



PERA e-AGRI NEWSLETTER

FACULTY OF AGRICULTURE - UNIVERSITY OF PERADENIYA

SERVICE EXCELLENCE, LEADERSHIP, COLLABORATION, ADAPTABILITY AND INNOVATION

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Events

Launching Ceremony of the Diamond Jubilee of the Faculty of Agriculture

The Faculty of Agriculture of the University of Peradeniya, the first ever agriculture faculty in the country, established in 1948 commemorates 75 glorious years of its unwavering dedication to agricultural higher education and allied fields in Sri Lanka in year 2023. The Faculty of Agriculture has a series of events planned throughout the year in celebration of its 75th anniversary under the tagline "A Diamond Thus Far and Beyond". To signify the commencement of the jubilee celebrations, a launching ceremony was held on the 4th July 2023 at the Animal Science Theatre of the Faculty. The event was presided over by Prof. M.D. Lamawansa, Vice-Chancellor of University of Peradeniya. All stakeholders of the faculty representing the private sector, public sector, and academia graced the occasion.

The Faculty, envisioned the launching ceremony as a student-centered event giving them due recognition as the main stakeholder of the faculty. From organizing to performing at the event, all activities were organized by the student body under the guidance of Dr. S.D.S. Hemachandra, Ms. N.M.N. Liyanage, and Ms. K.I.S. Thamali. The event was vibrant and entertaining with drama, classical and modern dancing, music and songs, and cutting the jubilee cake. Other highlights of the event were, alumni wishes from across the world, revealing of faculty website, launching of the jubilee logo and the letterhead, and presenting tokens of appreciation to external stakeholders, retired professors and lecturers of the Faculty.



NEWSLETTER

FACULTY OF AGRICULTURE - UNIVERSITY OF PERADENIYA

Celebrating World Bee Day

The Faculty proudly organized “World Bee Day” on 20th May 2023, a global initiative to raise awareness about the importance of bees and other pollinators. The event includes engaging activities such as exhibitions, workshops, and educational talks to educate attendees of all ages. The Department of Agricultural Biology co-organized the event with Bee Protection Society, Augustawatte, and Ceylon Bee Honey (Pvt) Ltd. Manusath Derana, Kadurata FM, and Haritha TV provided the media coverage. The event concludes with inspiring attendees to become ambassadors for bee conservation in their communities.



Achievements/Awards



Mr. L.N. Ranathunga a probationalary lecturer in the Department of Animal Science was awarded the Best Research Award by the Korean Society for Biochemistry and Molecular Biology (KSBMB) at the KSBMB International Conference 2023. The KSBMB is the largest academic society in South Korea to promote the advancement of science, technology, and human health by contributing to the academic development and distribution of biochemistry and molecular biology. The awarded research focused on the formulation of a probiotic against the influenza A virus (IVA) infection, which is one of the most severe respiratory viral infections in humans. This research was funded by the National Research Foundation of Korea and supervised by his Ph.D. supervisor, Professor Jong-Soo Lee, who is affiliated with the Veterinary Microbiology Laboratory, College of Veterinary Medicine, Chungnam National University, South Korea.

Appointments



Mr. W.A.M. Lowe has been appointed as a Lecturer (probationalary) in the Department of Animal Science with effect from 22nd June 2023.



Ms. T.I.G. Prabhashwari has been appointed as a Lecturer (probationalary) in the Department of Animal Science with effect from 22nd June 2023.



Mr. W.H.T.D. Wickaramahewa has been appointed as a Lecturer (probationary) in the Department of Agricultural Engineering with effect from 26th June 2023.



Ms. J.M.C.M. Jayasekara has been appointed as a Lecturer (probationary) in the Department of Food Science & Technology with effect from 10th July 2023.



Mr. L.N. Ranathunga has been appointed as a Lecturer (probationary) in the Department of Animal Science with effect from 14th July 2023.

