

International Forestry and Environment Symposium 2011

Where researchers, policy makers and industry meet.....

Organised by
Department of Forestry and Environmental Science, University of Sri Jayewardenepura

28th – 29th October 2011
at "Golden Rose" Conference Centre, Boralessgamuwa, Sri Lanka

Symposium Program

08.00 am Registration of participants

08 30 am – 09 30 am

INAUGURAL SESSION

08.30 am	Lighting the traditional oil lamp
08.35 am	University Anthem
08.40 am	Welcome address: Prof. Hiran Amarasekara, Head, Department of Forestry and Environmental Science, University of Sri Jayewardenepura
08.45 am	Address: Prof. S.S.L.W. Liyanage, Dean, Faculty of Applied Sciences, University of Sri Jayewardenepura
08.50 am	Address: Dr. N.L.A. Karunaratne, Vice Chancellor, University of Sri Jayewardenepura
09.00 am	Address: Chief Guest
09.10 am	Address: The Guest of Honour; Mr. Benjamin Sawyer, Assistant Manager, Arid Forests Branch, Forest Products Commission, Australia
09.40 am	Vote of thank: Prof. Nilanthi Bandara, Symposium Coordinator, Department of Forestry and Environmental Science, University of Sri Jayewardenepura

09.45 am - 10.00 am

Tea break

Day 01 - 28th October 2011

	Session 01 Forestry & Natural Resource Management Mr. Sarath Fernando, Former Conservator General of Forests, Forest Department	Session 02 Waste Management & Pollution Control Dr. Jagath Manthunge, Senior Lecturer, Department of Civil Engineering, University of Moratuwa	Session 03 Plantation Management Mr. Anura Sathurusinghe, Conservator of Forest (Research & Education), Forest Department
1 10.00 am- 10.15 am	34 Biological effects of three <i>Annona</i> species on <i>Callosobruchus chinensis</i> - A green alternative for storage pest management. U.K.P.R. Karunaratne	23 Eco-friendly method of manufacturing natural rubber latex dipped gloves containing minimum level of antigenic proteins. S. Liyanage	172 Effect of different seedling hosts on the growth of Indian sandalwood (<i>Santalum album</i>) at the nursery period. S.M.C.U.P. Subasinghe
2 10.15 am- 10.30 am	15 Joint forest management: a study of West Bengal in India. T.K. Mondal	01 A baseline survey on the eutrophic status of coastal waters in some selected western and southern coastal sectors in Sri Lanka. A. De Alwis	136 Research into sandalwood (<i>Santalum spicatum</i>) regeneration establishment in the semi arid and arid region in Western Australia. B. Sawyer
3 10.30 am -10.45 am	55 Effect of sward type and level of light on the agronomic performance and nutritive value of <i>Panicum maximum</i> VAR. Trichoglume and <i>Stylosanthes humilis</i> . C.J. Gajaweera	171 The Potential of GHG Emission Savings for Programmatic CDM by Municipal Solid Waste Composting in the Western Province, Sri Lanka. V.K.D.H. Kariyakarawana	135 Sandalwood Seeds for Oleochemical Industry: Sustainability in Sandalwood Agroforestry. D. Hettiarachchi
4 10.45 am - 11.00 am	58 Spatial variability of soil characteristics along a landscape gradient in Bellanwila-Attidiya area- Sri Lanka. R.U.K. Piyadasa	07 Pilot testing of bioremediation as an alternative treatment technology for municipal wastewaters. A. Pant	62 Run-off water harvesters and Agro-wells for supplementary irrigation of Rain-fed sugarcane at Sevanagala in Sri Lanka: A preliminary investigation. L.M.J.R. Wijayawardhana

