

Conference Program

AUSTRALIAN SOCIETY OF SUGAR CANE TECHNOLOGISTS



44th Annual Conference Working Together, Growing Together

Cairns Convention Centre
Tuesday 18th April - Friday 21st April 2023

ASSCT acknowledges the following:

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TIME	TUESDAY 18 TH APRIL 2023
07:30-13:30	AG field day at Meringa SRA Station
13:00-17:00	Kent - Asset Reliability Workshop
18:30	Welcome Drinks

WEDNESDAY 19 TH APRIL 2023			
TIME	AUDITORIUM		
09:00-10:30	Opening Session Industry Roadmap and Panel Q&A Guest speaker: Dr. Robert Speight, Director, Advanced Engineering Biology Future Science Platform		
10:30-11:00	Break		
11:00-11:30	Sugarcane bagasse pyrolysis for green energy production - Douglas, et al		
11:30-12:00	Diversification done differently: Feedback from the ISSCT Co-products Commission - Lavarack		
12:00-12:30	Development of the decision- support tool ‘Harvest Mate’: agronomic algorithms - Patane, et al		
12:30-13:30	Lunch		
	AUDITORIUM	M5/6	M7/8
13:30-14:00	Development of the decision - support tool ‘Harvest Mate’: economic calculations - Nothard, et al		Negligible interplot competition of cane yield in four-row plots - Natarajan, et al

14:00-14:30	Determining extraneous matter and billet length in sugarcane supplies using machine learning - Denman, et al	Supplier's Case Study: 10 minutes each for presentation and discussion <ul style="list-style-type: none">An alternative evaporator technology for first and second effects - Rosettenstein, et alKelly's Australia – Boiler Tube CleanerSRI - Australian Sugar Industry Training website courses now and into the future – KingNHP - Motor starting in a modern world – PiltABB Australia - Optimisation of drive technologies in sugar production - Schouw	Validation of using EC mapping to account for site variability in the early stages of selection in the Sugar Research Australia breeding program - Wei, et al
14:30-15:00	Modelling the harvester's front end to reduce billet and stool damage - Plaza, et al		Characterising the potential association of invertebrates with Yellow Canopy Syndrome of sugarcane - Xu, et al.
15:00-15:30	Break		
15:30-16:00	Feed forward control of mill chute level - Kent, Atkins	Use of mill by-products in the fallow in sugarcane production in Australia - Larsen, et al	Identification and implementation of markers for smut resistance in sugarcane breeding - Aitken, et al
16:00-16:30	Modelling the sugarcane crushing process with the software ABAQUS and LS-DYNA - Craw, Engler, Plaza	Macronutrient accumulation and partitioning in sugarcane biomass grown in the Burdekin region - Connellan	Decrypting the sugarcane genome architecture for pre-breeding applications - Piperidis
16:30-17:00	An improved model of pol extraction for mills and diffusers - Thaval, Kent	Micronutrient accumulation and partitioning in sugarcane biomass grown in the Burdekin - Connellan	Highlights from the new varieties - Piperidis, et al
17:30-18:30	Happy Hour		

THURSDAY 20th APRIL 2023			
TIME	AUDITORIUM	M5/6	M7/8
08:00-08:30	24–32 tonne Canefield locomotive final drive improvement - Santarossa, Dutta	Increasing our understanding of supersaturation and the use of massecuite dry substance in pan control – parts 1, 2 and 3 - Broadfoot, Fraga	Local Expert Analysis (LEA): An objective approach to identifying constraints and opportunities - Magarey et al
08:30-09:00	24–32 tonne Canefield locomotive reversing box improvement - Santarossa, Dutta		Tully growers refine the SIX EASY STEPS® Toolbox guidance for their late-season ratoons and a final-ratoon crop - Skocaj, et al
09:00-09:30	Sugarcane-locomotive control-system upgrade - Safer, Cheaper, Simpler - West	At-line purity measurement system – Moller	Reviewing the results of soil tests identifies opportunities to improve nutrient management in the Wet Tropics - Skocaj
09:30-10:00	24–32 tonne Canefield locomotive design - Santarossa, Smith, Titmarsh	Performance of the SRI Radial Design Evaporator in the final-effect position at Victoria Mill - Gilberd, et al	Learnings from the Hinchinbrook Community Feral Pig Management Program - Di Bella, et al
10:00-10:30	Break		
10:30-11:00	Posters: 5 minutes each for presentation and discussion <ul style="list-style-type: none"> Marian Mill treatment ponds and wetland - Stuart, Kuskopf Alkalinity generation from cation - exchange water softening for boiler feedwater at Wilmar's Inkermann Mill – Campbell Impact of lime saccharate addition to mud filter feed on mud loss and station retention - Richter, Norton Milling-train performance dashboard – Campbell 	Posters: 5 minutes each for presentation and discussion <ul style="list-style-type: none"> i-RAT: a tool to facilitate discussion between irrigators and advisors on increasing profitability and sustainability - Collins, et al Economic impacts of introducing rotational legume harvested crops into a sugarcane farming system: results from the Burdekin fallow-management trial - Connolly, et al 	

