



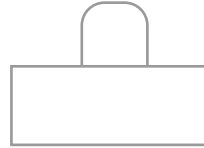
# APBC 2025 PERTH

17th AUSTRALASIAN PLANT BREEDING CONFERENCE

4 - 6 June 2025

Coffee/Tea

## Poster Hall



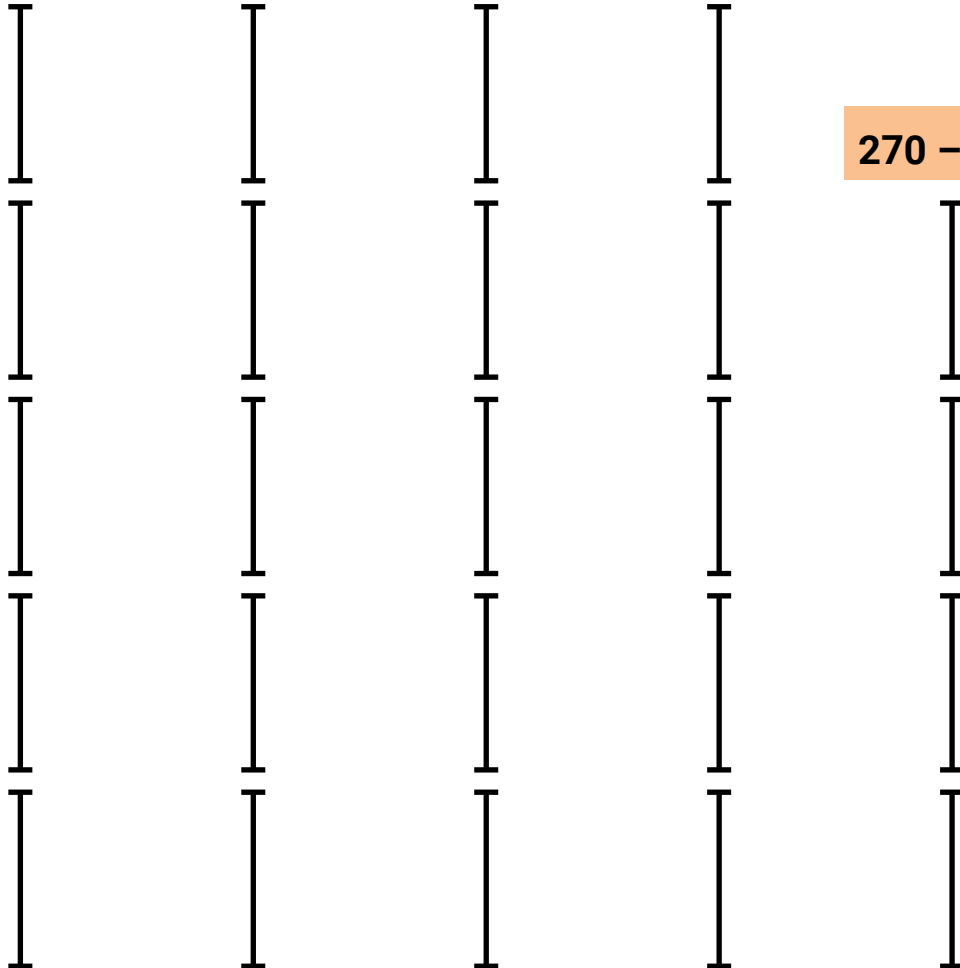
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Genomics and Advanced Breeding Techniques

