

International Forestry and Environment Symposium 2009

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

Organized by

Department of Forestry and Environment Science, University of Sri Jayewardenepura

18th – 19th December 2009

University of Sri Jayewardenepura, Nugegoda, Sri Lanka

Symposium Program

08 00 am Registration of participants

INAGURAL SESSION	
09 00 am	Lighting the traditional oil lamp
09 05 am	University Anthem
09 10 am	Welcome address: Dr. Hiran Amarasekara , Head, Department of Forestry and Environmental Science, University of Sri Jayewardenepura
09 15 am	Address: Dr. N.L.A. Karunaratne , Vice Chancellor, University of Sri Jayewardenepura
09 30 am	Address: Chief Guest Hon Minister Udaya Gammanpila , Minister of Agriculture, Agrarian Services Development, Irrigation, Industries and Environment Western Province
09 40 am	Address: The Guest of Honour Mr. M.A.R.D. Jayathilaka , Secretary, Ministry of Environment and Natural Resources
09 50 am	Vote of thank: Dr. Upul Subasinghe , Symposium Coordinator, Department of Forestry and Environmental Science, University of Sri Jayewardenepura

09 00am - 10.00am

Tea break

Day 01 - 18th December 2009

Time	Session 01 Forest and Natural Resource Management	Session 02 Waste Management Chairperson: Dr. Sujatha Gamage	Session 03 Socio- Economics of Natural Resource Management
1 10.00am - 10.15am	197 Fattening of mud crab <i>Scylla serrata</i> in cages using locally available animal byproducts in a brackish water pond K.S.G.S Fernando	026 Adaptation of different composting techniques by Local Government Authorities (LGA); case of solid waste management sector in the Sabaragamuwa, Central, North Central, North Western, and western province, Sri Lanka. W.G.A.S. Kumara	020 Human – wildlife conflict: issues, effects and conservation. B. Ojelade
2 10.15 am- 10.30 am	053 Biomass estimation in some dry zone forests in Sri Lanka from forest inventory data M.D.P. Kumarathunge	029 Waste composition analysis to estimate prevalence of recyclables to develop a conceptual Frame work of waste to money, in Kirulapone division, Colombo municipal area. W.G.A.S. Kumara	036 Assessing the Preferences of Plant Breeders for Utilization, Benefit Sharing and Prioritization of Conservation of Wild Rice Relatives in Sri Lanka. S. Guruge
3 10.30am -10.45am	095 Aboveground tree carbon stocks of Lowland evergreen mixed vegetation at Gannoruwa P.S. Pathinayake	LA 1 A Comparative Study of Alternative waste management Practices Kaduwela Pradeshiya sabha	050 Economic Valuation of Conservation of Genetic Resources of Wild Rice Relatives : Assessing the Preferences of Adjacent Community for Conserving <i>Oryza granulata</i> in the Wavulpane Area R. Dissanayake
4 10.45am – 11.00am	143 A study of carbofuran adsorption and leaching in three soil series of Jaffna peninsula T.K. Gnanavelrajah	LA 2 Solid Waste Management Urban Council Balangoda Urban Council Balangoda	110 Economic value of mangrove ecosystems in the panama village, Ampara district: a case study. K. Wijayaweera

<p>5 11.00 am- 11.15 am</p>	<p>196 Coastal green belt in Batticaloa district: Is Casuarina a success? T. Mathiventhan</p>	<p>LA 3 Waste Management: Puttlam Urban Council Puttlam</p>	<p>086 Socio-Economic Factors Affecting the Technology Adoption Level of Sugarcane in Rainfed Sector in Sevenagala. T.D.G.J. Peiris</p>
<p>6 11.15 am- 11.30am</p>	<p>085 Deep ploughing for soil water conservation in highly compacted gravelly lands L.P. Vidhana Arachchi</p>	<p>098 Microstrainer for removal of algae in drinking water treatment. S.S. Sethunge</p>	<p>195 A Values - based Approach for Managing Recreation and Visitor Services in Horton Plains and Kaudulla National Parks. R.M.W. Rathnayake</p>
<p>7 11.30 am- 11.45am</p>	<p>055 Deterioration of soil quality with continuous plantation of Teak N. T. Diyalawaththa</p>	<p>004 Growth response of Tobacco (<i>Nicotiana tobaccum</i>) for the enriched organic fertilizer from Municipal solid waste- Jaffna. N. Kannan</p>	<p>198 Economic Evaluation of Kotakanda Jak /Mahogany Mixed Forest Plantation. R.P.D.S. Chandani</p>
<p>8 11.45am- 12.00 pm</p>		<p>022 Effect of Particle Size of Coco Peat for Greenhouse Tomato (<i>Lycopersicon esculantum</i> Var.Ruby) Nursery. H.K.M.S. Kumarasinghe</p>	<p>164 Land Use Change detection analysis using remotely Sensed approach – Case Study for Kataragama area S. Perera</p>

