



CONFERENCE PROGRAM

Monday 19th August

Preconference activities

09:00-16:00 Tour of Essantis (formerly Unigrain), Smeaton Vic

AGSA Council events

16:00-18:00 AGSA Council meeting

18:30 AGSA Chair's dinner

Day 1 – Tuesday 20th August

Conference Opening

08:30 Registration

08:45 Welcome: **Dr Cassandra Walker and Assoc Prof Sushil Dhital**

Session 1.1

09:00 **Dr. Karen Massel**
University of Queensland
Updates on Genetic Modification

09:15 **Dr. Marie Appelbee**
Australian Grain Technology
Development of Resistant Starch Type 2 Wheat: Research to Supermarket – an innovative grains success story

09:30 **Mr. Jamie Macallister**
The New Zealand Institute for Plant and Food Research Limited
A genomic approach for breeding low-gluten epitope wheat

09:45 **Dr. Lindsay O'Brien**
The University of Sydney, Plant Breeding Institute
The commercialisation of wheat breeding's winners and losers

10:00 **Dr. Maneka Malalgoda**
University of Manitoba
A closer look at oat protein using HPLC and LC-MS techniques: Analyzing the impact of GxE on protein composition

10:15 **Dr. Ian Wesley**
Australian Export Grains Innovation Centre (AEGIC)
Standard methods: how they support the Australian grains industry

10:30 **Morning tea**

Session 1.2

11:00 **Dr Cassandra Walker**
Agriculture Victoria Research
Benchmarking Australian Pulses

11:15	Dr. Pankaj Maharjan <i>Agriculture Victoria Research</i> Compositional traits of historical field pea varieties
11:30	Dr. Eva-Maria Schmid <i>RMIT University</i> Different soy protein isolates have different performance indicators
11:45	Dr. JP Ral <i>CSIRO</i> The diversity of flavour and protein functionality among chickpeas
12:00	Ms. Louise Walker <i>La Trobe University</i> Protein and yield dynamics across Australian Vicia faba cultivars and environments
12:15	Mr. Ryan McNess <i>Curtin University</i> Effects of variety and environmental growing conditions on amounts and ratios of different conglutins in narrow-leaf lupins
12:30	Lunch
Session 1.3	
13:30	Mr Andrew May <i>Unigrain (Essantis)</i> Sustainable, plant-based ingredients for a better tomorrow
13:45	Dr. Vishal Ratanpaul <i>CSIRO</i> Powder flow properties of finely milled pulse flours and their effect on protein separation efficiency in air classification
14:00	Ms. Yanyan Lao <i>UNSW</i> Pre-roasting of pea protein for potential applications in plant-based milk
14:15	Dr. Simon Loveday <i>CSIRO</i> Chickpea and mung bean protein isolate functionality
14:30	Mr. Damodar Dhakal <i>Monash University</i> The fortification of lupin protein isolate affects the nutritional and rheological properties of lupin-oat yoghurt-like application.
14:45	Dr. Ryan du Preez <i>Central Queensland University</i> Functional food properties of kabuli chickpea genotypes grown in northern Australia
15:00	Afternoon tea
Session 1.4	
15:30	Dr Carl Dolgow <i>Collin Solutions</i> Influence of Raw Material Fluctuations on Food and Feed Extrusion
15:45	Ms. Mayang Pawitra <i>RMIT University</i> Alcohol-alkaline modified porous starch: a study on structural changes and functional evaluation
16:00	Mr. Anthony Halim <i>RMIT University</i> Comparative study of acid treatment of cassava, quinoa, and faba starches: functional and physicochemical properties

16:15	Mr. B K Amrit <i>Agriculture Victoria</i> Understanding the impact of mild wet fractionation on starch yield and pasting properties
16:30	Mrs Supuni Aluthge <i>RMIT University</i> Discovering the potentials of chia microgreen in food production
16:45	Ms. Jenani Sutharsan <i>UNSW</i> Role of fermentation on the dietary fibre content and bio accessibility of lutein and zeaxanthin in corn
17:00	Welcome mixer and poster session

