

PRELIMINARY SASTA CONGRESS 2011 PROGRAMME

Please note that this is a preliminary programme and is subject to change.

Pages 1 and 2 are the Agric Programme; Pg 4 is the Factory Programme

Wednesday 17 August 2011. MORNING: PLENARY (COMBINED FACTORY AND AGRICULTURE)

| | | | |
|---|-------|---|--|
| 07:00 | 08:30 | REGISTRATION | |
| 09:00 | 11:00 | OPENING SESSION | Chair: Gavin Smith |
| 09:00 | | SASTA President: Gavin Smith | Welcome |
| 09:05 | | Volker Wedekind | The shifting skills development landscape in South Africa |
| 09:30 | | Malcolm Sumner | Out of sight, out of mind - subsurface factors in sugarcane yield decline |
| 09:55 | | Graham Kingston | The difficult 2010 sugarcane harvest in Australia: Causes, effects and learnings |
| 10:20 | | SASTA Patron (SASA Chairman): Bongani Linda | Vote of thanks |
| 10:25 | | Awards Presentation | Robin Renton Memorial Award Presentation to Ashiel Jumman |
| 10:30 | 11:00 | TEA | |
| 11:00 | 12:25 | PLENARY SESSION | Chair: Kerry Redshaw |
| 11:00 | | Smith GT, Davis SB & Achary M | Eighty-sixth annual review of the milling season in southern Africa (2010-2011) |
| 11:25 | | Singels A, Ferrer S, Leslie GW, McFarlane SA, Sithole P & van der Laan M | Review of South African sugarcane production in the 2010-2011 season from an agricultural perspective |
| 11:50 | | Way MJ, Conlong DE & Rutherford RS | Biosecurity against invasive alien insect pests: A case study of <i>Chilo sacchariphagus</i> (Lepidoptera: Crambidae) in the southern African region |
| 12:15 | | Bezuidenhout CN | (Poster) - A bibliometrical analysis of regular SASTA authors between 2000 and 2010 |
| 12:25 | 13:10 | SASTA AGM and Awards presentation: Kynoch, Talbot-Crosbie, Cecil Renaud, Poster and student awards from 2010 Congress winners | Chair: Gavin Smith |
| 13:10 | 14:00 | LUNCH | |
| Wednesday 17 August 2011. AFTERNOON: AGRICULTURE | | | |
| 14:10 | 15:20 | AGRICULTURE SESSION 1 (Crop Protection I) | Chair: Stuart Rutherford |
| 14:10 | | Berry, S | Effect of anhydrous ammonia on cane yield, nematodes and eldana |
| 14:35 | | Campbell PL, Gillespie WA, Tweddle P & Butler M | Development of herbicide selection and knapsack calibration tables to assist emerging farmers in the South African sugarcane industry |
| | | van Antwerpen T, McFarlane SA, Govender P, Potier BAM, Way MJ, Flett B, Ramusi M, | |
| 14:55 | | Varsani A, Shepherd DN, Stillier M, Martin DP and Webster TM | Report on Maize Streak Virus in the South African sugar industry |
| 15:20 | 15:50 | TEA | |
| 15:50 | 16:50 | AGRICULTURE SESSION 2 (Crop Protection II) | Chair: Sharon McFarlane |
| 15:50 | | Berry SD, Ramouthar P, Subramoney S & Rutherford RS | Effect of Sugarcane Yellow Leaf Virus infection on sugarcane growth |
| 16:10 | | Mhora TT, Rutherford RS, van Heerden PDR & Danson JW | (Poster) A rapid <i>in vitro</i> method of detecting resistance to <i>Puccinia melanocephala</i> in sugarcane |
| 16:20 | | Way MJ, Webster TM & Leslie GW | (Poster) Leaf folder moth <i>Marasmia trapezalis</i> on sugarcane in South Africa |
| 16:30 | | Mhora TT, Rutherford RS & Danson JW | (Poster) Optimisation of a polymerase chain reaction protocol for diagnosing the presence of Bru1, a major rust resistance gene. |
| 16:40 | 16:50 | Buthelezi GK, Martin LA, Sweby DL, Way MJ & Rutherford RS | (Poster) Incidence of <i>Wolbachia</i> in arthropod pests of sugarcane in South Africa and other countries |
| 17:00 | | MEET AND GREET | |