Breeding for Climate Change and Stress Resilience

Breeding for Food/Feed Quality and Sustainable Practice



## GENOMICS AND ADVANCED BREEDING TECHNIQUES

#200	<b>Unveiling Rlm1 Gene using multi-sequencing approach</b> <u>Xavier Caguiat</u> , Junrey Amas, Aria Dolatabadian, William Thomas, Thomas Bergmann, David Edwards, Kadambot Siddique, Jacqueline Batley
#201	<b>Unravelling the genetic regulation of mango skin colour to identify molecular markers for selecting cultivars displaying a pinkish-red fruit blush</b> <u>A/Prof Christopher Cazzonelli</u> , Lucky Paudel, Asjad Ali, Natalie Dillon
#202	<b>Testing branching model predictions using mutant perturbations of Arabidopsis populations</b> <u>Kanishka Chandora</u> , Pushpavalli Raju, Md Shohel Rana, Yang Liu, Christine Beveridge, Mark Cooper
#203	<b>An integrated genomic approach to accelerate the domestication of channel millet</b> <u>Rahul Chandora</u> , Agnelo Furtado, Robert Henry
#204	<b>A large-scale data-driven study to understand the impact of environment on rain-grown cotton performance</b> <u>Qian Feng</u> , Pierce Rafter, Iain Wilson, Warren Conaty, Zitong Li
#205	<b>Exploring transient gene expression as a method for functional validation of blackleg R genes</b> <u>Amanda Hewa Maithrege</u> , Jacqueline Batley, William Thomas, Junrey Amas
#207	<b>Unearthing mycobiome structure in Brassica napus – Leptosphaeria maculans pathosystem</b> <u>Maria Lee</u> , Angela Van de Wouw, Aria Dolatabadian, Jacqueline Batley
#208	<b>A Bayesian Machine Learning Framework for Genomic Selection incorporating Genomic and Environmental Interactions</b> <u>Jia Liu</u> , James Walter, Julian Taylor, Shannon Dillon
#209	<b>Gene editing to improve grain quality in sorghum</b> <u>Carla Lopez</u>
#210	<b>Is UAV-Based Photogrammetry a useful tool for breeding for improved lodging resistance</b> <u>Srinivasa Reddy Mothukuri</u> , Mark Copper, Colleen Hunt, Esinam Amuzu-Aweh, Emma Mace, David Jordan
#211	<b>Genome-wide association study identifies Pita2 as a causal gene for panicle blast resistance in rice (Oryza sativa L.)</b> <u>Ian Paul Navea</u> , Mohammad Abdul Monsur, Marie Jeanie Yanoria, Dianne Dela Rosa, Sherry Lou Hechanova, Christian Joseph Cumagun, Ireneo Pangga, Suresh Kadaru, Sung-Ryul Kim, Van Schepler-Luu
#212	<b>Good Timing: Marker-assisted backcrossing rapidly moves a new flowering gene into commercial narrow-leafed lupins</b> <u>Karen Nelson</u> , Aneeta Pradhan, Candy Taylor, Matthew Nelson, Wallace Cowling
#213	<b>A point cloud data pipeline for tree breeding</b> <u>Mark Paget</u> , Robin Hartley, William Stout, Sai Aroju, Peter Massam, Sadeepa Jayathunga
#214	<b>Biomarkers of heat tolerance in wheat from proteomic profiling of flag leaves</b> <u>Agyeya Pratap</u> , Nicolas Taylor, Madan Pal, Viswanathan Chinnusamy, Kadambot Siddique
#215	<b>Molecular Dissection of LepR2; Understanding Blackleg Resistance Mechanism in Canola</b> <u>Huma Qamar</u>
#216	<b>Accelerating design and optimisation of genomic prediction methods using Arabidopsis thaliana as a model plant system</b> <u>Md Shohel Rana</u> , Pushpavalli Raju, Kanishka Chandora, Yang Liu, Owen Powell, Christine Beveridge, Mark Cooper
#217	<b>A Genomic Approach to Cross Prediction in Sugarcane: Partitioning Additive and Non-Additive Effects</b> <u>Andrew Rigby</u> , Seema Yadav, Felicity Atkin, Xianming Wei, Lee Hickey, Ben Hayes



## GENOMICS AND ADVANCED BREEDING TECHNIQUES

#218	<b>Unlocking the Genetic Potential of Genebanks: Insights from Genotyping Core Crops in the Australian Grains Genebank</b> <u>Dr Luisa Teasdale</u> , Gabriel Keeble-Gagnere, Sally Norton, Nicole Sawyer, Eve Barnes, Kerrie Forrest, Debbie Wong, Matthew Hayden
#219	<b>Integrating KDDart and AI/ML: OneDart as a Unified Platform for Genomics and Intelligence-Driven Applications</b> <u>Thi Thanh Thao Vu</u> , Jonathan Ting, Andrzej Kilian
#220	<b>Applying Genomics Tools for Novel Nematode Resistance in Sugarcane</b> <u>Christopher Tom</u> , Eric Dinglasan, Lee Hickey, Nathalie Piperidis, George Piperidis, Ben Hayes
#221	<b>Using RNA regulation to improve energy use efficiency and boost yield in wheat</b> <u>Rebecca Tyrrell</u> , Marten Moore, Barry Pogson, Andrew Bowerman
#222	<b>Targeted reduction of repetitive sequences to lower Whole-Genome Sequencing costs for crop breeding</b> <u>Dr. Michiel van Eijk</u> , Maartje Luteijn, Tom van Schaijk, Bart Nijland, Almer van Belzen, Nikkie van Bers, Stephan Ferreira
#223	<b>Enhancing Breeding Program Efficiency and Genetic Gain through High-Throughput Aerial Hyperspectral Phenotyping</b> <u>Anton Wasson</u> , Aswin Singaram Natarajan, Ryan Lagerstrom, Gilbert Permalloo, Stuart Brown, Todd Collins, Fernanda Dreccer, Gonzalo Estavillo, Greg Rebetzke, Nicholas Taylor
#224	<b>Building Interoperability in the Pan-genome Era: Tools and Strategies from the AGG Strategic Partnership</b> <u>Debbie Wong</u> , Kerrie Forrest, Don Isdale, Kenny Yu, Mahdi Rahimi, David Chisanga, Sally Norton, Gabriel Keeble-Gagnere, Matthew Hayden
#225	<b>Optimising Genomic Prediction for Aerobic Rice Breeding: Model Performance, Marker Density, and Training Population Size</b> <u>Dr Shona Wood</u> , Ricky Vinarao, Wenliu Gong, Jaquie Mitchell
#226	<b>Identification of QTLs responsible for biomass heterosis independent of flowering time in Arabidopsis thaliana</b> <u>Hiroto Yonechi</u> , Kazumasa Fujiwara, Ryo Fjimoto