Day 2 – Wednesday 21st August

Session 2.1

09:00	Dr Raffael Osen <i>Singapore Institute of Food & Biotechnology Innovation (SIFBI), Singapore</i> Driving sustainable protein ingredients innovation in Singapore
09:15	Prof. Roman Bukow <i>La Trobe University</i> Faba bean protein – an emerging plant protein source with versatile applications
09:30	Dr. Larisa Cato <i>AEGIC</i> Wheat quality aligned to noodles from the customer's perspective
09:45	Dr. Rewati Bhattarai <i>Curtin University</i> Recent advances in sorghum value addition for food applications
10:00	Dr Jennifer Dang <i>Perten Instruments of Australia</i> Determining paddy rice quality using the PaddyCheck
10:15	Mrs. Yasmeen Bashmil <i>The University of Melbourne</i> Green banana flour for moderating dough rheology: a wheat flour substitution study
10:30	Morning tea

Session 2.2

11:00	Dr. Sushil Dhital <i>Monash University</i> Sustainable Plant Protein Production: Addressing Extraction and By-Product Challenges
11:15	Dr. Shriya Henry <i>Swinburne University of Technology</i> Fungal Solid-State Fermentation Enables Cost-Effective Bacterial Cellulose Production from Cereal Waste
11:30	Mx. Panyot Mongkolchat <i>Swinburne University of Technology</i> Response Surface Optimisation of Cereal Waste for Sustainable Bacterial Cellulose Production Using Novel Lactic Acid Bacteria

11:45	Mr. Parbat Raj Thani <i>Central Queensland University</i> Bioactive compounds and antioxidant capacity of nigella sativa seed cake: nutraceutical potential
12:00	Mrs. Aduba Collins <i>Charles Sturt University</i> Impact of sorghum (<i>Sorghum bicolor</i> L. Moench) phenolic compounds on cancer development pathways
12:15	Dr. Mya Hlaing <i>CSIRO</i> Utilising Brewer's Spent Grain for Sustainable Microbial Protein Production
12:30	Lunch
Session 2.3	
13:30	Ms. Dilini Perera <i>Monash University</i> Starch Composition and Structural Alterations in Faba and Adzuki Beans (<i>Vigna angularis</i> and <i>Vicia faba</i>) During Storage: Implications for Hard-to-Cook Phenomenon
13:45	Ms. Bhawana Bhattarai <i>Agriculture Victoria Research and The University of Melbourne</i> Modelling red lentil seed coat colour to manage degradation in quality during storage
14:00	Ms. Piyumi Chathurangi Wanniarachchi <i>Curtin University</i> Effects of irrigation and sowing time on the lipoxygenase activity in Australian Sweet Lupins (<i>Lupinus angustifolius</i> L.)
14:15	Mr. Joel Johnson <i>The University of Queensland</i> Simulated grazing effects on cowpea phytochemical and proximate composition
14:30	Mr. Md Rahmatuzzaman Rana <i>Charles Sturt University</i> Impact of agronomic management on wheat quality
14:45	Mrs. Yvonne Fernando Adibuduge <i>Swinburne University of Technology</i> Screening commercial rice varieties for water use efficiency under limited water availability
15:00	Afternoon tea
AGSA Annual General Meeting	
15:30	AGSA AGM (all welcome)
Advisory Committee meeting	
16:30	Advisory Committee meeting (all welcome)
AGSA Conference dinner – Presentation of awards	
18:30	Pre-dinner drinks
19:00-22:00	Conference dinner Presentation of awards Conference Entertainment: Comedian Damian Callinan

Day 3 – Thursday 22nd August

Session 3.1

09:00	Industry Panel, Future Trends and Needs Dr Carl Dolgow (<i>Collin Solutions</i>) Dr Jessica Ferguson (<i>Sanitarium</i>) Dr Kirsty Germaine (<i>Mauri</i>) Mr Arjan Jongkees (<i>Simplot</i>) Mr Andrew May (<i>Essantis</i> , formerly <i>Unigrain</i>) Mr Daniel Mullette (<i>Harvest B</i>)
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10:30 Morning tea

