



**8TH INTERNATIONAL FOOD LEGUME
RESEARCH CONFERENCE AND
5TH AUSTRALIAN PULSE CONFERENCE**
15 - 19 SEPTEMBER 2025 • PAN PACIFIC PERTH



Monday 15 September 2025

08:30 – 17:00	Pre-Conference Workshops <i>(Pre-registration required)</i>
08:30 – 17:00	National Pulse Pathology Workshop <i>Goldsworthy</i>
09:00 – 16:00	Pulses Genetic Gains Workshop <i>Hamersley</i>
14:30 – 17:00	Pretzel Workshop <i>Boardroom</i>
15:00 – 18:00	Registration Desk Open <i>Golden Ballroom Foyer</i>
17:30 – 19:30	Welcome Reception <i>Exhibition Hall, Grand River Ballroom</i>
	Sponsored by  Centre for Crop and Disease Management  GRDC GRAINS RESEARCH & DEVELOPMENT CORPORATION  Curtin University
17:30 – 17:40	Global perspectives of legumes Stan Blade (India)
17:40 – 17:50	Lentils in West Australian farming systems John Young (Australia)
17:50 – 18:00	Pulse market trends Mary Raynes (Australia)



**8TH INTERNATIONAL FOOD LEGUME
RESEARCH CONFERENCE AND
5TH AUSTRALIAN PULSE CONFERENCE**
15 - 19 SEPTEMBER 2025 • PAN PACIFIC PERTH



Tuesday 16 September 2025

07:30 – 17:00	Registration Desk Open <i>Golden Ballroom Foyer</i>
08:00 – 16:00	Exhibition Open <i>Exhibition Hall, Grand River Ballroom</i>
08:00 – 08:30	Arrival Tea & Coffee <i>Exhibition Hall, Grand River Ballroom</i>
08:30 – 09:00	Opening Ceremony and Welcome to Country <i>Golden Ballroom</i>
	Welcome to Country
	Opening Remarks and Housekeeping A/Prof Lars Kamphuis
	Opening Address Dr Kaara Klepper, Broadacre Systems Executive Director
09:00 – 11:00	Session 1: Legume Genetic Resources: Tapping into Diversity <i>Golden Ballroom</i>
<i>Session Chairs</i>	<i>Janine Croser & Ahsan Asif</i>
09:00 – 09:30	Plenary Address: Pea breeding strategies for the agroecological and food transitions Judith Burstin (France)
09:30 – 09:50	Invited Speaker Presentation: Genomics and artificial intelligence-based approaches to analyze 10,225 genomes for harnessing genebank diversity for chickpea improvement Rajeev Varshney (Australia)
09:50 – 10:01	Decentralized conservation of food legumes genetic resources in the INCREASE citizen science experiment Giulia Frascarelli (Italy)
10:01 – 10:12	Finding hidden gems: Applying phenomics and GWAS to plant genetic resource panels Clarice Coyne (United States)
10:12 – 10:23	Unlocking the genetic potential of pulses: Insights from genotyping pulse crops in the Australian Grains Genebank Luisa Teasdale (Australia)
10:23 – 10:34	Identification of key genes associated with the short-winged trait in <i>Vicia faba</i> L. via re-sequencing, GWAS, and high-resolution bulked segregant analysis



**8TH INTERNATIONAL FOOD LEGUME
RESEARCH CONFERENCE AND
5TH AUSTRALIAN PULSE CONFERENCE**
15 - 19 SEPTEMBER 2025 • PAN PACIFIC PERTH



