

**4<sup>th</sup> FOREST SCIENCE RESEARCH SYMPOSIUM**  
**Tuesday 3<sup>rd</sup> August – Wednesday 4<sup>th</sup> August 2010**  
**Hilton College School, Hilton**



**FINAL PROGRAMME**  
**TUESDAY 3<sup>RD</sup> AUGUST – DAY 1**



**agriculture,  
forestry & fisheries**

Department:  
Agriculture, Forestry and Fisheries  
REPUBLIC OF SOUTH AFRICA

**Session 1**

<b>08h00 - 08h40</b>		<b>REGISTRATION &amp; TEA</b> <i>Venue: Foyer of the Hilton College Theatre</i>	
08h40 – 09h00	Welcome		Ms Chipeta, DAFF Prof C Breen, ICFR
09h00 – 09h40	<b>Plenary:</b> The potential of biofuels in South Africa when considering first and second (cellulosic) ethanol technologies		Emile van Zyl, U Stellenbosch
09h40 – 10h05	A review of sustainable development of Bioenergy in Africa: An outlook for the future bioenergy industry		Paxie Chirwa U Pretoria
10h05 – 10h30	Charcoal production and Miombo Woodland degradation: What policy makers need to know.		Stephen Syampungani Copperbelt University
10h30 – 10h55	Indicators from greater eThekweni as to the benefits of a transdisciplinary agroforestry approach to ensure community involvement in the sustainable management of plantation forestry in SA		Mike Underwood, UKZN
<b>10h55 – 11h15</b>		<b>TEA &amp; COFFEE</b> <i>Venue: Foyer of the Hilton College Theatre</i>	

**Session 2**

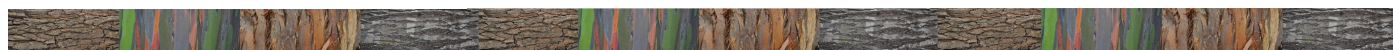
11h15 – 11h40	The Forest Molecular Genetics Programme: Development of a genomics and biotechnology research platform for plantation forestry in SA		Eshchar Mizrahi U Pretoria
11h40 – 12h05	Vegetative propagation of <i>Eucalyptus</i> clones in East Africa – diffusion of innovative propagation systems		Flic Blakeway CSIR
12h05 – 12h30	Triploid black wattle ( <i>Acacia mearnsii</i> ) – a means to control the spread of a commercially important forestry species in South Africa		Sascha Beck-Pay ICFR
12h30 – 12h55	Genome sequence of <i>Pantoea ananatis</i> : its significance in forest pathology		Teresa Coutinho FABI, U Pretoria
<b>13h00 – 13h15</b>		<b>Group Photograph</b>	
<b>13h15 – 14h00</b>		<b>LUNCH</b> <i>Venue: Gardens in front of the Hilton College Theatre</i>	

**Session 3(i)**

14h00 – 14h25	Forest Research in South Africa – A proud history and bright future		Ronald Heath DAFF
14h25 – 14h50	A stratification of the South African forestry landscape based on climatic parameters		Josh Louw NMMU
14h50 – 15h15	Do we understand the effects of changes in soil properties on long-term site productivity of commercial forest plantations in South Africa?		Diana Rietz ICFR
15h15 – 15h40	Sappi Plant Quality Index: The Pines		Craig Ford Sappi
<b>15h40 – 16h00</b>		<b>TEA &amp; COFFEE</b> <i>Venue: Foyer of the Hilton College Theatre</i>	

**Session 3(ii)**

16h00 – 16h25	Phosphorus (P) and potassium (K) fertilizer increased tree growth and changed nutrient content of topsoil, forest floor litter and tree stems of <i>Pinus patula</i> on gabbro-derived soils in Swaziland		Jacob Crous Sappi
16h25 – 16h50	The use of dynamic height and site index equations in stand-level growth and yield modelling		Horst Kassier Sappi
16h50 – 17h15	Early responses of <i>Pinus radiata</i> to mid-rotation fertilisation across a soil water availability gradient in the Western Cape		Ben du Toit U Stellenbosch
17h15 – 17h30	Short Break		
<b>17h30 – 18h15</b>		<b>National SAIF AGM</b>	
<b>18h15 – 20h00</b>		<b>COCKTAIL PARTY AT THE FLEUR DE LYS CLUB, HILTON COLLEGE</b>	



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**FINAL PROGRAMME**  
**WEDNESDAY 4<sup>TH</sup> AUGUST – DAY 2**



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**Session 4**

<b>07h30 - 08h00</b>	<b>TEA &amp; COFFEE</b> <b>Venue: Foyer of the Hilton College Theatre</b>	
08h00 – 08h40	<b>Plenary:</b> The role of environmental economics in optimal and sustainable management and development of SA forest resources	Eric Mungatana, U Pretoria
08h40 – 09h05	<i>Pinus</i> sawtimber tree optimisation in South Africa: A comparison of mechanised tree optimisation (harvester/processor) versus current manual methods	John Eggers NMMU
09h05 – 09h30	Native and introduced insects as a threat to South African forestry	Jeff Garnas FABI, U Pretoria
09h30 – 09h55	Managing the impact of the pitch canker fungus, <i>Fusarium circinatum</i> , in South Africa	Andrew Morris Sappi
09h55 – 10h20	Cossid moth infestation in <i>Eucalyptus nitens</i> on the Mpumalanga Highveld – Survey results and analysis	Marcel Verleur Sappi
<b>10h20 – 10h45</b>	<b>TEA &amp; COFFEE</b> <b>Venue: Foyer of the Hilton College Theatre</b>	

**Session 5**

10h45 – 11h10	Effect of forest fire and subsequent wet-deck storage on wood quality: Literature review and South African experience	Francois Malan KLF
11h10 – 11h35	Wood quality and water-stress response mechanisms of <i>Pinus radiata</i> D. Don. in southern New South Wales, Australia	Julian Chan PG Bison
11h35 – 12h00	Penetration and retention of 'replacement CCA' preservative formulations into softwood sapwood: Potential for environment management	Elisha Ncube Copperbelt University
12h00 – 12h25	Raman line-mapping of cell walls of four hardwood genotypes and a softwood genotype: Influence of acid bi-sulphite pulping	Viren Chunilall CSIR
<b>12h30 – 13h30</b>	<b>LUNCH</b> <b>Venue: Gardens in front of the Hilton College Theatre</b>	

**Session 6**

13h30 – 14h00	Research Ethics in an increasing complex world	Rob Slotow UKZN
14h00 – 14h25	Chapter one from Mondi's history book on Zululand productivity	Gert van den Berg Mondi
14h25 – 14h50	Evaluation of wood quality traits including the near infrared technique for selection in tree breeding programmes	Nicola Edwards Mondi
14h50 – 15h15	Development of a riverine gum, <i>Eucalyptus macarthurii</i> , into a commercial forestry species in South Africa	Tammy Swain ICFR
15h15 – 15h45	Closure	Colin Dyer ICFR
<b>15h45 – 16h00</b>	<b>TEA &amp; COFFEE</b> <b>Venue: Foyer of the Hilton College Theatre</b>	