<p>5 11.00 am- 11.15 am</p>	<p>84 Preliminary study on the adaptation of wild Guinea grass (<i>Panicum maximum</i>) to different agro climatic regions in Hambanthota District.</p> <p>C.J. Gajaweera</p>	<p>13 Development of a HPLC method to quantify <i>Hepatotoxin microcystin</i> - LR in water.</p> <p>P. Manage</p>	<p>157 Evaluation of drinking water supply schemes in estate sector-A case study on Telbedda estate Sri Lanka.</p> <p>G.G.T. Chandrathilake</p>
<p>6 11.15 am- 11.30 am</p>	<p>141 Breakdown of mangrove leaf litter in a replanted mangrove forest in Kalpitiya, Puttlam lagoon.</p> <p>M.D.J.N. Wijesinghe</p>	<p>173 The potential of waste oil generated from service stations in western province for the use in kiln co-processing in cement industry.</p> <p>K.K.D.H. Kumara</p>	<p>178 Pressure and non pressure preservation methods for rubber wood treatment by Boron preservatives.</p> <p>U. Abesinghe</p>
<p>7 11.30 am- 11.45 am</p>	<p>93 Foraging ecology of Red-vented Bulbul <i>Pycnonotus cafer</i> in University premises and nearby forest patch in Mihinthale, Sri Lanka.</p> <p>S. Rajakaruna</p>	<p>28 Design and development of a Municipal Solid Waste pyrolyzer for producing high quality biochar.</p> <p>C.R.S. Gajagan Hewage</p>	
<p>8 11.45 am- 12.00 pm</p>	<p>81 Response of multiple biomarkers in <i>Cirrhinus mrigala</i> during short term exposure to chromium.</p> <p>P. Rama Krishan</p>	<p>164 Waste disposal and health – with reference to incidence of cancer in the neighborhood of the National Cancer Institute, Maharagama.</p> <p>D.M.S.H.K. Ranasinghe</p>	
<p>12.00 pm- 12.15pm</p>		<p>Discussion</p>	

12.15 pm – 01.00 pm

Lunch

1.00pm – 01.20pm

Poster Session

	Session 01 Forestry & Natural Resource Management cont...	Session 02 Waste Management & Pollution Control cont... Prof. Niranjane Rathnayake, Department of Civil Engineering, University of Moratuwa	Session 04 Biodiversity Conservation & Management Dr. Devaka K. Weerakoon, Department of Zoology, Faculty of Science, University of Colombo
9 1.30 pm- 1.45 pm	109 Impact of cattle grazing and irrigation water influx to the Nitrate and Pospbate levels of lagoon ecosystem in Bundala national park. R.G.S.T. Aluthwattha	90 A study on plastic wastes and environment. R. Ponnusamy	44 Analysis of genetic diversity in candidate plus trees of <i>Moringa oleifera</i> through RAPD DNA marker. S.P. Mishra
10 1.45 pm- 2.00 pm	89 Assessing the C stocks in various land use practices: A case study from sub-humid tropics of eastern India S. L. Swamy	112 Multiple biomarker response in fish <i>Clarias gariepinus</i> during sub-chronic exposure to Benzotriazole. S.K. Satyanarayanan	38 Entomofauna diversity in the mangrove environment of Southeast coast of India. B. Srinivasan
11 2.00 pm- 2.15 pm	176 Analysis of mangrove vegetation cover and the present status of aquaculture. S.S. Nigamuni	06 Effect of Temporal Variation of Climates on Biodegradation and Leachate Pollution Levels of Gohagoda Dumpsite. S. Wijetunga	26 Intraspecific variation and taxonomic delimitation in <i>Munronia pinnata</i> (Meliaceae) in Sri Lanka. R.M. Dharmadasa
12 2.15 pm – 2.30 pm	170 Trends in extreme events of rainfall in low country wet zone of Sri Lanka. H.M.L.K. Herath	97 Estimation of Energy and Material Recovery Potential from the Gohagoda Dumpsite. R.T.K. Ariyawansa	20 Challenges in conserving the Mangroves associated with the Puttalam Estuary, with special reference to the Seguwantivu Conservation Forest. N. Perera