| Thursday 18 August 2011: Day 2 AGRICULTURE | | | |
|--|-------|--|---|
| 08:00 | 10:00 | AGRICULTURE SESSION 3: (Crop Protection III - Special Focus: Eldana) | Chair: Malcolm Keeping |
| 08:00 | | Harraca V, Conlong DE & Rutherford RS | <i>Eldana saccharina</i> sex appeal: A future method to monitor and control this pest? Understanding the chemical ecology of stimulo-deterrent diversion as a basis for sugarcane pest control: <i>Eldana saccharina</i> vs <i>Melinis minutiflora</i> |
| 08:20 | | Harraca V, Du Pissanie J, Rutherford RS & Conlong DE | Parental and F1 sterility of <i>Eldana saccharina</i> Walker (Lepidoptera: Pyralidae) |
| 08:40 | | Walton AJ, Conlong DE & Addison MF | Performance of sterilized <i>Eldana saccharina</i> Walker (Lepidoptera Pyralidae) in mating trials |
| 09:00 | | Mudavanhu P, Conlong DE & Addison P | Effects of <i>Wolbachia</i> infection on the interactions between <i>Eldana saccharina</i> and its insect parasitoids |
| 09:20 | | Pillay P, Sweby DL, Martin LA, Zulu M, Conlong DE & Rutherford RS | Nutrient management options for reducing <i>Eldana saccharina</i> (Lepidoptera: Pyralidae) infestation of trashed sugarcane fields: Results from a preliminary study |
| 09:40 | | van Antwerpen R, Conlong DE & Miles N | |
| 10:00 | 10:30 | TEA | |
| 10:30 | 12:10 | AGRICULTURE SESSION 4: (Crop Nutrition and Soils) | Chair: Rianto van Antwerpen |
| 10:30 | | Miles N, van Antwerpen R, van Heerden PDR, Rhodes R, Weigel A & McFarlane SA | Extractable silica in soils of the sugar industry and relationship with crop uptake |
| 10:50 | | Sithole SB, Keeping MG, Smit MA, Miles N, Mkhize ND & Sempersad C | Effect of water availability on silicon uptake by sugarcane and silicon-mediated resistance to <i>Eldana saccharina</i> Walker. |
| 11:10 | | Stranack RA & Miles N | Nitrogen nutrition of sugarcane on an alluvial soil on the KwaZulu-Natal north coast: Effects on yield and leaf nutrient concentrations |
| 11:35 | | Weigel A, Eustice T, van Antwerpen R, Naidoo G & Schulz E | Soil Organic Carbon (SOC) changes indicated by Hot Water Extractable Carbon (HWEC) |
| 12:00 | | van Antwerpen R, Makoro P, Olivier F & Eustice T | (Poster) Time saving calibration methods for soil water monitoring sensors |
| 12:10 | 12:20 | LEG STRETCH | |
| 12:20 | 13:05 | AGRICULTURE SESSION 5: (Environment) | Chair: Dave Sutherland |
| 12:20 | | Eustice T, van der Laan M & van Antwerpen R | Comparison of greenhouse gas emissions from trashed and burnt sugarcane cropping systems in South Africa |
| 12:45 | | van der Laan M, van Antwerpen R, Bristow KL, Olivier F, Mthembu I & Weigel A | River water quality in the South African sugar industry |
| 13:05 | 14:00 | LUNCH | |
| 14:00 | 15:25 | AGRICULTURE SESSION 6: (Crop Protection IV) | Chair: Graeme Leslie |
| 14:00 | | Govender N, Conlong DE & Smith FR | Biodiversity of Lepidopteran stemborers and associated parasitoids in wild hosts surrounding sugarcane fields |
| 14:20 | | Way MJ, Rutherford RS & Harraca V | Sugarcane thrips <i>Fulmekiola serrata</i> (Thysanoptera: Thripidae) dispersal studies Developments in the use of insecticides for the control of the sugarcane thrips <i>Fulmekiola serrata</i> (Kobus) in South Africa |