**12.00 pm-
12.15pm**

Discussion

12.15pm – 01.00 pm

Lunch

1.00pm – 01.20pm	Poster Session		
1.30pm- 3.45pm	Session 04 Forest Products and Their Utilisation	Session 02 Waste Management cont... Chairperson: Dr. M.M. Pathmalal	Session 03 Socio- Economic of Natural Resource Management cont... Chairperson: Dr. P. Gunawardena
9 1.30 pm- 1.45pm	066 Timber production in high density planting of <i>Hevea brasiliensis</i> . T. U. K. Silva	178 Design an Effective Solid Waste Management System for a Local Authority in Sri Lanka. T.P.G.P. R. Gurusinghe	032 Community dependency on Sand dunes for Household Income: Evidence from two coastal villages in Pottuvil. P. Sivarajah
10 1.45 pm- 2.00 pm	080 Growth, Biomass and Carbon Accumulation among Rubber (<i>Hevea brasiliensis</i>), Teak (<i>Tectona grandis</i>) and Mahogany (<i>Swietenia macrophylla</i>) A Case Study from 1 to 10 Years of Age Series. N. Appuhamy	186 Ensuring human safety and addressing environmental concern through better management of biomedical waste: a case study of aurangabad city,m.s.,India. K. Khobragade	189 Estimation of Ecological Footprint for Madurawala Divisional Secretariat area, Kaluthara District. W. D. Sepalika
11 2.00 pm- 2.15 pm	169 Forest Woodland Ecosystem: An Insight into the Addition of Litter through Teak Plantation A. K. Mani	194 Managing waste in a watershed: the case of the paradeke oya watershed. K. Melvani	213 Evaluation of Farmers' Woodlot in the aspects of growth and effect on farmers K.M.T.S. Jayarathne
12 2.15 pm – 2.30 pm	174 Estimation of Biomass Carbon of Eucalyptus grandis Using IRS LISS III Satellite Images in Up Country Wet Zone of Sri Lanka A. Gunawardena	096 Bioremediation of carbofuran by isolated bacteria from soil. L.M.A.M. Thilakarathne	166 Utilization of molluscs as a food resource among traditional communities in Kalpitiya Region (KR) of Sri Lanka. T. Siriwardana
13 2.30 pm- 2.45 pm	201 Comparison of wood quality of even-aged Teak (<i>Tectona grandis</i> L.f.) plantations in three districts of Sri Lanka. D.P. Weerasinghe		190 Changing Socio Economic Pattern and Conservation of Maduganga Wetland. P. Manusinghe

<p style="text-align: center;">14 2.45 pm – 3.00 pm</p>	<p>200 Investigation of ergonomic parameters of university lecture hall furniture. U.L. Palamakumbura</p>		<p>208 Cost effectiveness analysis for a pilot scale constructed wetland plant to treat gray water S. Karunaratne</p>
<p style="text-align: center;">15 3.00 pm- 3.15 pm</p>	<p>212 Evaluation of Benefits that can be obtained from FSC Certification K.M.T.S. Jayarathne</p>		
<p style="text-align: center;">16 3.15pm- 3.30 pm</p>	Discussion		

