Wednesday 6 September	Thursday 7 September
7:30 Registration desk open 8:00 Tea & coffee	7:45 Tea & coffee (Registration desk open)	7:45 Tea & coffee (Registration desk open)
8:30 Housekeeping 8:40 AACS Welcome	8:25 Housekeeping	8:25 Housekeeping 8:30 AACS AGM
Session 1: Plenary Chair: Paul Grundy 9:00 Oliver Knox 9:30 Merry Conaty	Session 5: PLANT Chair: Joseph Foley 8:30 Plenary (Warwick Stiller) 9:00 Speaker sessions	Session 9: PLANT Chair: Guna Nachimuthu 9:15 Speaker sessions
10:00-10:30 Morning tea	10:00-10:30 Morning tea	10:15-10:45 Morning tea
Session 2: PEOPLE Chair: Susan Maas 10:30 Speaker sessions 12:10 Plenary (Simon Blyth)	Session 6: TECH Chair: Warren Conaty 10:30 Plenary (Alison McCarthy) 11:00 Speaker sessions	Session 10: PADDOCK Chair: Alison McCarthy 10:45 Plenary (Graham Charles) 11:15 Speaker sessions
12:30-1:30 Lunch	12:35-1:30 Lunch	12:25-1:30 Lunch
SESSION 3: Concurrent 1:30 Session 3a: PADDOCK Chair: Linda Smith 1:30 Session 3b: PLANET/PLANT (Church Theatre) Chair: Kristen Knight	Session 7: NEXT GEN Chair: Nicole McDonald 1:30 Plenary (Katie Broughton and Yui Osani) 2:00 Speaker sessions	Session 11: PADDOCK Chair: Lucy Egan 1:30 Speaker sessions 3:05 Closing statements
3:20-3:45 Afternoon tea	3:20-3:45 Afternoon tea	3:30-4:30 Afternoon tea
Session 4: PLANT Chair: Zitong Li 3:45 Speaker sessions	Session 8: COMMS Chair: Megan Woodward 3:45-4:30 Discussion panel	
5:00-6:30 Welcome drinks (Empire Theatre Complex)	6:00-10:30 Conference Dinner (UniSQ Refectory)	

Note: All conference sessions are in the Armitage Centre, except for Session 3b which is in the Church Theatre. The conference dinner is at the Refectory (R block) at the University of Southern Queensland (Toowoomba campus).

Tuesday 5 September

7:30	Registration desk open
8:00	Tea & coffee
8:30	Housekeeping
8:40	AACS Welcome
9:00-10:00	Session 1: Plenary sessions
CHAIR	Dr Paul Grundy
9:00	Oliver Knox: Soils – their health, myths and sustainable future
9:30	Merry Conaty: A digital strategy for the Australian cotton industry, what is it and why should researchers be excited?
10:00-10:30	Morning tea
10:30-12:30	Session 2: PEOPLE
CHAIR	Susan Maas
10:30	Don Jones: A private/public sector collaboration to address FOV
10:45	Kieran O’Keeffe: Southern NSW Grower groups — the key to adoption of best practice.
10:50	Nicole McDonald: Utilising Research to Address the National Agricultural Workforce Strategy for the Australian Cotton Industry
11:05	Nikki Kelly: Exploring a cotton and grains agricultural apprenticeship model
11:15	Melissa Sullivan: How to attract and retain young people to the cotton industry
11:25	Derek Long: Putting cotton in the spotlight in agricultural education
11:40	Melinda Mylek: Are we sustaining wellbeing in the cotton industry and cotton communities?
11:55	Renée Anderson: Building sustainable practices - The connection between wellbeing and agriculture
12:10	Simon Blyth (plenary): The role of technology in supporting adoption of best practice - Maverick case study
12:30-1:30	Lunch
1:30-3:20	Session 3: Concurrent sessions
	Session 3a: PADDOCK
	CHAIR: Dr Linda Smith
1:30	Sally Taylor: Insect pest management and research in U.S. cotton
1:45	Jamie Hopkinson: Resistance to spirotetramat in silverleaf whitefly. What’s happening in cotton?
2:00	Amanda Padovan: The challenges and opportunities of molecular resistance monitoring: A case study in <i>Helicoverpa armigera</i> Bt resistance
2:15	Dinesh Kafle: Plant-parasitic nematodes, a threat to Australian cotton?
2:30	Greg Holt: Orienting and rotating round modules to reduce plastic contamination risk
2:45	René van der Sluijs: Effect of nitrogen application rates on cotton yield and fibre quality - results from recent trials in Australia
3:00	Joseph Foley: Demonstrating and integrating irrigation technology for cotton
3:05	Wendy Quayle: Characterising nitrogen-water interactions in cotton bankless channel surface irrigation systems
	Session 3b: PLANET/PLANT (Church Theatre)
	CHAIR: Dr Kristen Knight
1:30	Michael Rose: Diagnosing agrochemical “drift” injury through leaf tissue analysis — what have we learnt?
1:45	Malem McLeod: The trends of water productivity and water sustainability indicators for Australian cotton from the benchmarking program
2:00	Murray Hall: Innovative fibres, their economic viability, sustainability, threats, and opportunities - with specific reference to cotton
2:15	Simone Heimoana: Closing the loop – developing circular pathways for cotton production systems by creating value options from cotton gin trash waste
2:30	Blake Palmer: Does foliar nutrition help cotton crops overcome waterlogging?
2:45	Paul Grundy: Why early season square retention rarely matters for high yielding Bollgard 3 In Australia
3:00	Larissa Holland: Improving understanding of growth and development of cotton varieties
3:15	Xiaoqing Li: Gene editing in cotton, what is it good for?
3:20-3:45	Afternoon tea

