

SSSSL Newsletter

SOIL SCIENCE SOCIETY OF SRI LANKA

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Annual General Meeting 2015/2016

The 45th Annual sessions and Annual general meeting of the Soil Science Society was held on 26th March 2015 at SRICANSOL Centre, Faculty of Agriculture, University of Peradeniya with the participation of around 70 members. The customary Joachim Memorial Lecture was delivered by Mr. D.N. Sirisena, Deputy Director, Rice Research and Development Institute, Batalagoda. The lecture entitled “Nutrient Management in the Paddy Fields for Sustainable Rice Production” was well formulated with sufficient data. Through this informative lecture, Mr. Sirisena highlighted the soil management related challenges, namely, decline of soil fertility, excessive use of inorganic fertilizers and development of soil salinity. Further, he described measures taken during last three decades and on-going researches to face these challenges and improve the national production of rice.



Mr. D.N. Sirisena delivering the customary A.W.R. Joachim memorial lecture

The Joachim Memorial Lecture was followed by the technical session. Three members of the Soil Science Society made scientific contributions by delivering oral presentations. Ms. F. Rosemary, PhD student at the Postgraduate Institute of Agriculture, University of Peradeniya presented research findings on “Short-scale variability of trace metals in different land uses in a Dry Zone soil catena”. Her presentation revealed that the concentrations of Cd, Cu, Pb, Ni and Zn in Catenary level are far below the permissible levels of European community set standards. Besides, a considerable short-scale spatial variability of trace metals, namely in the Dry Zone of Sri Lanka, which can be modeled using Geostatistical techniques in relation to land use. Dr. Meththika Vithanage, Research Fellow, Chemical and Environmental Systems Modeling Research Group, Institute of Fundamental Studies, delivered a presentation on “Effect of Biochar on heavy metals in polluted soils”. In her presentation, she elaborated the potential of biochar, as a soil amendment to immobilize Ni, Cr, and Mn in serpentine soil and minimize phytotoxicity. Dr. N.S. Abesingha, Senior lecturer attached to the Department of Agricultural Engineering and Soil Science, Faculty of Agriculture, Rajarata University contributed for the annual session by delivering a presentation on “SWAT based modeling

to assess the future climate change impact on water resources”. Through a case study conducted in Gomti River basin in India, Dr. Abesingha highlighted the calibration procedures of and Water Assessment Tool (SWAT) and its integration with different climate change projection to assess impacts of climate change on water resources and crop production.

Field Visit to Arugam Bay and Baticaloa

After the Annual General Meeting, members headed out on a field trip to Arugam Bay and Baticaloa region to study the soils and major agricultural systems of the Eastern Province.



Participant of the field trip observing farmer fields in Baticaloa



Casuarina plants in soil conservation in coastal belts of Sri Lanka

Members studied a sandy Regosols soil profile at Arugambe and also visited a soil conservation site located nearby. In there Casuarina has been planted to protect the land from wind erosion. Dr. Nayakakorale shared his knowledge on the use of Casuarina plants in soil conservation in coastal belts of Sri Lanka. After

studying soils in this region the members met a successful vegetable farmer in Baticaloa whose sandy soil had been effectively managed using organic manure and irrigation practices to produce high yields. His commitment to agricultural production has earned him several awards and some foreign visits.

SSSSL Office Bearers:2015/2016

Following members were elected to the executive committee during the AGM for the year 2015/2016

President: Dr. R.S. Dharmakeerthi
Vice President: Dr. W.S. Dandeniya
General Secretary: Dr. A.P. Heenkende
Treasurer: Mr. Upali Yapa
Editor: Dr. U. W. A. Vitharana
Auditor: Dr. W. M. J. Bandara

Committee Members

Dr. N. Abeysingha
 Dr. Chammi Attanayake
 Ms. R.P. Hettiarachchi
 Mr. P.R. Idamekorala
 Dr. Iranie Wijebandara
 Dr. T. Karunainathan
 Mr. A.H. Kulasiri
 Ms. U. Ratnayake
 Mrs. Renuka de Silva

Mid Term Technical Session on Current status of contaminants in soil and water in Sri Lanka

The SSSSL conducted its Mid Term Technical Session by organizing a workshop to share up-to-date research evidences on the current status of contaminants in soil and water resources in Sri Lanka. This workshop was held at the main auditorium of the Plant Genetic Resource Centre, Gannoruwa on 28th August 2015 with the participation of 78 members. The workshop was chaired by Dr. Ajantha de Silva, Director Natural Resource Management Centre, Peradeniya.



Dr. R.S. Dharmakeerthi, President SSSSL addressing the workshop participants

Highlighting importance of natural sources of soil and water contaminants, Prof. Rohana Chandrajith delivered an informative lecture on "Geogenic occurrence of trace elements and their

potential threats in Sri Lanka". By stressing the anthropogenic activities as a source of contaminants, Mr.D.N.Sirisena presented evidences on the level of trace elements in agricultural inputs used in Sri Lanka and its contribution to soil contamination. Through, comprehensive review of available scientific information, Dr Chammi Attanayake and Prof. Rohan Weerasooriya presented overviews of trace elements in soil and water resources in Sri Lanka, respectively. Dr. Sujithra Weragoda delivered a presentation on organic pollutants in water resources in Sri Lanka. Scientific approach for the identification of root cause for health issues related to contaminants was presented by Prof. Gamini Rajapaksha. Dr. Manthirithilaka Herath discussed a very important dimension of the issue of soil contamination; public awareness by delivering a presentation on "Communication of sensitive scientific information" Dr. Keerthi Kularatne contributed for the workshop in the capacity of a medical professional by delivering a presentation on health effects of contaminants in soil and water were presented their technical presentations.