Session 3.2

11:00	Ms. Theresa Pham <i>The Grains & Legumes Nutrition Council</i> From awareness to action: mitigating low whole grain intake in Australia
11:15	Dr. Vito Jr Butardo <i>Swinburne University of Technology</i> Comprehensive nutritional, safety and germination efficiency profiling of soft and hard seed coat adlay varieties reveals potential for sustainable food Systems
11:30	Dr. Bernadine Flanagan <i>The University of Queensland</i> Fermentability of Grains in Weaning Piglet Feed, the Effects of Particle Size and Exogenous Enzyme Supplementation
11:45	Dr. Kate Howell <i>University of Melbourne</i> Exploring the diversity of wheat for flavour, nutrition and artisan bakery products
12:00	Dr. Mahsa Majzoobi <i>RMIT University</i> Nutritional diversity and food security by rediscovering the underutilized grains
12:15	Prof. Mike Gidley <i>The University of Queensland</i> Grain factors underlying efficient and sustainable feeding of chickens

12:30 Lunch

Conference close

Post conference activity

13:30-16:30	Workshop: Bringing new grain-based food products ideas to life
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POSTERS

- 1 **Ms. Xiaoyu Feng:** Effect of solid-state fermentation by *Bacillus subtilis* on the nutritional value and functionality of hempseed cake
- 2 **Ms. Anahita Sharifi:** A comprehensive review of protein extraction methods from pulses and their usage in bakery products
- 3 **Mrs. Yvonne Fernando Adibuduge:** Screening commercial rice varieties for water use efficiency under limited water availability
- 4 **Ms. Renee De Boer:** The root architectural traits of germinating temperate japonica rice grains screened for salinity and osmotic tolerance
- 5 **Dr. Wendy Hunt:** Amylose content of wheat flour noodles effects satiety and glycaemic response in healthy adults
- 6 **Dr. Dongdong Ni:** Unveiling nutritional, health, and allergy potential of black soldier fly larvae protein using INFOGEST in vitro digestion and proteomics
- 7 **Mr. Ashfak Ahmed Sabuz:** Impact of storage on raw and processed rice composition and their

volatile profile

- 8 **Mr. Md Rahmatuzzaman Rana:** Impact of agronomic management on wheat quality
 - 9 **Mr. Nicola Novello:** Dual-purpose peanuts in future atmospheric environments: interactive impacts of elevated carbon dioxide and in-season biomass cutting on peanut and forage yield
 - 10 **Dr. Surjani Uthayakumaran:** Improved high-throughput hybrid Solvent Retention Capacity (SRC) test to predict cookie quality of Australian soft wheat
 - 11 **Mr. Theo Webster:** Effect of pulse flour inclusion on instant noodle quality.
 - 12 **Mr. Michael Ruderman:** Application of digital image analysis to assess the texture of bread products
 - 13 **Mrs. Radhika Dhakal Sedhai:** Rice bran and pigmented lactic acid bacteria enhance the nutritional and functional Properties of Soy Yoghurt
 - 14 **Mrs. Dhananga Senanayake:** Exploring the potential of exopolysaccharide-producing microorganisms to enhance the techno-functional properties of lupin flour
 - 15 **Mrs. Fathima Afka Deen:** Fermentation to enhance the functional property of textured soy protein
 - 16 **Ms. Farkhondeh Abedi:** Carbohydrate profiling of four Australian native grains: insights for nutrition and industry
 - 17 **Dr. Haelee Fenton:** InsideOats, a focus on flavour and aroma discovery for food, beverage and ingredient applications
 - 18 **Dr. Haelee Fenton:** Characterisation of grain quality in an Australian oat (*Avena sativa*) breeding program.
 - 19 **Ms. Bin Jia:** Impact of extrusion-induced protein molecular rearrangement on cooking qualities, in vitro starch and protein digestion of durum wheat pasta
 - 20 **Ms. Malsha Wannu Arachchige:** Texturization of mung bean, cowpea, soy flour, and soy protein isolates
 - 21 **Ms. Chamodi Gunathunga:** Optimizing bioactive compounds in rice, maize, green gram, and soy through germination powder
 - 22 **Dr Jennifer Dang:** Wheat quality analysis using a new Perten grain characterisation system
 - 23 **Dr Kwame Attafuah Ampofo:** The effects of 'Food Banks and Gene Banks' on indigenous legume foods
 - 24 **Prof. Ikramullah Khan:** Spread of invasive weed seeds through wheat grains in the NWest Pakistan
 - 25 **Mr Billy Lo:** Improving the functional properties of lupin proteins using green technology for food applications
 - 26 **S. Gall:** Correlation of the Brabender ViscoQuick with the Brabender Micro Visco-Amylograph and Viscograph-E
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