3:45-5:00	Session 4: PLANT
CHAIR	Dr Zitong Li
3:45	Melanie Soliveres: A study of cotton bunchy top, will it go viral?
3:50	Lucy Egan: Untangling the Gordian knot of breeding for resistance to Verticillium wilt
4:05	Iain Wilson: Molecular biology to the rescue (again!): How genomics aids managing disease resistance in cotton
4:10	Hannah Hartnett: Influence of seed characteristics and physiological quality on establishment vigour
4:25	Qian-Hao Zhu: Pollen based cotton transformation, is it possible?
4:40	Philippe Moncuquet: The cotton genome puzzle: The value of connecting the pieces
5:00-6:30	Welcome drinks

Wednesday 6 September

7:45	Tea & coffee (Registration desk open)
8:25	Housekeeping
8:30-10:00	Session 5: PLANT
CHAIR	Dr Joseph Foley
8:30	Warwick Stiller (plenary): From the Holocene epoch to the era of AI
9:00	Peng Chee: QTL validation and identification of candidate genes in qFL-Chr.25, a <i>G. barbadense</i> -sourced QTL conditioning for increased fiber lengths in four diverse <i>G. hirsutum</i> backgrounds
9:15	Pierre Rafter: Exploiting GxE interactions to advance rainfed cotton yield
9:30	Annelie Marquardt: New approaches to improving water productivity in cotton
9:45	Demi Sargent: Unravelling the components of mesophyll conductance in <i>Gossypium</i> species to improve tolerance to heat and drought stress
10:00-10:30	Morning tea
10:30-12:30	Session 6: TECH
CHAIR	Dr Warren Conaty
10:30	Alison McCarthy (plenary): Artificial intelligence: what is it and what does it mean for cotton?
11:00	Greg Holt: AI classifier to enable an auto-calibration system for a gin-stand based machine-vision inspection system for plastic contamination
11:15	Moshiur Farazi: What can you see? Harnessing deep learning for cotton leaf hairiness phenotyping with HairNet2
11:30	Xuesong Li: New ways to measure old traits: a case study in cotton biomass dynamics
11:45	Manish Patel: Better than 20/20 vision: the role of AI in disease phenotyping
12:00	Zitong Li: Can A.I. select cotton lines suited for different environments?
12:15	Chris Teague: Predicting micronaire using variables from an industry agronomic database (ERICA)
12:25	Craig McDonald: Extensive Validation of the BARRY Model for the 2021 -22 Season
12:35-1:30	Lunch
1:30-3:20	Session 7: NEXT GEN
CHAIR	Dr Nicole McDonald
1:30	Katie Broughton and Yui Osani (2019 Early Career Award recipients)
2:00	Chantal Corish: Understanding the role psychological safety can play in enhancing the learning and performance behaviours of leaders and employees on Australian cotton farms
2:05	Grace Fang: Over-expression of P450 CYP6CM1 associated with resistance to imidacloprid in Australian <i>Bemisia tabaci</i> MEAM1
2:20	Garima Dubey: Drought resilient cotton: Developing a new biochemical understanding of developing drought resistant cotton.
2:25	Sharna Holman: Understanding <i>Spodoptera litura</i> larval survival in Bollgard 3 crops in Northern Australia
2:40	Harry Paine: Benefits of a sprayable mulch in dryland cotton systems
2:45	Jonathon Moore: Palaeochannel spaghetti: Within-field soil and cotton yield variability on southern NSW palaeochannel systems
3:00	Mikaela Tilse: An approach to map cotton fibre quality on commercial farms using remote sensing and geostatistics
3:05	Arun Chandra Manivannan: Sustainable saccharification: Gin waste to fermentable sugars by microbial enzymes
3:20-3:45	Afternoon tea
3:45-4:30	Session 8: COMMS discussion panel
	Meg Woodward: Communicating good science: panel discussion
6:00-10:30	Drinks at 6:00 for Conference Dinner seating at 6:30. Dinner includes AACS award and life member announcements.