	Haitian Yu (China)
10:34 – 10:39	The reproductive phenology in response to photo-thermal cues is diverse in wild chickpea Judith Lichtenzveig (Australia)
10:39 – 10:44	Genome-wide association study (GWAS) to delineate QTLs/candidate genes for cold tolerance in chickpea (<i>Cicer arietinum</i> L.) Reyaz Mir (Australia)
10:44 – 10:49	Identification of anthracnose disease resistance gene in narrow-leafed lupin Gaofeng Zhou (Australia)
10:49 – 10:54	Pre-breeding to improve grain legumes: Achievements and insights Shivali Sharma (India)
11:00 – 11:30	Morning Tea, Industry Exhibition and Poster Displays <i>Exhibition Hall, Grand River Ballroom</i>
11:30 – 13:00	Session 2: Legume Agronomy: Economic, Environmental and Social Dimensions <i>Golden Ballroom</i>
<i>Session Chairs</i>	<i>Ram Nair & Kristy Hobson</i>
11:30 – 11:50	Invited Speaker Presentation: The phenotype of pulse plants in crop stands: An ecophysiological perspective Victor Sadras (Australia)
11:50 – 12:01	Sustainable rice fallow management with legumes for enhanced productivity and income for farmers Smita Sharma (India)
12:01 – 12:12	Long-term assessment of sowing time for lentil in southern Australia considering seasonal variability and farm system interactions Ashley Wallace (Australia)
12:12 – 12:23	Environmental drivers of yield variability in lentil Lia Olmedo Pico (Australia)
12:23 – 12:34	Impact of simulated grazing on recovery of narrow leaf lupin: implication for decision making in mixed farming systems Razlin Azman (Australia)
12:34 – 12:44	Arbuscular mycorrhizal fungi are an under-valued resource for improving mungbean yield Kirsty Owen (Australia)
12:44 – 12:55	Subsurface acidity: A limitation to pulses in sNSW farming systems Mark Richards (Australia)



**8TH INTERNATIONAL FOOD LEGUME
RESEARCH CONFERENCE AND
5TH AUSTRALIAN PULSE CONFERENCE**
15 - 19 SEPTEMBER 2025 • PAN PACIFIC PERTH



13:00 – 14:00	Lunch, Industry Exhibition and Poster Displays <i>Exhibition Hall, Grand River Ballroom</i>
13:30 – 14:00	Meet the Poster Authors <i>Exhibition Hall, Grand River Ballroom</i>
14:00 – 15:30	Session 3.1: Innovative Breeding Technologies: Improving Genetic Gain <i>Golden Ballroom</i>
<i>Session Chairs</i>	<i>Tom Warkentin & Simon Michelmore</i>
14:00 – 14:20	Invited Speaker Presentation: From less than 1K to 1.5M tonnes: The rise of the Australian lentil industry Sukhjiwan Kaur (Australia)
14:20 – 14:31	Identification and validation of genetic loci controlling earliness in lentil (<i>Lens culinaris</i> L.) using QTL-seq Gyan Prakash Mishra (India)
14:31 – 14:42	High-quality genome assembly and genome-wide association studies decipher the genetic basis of heat-dissipation and yield traits in mungbean Xingxing Yuan (China)
14:42 – 14:53	Field peas in Australia: Past, present and future Babu Pandey (Australia)
14:53 – 15:04	Enhancing legume breeding and food security in West Africa Vivienne Anthony (Australia)
15:04 – 15:09	Breeding field pea varieties with improved protein content Dengjin Bing (Canada)
15:09 – 15:14	Breeding lentils for heat tolerance using genomic selection Casey Flay (Australia)
15:14 – 15:19	Use of phenotypic selection to accelerate the development of Ascochyta blight resistant chickpea varieties Ahsan Asif (Australia)
15:19 – 15:24	Performance of machine harvestable lentil (<i>Lens culinaris</i> Medikus) accessions in semiarid environments Outmane Bouhlal (Morocco)
15:30 – 16:00	Afternoon Tea, Industry Exhibition and Poster Displays <i>Exhibition Hall, Grand River Ballroom</i>
16:00 – 17:00	Session 3.2: Innovative Breeding Technologies: Improving Genetic Gain and Data Driven Legumes <i>Golden Ballroom</i>
<i>Session Chairs</i>	<i>Donal O'Sullivan & Sukhjiwan Kaur</i>



**8TH INTERNATIONAL FOOD LEGUME
RESEARCH CONFERENCE AND
5TH AUSTRALIAN PULSE CONFERENCE**
15 - 19 SEPTEMBER 2025 • PAN PACIFIC PERTH



