

Monday evening Welcome reception sponsored by Coopers						
DAY 1 - 10 Sept	start	finish	length	Proposed title	Presenter	Affiliation
Tuesday	8.25	8.35	10 mins	1.1 Introduction and welcome	Mr Blakely Paynter	Department of Primary Industries and Regional Development
	8.35	8.45	10 mins	1.2 Welcome to Country	Mr Walter MacGuire	Go Cultural Aboriginal Tours and Experiences
	8.45	9.00	15 mins	1.3 Official symposium opening	The Honourable Alannah MacTiernan MLC	Minister for Agriculture and Food; Regional Development Minister Assisting the Minister for State Development, Jobs and Trade
				The supply chain	Chair - Dr Andy Crane	Curtin University and Non-Executive Director
	9.00	9.30	30 mins	1.4 Supply chain costs	Prof Ross Kingwell	Australian Export Grains Innovation Centre
	9.30	10.00	30 mins	1.5 Differentiating Australian barley	Mr Drew Robertson	CBH Group
	10.00	10.05	5 mins	1.6 A new era for malting barley accreditation in Australia?	Dr Megan Sheehy	Barley Australia
	10.05	10.20	15 mins	1.7 Industry innovation the barley rationalisation process in WA	Mr Lyndon Mickel	Grain Industry Association of Western Australia
	10.20	10.30	10 min	1.8 Exploring technical insights for Australian barley	Ms Mary Raynes	Australian Export Grains Innovation Centre
	10.30	11.00	30 mins	Morning Tea		
				Current and future trends	Chair - Mr Paul Rigoni	Barrett Burston Malting Co
Tuesday	11.00	11.30	30 mins	2.1 Grains RD&E focus for the next 20 years - preparing for all eventualities	Dr Steve Jefferies	Grains Research and Development Corporation
	11.30	12.00	30 mins	2.2 Observations on malting barley in the US and how it might impact our region	Mr Mont Stuart	Cargill Malt Asia Pacific
	12.00	12.30	30 mins	2.3 The use of heirloom barley varieties for craft brewing	Dr Doug Stewart	Coopers Brewery
	12.30	13.30	60 mins	Lunch		
				Contribution of barley to beverage flavour	Chair - Prof Glen Fox	University of California
Tuesday	13.30	14.00	30 mins	3.1 The contributions of barley to beer flavour	Dr Maria Munoz Amatriain	Colorado State University
	14.00	14.20	20 mins	3.2 Flavour differences in wort from different barley varieties	Dr Sue Stewart	University of Adelaide
	14.20	14.40	20 mins	3.3 Identifying signature flavours and aromas imparted by Canadian malting barley varieties in beer	Dr Yueshu Li	Canadian Malting Barley Technical Centre
	14.40	15.00	20 mins	3.4 Distilling world class whisky in the south west of Western Australia	Mr Cameron Syme	Limeburners
	15.00	15.30	30 mins	Afternoon Tea		
				Focus on India and Vietnam	Ms Mary Raynes	Australian Export Grains Innovation Centre
Tuesday	15.30	16.00	30 mins	4.1 Barley requirements for malting and brewing in India	Mr Vikas Jan	PMV Malt
	16.00	16.30	30 mins	4.2 Malting in Vietnam: Growth and market demand	Mr Rob Wicks	Intermalt
	16.30	17.00	30 mins	4.3 Brewing in Vietnam: Growth and beer styles	Mr Sean Thommen	East West Brewing Company
Tuesday	evening Social event sponsored by InterGrain					
DAY 2 - 11 Sept	start	finish	length	Proposed title	Presenter	Affiliation
				Malting and brewing: Identifying issues and solutions	Chair - Dr Matthew Tucker	University of Adelaide
Wednesday	8.30	9.00	30 mins	5.1 Modernising of malt quality testing towards functional tests of malt quality	Dr Evan Evans	Tassie Beer Doctor
	9.00	9.30	30 mins	5.2 Manipulation of protein degradation in malting – can it be done?	Dr Qisen Zhang	Australian Export Grains Innovation Centre
	9.30	10.00	30 mins	5.3 The importance of starch in brewing: Its time to consider composition over content	Prof Glen Fox	University of California
	10.00	10.30	30 mins	Morning tea		
				Sustainable, economic use of nitrogen to achieve quality targets	Chair - Dr Paul Telfer	Australian Grain Technologies
Wednesday	10.30	11.00	30 mins	6.1 Genetic and physiological determinants of nitrogen response: lessons from wheat	Dr Alison Bentley	NIAB