| 14:40 | | Leslie GW & Moodley S | |
| 15:00 | | Way MJ, Webster T, Sempersad C & Conlong DE | Monitoring white grub beetle larvae (Scarabaeidae) in sugarcane in the Midlands North Region of KwaZulu-Natal |
| 15:25 | 15:50 | TEA | |
| 15:50 | 16:30 | AGRICULTURE SESSION 7: (Agricultural Development) | Chair: Kathy Hurlly |
| 15:50 | | Dlamini, J | Facilitating institutional change: a precursor for development success? |
| 16:10 | | Qwabe BV and Murray JJ | Aligning stakeholders to achieve the best outcome in agriculture |
| 19:00 | | AUTHORS' DINNER | |
| Friday 19 August 2011: Day 3 AGRICULTURE | | | |
| 08:15 | 10:30 | AGRICULTURE SESSION 8: (Agronomy) | Chair: Abraham Singels |
| 08:15 | | Cheeroo-Nayamuth BF, Nayamuth ARH & Koonjah S | Yield analysis in the west sector of the Mauritian sugarcane industry |
| 08:40 | | Donaldson RA, Greenfield PL & Shanahan PE | Effects of low temperatures on irrigated May and December ratoons |
| 09:05 | | Ibrahim AE | Long term positive impact of structural reforms on cane production processes at Kenana Sugar Co., Sudan |
| 09:30 | | Jones MR, Singels A & Inman-Bamber NG | Simulating source and sink control of structural growth and development and sugar accumulation in sugarcane |
| 09:50 | | Mbatha TP, Ramburan S & Smit MA | Evaluating sugarcane cultivar responses to trashing: preliminary observations |
| 10:10 | | van Heerden PDR | Effects of lodging and anti-lodging chemicals on the productivity of variety N25: Preliminary findings |
| 10:30 | 11:00 | TEA | |
| 11:00 | 13:05 | AGRICULTURE SESSION 9: (Varieties) | Chair: Sandy Snyman |
| 11:00 | | Ramburan S & Zhou M | Investigating sugarcane genotype x environment interactions under rainfed conditions in South African using variance components and biplot analysis |
| 11:25 | | Zhou M, Joshi S, Maritz T & Koberstein H | Components of Genotype by Environment interaction among SASRI Regional Breeding and Selection Programmes and their implications |
| 11:50 | | Ramburan S | Interpreting sugarcane varietal adaptability to time of harvest |
| 12:15 | | Mangar MM, Nayamuth ARH, Koonjah SS & Cheeroo-Nayamuth, BF | Scope for varietal improvement to extend the harvest season in Mauritius |
| 12:40 | | Zhou M, Chihana A & Parfitt R | Trends in variance components and optimum replications and crop-years for Variety Trials at Dwangwa Sugar Estate in Malawi |
| 13:05 | 13:45 | LUNCH | |
| 13:45 | 15:05 | AGRICULTURE SESSION 10: (Bioresources Engineering) | Chair: Carel Bezuidenhout |
| 13:45 | | Boote GLN, Bezuidenhout CN & Lyne PWL | The development and application of a stockpiling model at the Umfolozi Sugar Mill |
| 14:05 | | Gerwel CN, Hildbrand S, Bodhanya SA & Bezuidenhout CN | Systemic approaches to understand the complexities at the Umfolozi and Felixton mill areas |
| 14:25 | | Sibomana MS, Bezuidenhout CN & Lyne PWL | Analysis of the Felixton integrated supply and production system with an emphasis on cane quality |
| 14:45 | | Moodley S, Bezuidenhout CN & Lyne PWL | An investigation into sugarcane vehicle loading efficiency and accuracy |
| 15:05 | | END OF CONGRESS | |

