



Grains, Gains, Profits

71st Australasian Grain Science Online Conference

Australasian Grain Science Association

CONFERENCE PROGRAM

Monday 23 August

Time	Activity
8.45-10.30	Session 1. Conference opening ceremony and F. B. Guthrie Presentation and Address. Session Chair: Dr. Cassandra Walker.
8.45-9.00	Welcome to the 71 st Annual Conference by the Conference Chair and the Chair of AGSA.
9.00-9.15	The origins of the Australasian Grain Science Association. Colin Wrigley AM (Patron)
9.15-9.30	The vision for the future of AGSA – Why an Advisory Committee? Chris Blanchard.
9.30-10.30	Presentation of the F. B. Guthrie Award to Emeritus Professor Les Copeland AM and the Guthrie Award Address. Resilience of agri-food systems: perspectives of a grains scientist.
10.30-11.00	<i>Morning break</i>
11.00-12.30	Session 2. Food structure-functionality and the A. B. Blakeney Early Career Scholarship Award presentation. Session Chair: Dr. Sushil Dhital.
11.00-11.30	Rebecca Thistlethwaite - A three-tiered, high throughput phenotyping approach to high temperature tolerance and wheat improvement.
11.30-11.50	Sushil Dhital - Molecular mechanisms towards increasing the nutritional functionality of white salted noodles.
11.50-12.10	Mike Sissons - Processing factors affecting the in vitro starch digestion in spaghetti.
12.10-12.30	Wei Zou - Harnessing lignin for slowing starch digestion rates of carbohydrate foods.
12.30-1.30	<i>Lunch break</i>
1.30-2.50	Session 3. Impact of technology on grain and food quality. Session Chair: Dr. Mike Sissons.
1.30-1.50	Malik Nawaz - Can partial enzymatic hydrolysis of legume proteins improve the colloidal stability of legume-based milk alternative?
1.50-2.10	Frank Bekes - Investigation of protein and epitope characteristics of oats.
2.10-2.30	Darren Yates - GQPM Builder: Predicting rice grain yield and quality through data and artificial intelligence.
2.30-2.50	Cassandra Walker - Characterisation of post-harvest grain quality using sensor technologies.
2.50-3.30	<i>Afternoon break</i>
3.30-4.30	Session 4. Starch and lipids in cereals. Session Chair: Professor Chris Blanchard.
3.30-3.50	Les Copeland AM - Residual short-range molecular order in gelatinized starch influences retrogradation.
3.50-4.10	Siem Siah - The potential of using Solvent Retention Capacity (SRC) to predict Australian soft wheat quality
4.10-4.30	Markus Loens - The change in gelatinization properties of starch due to the use of different vegan milk alternatives.
4.30	Close of the days' proceedings.

Tuesday 24 August

Time	Activity
9.00-10.30	Session 5. Whole grains and the F. B. Guthrie Presentation and Address. Session Chair: Dr. Cassandra Walker.
9.00-9.30	Sara Grafenauer - Healthcare cost savings associated with increased whole grain consumption among Australian adults.
9.30-10.30	Presentation of the F. B. Guthrie Award to Dr. Joe Panozzo and Guthrie Award Address. Applying 21 st Century Science to the Guthrie-Farrer Model.
10.30-11.00	<i>Morning break</i>
11.00-12.20	Session 6. Early Career Presentations, Posters and Sponsors. Session Chairs: Drs. Jesse Beasley and Vito Butardo.
11.00-11.10	Keyu Tao - Exploring molecular structural differences between chalky part and translucent part at multiple starch structural levels based on white belly and white core rice grains.
11.10-11.20	Joel Johnson - Assessment of bioactive compounds in faba bean using infrared spectroscopy.
11.20-11.30	Borkwei Ed Nignpense - Purple Rice Phenolic Composition and Antioxidant Potential during in vitro gastrointestinal digestion.
11.30-11.40	John Kalitsis - In-line NIR flour stream analysis to optimize flour stream blending using mathematical modelling.
11.40-11.50	Smriti Shrestha - Protein-based value addition of Australian lentil cultivars.
11.50-12.00	Lavaraj Devkota - Evaluating the effect of thermal and pulsed electric field assisted hydration of common beans on bioactive component leaching.
12.00-12.10	Achini Herath - Development of a spectroscopic screening method & quantification of polyphenols, flavonoids and AO in commercially available coloured whole grain rice.
12.10-12.20	Allister Clarke - Predicting rice whole grain yield.
12.20-1.30	<i>Lunch break</i>
1.30-3.30	Session 7. Early Career Presentations (continued), Posters and Sponsors.
1.30-1.40	Muhammad Yahya - Does grain quality differ in two sister lines of wheat exposed to terminal heat stress?
1.40-1.50	Catherine Lawn - Effect of short periods of heat stress on protein composition in barley.
1.50-2.10	Colin Wrigley AM - Advice about getting your research paper accepted for publication (or rejected).
2.10-2.20	Syed Abdullah - Reducing amylase-trypsin inhibitors in wheat varieties.
2.20-2.30	Anne Bridges - Delivering safe food to International expectations.
2.30-2.40	Anita Stefoska-Needham - A cross-sectional audit of sorghum in breakfast cereals and snack bars in Australian supermarkets.
2.40-2.50	CI Scientific, Jurgen Cyrulla.
2.50-3.00	Perkin-Elmer, Raul Ovelar. From Perten to PerkinElmer – a broader range of testing.
3.00-3.10	Deltagen, Michael Watson. A summary of new methods developed by Megazyme. Presentation of the Association's Service Award (sponsored by Megazyme).
3.10-3.20	Jenny Wood – NSW DPI Grain Quality Group – a coordinated research group.
3.20-3.30	Australian Grain Technologies Pty Ltd Virtual Field and Laboratory Tour, Douglas Lush.
3.30-4.00	<i>Afternoon break</i>
4.00-5.00	AGSA Annual General Meeting