Capacity Building

Induction Program for Temporary and Newly Recruited Academic Staff Members - 2023

The Teaching Methodology Unit (TMU) of the Faculty of Agriculture successfully conducted the induction training program for temporary and newly recruited academic staff members on the 12th and 13th of August 2023. The event took place in the Boardroom of the Faculty of Agriculture. This annual program is mandatory for temporary staff members, and this year, forty participants completed the training program successfully. Prof. S.S. Kodithuwakku, the Dean of the Faculty, graced the event with his presence and delivered the introductory remarks. A distinguished panel of resource persons, including Prof. B. Marambe, Prof. K. Perera, Prof. G.L.L.P. Silva, Prof. S. Kumar, Dr. H. Wickramasuriya, Dr. A. Bulathwatta, Mr. M. Ekanayake (Acting Registrar, UoP), and Mr. T. Weerasekara (Deputy Bursar, Payment & Budgeting, UoP) conducted informative sessions.



Skill Development Training Programs for Undergraduates

The Department of Crop Science offered six certificate courses for Undergraduate students (20 Batch) of the Faculty of Agriculture during August 2023. The workshops conducted were Bonsai Basis, Floral Decors as a Business, Organic Agriculture, Interior Plant Scaping, Commercial Nursery Plant Production, and Urban Agriculture. All the programs were conducted with the aim of improving skills of the students. Academic staff members of the Department and private and public sector representatives served as resource persons.



The Department of Soil Science offered two certificate courses for Undergraduate students (20 Batch) of the Faculty of Agriculture during August 2023. The course "GIS tools for Agriculture" introduced basic GIS tools useful in preparation of geospatial data bases, analysis and display with a practical component. The course "GPS, Google tools and UAV technologies in Agriculture" helped participants to explore these technologies with hands-on experiences in using them for agriculture. Prof. W.A.U. Vitharana conducted both programs.



Reading Challenge

The Reading Challenge, a collaborative effort between the Library, Faculty of Agriculture, English Language Teaching Unit, and Language Teaching Committee, aimed to instil a love for reading among students of the Faculty. An introductory session, featuring a motivational speech by Dr. A.G.H.J. Edirisinghe from the Faculty of Engineering, University of Peradeniya, took place on 19th May 2023. Over 100 students participated, including those from the 18, 19, and 20 batches. The Reading Challenge, held between 22nd May and 22nd June, 2023, encouraged active reading, requiring participants to read at least four books and one magazine. Books encompassed both narrative and Agriculture-related topics. Throughout the challenge, students borrowed books for up to a week, while magazines were available at any time. Participants analyzed their favorite book and submitted either a five-minute video or a concise one-page document discussing their chosen read. These reviews were consolidated into a single Word document, incorporating vital details such as the book's title, author, publisher, and publication year.



Outreach

Schools-University Partnership Initiative

The Faculty has set up a new committee, namely "Schools-University Partnership Initiative" with the purpose of training young minds in the country. With this initiative, training programs were conducted for Advanced Level students of the Kingswood College and Dharmaraja College, Kandy during August 2023. The programs aimed to provide valuable insights into the field of agriculture and its various disciplines. The students were immersed in interactive and hands-on sessions, where they had the opportunity to explore the various departments of study at the Faculty. These practical sessions were conducted across eight departments, enabling the students to gain a holistic understanding of the diverse aspects of agriculture. In addition to the training programs, exposure visits to the Faculty were made by Basilica College, Ragama and Highforest School, Kandapola.



Training Program for Advanced Level Teachers on Molecular Biology and Recombinant DNA Technology



The Faculty of Agriculture at the University of Peradeniya proudly celebrates its 75th Anniversary in 2023. As part of the jubilee celebrations, the Faculty has launched a series of workshops designed for Advanced Level Biology stream teachers, focusing on Molecular Biology and Recombinant DNA Technology. This program is generously sponsored by Ceylon Biscuits Limited and is conducted in collaboration with the Ministry of Education. The primary objective of this initiative is to provide Biology teachers with a comprehensive understanding of Unit 7 of the Advanced Level Biology Syllabus. This will enable them to teach the subject more effectively and also promote the academic programs offered by the Faculty of Agriculture. By doing so, we aim to facilitate the "Train the Trainers" concept, fostering a lasting positive impact on the Faculty and its contributions to the nation. Recognizing the crucial role of school teachers in influencing students' career choices, the Faculty is dedicated to engaging this stakeholder group in its mission to popularize science and introduce young minds to career opportunities in agriculture and related sectors. The inaugural program of this series was successfully conducted with the participation of teachers from the Central Province on 23rd and 24th August 2023.

