

20th AUSTRALIAN BARLEY TECHNICAL SYMPOSIUM



22nd – 25th August 2022
Gold Coast – Queensland
QT Gold Coast

QUALITY AUSTRALIAN BARLEY: DRIVING OPPORTUNITIES AND VALUE

Draft Program

Sunday 21 st August 2022		
08.00 am-O/N	Pre Conference Field Trip: Gatton, Toowoomba (overnight) (additional cost)	
Monday 22 nd August 2022		
O/N-5.00pm	Pre Conference Field Trip cont: Hermitage Research Centre, Warwick	
6.00-7.00pm	Student Forum with Industry Leaders	
7.00-9.00pm	Welcome Reception	Sponsored by SeedForce QT Poolside
Tuesday 23 rd August 2022		
8.15-9.00am	Welcome: Acknowledgement of Country	Joel Gilmore
	GRDC Update	Peter Carberry
	Grains Australia Update	Terry Enright
	Opening of Conference	Mark Dieters
9.00-10.30am	Session 1: Adding Value – Improving Flavour	Sponsored by BBM Session Chairs: Paul Rigoni/Simon Leach
9.00-9.30am	KEYNOTE: Breeding for barley variety flavour	Pat Hayes
9.30-10.00am	KEYNOTE: Craft malting in the USA: reviving an old craft in the 21 st century	Jesse Bussard
10.00-10.15am	Differences in flavour of malt from different barley varieties and growing regions	Sue Stewart
10.15-10.30am	Panel discussion and question time	
10.30-11.00am	Morning Tea	Sponsored by AGT
11.00-12.30pm	Session 2: Adding Value – Malting and Brewing	Sponsored by CUB Session Chairs: Mark Goldsmith /Jeff Stewart
11.00-11.30am	KEYNOTE: Malt for craft brewers. Separating wants from needs	Doug Stewart
11.30-11.45am	ZoomBarley Varietal Identification 2.0	Nicolas Martelli

11.45-12.00pm	Proteomics reveals commitment to germination in barley seeds is marked by loss of stress response proteins.....	Edward Kerr
12.00-12.15pm	Adapting hop production to target craft brewers	Simon Whittock
12.15-12.25pm	CUB Update	Ebony Arabella
12.25-12.40pm	Panel discussion and question time	
12.40-1.50pm	Lunch & Poster	Sponsored by Lion
1.50-5.30pm	Session 3: Achieving a Sustainable Barley Industry	Sponsored by Bayer Session Chairs: David Moody/Mary Raynes
1.50-2.20pm	KEYNOTE: Sustainability, who leads, who pays? A consumer driven take on barley and sustainability	Anne Stephens
2.20-2.50pm	TBC	Nikki Else
2.50-3.05pm	Sustainability of barley production and processing	Michael Clancy
3.05-3.20pm	Question time	
3.20-3.40pm	Afternoon Tea	Sponsored by Bayer
3.40-3.50pm	Bayer Update	Richard Jackman
4.05-4.25pm	The economics of sustainability compliance	Andy Barr
4.25-4.45pm	The value of agrichemicals in a sustainable farming system	Andrew Weidemann
4.40-5.00pm	Head of the zero carbon emissions target for all growers	Simon Wallwork
5.00-5.30pm	Panel discussion and question time	
5.45-9.00pm	Networking Function	Offsite
Wednesday 24th August 2022		
8.30-10.30am	Session 4: Marketing Quality Australian Barley	Sponsored by AEGIC Session Chairs: Jack King/Megan Sheehy
8.30-9.00 am	KEYNOTE: Markets for Australian barley beyond 2025	Mary Raynes
9.00-9.30am	KEYNOTE: Our Humble Barley	John Stuart
9.30-9.45am	A supply chain digital twin system to improve the performance and efficiency of the Australian grain supply chain	Julius Kotir
9.45-10.15am	Strategic Plan for the Barley Industry	Drew Robertson
10.15-10.30am	Panel discussion and question time	
10.30-11.00am	Morning Tea	Sponsored by BASF
11.00-12.15pm	Session 5: Agronomy and Farming Systems	Sponsored by GRDC Session Chairs: Jon Thelander/Stewart Coventry
11.00-11.15pm	Global synergies in crop development, agronomy and genetics to improve barley productivity	Kenton Porker