3.45 pm- 4.00 pm Tea break

	Session 01 Forest and Natural Resource Management cont... Chairperson: Dr. H. Amarasekara	Session 05 Environment Friendly Technologies and Green Solutions	Session 06 Bio diversity and Biodiversity Conservation Chairperson: Prof. D.M.H.S.K Ranasinghe
<p style="text-align: center;">17 4.00 pm -4.15 pm</p>	<p>017 Effects of abiotic environmental factors on fish yield from traditional stilt fishery in Southern Sri Lanka. M.C.L. Zoysa</p>	<p>005 Use of anti- fungal Properties of clove, cinnamon, nutmeg and beetle leaf extracts to control anthracnose disease of Capsicum species. P. Alahakoon</p>	<p>154 Diversity of medicinal plants in the mihintale sanctuary. A. Herath</p>
<p style="text-align: center;">18 4.15 pm- 4.30 pm</p>	<p>206 Change of crown diameter with dbh of <i>Swietenia macrophylla</i> (mahogany) even – aged monocultures. W.A.S. Lakmali</p>	<p>082 Efficiency of some local plants as eco-friendly pest control agents in reducing infestation of rice by <i>Sitophilus oryzae</i> L. (Coleoptera : Curculionidae). T. V. N. M. Gunarathna</p>	<p>179 First description of fresh water medusa <i>Craspedacusta sowerbyi</i> (Lankester, 1880) in Sri Lanka R.R.M.K.P Ranatunga</p>

19 4.30 pm- 4.45 pm	102 An Assessment of Groundwater Quality in the Land Area around the University of Sri Jayewardenepura. B. Dorakumbura	111 A Multi Agent System for Environmental Friendly Agriculture. R. Rupasinghe	184 An overview of Mangrove Diversity of the Eastern Province of Sri Lanka: Current status and trends. K. Wijayaweera
20 4.45 pm- 5.00 pm	135 Changes of the top soil layer due to different land use patterns in Nuwara-Eliya district- Sri Lanka. M.K.A.A. Amali	185 Efficient removal of nitrogen/phosphorus by Bio-Geo Filter ditches consisting of laterite soil and sand-coir dust mixture. G.S.M Fonseka	046 Comparison of sampling techniques to estimate tree diversity and aboveground biomass in Sinharaja forest. M.D.P. Kumarathunge
21 5.00 pm- 5.15 pm	191 Estimation of carbon stock in Kandyan Homegardens located in Kandy and Matale Districts in Sri Lanka W.A.S.S. Dissanayake	202 Green Solutions in development – Utilization of treated tannery waste water using HRTS (High Rate Transpiration System). S. Krishnamoorthi	176 Photosynthetic light response of selected plant species occupying different vertical strata of lowland wet evergreen forests in Sri Lanka. H. R. Suranga
22 5.15 pm -5.30 pm	205 Investigation into the optimal fertilizer regime of <i>Swietenia macrophylla</i> (Mahogany) and recommendations for Management of fertility in sites. S. Jayasinghe		175 Habitat use by Terns and Gulls (Lariidae) in a coastal landscape in North-Western Sri Lanka C.D. Kaluthota
22 5.30 pm- 5.45 pm	207 Establishment of relationships of growth at 7 years old mahogany trees with selected site factors in low country wet zone, using GIS as a tool K.R.A.H.A. Randeni		131 Diversity and distribution of mangrove flora in the Attaragoda wetland, Galle with some notes on avifauna B. Jayasekara
23 5.45 pm – 6.00 pm			

6.00 pm – 6.15pm

Discussion

END OF FIRST DAY SESSIONS

Day 02 - 19th December 2009

Session 07 Ecology Chairperson: Prof. B.M.P. Singhakumara		Session 08 Bio-technology and Tissue Culture		Session 09 Pollution Control Chairperson: Ms. N.J.G.J. Bandara	
1 08.00am -8.15am	010 Re-emerging Salutogenic Perspective of Therapeutic Effect of Natural Environments in the Forests: Dynamics of "Forest Therapy" in Sacred Ecology. D. Perera	088 Towards the production of an efficient fungal inoculum for rapid sawdust decomposition. R. Punchihewa	016 Assessment and abatement measures for vehicular air pollution: Colombo-Sri Lanka. C. D. Weerathunghe		
2 08.15 am- 8.30am	132 Seasonal variations in fish and aquatic plant diversity in the Anavilundawa reservoir M.S.S. Jayasekara	121 Importance of SSCP method in identification of genetic diversity of two populations of <i>Macrobrachium rosenbergii</i> dacqueti in southern part of Sri Lanka: Implications for conservation of biodiversity. H. Munasinghe	093 Effect of the Solid Waste Effluents to the chemical properties of the soil surrounding the Moon Plains Landfill at Nuwara Eliya. M.A.C. Abeysena		
3 8.30 am- 8.45 am	049 Comparison of synchronization indices used for determination of plant phenological synchronization. R.M.C.S Ratnayake	117 Cytotoxicity of a selected group of medicinal mushrooms A. M. Hettiarachchi	133 Sugar cane Bagasse based activated carbon as an adsorbent For Phenol removal from aqueous solution. H.D.S.S Karunarathne		
4 8.45 am- 9.00 am	087 Bioactivities of the endolichenic fungi of the lichen <i>Usnea barbata</i> at Hakgala montane forest. C. Rajapaksha	181 Micro propagation of Teak. A. L. M. Zuhry	116 Raw Materials and Temperature Effect on Shelf Life of <i>Trichoderma viride</i> in Compost. R. R. D. T. Niranga		