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## BREEDING FOR CLIMATE CHANGE AND STRESS RESILIENCE

#240	<b>Candidate Genes and Linked SNP Markers Associated with Drought Tolerance on Wheat Chromosome 4A</b> <u>Joanne Caguiat</u> , Sultan Mia, Hui Liu, Guijun Yan, Kadambot Siddique
#241	<b>Proteome changes in Brassica napus florets under heat stress during early reproduction</b> <u>Xiaojie Hu</u> , Sheng Chen, Xiaoke Ping, Kadambot Siddique, Wallace Cowling
#242	<b>Investigating the factors inducing difference in Salicylic acid responsiveness between cultivars to impart environmental adaptability to crops</b> <u>Mei Iwamura</u> , Mst. Arjina Akter, Naomi Miyaji, Motoki Shimizu, Ryo Fujimoto
#243	<b>Turning up the heat on chickpea yield: a multi-omics prediction approach</b> <u>Callum Jamie</u> , Eric Dinglasan, Kristy Hobson, Lee Hickey, Shanice Van Haeften, Millicent Smith
#244	<b>Hypomethylation and growth defects due to loss of DDM1 function in Brassica rapa</b> <u>Chisato Murakami</u> , Ayako Okuzaki, Nobuya Koizuka, Kaoru Tonosaki, Ryo Fujimoto <sup>1</sup>
#245	<b>Securing wheat and barley yields by optimising the yield-resilience trade-off in water-limited environments</b> <u>Zuzana Pliskova</u> , Andrew Bowerman, Kai Chan, Hendry Susila, David Tabah, Barry Pogson
#246	<b>Transgenerational Eco-Physiological Variation in Clonal Shiraz Grapevines: Implications for Drought-Resilient Breeding</b> <u>Grace Prayogo</u> , Vinay Pagay
#247	<b>Breeding for improved heat tolerance in wheat</b> <u>Irene Van Den Berg</u> , Zibei Lin, Rebecca Thistlewaite, Debbie Wong, Kerrie Forrest, Dini Ganesalingam, Matthew Hayden, Richard Trethowan, Sukhjiwan Kaur
#248	<b>Identifying a New Generation of Bt Maize hybrids for smallholder farmers in South Africa</b> <u>Dr Siphiwokuhle Shandu</u> , Outlwile Balepile, Innocentia Gwili, Kingstone Mashingaidze, Nhlakanipho Mpila, Marriam Sithole



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## BREEDING FOR FOOD/FEED QUALITY AND SUSTAINABLE PRACTICE

#270	<b>Improved selection of maize hybrids under competition due to single-row plots in multi-environment trials</b> <u>Dr Tolera Keno Fufa</u> , Emma Mace, Ian Godwin, David Jordan, Alison Kelly
#271	<b>Identification of Genetic Determinants of Fibrosity in Pineapple Fruit: A Genome-Wide Association Study (GWAS) Approach</b> <u>Farhana Jenny</u> , Garth Sanewski, Heather Smyth, Daniel Cozzolino, Jaqueline Moura Nadolny, Craig Hardner
#272	<b>Breeding new annual pasture legumes for Australian and global markets</b> <u>Dr Phillip Nichols</u> , Bradley Wintle, Megan Ryan, Judith Lichtenzveig, Martin Harmer, Blair McCormick, Alan Stewart, Derek Woodfield
#273	<b>Variation in seed protein, selected minerals, phytic acid and potential mineral bioavailability of cowpea mutants and accessions</b> <u>Moshieng Ntswane</u> , Maryke Labuschagne, Siphiwokuhle Shandu, Paul Rantso, Ntombokulunga Mbuma
#274	<b>Consumer-Driven Breeding for Pineapple and Mango: Enhancing Quality and Sustainability</b> <u>Ishita Pramanik</u> , Simoné Moller, Philippa Lyons
#275	<b>Identification of resistance genes in Brassica napus against Leptosphaeria maculans infection through transient gene expression</b> <u>Zuhra Qayyum</u>
#276	<b>Mass spectrometry-based proteomic profiling of soluble protein fractions in commercial oat milk</b> <u>Aparna Saha</u>