The presentations were followed by a very active and thought provoking discussion chaired by Prof. R. M. C. P. Rajapakse. The SSSSL is expecting to publish a special publication on the basis of the information generated in the workshop.

Fertilizer Day Program- 2015

The 11th Fertilizer Day program was held on 4th December 2015 at SRICANSOL centre. This year, the theme of fertilizer day program was "Use and management of fertilizer for a better life". Biofertilizers are considered as one of the best of cutting down the inorganic fertilizer use. Highlighting this potential of biofertilizers Prof. R.M.C.P. Rajapaksa, Department of Soil Science, Faculty of Agriculture, University of Peradeniya made a presentation on "Bio fertilizers for annual crops: Potentials and limitations". While summarizing the promising results of biofertilizers developed at the Department of Soil Science, she highlighted the soil, climate and crop specificities of biofertilizers.



Prof. Dharshi Kumaragamage delivering her presentation on "Site specific fertilizer application in Sri Lanka"

The presentation of Prof. Rajapakse was followed by another interesting presentation by Mr. Mahesh Liyanage, Tea Research Institute, Thalawakele. His presentation title was "Management of soil acidity for better fertilizer use in tea growing soils of Sri Lanka". Mr. Mahesh summarized the research findings of his MPhil research highlighting the potential of site-specific management of soil acidity at soil series level. Finally, Prof. Dharshi Kumaragamage, University of Winnipeg made a very informative presentation on "Site specific fertilizer application in Sri Lanka". While summarizing accumulated knowledge on

approaches tested and adopted for the site-specific fertilizer application in Sri Lanka she presented some future directions. Fifty three members participated for this event and after the technical session participants were visited Digana area to visit Dolomite Deposits. By the invitation of SSSSL, Prof Kapila Dhanayake also participated for the field visit and his expertise descriptions were invaluable input for all participants to broaden their knowledge. The society wishes to express its sincere gratitude for Prof Kapila Dhanayake for his continuous support for the society activities.

SSSSL facilitated student activities

The SSSSL fully funded a one day workshop on “GIS for Agricultural Research” which was organized by the Soil Science Society of the Faculty of Agriculture. This one-day workshop was conducted offered for the undergraduate students of the Faculty of Agriculture on 31st May 2015. The SSSSL member Dr. U.W.A.Vitharana, Senior Lecturer, Department of Soil Science served as the resource person for this workshop voluntarily. The workshop comprised of an introductory session of the fundamentals of GIS, field session on GPS guided soil sampling and computer laboratory session on the use of GIS software for the construction of location maps and generating a continuous soil map.



Students participating the laboratory session of the workshop on “GIS for Agricultural Research”

Publications

Soil Science Society of Sri Lanka released the Voume 24 of Journal of Soil Science Society of Sri Lanka. This issue comprised of following articles:

Transformation of applied Zn in a flooded soil in a rainfed ecosystem

D. M. D. I. Wijebandara, G. S. Dasog and P. L. Patill

The response of selected rice varieties to partial nitrate nutrition and their ability to suppress nitrification

W.S. Dandeniya



“Essentially, all life depends upon the soil ... There can be no life without soil and no soil without life; they have evolved together.”

Charles E. Kellogg, USDA Yearbook of Agriculture, 1938

Hydro-chemical status of the Mahakanumulla cascade in the dry zone of Sri Lanka

W.M.G.D. Wijesundara, K.A. Nandasena, A.N.Jayakody

Assessing the quality of biochar produced from coconut husk waste

P. Vasujini, W. S. Dandeniya, R. S. Dharmakeerthi

Journal is now freely available on-line at the website: www.ssssl.org

New Members

Professionals from different institutions have obtained life membership of the Society during the year 2014-2015. We warmly welcome them to the society and expect their active participation in society activities and to popularize soil science in Sri Lanka. Details of the new members are:

No.	Name	Affiliation
1	Ms.K.K.D.Chandrasekara	Regional Rice Research and Development Centre, Bombuwela
2	Ms.K.T.M.Sudharshini Perera	HORDI,Dept. of Agriculture, Gannoruwa
3	Mr. S. Raguraj	Tea Research Institute of Sri Lanka, Thalawakale
4	Ms. R.K.Amali	Tea Research Institute of Sri Lanka, Thalawakale
5	Mr. E.M.Amila Dharshana	Department of Soil Science ,University of Peradeniya
6	Ms. H.G.Kasuni Hirnathika	Department of Soil Science ,University of Peradeniya
7	Dr. K.G.M.C.Preethi Gajanayake	Faculty of Agriculture and Plantation Management. University of Wayamba
8	Ms. K.G.N.Palansooriya	Department of Soil Science ,University of Peradeniya