11.15-11.30pm	Why Barley is a very good fit in our farming system	Rob Long
11.30-11.45pm	Making the best of Barley	Matt Gardner
11.45-12.00pm	Agronomic management techniques for reducing barley head loss in Southern Australia	Melissa McCallum
12.00-12.30pm	Panel discussion and question time	
12.30-1.30pm	Lunch	Sponsored by Seednet
1.30-2.15pm	Session 6: Resistance & Elevator Pitches	Session Chairs: Laura Ziems / Ben Schulz
1.30-1.34pm	Pre-season soil/crop residue testing can identify barley crops at risk of spot form of net blotch infection	Mark McLean
1.34-1.38pm	Quantitative proteomics of the malt barley proteome: Understanding the impact of genetic variation on water uptake	Clare O'Lone
1.38-1.42pm	Identification of QTL for the number of vascular bundles in barley stem	Yanan Niu
1.42-1.46pm	QTL mapping of barley lodging resistance	Tianxiao Chen
1.46-1.50pm	Delving into the genetic architecture of early vigour in Australian barley	Samir Alahmad
1.50-1.54pm	Investigating DNA methylation changes due to crop breeding techniques in barley	Judith Eglitis
1.54-1.58pm	Protein identifications from hordein-reduced barley and malt	Mahya Bahmani
1.58-2.02pm	Utilising novel genetic diversity to increase barley yields nationally	Anh Tung Pham
2.02-2.06pm	Investigating different genomic prediction models in commercial barley breeding programs	Shiva Azizinia
2.06-2.10pm	Nested association mapping to dissect the genetic architecture of spot blotch resistance in barley	Dipika Roy
2.10-2.15pm	Searching sources of germplasm with multiple disease resistance against barley foliar diseases	Sanjiv Gupta
2.15-3.00pm	Afternoon Tea & Poster Session	
3.00-5.15pm	Session 7: New Opportunities	Sponsored by Coopers Session Chairs: Doug Stewart/Glen Fox
3.00-3.30pm	KEYNOTE: Leveraging the barley pan-genome for disease resistance gene discovery	Matthew Moscou
3.30-4.00pm	KEYNOTE: CRISPR beer: gene editing and the barleys of the future	Ian Godwin
4.00-4.15pm	Genetic approaches to induce novel variation in barley for the control of grain development	Matthew Tucker
4.15-4.30pm	Whisky is better with chips and pretzels	Gabriel Keeble-Gagnere
4.30 -5.00pm	KEYNOTE: Development of green (unkilned) barley malt as a brewing raw material	David Cook
5.00-5.15pm	Panel discussion and question time	
5.15-6.15pm	ABTS AGM	
	Free Evening	

Thursday 25 th August 2022		
8.30-10.00am	Session 8: Biotic Stress Tolerance/Resistance	Session Chairs: Lisle Snyman/Mark Dieters
8.30-9.00am	KEYNOTE: Key barley diseases and their impacts on quality	Ruth Dill-Macky
9.00-9.15am	Fungicide resistance in the barley foliar pathogen <i>Pyrenophora teres f.teres</i> in the southern growing region of Australia	Tara Garrard
9.15-9.30am	Is fungicide management of Spot-form net blotch economic in the low rainfall regions of Western Australia?	Andrea Hills
9.30-9.45am	Pairing classical techniques and statistical genetics to characterise rust resistance genes	Laura Ziems
9.45-10.00am	Mapping of quantitative <i>trait loci</i> in barley associated with resistance to the stripe rust pathogen <i>Puccinia striiformis f. sp. Hordei</i>	Davinder Singh
10.00-10.15am	Panel discussion and question time	
10.15-10.40am	Morning Tea	Sponsored by Elders
10.40-12.00pm	Session 9: Abiotic Stress Tolerance	Session Chairs: Stewart Coventry/Lisle Snyman
10.40-11.10am	New strategies of the ICARDA Global Barley Breeding Program to breed barley for the Developing World	Miguel Sanchez-Garcia
11.10-11.25am	How to beat the heat: New genetics for breeding fertile and heat-tolerant barley	Camilla Hill
11.25-11.40am	Digging deeper to improve yield stability: harnessing roots using new breeding technologies	Lee Hickey
11.40-11.55am	Proteome responses in barley during short periods of heat stress applied in early grain fill	Catherine Lawn
11.55-12.10pm	Finding the links between stomata and plant acid soil (Al toxicity) tolerance	Chenchen Zhao
12.10-12.25pm	Panel discussion and question time	
12.25-1.15pm	Lunch	Sponsored by BBM
1.15-3.15pm	Session 10: Genetics & Breeding	Sponsored by InterGrain Session Chairs: Tress Walmsley/ Paul Telfer
1.15-1.45pm	KEYNOTE: Genomic signatures of Australian barley breeding history	Chengdao Li
1.45-2.00pm	Fun and challenges in barley breeding: complex crosses	David Moody
2.00-2.15pm	Exploring the Genetic Potential to Develop Barley Cultivars with Long Coleoptiles	Hannah Robinson
2.15-2.30pm	Can vegetative indices from high-throughput phenotyping be used to improve grain yield prediction accuracy for genomic selection in barley?	Silvina Baraibar
2.30-2.45pm	Using artificial intelligence algorithm to rapidly improve multiple disease resistance in barley	Eric Dinglasan
2.45-3.00pm	Genome editing to create barley with designer roots	Zachary Aldiss
3.00-3.15pm	Barley with tolerance to group 1 herbicides - A weed management tool	Tristan Coram
3.15-3.25pm	InterGrain update	Tress Walmsley
3.25-3.40pm	Panel discussion and question time	

3.40-4.00pm	Afternoon Tea	Sponsored by ADAMA
4.00-5.15pm	Session 11: Barley a Versatile Crop - Food, Feed and Fodder	Session Chairs: John Stuart/Mark Lewis
4.00-4.15pm	Impacts of starch and fibre quality on human/animal nutrition	Mike Gidley
4.15-4.45pm	Barley and Aquaculture: Beer, bugs and sustainability	Megan Edwards
4.45-5.00pm	Panel discussion and question time	
5.00-5.15pm	Conference close	Mark Dieters
7.00-11.00pm	ABTS Conference Dinner	Sponsored by Coopers
Friday 26th August 2022 Post Conference Workshop (additional cost)		
7.15am	Bus depart to UQ	
9.00-4.00pm	Introduction to Practical Brewing Course at UQ	Glen Fox & Ben Schulz

KAM Events, is your locally based accredited Professional Conference Organiser. We guarantee our clients receive excellent customer service, the correct selection of venues and the best outcome for your event.