16:00 – 16:20	Invited Speaker Presentation: Leveraging pangenome graphs for accurate skim-sequencing imputation to accelerate genetic gain in breeding programs Kumar Gaurav (United Kingdom)
16:20 – 16:31	Development of genetic resources for improvement of faba (Vicia faba L.) in Western Canada Nicholas Larkan (Canada)
16:31 – 16:42	Harnessing the power of pulses: Breeding for a farming system to improve sustainability Lee Hickey (Australia)
16:42 – 16:47	Using proximal sensing data to enhance genomic prediction accuracy for seed yield in lentil Abeya Tefera (Australia)
16:47 – 16:52	Synergising high-throughput phenotyping and genomic selection to boost grain yield and other agronomic traits predictions in field pea Adnan Riaz (Australia)
16:52 – 16:57	Plot to field - Farm scale pulse research program in Alberta, Canada Jagroop Gill Kahlon (Canada)
	<i>Day 1 Concludes</i>



**8TH INTERNATIONAL FOOD LEGUME
RESEARCH CONFERENCE AND
5TH AUSTRALIAN PULSE CONFERENCE**
15 - 19 SEPTEMBER 2025 • PAN PACIFIC PERTH



Wednesday 17 September 2025

08:00 – 17:00	Registration Desk Open <i>Golden Ballroom Foyer</i>
08:30 – 16:00	Exhibition Open <i>Exhibition Hall, Grand River Ballroom</i>
08:30 – 09:00	Arrival Tea & Coffee <i>Exhibition Hall, Grand River Ballroom</i>
08:30 – 09:00	International Steering Committee Meeting <i>Closed Door Session</i>
09:00 – 11:00	Session 4: Legume Biology: From Ecosystems to Molecules <i>Golden Ballroom</i>
Session Chairs	<i>Victor Sadras & Cassandra Walker</i>
09:30 – 09:50	Plenary Address: From lab to field: Navigating the science, regulation, and public perception of GM Cowpea in Africa <i>Jerry Nboyine (Africa)</i>
09:30 – 09:50	Invited Speaker Presentation: Molecular dynamics of a halogenated auxin in pea pod growth <i>Lars Ostergaard (United Kingdom)</i>
09:50 – 10:01	Mutation of alkaloid regulator LaRAP2.7 enabled the domestication of narrow-leaved lupin <i>Chunsheng Xiao (Australia)</i>
10:01 – 10:12	Genome-wide association analyses identified candidate gene CaMYB114 controlling black seed coat in chickpea <i>Hao Luo (Australia)</i>
10:12 – 10:23	Development of an eTILLING platform for <i>Vicia faba</i> L. <i>Donal O'Sullivan (United Kingdom)</i>
10:23 – 10:34	Regulation of soybean seed weight by an underutilized component in GmSK21-GmSW19-GmSW5 module <i>Yinghui Li (China)</i>
10:34 – 10:39	Temporal shading impacts <i>Vicia faba</i> grain yield and protein concentration <i>Louise Walker (Australia)</i>
10:39 – 10:44	Deep roots, better crops: Investigating root and shoot traits in historical and modern pea genotypes <i>Dorte Bodin Dresbøll (Denmark)</i>
10:44 – 10:49	Multi-model genome-wide association study reveals molecular markers associated with agronomic traits in a Kabuli chickpea (<i>Cicer arietinum</i> L.)



**8TH INTERNATIONAL FOOD LEGUME
RESEARCH CONFERENCE AND
5TH AUSTRALIAN PULSE CONFERENCE**
15 - 19 SEPTEMBER 2025 • PAN PACIFIC PERTH