<p>13 2.30 pm- 2.45 pm</p>	<p>107 Population structure and dynamics of <i>Nerothermis tulla</i> (Odonata: Libellulidae) with water availability in rice field ecosystem. R.G.S.T. Aluthwattha</p>	<p>102 Heavy metal analysis in Alligator weed and compare with Sessile joy weed (Mukunuwenna). R. Fernando</p>	<p>54 Species richness and diversity of aquatic avifauna at the Annaiwilundawa Ramsar site of North-Western Sri Lanka. D. Mahaulpatha</p>
<p>14 2.45 pm – 3.00 pm</p>		<p>127 The investigation of the use of Laterite for removal of Cd²⁺ from aqueous medium. R.G.S.T. Aluthwattha</p>	<p>168 Herbivory of tree seedlings grown in shade and sun along an altitudinal gradient of the Sinharaja forest. S. Ranathunge</p>
<p>15 3.00 pm- 3.15 pm</p>		<p>131 Extraction and Usage of Natural Enzymes to Produce Biodegradable Polymer Materials. A.M.P.B. Samarasekara</p>	<p>60 Development of a Macroinvertebrate - based Index of Biotic Integrity (M-IBI) for Colombo-Sri Jayawardhanapura canal system (A new approach to assess stream/ wetland health). R. Perera</p>
<p>3.15-3.30 pm</p>		<p>Discussion</p>	

3.30 pm- 3.45 pm

Tea break

	Session 05 Socio Economics of Natural Resources Management Prof. Marcus M. Karunanayake, Department of Geography, University of Sri Jayewardenepura	Session 02 Waste Management & Pollution Control cont... Prof. P.M. Jayaweera, Department of Chemistry, University of Sri Jayewardenepura	Session 04 Biodiversity Conservation & Management cont... Dr. U.K.G.K. Padmalal, Department of Zoology, OUSL, Colombo
16 3.45 pm -4.00 pm	29 Ethnobotanicals for storage pest management: Effect of powdered leaves of <i>Olox zeylanica</i> in suppressing infestations of rice weevil <i>Sitophilus oryzae</i> (Coleoptera: Curculionidae). H.S.D. Fernando	132 Preparation of photodegradable polymer blends using natural resources. A.M.P.B. Samarasekara	61 Conservation of aquatic avifauna: A case study in proposed Kotuattawala Nature Reserve Sri Lanka. D. Diwakara
17 4.00 pm- 4.15 pm	73 Evaluation of ISO recommendations on analysis of precision experiments. M.D.N. Gunaratne	145 Analysis of impact of compost bin method in Lunawa project area. N. Hettige	66 Recovery of bird feeding guilds during tropical forest regeneration. T. De Silva
18 4.15 pm- 4.30 pm	47 Management of aquatic invasive plants in dry zone tank habitats: exploring the primary stakeholder perceptions. U.K. Jayasinghe-Mudalige	04 Comparison assessment of utilization of coal fly ash, clinker ash and synthetic aggregates as a soil ameliorant for sweet potato cultivation. G. Jayasinghe	71 Termites in a remnant lowland wet evergreen Dipterocarp forest in Moraella in the knuckles range: a preliminary study. J.P. Edirisinghe
19 4.30 pm- 4.45 pm	51 Small scale environment projects and their impact on minimizing land degradation in Sri Lanka: A case study of Community Development Centre, Aranayake. D. Jayasinghe	63 The temporal variation of landfill leachate quality at Gohagoda dumpsite. H. Wijesekara	167 Leaf morphological variation of canopy dominant tree species in Sinharaja forest: Along an altitudinal gradient and differing light level. S. Ranathunge