11:00-11:30	<ul style="list-style-type: none"> Comparing install methodologies for pans and evaporators - Bonassi Investigating diversion strategies for B molasses to improve sugar recovery - Mitchell Optimising bagasse diffuser juice application – Rains Transition to site-produced panstage graining slurry – Copnell INV SWP Roller Arcing Effectiveness – De Bella 	<ul style="list-style-type: none"> Effect of liquid calcium application on sugarcane yield in a fifth-ratoon crop in the Herbert River district - Park, et al Adjusting plant-cane nitrogen rates following legume cover crops in the Murray district - Rincon, et al SugarPath: a novel handheld diagnostic device for on-farm spatial and temporal pathogen surveillance - Strachan, et al Beyond the conventional method for nucleic acid isolation and quantification for detection of sugarcane pathogens - Chakraborty, et al Revisiting variety ratings for ratoon stunting disease - Ngo, et al Exotic moth borers – preparing for any incursion - Powell, et al Seasonal population dynamics and comparative trapping of above-ground invertebrate pests in Australian sugarcane – Powell Solving the mystery of yellow canopy syndrome in sugarcane - are invertebrates the missing link? - Powell, Xu <p>Supplier's Case Study: 10 minutes each for presentation and discussion</p> <ul style="list-style-type: none"> Stoller and Sugar Cane plant root development – Stoller 	
11:30-12:00			
12:00-12:30	Manufacturing section meeting	Agriculture section meeting	
12:30-13:30	Lunch and Viewing Posters		
13:30-14:00	On-line monitoring of C seed graining using the ITECA Crystobserver to improve pan-stage performance - Selby, et al	Early detection of sugarcane diseases through hyperspectral imaging and deep learning - Bao, et al	Effects of farming practices on end-of-paddock run-off water quality in the Central region - Schembri, Fillols
14:00-14:30	Development, analysis and testing of a dimple tube to improve vacuum-pan performance - Rosettenstein, et al	SugarPATH: a handheld device for advancing sugarcane disease diagnostics - Shiddiky, et al	Potential of sugarcane farming systems in the Lower Burdekin to sequester soil carbon - Power, et al
14:30-15:00	Use of a Neltec purge sensor to improve the efficiency of batch centrifugal operation - Broadfoot, et al	A step-change in disease diagnosis: pathogen detection in cane delivered to the sugar factory - Magarey, et al	Profitability and environmental implications of innovative practice changes and irrigation improvements - Connolly, Renouf, Nothard, Milbank, Poggio
15:00-15:30	Break		
15:30-16:00	When it is not so hot in a boiler – Mann	Comparing RSD screening methods for sugarcane and the real costs of diagnosis - Di Bella, et al	Upgrading the Farm Economic Analysis Tool (FEAT): a decision-support tool to assess farming options - Millbank, et al
16:00-16:30	Towards improving airheater design to minimise corrosion: modelling of a single tube - Ralph, et al	A rapid method of screening sugarcane clones for resistance to red rot - Bhuiyan, et al	Effect of application timing of nitrogen fertiliser on sugarcane crop performance and NUE - Salter, Kok
16:30-17:30	Annual General Meeting		
18:30-22:00	Gala Dinner [Pullman Cairns International Hotel]		

Venue Legends:

AUDITORIUM

M5/6

M7/8

CITY TERRACE

ARENA

Note: Each activity is coloured according to the venue in which they are being held.