	under Mediterranean environments Moez Amri (Morocco)
10:49 – 10:54	Stacking for success: Enhancing chickpea yield with superior haplotypes Victor Papin (Australia)
11:00 – 11:30	Morning Tea, Industry Exhibition and Poster Displays <i>Exhibition Hall, Grand River Ballroom</i>
11:30 – 13:00	Session 5: From Soil to Shoot: Tackling Above and Below-Ground Pathogens <i>Golden Ballroom</i>
<i>Session Chairs</i>	<i>Lars Kamphuis & Judith Burstin</i>
11:30 – 11:50	Invited Speaker Presentation: Transcription regulation in <i>Ascochyta rabiei</i> and its impact on chickpea <i>Ascochyta</i> blight disease severity Ido Bar (Australia)
11:50 – 12:01	Progress in faba bean gall disease (<i>Physoderma viciae</i>) research on faba bean (<i>Vicia faba</i>) in Ethiopia: Pathogen identification, epidemiology, and management strategies Asnakech Beyene (Ethiopia)
12:01 – 12:12	Host status and source performance of legumes reveal four interaction patterns in broomrape parasitism Rachid Mentag (Morocco)
12:12 – 12:23	Identification and characterisation of a key pathogenicity factor of <i>Ascochyta rabiei</i>, causal agent of <i>Ascochyta</i> blight in chickpea Lars Kamphuis (Australia)
12:23 – 12:34	Improving narrow leafed lupin (<i>Lupinus angustifolius</i>) resistance to seed and pod <i>Phomopsis</i> (<i>Diaporthe toxica</i>) Elaine Gough (Australia)
12:34 – 12:39	Basal sclerotinia: A significant constraint for Western Australian lupin growers Zia Hoque (Australia)
12:39 – 12:44	Uncovering hidden treasures from the Australian mung bean diversity set: Is there resistance to the root-lesion nematode <i>Pratylenchus thornei</i>? Begita Adhikari (Australia)
12:44 – 12:49	Epidemiological patterns of <i>Sclerotinia</i> white rot in lentil crops in South Australia Mohsen Khani (Australia)
12:49 – 12:54	Field phenotyping of lentil populations reveal trait-associated loci for resistance to <i>Ascochyta</i> blight Bernadette Henares (Australia)
13:00 – 14:00	Lunch, Industry Exhibition and Poster Displays <i>Exhibition Hall, Grand River Ballroom</i>



**8TH INTERNATIONAL FOOD LEGUME
RESEARCH CONFERENCE AND
5TH AUSTRALIAN PULSE CONFERENCE**
15 - 19 SEPTEMBER 2025 • PAN PACIFIC PERTH



13:30 – 14:00	Meet the Poster Authors <i>Exhibition Hall, Grand River Ballroom</i>
14:00 – 15:30	Session 6: Legumes in a Changing Environment: Tackling Abiotic Stresses <i>Golden Ballroom</i>
<i>Session Chairs</i>	<i>Ido Bar & Marisa Collins</i>
14:00 – 14:20	Invited Speaker Presentation: Pulse performance in water-limited Australian systems: Insights from a national GxExM study Fernanda Dreccer (Australia)
14:20 – 14:31	Does early phenotyping of root and stomatal traits predict drought resilience in faba bean? Dorte Bodin Dresbøll (Denmark)
14:31 – 14:42	Evaluating high temperature tolerance in lentil: A phenotyping strategy Audrey Delahunty (Australia)
14:42 – 14:53	Integrating phenotypic, genomic, and transcriptomic tools to evaluate heat tolerance in interspecific chickpea Sophie Duchesne (Canada)
14:53 – 15:04	Crop modelling to characterise joint heat and water stress environments for Australian chickpea Lachlan Lake (Australia)
15:04 – 15:09	Adapting to adversity: Grasspea's genetic blueprint for thriving in harsh conditions Priyanka Gupta (Morocco)
15:09 – 15:14	Designing high-yielding and drought tolerant chickpeas for Australian environments through haplotype-based breeding Rutwik Barkmukh (Australia)
15:14 – 15:19	Enhancing chickpea resilience for chilling stress using wild Cicer diversity Amanuel Bekuma (Australia)
15:19 – 15:24	Effect of acute heat stress during pod filling on key marketable traits of lentil Minhao Li (Australia)
15:30 – 16:00	Afternoon Tea, Industry Exhibition and Poster Displays <i>Exhibition Hall, Grand River Ballroom</i>
16:00 – 17:00	Session 7: Localised Pulse Research in Diverse Regions <i>Golden Ballroom</i>
<i>Session Chairs</i>	<i>Rajeev Varshney & Padma Ishwarya</i>
16:00 – 16:20	Invited Speaker Presentation: Advancements in common bean research and development in Africa: A model for pulse transformation Berhanu Amsalu Fenta (Africa)