5 9.00 am -9.15 am	134 Changing Ichthyological diversity in Bellanwila- Attidiya wetland. P.U. Wewalwala	057 In vitro germination and shoot proliferation of <i>Pterocarpus marsupium</i> Roxb., a rare medicinal plant P.S. Warakagoda	157 Potential usage of bio-diesel produced from scraped coconut refused for power tiller operation. K. T. Ariyawansa
6 9.15 am – 9.30 am	136 Diversity and distribution of epiphytic lichens in relation to different forest types in Knuckles Mountain range - Sri Lanka. G. Weerakoon	145 Identification of <i>Ralstonia solanacearum</i> in imported seed potatoes. A.L.A.G.P. Ambegoda	168 Identifying Cost Effective Feed Composition for Quicker Vermicomposting. S. Vijayabaskaran
7 9.30 am- 9.45 am	101 Probability of endangered species preservation: a study of freshwater turtles conservation in Ampara district S.Kirupakaran	149 First Report of three distinct citrus viroids associated with diseased citrus plants of Sri Lanka. B.K.K.N.N Wijesinghe	007 Determination of effective shrubs for urban air pollution control. S.A.E.C. Wijesinghe
8 9.45 am- 10.00 am	105 Taxonomic studies on deltocephaline leafhoppers (Hemiptera:cicadellidae: deltocephalinae) of Sri Lanka. R. Gnaneswaran	156 DNA Barcoding of the Sri Lankan Slender Loris (<i>Loris tardigradus</i> or <i>Loris lydekkerianus</i> ?) – A preliminary report A. Fernando	015 Assessment of hazardous volatile organic compounds (VOC) and modeling of their source contribution in a highly industrialized location. R. Ethirajan
9 10.00 am - 10.15 am			092 Effect of salinity on growth and NaCl accumulation by seedlings of <i>Rhizophpra mucronata</i> and <i>Rhizophora apiculata</i> : Implications on their desalination potential. K.H.W.L. De Silva
10 10.15 am- 10.30 am			027 Fruit and Vegetable Leachate in Dry Batch Biogas Digester as a Nutrient Solution for Hydroponics. M.P.W. Gunawardena
10.30 am- 10.45am	Discussion		

10.45am 11.00 am**Tea Break**

Session 06 Bio Diversity and Biodiversity Conservation cont...		Session 08 Bio-technology and Tissue Culture cont...	Session 09 Pollution Control cont...
11 11.00 am- 11.15 am	076 Baseline Survey on Biodiversity in up country Tea Estates in Sri Lanka. G.G.T. Chandrathilake	051 Genetic analysis of morphologically non-identifiable translocated <i>Puntius bandula</i> population at Salgala using CO1 region of mt DNA. T. Muthunayake	075 Studies on the potential use of <i>Strychnos potatorum</i> L.f seeds for water purification. B. A. Perera
12 11.15 am- 11.30am	059 Diversity and microhabitats of termites in a natural and a secondary forest in hantane hills, Kandy district. I. I. Hemachandra	112 Preliminary study on DNA barcoding of cinnamon varieties in Sri Lanka. S. Samaradivakara	129 Variation of some physiochemical parameters along a part of a Dutch canal in North Western Province of Sri Lanka. P. V. S. L. Gunawardana
13 11.30 am- 11.45am	163 Diversity of avifauna in disturbed and undisturbed habitats within the Mihintale sanctuary of Sri Lanka. C. Wimalasekara	128 First report on the presence of begomovirus associated DNA beta satellite molecules in yellow vein disease of two wild plants in Sri Lanka. A. N.W.S. Thushari	130 Environmental factors influence the chronic kidney disease prevailing in north central province in Sri Lanka. J. Liyanage
14 11.45 am- 12.00 pm	177 Valuation of acute toxicity to Indian major carp, <i>Cirrhinus mrigala</i> of neem leaf extract (<i>Azadirachta indica</i> A. Juss). S. Manoharan	068 DNA barcoding of Sri Lankan Tea – A method to secure ownership in the international trade. E.D.T.S. Wickramasinghe	142 Effects of nitrogen and phosphorous fertilizer on rice straw decomposition. B.C. Walpola
15 12.00 pm- 12.15 pm	211 Distribution and some population parameters of <i>Balanocarpus kithulgalensis</i> in Kithulgala Forest Reserve R.D.S.S. Ranathunga		060 A Comparative Evaluation of Sustainability Indicators of VP and Seedling Tea in Nahavilla Organic Project. G.D.O.C. Kumarasiri
12.15 pm- 12.30pm	Discussion		