Wednesday 25 August GRAINS – GAINS – PROFITS

Time	Activity
8.45-10.30	Session 1. The Australian Grains Industry – The Changing Operating Environment. Session Chair: Dr. Cassandra Walker.
8.45-9.00	Grains Australia Limited – a New Era for the Australian Grains Industry. Rebecca Reardon, Board Member, Grains Australia Limited.
9.00-9.20	Future Grains Research Investment Directions. Dr. Nicole Jensen, General Manager, Genetic and Enabling Technologies, Grains Research and Development Corporation.
9.20-9.40	GrainGrowers State of the Grains Industry Report 2021. Zach Whale, General Manager Policy and Advocacy, GrainGrowers Limited.
9.40-9.55	Growing Rice with Benefits. Garry and Margaret Knagge, Rice Growers, Gogeldrie, NSW.
9.55-10.15	Capturing increased value from the supply chain. Angus Woods, Woods Foods, Billa Billa, Queensland.
10.15-10.30	Discussion forum with the speaker panel.
10.30-11.00	<i>Morning break</i>
11.00-12.30	Session 2. Market updates. Session Chair: Dr. Haelee Fenton.
11.00-11.20	Wheat: The Pacific, Mid-east, Africa and North Asia Market Overview. Tremayne Watts, Export Sales Manager, Cargill Australia.
11.20-11.40	Wheat: South East Asia – a Reality Check. Tim Dewan, Managing Director, Global Grain Pty Ltd.
11.40-12.00	Shaping our Future – Australian Grain Markets Beyond 2030. Ken Quail, General Manger - Research and Technical Services, Sydney, Australian Export Grains Innovation Centre.
12.00-12.20	Pulses. Mitchell Elks, Sales and Marketing Manager AGT Foods Toowoomba.
12.20-12.30	Discussion forum with the speaker panel.
12.30-1.30	<i>Lunch break</i>
1.30-3.00	Session 3. Gains from Grains – Some case studies documenting yield and quality gains leading to increased value in the supply chain. Session Chair: Katrina Swift, Grower, Tichborne, NSW.
1.30-1.50	Wheat: Yield improvement in the northern region. Haydn Kuchel, Chief Executive Officer, Australian Grain Technologies Pty Ltd.
1.50-2.10	Pulses: Capturing and sustaining yield and rotational benefits of pulses. Kristy Hobson, Chickpea Breeder, Tamworth, NSW.
2.10-2.30	Pulses: Capturing the health benefits. Chris Blanchard, Charles Sturt University, Wagga Wagga.
2.30-2.50	Converting gains from breeding and research into on-farm profits. Mitch Cuell, Agronomist, Outlook Ag.
2.50-3.00	Discussion forum with the speaker panel.
3.00-3.30	<i>Afternoon break</i>
3.30-5.00	Session 4. New Grains and New Futures for Established Grains? Coordinator: Dr. Angela Pattison. Session Chair: Laura Skipworth, Manager, Emerging Industries, AgriFutures Australia.
3.30-3.50	Native grains – historic staple, future fad? Ali Khoddami. University of Sydney.
3.50-4.10	A Local perspective. An interview with Aunty Kerrie.
4.10-4.30	How does elevated carbon dioxide affect the grain properties of Australian Native Rices? Sayedur Rahman, University of Sydney.
4.30-4.50	Investigating the high value uses of sorghum. Annie Riaz, Charles Sturt University, Wagga Wagga, NSW.
4.50-5.00	Discussion forum with the speaker panel.
5.00	Close of the days' proceedings and the 71 st Australasian Grain Science Conference by the Conference Chair Lindsay O'Brien.