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| 09:00 | 11:00 | OPENING SESSION | Chair: Gavin Smith |
| 09:00 | | SASTA President: Gavin Smith | Welcome |
| 09:05 | | Volker Wedekind | Guest speaker on education and training in technical and engineering fields - title to be confirmed |
| 09:30 | | Malcolm Sumner | Out of sight, out of mind - subsurface factors in sugarcane yield decline |
| 09:55 | | Graham Kingston | The difficult 2010 sugarcane harvest in Australia: Causes, effects and learnings |
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Wednesday 17 August 2011. AFTERNOON: FACTORY WORKSHOP

| | | | |
|-------|-------|---|---|
| 14:00 | 17:00 | FACTORY SESSION 1: BIOREFINING WORKSHOP | Chair: |
| 14:00 | | | Introduction & Welcome |
| 14:05 | | | What is a biorefinery? |
| 14:30 | | | Future opportunities for value addition |
| 14:55 | | | Product choices & markets - panel & questions |
| 15:20 | 15:45 | TEA | |
| 15:45 | 17:00 | BIOREFINING WORKSHOP Continued | |
| 15:45 | | | Implications for the SA sugar industry |
| 16:20 | | | Way forward - panel & questions |
| 16:50 | 17:00 | | Conclusions & closing remarks |
| 17:00 | | MEET AND GREET | |

Thursday 18 August 2011 FACTORY

| | | | |
|-------|-------|--------------------------------------|---|
| 09:30 | 10:30 | FACTORY SESSION 2 - Cane | |
| 09h30 | | Loubser RC & Barker B | Cane characterisation : The percolation test |
| 10h00 | | Bernhardt HW & Arnold DR | Cane trash burner: A novel way of utilising the energy inherent in sugarcane trash |
| 10h30 | 11:00 | TEA | |
| 11:00 | 13:00 | FACTORY SESSION 3: REFINING | |
| 11h00 | | Sibiya T & Singh I | Laboratory & pilot plant test work to evaluate powdered activated carbon as an ad-hoc refinery decolourising additive for use during periods of high raw colour |
| 11h30 | | Maseko Q, Singh R & Motsa N | Steps taken to improve refined sugar turbidity at the Pongola sugar refinery |
| 12h00 | | Allen P & Padayachee N | Agricultural use of filter cake from the Tongaat Hulett Sugar refinery |
| 12h30 | | Madho S & Davis SB | Silica in low-grade refinery sugars |
| 13h00 | 14:00 | LUNCH | |
| | | FACTORY SESSION 4: CHEMICAL ANALYSIS | |
| 14h00 | | Naidoo Y & Simpson R | Can Near Infrared Spectroscopy (NIRS) be used to predict lactic acid, acetic acid and ethanol in sugarcane mixed juice? |
| 14h30 | | Walford SN | Solving the puzzle the CSI way : The role of instrumentation |
| 15h00 | | TEA | |
| 19:00 | | AUTHORS' DINNER | |

Friday 19 August 2011 FACTORY

| | | | |
|-------|-------|---|---|
| 09:00 | 10:30 | FACTORY SESSION 5: MECHANICAL EQUIPMENT | |
| 09h00 | | Flansburg C | All-welded one-piece V-wire screen baskets for continuous centrifugal operation in sugar processing |
| 09h30 | | Dutttagupta J | Sintered alloy powder carbide and tungsten carbide materials for shredder hammer tips |
| 10h00 | | Lewinski J | Operation of sugar mills with individual variable speed drives |
| 10h30 | 11:00 | TEA | |
| 11:00 | 12:30 | FACTORY SESSION 6: MISCELLANEOUS | |
| 11h00 | | Getaz M & Sanders R | Recent developments in vertical crystalliser design |
| 11h30 | | Smith GT | Need identified for a foreman-in-training scheme |
| 12h00 | | Zaidi F | Waste water treatment: A fresh perspective for sugarcane/molasses-to-ethanol plants |
| 12h30 | 13:45 | LUNCH | |
| 13:45 | 15:05 | COMBINED AGRICULTURE AND FACTORY SESSION 10/7: (Bioresources Engineering) | Chair: Carel Bezuidenhout |
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