**8TH INTERNATIONAL FOOD LEGUME
RESEARCH CONFERENCE AND
5TH AUSTRALIAN PULSE CONFERENCE**
15 - 19 SEPTEMBER 2025 • PAN PACIFIC PERTH



16:20 – 16:31	PHENO-MA high throughput phenotyping platform for advancing legume breeding under climate change Moez Amri (Morocco)
16:31 – 16:42	Scaling up mungbean varieties in Asia and Africa Ramakrishnan Madhavan Nair (India)
16:42 – 16:47	Unifying molecular diversity and G×E interaction frameworks for the selection of thermo-tolerant, robust chickpea lines Teena Patel (India)
16:47 – 16:52	Genetic background of common bean seed market-classes Maria Lackmann (Germany)
16:52 – 16:57	Fast-cooking nutritious beans through innovations in common bean breeding in East Africa Renu Saradadevi (Australia)
17:00 – 17:30	The Australian Sweet Lupin – a John Gladstones' legacy Mark Sweetingham (Australia)
	<i>Day 2 Concludes</i>



**8TH INTERNATIONAL FOOD LEGUME
RESEARCH CONFERENCE AND
5TH AUSTRALIAN PULSE CONFERENCE**
15 - 19 SEPTEMBER 2025 • PAN PACIFIC PERTH



Thursday 18 September 2025

08:00 – 17:00	Registration Desk Open <i>Golden Ballroom Foyer</i>
08:30 – 16:00	Exhibition Open <i>Exhibition Hall, Grand River Ballroom</i>
08:30 – 09:00	Arrival Tea & Coffee <i>Exhibition Hall, Grand River Ballroom</i>
09:00 – 11:00	Session 8: On the Pulse: Industry and Research – Opportunities for Collaborations <i>Golden Ballroom</i>
Session Chair	Kathy La Macchia
09:00 – 09:30	Plenary Address: Pulses: The powerhouse of innovation in the global alternative protein sector Dr Padma Ishwarya (India)
09:30 – 11:00	Panel Discussion On the Pulse: Industry and Research – Opportunities for Collaborations Facilitator: Kathy La Macchia Panellists: TJ Higgins, Rajeev Varshney, Tom Warkentin, Peter Wilson, Neil Wittner
11:00 – 11:30	Morning Tea, Industry Exhibition and Poster Displays <i>Exhibition Hall, Grand River Ballroom</i>
11:30 – 13:00	Session 9: Legumes: From Farm to Plate <i>Golden Ballroom</i>
Session Chairs	Mark Seymour & Jerry Nboyine
11:30 – 11:50	Invited Speaker Presentation: Understanding the hard-to-cook (HTC) trait in beans: Molecular insights and end-use quality Sushil Dhital (Australia)
11:50 – 12:01	Use of Apulian black chickpea flour and extruded lentil flour in the production of pizza Antonella Pasqualone (Italy)
12:01 – 12:12	Impact of extraction methods on the physicochemical and functional properties of pea proteins: Comparison with commercial pea and soy proteins Anahita Sharifi (Australia)
12:12 – 12:23	Impacts of inorganic nitrogen availability on chickpea grain composition Sally Buck (Australia)



**8TH INTERNATIONAL FOOD LEGUME
RESEARCH CONFERENCE AND
5TH AUSTRALIAN PULSE CONFERENCE**
15 - 19 SEPTEMBER 2025 • PAN PACIFIC PERTH