	11.00	11.20	20 mins	6.2 Identification and characterization of Tibetan wild barley accessions with high low-N tolerance	Prof Guoping Zhang	Zhejiang University
	11.20	11.40	20 mins	6.3 How is grain protein content established and used? Protein synthesis and degradation during filling, malting	Dr Owen Duncan	University of Western Australia
	11.40	12.00	20 mins	6.4 Optimum nitrogen timing strategies in barley to increase grain protein and maintain yield	Mr Jeremy Curry	Department of Primary Industries and Regional Development
	12.00	13.00	60 mins	Lunch		
				Managing / reducing biotic / abiotic stresses	Chair - Mr Geoff Thomas	Department of Primary Industries and Regional Development
Wednesday	13.00	13.30	30 mins	7.1 Too soon oldt undt too late schmart!	Mr Greg Platz	Queensland Department of Agriculture and Fisheries
	13.30	13.45	15 mins	7.2 A comprehensive national study of losses and economic management of SFNB in barley in Australia	Dr Mark McLean	Agriculture Victoria
	13.45	14.00	15 mins	7.3 Using mutational genomics to determine the molecular basis of resistance to barley leaf rust	Dr Peter Dracatos	University of Sydney
	14.00	14.15	15 mins	7.4 Molecular characterisation of the <i>Rph13</i> barley leaf rust resistance locus	Dr Mathias Jost	CSIRO Agriculture and Food
	14.15	14.30	15 mins	7.5 <i>Rph15</i> from wild barley (<i>Hordeum spontaneum</i>) confers resistance to diverse leaf rust isolates	Dr Chunhong Chen	CSIRO Agriculture and Food
	14.30	14.45	15 mins	7.6 The intrinsic and regulated proteomes of barley seeds in response to fungal infection	Dr Ben Schultz	University of Queensland
	14.45	15.00	15 mins	7.7 Evaluating rotations and crop genetics as strategies to delay fungicide resistance in barley net blotch	Dr Ayalsew Zerihun	Centre for Crop and Disease Management

DAY 2 cont'd	start	finish	length	Proposed title	Presenter	Affiliation
	15.00	15.30	30 mins	Afternoon tea		
				Managing / reducing biotic / abiotic stresses (continued)	Chair - Dr Hannah Robinson	InterGrain
Wednesday	15.30	16.00	30 mins	8.1 Naturally occurring variants of HvHKT1;5 determine barley grain sodium content	Dr Robbie Waugh	James Hutton Institute
	16.00	16.15	15 mins	8.2 Fine mapping two major grain length loci in barley (<i>Hordeum vulgare</i> L.)	Mr Calum Watt	Western Barley Genetics Alliance
				Elevator Pitches		
	16.15	16.20	5 mins	8.3 Metabolomic and transcriptomic analyses reveal the difference in salt tolerance between barley and rice	Mr Liangbo Fu	Zhejiang University
	16.20	16.25	5 mins	8.4 Identification of microRNAs in response to aluminium stress in the roots of barley	Ms Liyuan Wu	Zhejiang University
	16.25	16.30	5 mins	8.5 Identification of microRNAs responding to salt stress in barley by high-throughput sequencing and degradome analysis	Mr Liuhui Kuang	Zhejiang University
	16.30	16.35	5 mins	8.6 Quantitative trait loci and markers associated with genes for barley salinity tolerance at germination	Mr Edward Mwando	Western Barley Genetics Alliance
	16.35	16.40	5 mins	8.7 Effect of major semi-dwarf genes on plant height and phenology in a barley MAGIC population	Mr Viet Dang	Western Barley Genetics Alliance
	16.40	16.45	5 mins	8.8 Genetic and evolutionary analyses on the blue aleurone genes in barley	Dr Yong Jia	Western Barley Genetics Alliance
	16.45	16.50	5 mins	8.9 Grain plumpness in barley under terminal heat stress: association with grain growth components and stay-green	Dr Hamid Shirdelmoghanloo	Department of Primary Industries and Regional Development
	16.50	16.55	5 mins	8.10 Potential for improvement of nitrogen Use efficiency in Australian barley varieties	Mrs Sakura Karunaratne	Western Barley Genetics Alliance
	16.55	17.00	5 mins	8.11 Unravelling the complex genetic architecture of spot blotch resistance in barley	Mrs Dipika Roy	University of Queensland
	17.00	17.05	5 mins	8.12 Measuring the impact of environment on yield and quality losses from net form net blotch	Mr Clayton Forknall	Queensland Department of Agriculture and Fisheries