12.30 pm- 1.15 pm**Lunch**

Time	Session 06 Bio Diversity and Biodiversity Conservation cont...	Session 10 Climate Change Chairperson: Dr. B.M.S. Batagoda	Session 09 Pollution Control cont...
16 1.15 pm- 1.30 pm	047 Effects of carbofuran on survival and growth of <i>Duttaphrynus melanostictus</i> tadpoles. M.R. Wijesinghe	054 Analysis of farmers' perception on climatic change and adoption strategies. A. L. Sandika	140 Water quality assessment in relation to flushing characteristics in Puttalam Lagoon, Northwest coast of Sri Lanka. H.B. Jayasiri
17 1.30 pm- 1.45 pm	099 Ovitrap surveys within the university premises of Sri Jayawardenepura for <i>Aedes aegypti</i> and <i>Aedes albopictus</i> , and for seasonal shift in relative abundance of these mosquito species. V. K. Gunathilake	150 Variation of rainfall in relation to onset of monsoons within Sri Lanka. B.A.N. Dilrukshi	173 Levels of heavy metal uptake by <i>Abelmoschus esculentus</i> and <i>Buchole dactyloides</i> grown in a damaged dry-battery disposal site in the wet zone of Sri Lanka. S. Weerasinghe
18 1.45pm- 2.00 pm	107 Herpetofaunal diversity and distribution in Kalugala proposed forest reserve in Sri Lanka. W. M. S. Botejue	077 Variation of sap flow of two coconut (<i>Cocos nucifera</i> L.) cultivars (CRIC 60 and CRIC 65) in response to variation in climatic conditions. W. S. Madurapperuma	090 Analysis of contaminants associated with Bomuruella Reservoir at Nuwara Eliya. R.A. Jayasinghe
19 2.00 pm- 2.15 pm	123 How do Sri Lankan shrub frogs <i>Philautus popularis</i> spend their night time: Field observations from Bolgoda wetland complex. H.G.S. K. Dayananda	120 Carbon Sequestration Potential of Trees Outside Forests (TROF) in Sri Lanka as a Mechanism of Mitigating Climate Change Impacts. K.T. Premakantha	
20 2.15 pm- 2.30 pm	009 Effects of urea and adult palm fertilizer mixture on the survival and body wall tissues of earthworms. W. U. Chandrasekera	138 Global climate change: impact on the coastal zone of Sri Lanka. I. Wijayawardane	

21 2.30 pm- 2.45 pm	078 Distribution and Population Parameters of Selected Tree Species in Gilimale and Kithulgala Forest Reserve. S. S. Ranathunga	063 Effects of Climate Change on Estimates of Potential Groundwater Recharge in the Dry Zone of Sri Lanka. R. de Silva	
22 2.45pm- 3.00 pm		183 Temporal variability of rainfall pattern in the wet zone of Sri Lanka: (A Comparative study for the Periods, 1941-1970 and 1971-2000). E. M. Savithri Ranasinghe	
23 3.00 pm- 3.15 pm		209 Carbon finance through Cleaner Technology Options in Sri Lanka for Forestry and Land use sectors H. Ranasinghe	
24 3.15pm – 3.30pm		210 Climate Change and need for sustainable energy H. Ranasinghe	
4.15 pm- 4.30 pm	Discussion		

4.30pm - 4.45pm

Tea Break

**5 00pm –
5.30 pm**

CONCLUDING SESSION