12:23 – 12:34	Aroma compound binding of legume proteins during high pressure and heat processing Regine Stockmann (Australia)
12:34 – 12:39	Enhancing the protein composition of lupin grain for optimal nutritional quality Arineh Tahmasian (Australia)
12:39 – 12:44	Increasing protein content and grain yield using multiparent derived elite lines in faba bean Fouad Maalouf (Lebanon)
12:44 – 12:49	Convenient, delicious, and nutritious value-added foods from Australian pulses John Carragher (Australia)
12:49 – 12:54	Processing dry fractionated faba bean protein concentrate using a micro-compounder Andreas Hopf (Australia)
13:00 – 14:00	Lunch, Industry Exhibition and Poster Displays <i>Exhibition Hall, Grand River Ballroom</i>
13:30 – 14:00	Meet the Poster Authors <i>Exhibition Hall, Grand River Ballroom</i>
14:00 – 15:30	Session 10: Nutritious Legumes: Meeting Consumer Needs and Market Demand <i>Golden Ballroom</i>
<i>Session Chairs</i>	<i>Kurt Lindbeck & Shiv Agrawal</i>
14:00 – 14:20	Invited Speaker Presentation: From seed to plate, and beyond: Improving the nutrition and sensory qualities of legume-based foods Prof Tony Bacic (Australia)
14:20 – 14:40	Invited Speaker Presentation: Australian Pulse Proteins Cassandra Walker (Australia)
14:40 – 14:51	Pulse power: Trends and transitions in the plant based food market Theresa Pham (Australia)
14:51 – 15:02	Multi-omics analysis of common beans reveals the evolutionary dynamics of phytohemagglutinins, a global food safety concern Pei Xu (China)
15:02 – 15:13	Common beans and cowpeas as nutrient-rich alternatives to soy in corn-soy blend complementary foods for combating undernutrition in under-five Malawian children Yankho Kaimila (Malawi)
15:13 – 15:24	Lathyrus improvement in India: Retrospect and prospect Sanjeev Gupta (India)



**8TH INTERNATIONAL FOOD LEGUME
RESEARCH CONFERENCE AND
5TH AUSTRALIAN PULSE CONFERENCE**
15 - 19 SEPTEMBER 2025 • PAN PACIFIC PERTH



15:24 – 15:35	'Raising the pulse': Systems analysis of the environmental, nutritional and health benefits of pulse-enhanced foods Paola Tosi (United Kingdom)
15:35 – 16:00	Afternoon Tea, Industry Exhibition and Poster Displays <i>Exhibition Hall, Grand River Ballroom</i>
16:00 – 17:00	Session 11: Nitrogen Fixation <i>Golden Ballroom</i>
<i>Session Chairs</i>	<i>Berhanu Fenta & Tony Bacic</i>
16:00 – 16:20	Invited Speaker Presentation: Collect, Experiment, Apply, Repeat: The innovation loop driving efficient biofertilisers Marcela Mendoza-Suarez (Denmark)
16:20 – 16:31	Exploring symbiotic nitrogen fixation efficiency across diverse mungbean germplasm utilising high-throughput phenotyping Estelle Grundy (Australia)
16:31 – 16:42	Rhizobium-mungbean symbiosis in Australia Yvette Hill (Australia)
16:42 – 16:53	Stack the odds: Haplotype selection for symbiotic nitrogen fixation in field pea Will Shafer (Australia)
16:53 – 16:58	HeadStart-Inoculation®, an alternative method to achieve effective nodulation on agricultural legumes Chris Poole (Australia)
17:00 – 17:30	Awards Ceremony & Conference Close
18:30 – 19:00	Pre-dinner Reception <i>Golden Ballroom Foyer</i>
19:00 – 22:00	Conference Dinner <i>Golden Ballroom</i>
	Sponsored by   
	Minister Address Hon Minister Jackie Jarvis MLC



**8TH INTERNATIONAL FOOD LEGUME
RESEARCH CONFERENCE AND
5TH AUSTRALIAN PULSE CONFERENCE**
15 - 19 SEPTEMBER 2025 • PAN PACIFIC PERTH



Friday 19 September 2025

	Field Day Tours (Pre-registration required)
	Sponsored by 
08:00 – 17:00	Tour 1: AGT Field Day Tour
09:00 – 12:00	Tour 2: CBH Grain Handling Tour
09:00 – 14:00	Tour 3: Murdoch University Tour