<p>20 4.45 pm- 5.00 pm</p>	<p>56 Occupational Risk factors of chronic kidney disease of unknown etiology in North Central Region of Sri Lanka.</p> <p>K.B. Jayasekara</p>	<p>160 An example of green nanotechnology; Antimicrobial nanosilver from waste X-ray photographic films.</p> <p>V. Karunaratne</p>	<p>85 Arbuscular mycorrhizae affect invasiveness of alien invasive plants through indigenous forest species in the dry zone of Sri Lanka.</p> <p>P.N. Yapa</p>
<p>21 5.00 pm -5.15 pm</p>	<p>123 Women's role in biodiversity conservation; A case study in bordering villages of Mihintale Sanctuary.</p> <p>R. Jayawardena</p>	<p>02 A study on the effect of dredging on the water quality improvement and fishery in the Lunawa Lagoon.</p> <p>A. De Alwis</p>	<p>99 Diversity, abundance and distribution of amphibians in the Mihintale sanctuary, in Sri Lanka.</p> <p>D.M.D.S.B. Dissanayake</p>
<p>22 5.15 pm- 5.30 pm</p>	<p>174 Estimation of damage cost of gem mining in Sri Lanka.</p> <p>D.S.A. Senarath Yapa</p>	<p>180 Structural changes of substrate(roof clay tile) up on rhizospheric changes in constructed wetland planted with <i>Typha angustifolia</i></p> <p>M. W. Jayaweera</p>	
<p>5.30 pm – 5.45pm</p>		<p>Discussion</p>	

END OF FIRST DAY SESSION

Day 02 - 29th October 2011

<p><i>Session 05</i> Socio Economics of Natural Resources Management cont... Prof. Sampath Amarathunge, Dean, Faculty of Management Studies & Commerce, Univesity of Sri Jayewardenepura</p>				<p><i>Session 06</i> Climate Change Prof. W.L. Sumathipala, Department of Physics, Faculty of Natural Sciences, OUSL</p>				<p><i>Session 04</i> Biodiversity Conservation & Management cont... Mr. Gamini Gamage, Director, Bio-diversity Secretariat, Ministry of Environment & Natural Resources</p>			
1 08.00 am -8.15 am		<p>10 Folk health practices by tribal community in Kinnaur district of western Himalaya: Need for restoration of old tradition.</p> <p>V. Thaplyal</p>	<p>179 Comparative enumeration for dominant species in selected natural forests, north central province, Sri Lanka to be used in assessment of carbon sequestration.</p> <p>A.A.S.C. Ranaweera</p>	<p>100 Heart rot of <i>Delonix regia</i> (flame tree) in urban landscape</p> <p>P. Fernando</p>							
2 08.15 am- 8.30 am		<p>43 Modeling susceptibility of a forest based community in drought prone region of West Bengal.</p> <p>G. Basu</p>	<p>114 Carbon mitigation potential of different land use systems in Northwest Himalayas of India.</p> <p>S. Kerketta</p>	<p>64 Studies on Saltwater crocodile <i>Crocodylus porosus</i>, Schneider. 1801 (Reptilia: Crocodylia); from the Madras Crocodile Bank Trust, Tamil Nadu</p> <p>S. Muthukumarasamy</p>							
3 8.30 am- 8.45 am		<p>57 Microbial formulation containing Eppawela Rock Phosphate (ERP) as a Source of Phosphorus to field crops.</p> <p>D.B. Kelaniyangoda</p>	<p>129 Forest management effects on carbon sequestration and Nitrous Oxide release.</p> <p>S. Gautam</p>	<p>92 Amphibian diversity and endemism in the swamp forests of Agusan Marsh, Philippines.</p> <p>O. Nuneza</p>							