	17.05	17.10	5 mins	8.13 Fungicide efficacy on DMI resistant spot form net blotch in West Australia's high rainfall zone	Ms Andrea Hills	Department of Primary Industries and Regional Development
	17.10	17.15	5 mins	8.14 Discovering new fungal disease resistance genes in barley: do exotic landraces hold the key?	Dr M. Jordi Muria-Gonzalez	Centre for Crop and Disease Management
	17.15	17.20	5 mins	8.15 Enhancing Fusarium crown rot resistance by marker-assisted gene pyramiding in barley	Dr Zhi Zheng	CSIRO Agriculture and Food
	17.30	18.00	30 mins	8.16 ABTS Inc AGM		
Wednesday	evening			Free evening		
DAY 3 - 12 Sept	start	finish	length	Proposed title	Presenter	Affiliation
				Genetics	Chair - Prof Chengdao Li	Western Barley Genetics Alliance
Thursday	8.20	8.50	30 mins	9.1 Barley gene bank genomics	Dr Nils Stein	International Barley Pan Genome
	8.50	9.20	30 mins	9.2 Pan-genomics in barley: first results and next steps	Dr Martin Mascher	IPK-Gatersleben
	9.20	9.40	20 mins	9.3 CRISPR-Cas9 Genome editing and precision barley breeding	Dr Yong Han	Western Barley Genetics Alliance
	9.40	10.00	20 mins	9.4 Identification of regulatory pathways controlling endosperm development in barley	Dr Matthew Tucker	University of Adelaide
	10.00	10.30	30 mins	Morning tea		
				Increasing productivity / profit of barley through management	Chair - Mr Blakely Paynter	Department of Primary Industries and Regional Development
Thursday	10.30	10.50	20 mins	10.1 Nitrogen rate, sowing date and variety effects on yield and quality in spring malting barley in Ireland	Dr Max Potterton	Boortmalt
	10.50	11.10	20 mins	10.2 Environmental cues that determine productivity of barley versus wheat	Dr Kenton Porker	South Australian Research and Development Institute
	11.10	11.30	20 mins	10.3 Management practices to minimise the effect of waterlogging of field crops	Mr S M Nuruzzaman Manik	University of Tasmania
	11.30	11.45	15 mins	10.4 Effects of plant growth regulator applications on malting barley in Western Canada	Dr Hiroshi Kubota	Agriculture and Agri-Food Canada
	11.45	12.00	15 mins	10.5 Technical assessment of malt barley quality stored in silo bags	Mr Aidan Sinnott	South East Premium Wheat Growers Association
	12.00	13.00	60 mins	Lunch		
				Genetics	Chair - Dr Brett Ford	Grains Research and Development Corporation
Thursday	13.00	13.30	30 mins	11.1 Integrating new breeding technologies in modern breeding programs	Dr Mark Cooper	Queensland Alliance for Agriculture and Food Innovation
	13.30	14.00	30 mins	11.2 Utilising crop genome diversity to increase genetic gain	Dr Kai Voss-Fels	Queensland Alliance for Agriculture and Food Innovation
	14.00	14.15	15 mins	11.3 Speed breeding technology to boost barley breeding and research	Dr Lee Hickey	Queensland Alliance for Agriculture and Food Innovation
	14.15	14.30	15 mins	11.4 Next-generation sequence-based genotyping to dissect the genetic basis of agronomically relevant traits in barley	Dr Camilla Hill	Western Barley Genetics Alliance
	14.30	14.40	10 mins	11.5 Genome wide association studies of root system architecture in barley	Dr Raja Khanal	Agriculture and Agri-Food Canada
	14.40	14.50	10 mins	11.6 Genetic solutions counteract climate change to improve Australia's barley production	Dr Tianhua He	Western Barley Genetics Alliance
	14.50	15.00	10 mins	11.7 Reform barley inflorescence architecture for temperature adaptation and yield improvement	Dr Gang Li	University of Adelaide
	15.00	15.30	30 mins	Afternoon tea		
				Big data and machine learning for barley research	Chair - tba	tba
Thursday	15.30	15.45	15 mins	12.1 tba	tba	tba
	15.45	16.00	15 mins	12.2 tba	tba	tba
	16.00	16.15	15 mins	12.3 tba	tba	tba
	16.15	16.30	15 mins	12.4 tba	tba	tba
	16.30	16.45	15 mins	12.5 Symposium wrap-up	Dr Megan Sheehy	Barley Australia
Thursday	evening			Conference dinner		