Thursday 7 September

7:45	Tea & coffee (Registration desk open)
8:25	Housekeeping
8:30	AACS AGM
9:15-10:15	Session 9: PLANT
CHAIR	Dr Guna Nachimuthu
9:15	Jon Baird: Assimilated N – the importance of internal nitrogen to developing fruit in cotton plants
9:30	Robert Sharwood: Opportunities for improving cotton production under future climates – the new role of synthetic biology.
9:45	Michael Bange: Boll periods in modern cotton systems
10:00	Katie Broughton: Can we alter crop development using novel plant growth regulators?
10:15-10:45	Morning tea
10:45-12:25	Session 10: PADDOCK
CHAIR	Dr Alison McCarthy
10:45	Graham Charles (plenary): The weed control fix
11:15	Jeff Werth: Utilising the double knock to increase efficacy of weed control on major weeds in Xtendflex cotton systems
11:20	Tim Weaver: Future Farm: Using a shiny App and Google Earth to access Satellite data to make better N decisions.
11:35	Guna Nachimuthu: Legacy effects of soil compaction on cotton and wheat crops in Vertosols: Insights from a field experiment
11:40	Gupta Vadakattu: Starving soil microbes: consequences to cotton plant and soil health
11:55	Patrick Filippi: Mapping cotton fields, predicting yield, and identifying yield limitations using scalable approaches for the Australian cotton industry
12:10	Eric Koetz: A baseline assessment and survey of weeds and weed management systems in northern cotton regions
12:25-1:30	Lunch
1:30-3:05	Session 11: PADDOCK
CHAIR	Dr Lucy Egan
1:30	Kaitlyn Bissonette: Challenges facing U.S. cotton production: a focus on pathogens and nematodes
2:00	Murray Sharman: Development and application of rapid molecular assays for cotton pathology
2:05	Emma Chorley: Cotton Disease Action Research Initiative – What have we achieved and learnt in the first year?
2:20	Donald Gardiner: Fluorescently tagged <i>Verticillium dahliae</i> to understand the infection process on cotton and other plants
2:25	Karthikeyan Muthusamy/ Sambasivam Periyannan: How are diseases in cotton managed in India, the leading producer?
2:40	Linda Scheikowski: An overview of <i>Verticillium</i> host range
2:45	Duy Le: <i>Alternaria alternata</i> causes distinct foliar symptoms on cotton in New South Wales
3:00	Linda Smith: Reoccurring wilt: The Eutypella story
3:05	Closing statements
3:30-4:30	Afternoon tea