<p>4 8.45 am- 9.00 am</p>	<p>83 Temporal Pattern of Livelihood Dependency and Anthropogenic Pressures in Kalakad-Mundanthurai Tiger Reserve, Tamil Nadu, India.</p> <p>S. Gupta</p>	<p>50 Global warming and climatic change: A case study on dairy farmers' awareness and adoption measures in Anuradhapura District of Sri Lanka.</p> <p>G. De Silva</p>	<p>94 Forest structure, species diversity and aboveground biomass of the Sundarbans Mangrove Swamps.</p> <p>H. Gupta</p>
<p>5 9.00 am -9.15 am</p>	<p>118 Economic impacts of forest on tribal livelihood: A diagnostic study in Similipal reserve forest in Orissa, India.</p> <p>S. Patra</p>	<p>52 ICT as a mode of transport to reduce the Climate Change: A Case Study in Colombo City Area.</p> <p>P.C.P. De Silva</p>	<p>104 Identification of different varieties of mangoes (<i>Mangifera indica</i> L.) in Jaffna.</p> <p>N. Krishnapillai</p>
<p>6 9.15 am – 9.30 am</p>	<p>82 Economic valuation of forest ecosystem services: A case of recreational services of Basavana Betta state forest, Karnataka, India.</p> <p>C.R.B. Venkatarayappa</p>	<p>134 <i>Hydrilla verticella</i> as a carbon capturing plant.</p> <p>C.D. Jayaweera</p>	<p>120 Selection of <i>Artocarpus heterophyllus</i> Lam. (jackfruit) varieties using AFLP markers.</p> <p>R.L. Thantrige</p>
<p>7 9.30 am- 9.45 am</p>	<p>46 An analysis of effects of Socioeconomic characteristics of households on food Production in homegarden systems in Kandy, Sri Lanka.</p> <p>V. Sivapathasundaram</p>	<p>137 Potential for voluntary carbon market in Sri Lanka - A success story of Hiniduma - Kanneliya Biolink project.</p> <p>S. Wahala</p>	<p>126 Behavior and territorial mapping of Indian Black Robin.</p> <p>M.A.J. Dissanayake</p>
<p>8 9.45 am- 10.00 am</p>	<p>53 Conservation of Ground Water Resources and Energy by Proper Selection of Water Treatment Processes.</p> <p>N. Ratnayake</p>	<p>139 Carbon stocks in selected dry and wet zone forests of Sri Lanka.</p> <p>K.A.J.M. Kuruppuarachchi</p>	<p>156 Behaviour of goats in a natural forest with special emphasis on eating behavior.</p> <p>D. Senaratna</p>

9 10.00 am - 10.15 am	162 Status of renal failure in Vavuniya District - some causes and remedies. D.M.S.H.K. Ranasinghe	143 Role of ICTs in early warning of Climate-Related disasters: A Sri Lankan case study. K. Wickramasinghe	169 Leaf chlorophyll concentration of canopy dominant tree seedlings grown in different light environment across the topographic gradient. S. Ranathunga
10 10.15 am- 10.30 am		79 Variation in Biomass and C stocks in five promising <i>Populus deltoides</i> clones under an agroforestry system. A.M. Swamy	175 Study on leaf nutrients of canopy dominant tree saplings and soil nutrients across different topographic positions of a Sri Lankan rain forest. M.U. Perera
10.30 am- 10.45am Discussion			

10.45am 11.00 am

Tea Break

		Session 07 Sustainable Energy Dr. Mahesh Jayaweera, Department of Civil Engineering, University of Moratuwa	Session 04 Biodiversity Conservation & Management cont... Prof. D.M.S.H.K. Ranasinghe, Department of Forestry and Environmental Science, University of Sri Jayewardenepura
11 11.00 am- 11.15 am		41 Water footprint of broiler meat production in Sri Lanka: An analysis. N.S.B.M. Atapattu	75 Lichens as indicators of changing environmental conditions in Horton Plains National Park, Sri Lanka. U. Jayalal
12 11.15 am- 11.30 am		103 Possibilities of micro algae <i>Nanachloropsis</i> sp. used as	77 Species composition of Odonate fauna in Meegahawatta, a wetland area in

		renewable energy source under local condition. C.P. Rupasinghe	Hanwella, Sri Lanka. H.K. Maddumagea Dona
13 11.30 am- 11.45 am		177 Screening the potential of plant species to be used for dendro energy generation. D.N. Kannangara	59 Identification of shrew species of Sri Lanka using hair anatomy. D. Manawadu
14 11.45 am- 12.00 pm		68 Factors to be taken into account in the use of solar water heaters as a sustainable energy option. S. Karavita	
12.00 pm-12.15 pm		Discussion	

CONCLUDING SESSION	
12.30 pm	Address by Prof. Hiran Amarasekara, Head, Department of Forestry and Environmental Science, University of Sri Jayewardenepura
12.50 pm	Vote of thanks

01.00 pm Lunch