Partnership with Ceylon Bee Honey (Pvt) Ltd

A Memorandum of Understanding between Ceylon Bee Honey (Pvt) Ltd and the University of Peradeniya was signed at the Vice-chancellor's office on 20th June 2023 for establishing an apiary and to implement a project to develop a practical honey bee research and education programme at the Faculty of Agriculture. Prof. M.D. Lamawansa, Vice-Chancellor, University of Peradeniya, Prof. S.S. Kodituwakku, Dean, Faculty of Agriculture, Dr. N.U. Jayawardana, Head, Department of Agricultural Biology, Dr. W.H. Jayasinghe, Department of Agricultural Biology, Mr. T.B. Thambawita & Mr. T.M. Wijesinghe, Directors of Ceylon Bee Honey (Pvt) Ltd attended the event.



Training Program for the Students of Huazhong Agricultural University, China

The Agriculture Education Unit, Faculty of Agriculture has successfully completed a ten-day training programme on the topic of 'Sustainable Tea Production and Processing' for two professors and five students from the College of Horticulture and Forestry Sciences, China. During the visit, the delegation had the opportunity to visit several prominent institutions and locations in Sri Lanka's tea industry. Their schedule included visits to the training center of the Tea Small Holding Development Authority, Hanthana, Tea Research Institute in Talawakele, Pedro Tea Factory, Labookellie Tea Factory, Giragama Tea Factory, and Ceylon Tea Museum at Hanthana. Furthermore, the primary purpose of their visit was to explore the possibility of establishing a Memorandum of Understanding between their institution and the Faculty to open doors to promote research collaboration, joint talent training in the field of tea, and the establishment of a robust China-Sri Lanka Tea Education and International Curriculum Exchange Mechanism. The program was coordinated by Prof. L.K. Weerasinghe, Department of Crop Science. Prof. G. Hitinayake and Prof. L.K. Weerasinghe of Department of Crop Science and few other tea sector experts from the public sector organizations served as resource persons of the training program.



New Developments

Soil Science Laboratory of the Department of Soil Science, Faculty of Agriculture (SSFA) has become a member to the Global Soil Laboratory Network (GLOSOLAN) since 5th August 2023. The network was officially launched in November 2017 under the framework of the Global Soil Partnership (GSP) of the Food and Agriculture Organization of the United Nations (FAO) with the aim to harmonize soil laboratory methods and data results (GSP Pillar 5). The official representative of SSFA in GLOSOLAN is Prof. W.A.U. Vitharana, Head, Department of Soil Science.

International Collaborations

Collaboration with University of Illinois at Urbana-Champaign

A team from the University of Illinois visited the University on the 8th August 2023 to discuss the potential collaborations between the two Universities. The purpose of this visit is to engage in discussions regarding potential collaborations in areas concerning poultry, dairy, and the cultivation of soybeans. A discussion aiming at future research collaboration was held with the Faculty staff members and the US delegates on 13th August 2023 at the Boardroom of the Faculty.



Collaboration with Korean Universities

The delegations from Kookmin University and Chung-Ang University of Korea recently visited the Faculty to establish collaborative ventures. During this visit, a "Letter of Intent" was formalized and signed by the Vice-Chancellor.



Student Activities/Achievements

Profood Propack AgBiz 2023

Students of the Society of Food Science and Technology, University of Peradeniya participated in the Profood Propack AgBiz 2023 organized by the Sri Lanka Food Processors Association (SLFPA). The exhibition was held during 4-6th August 2023 at the BMICH Colombo with the participation of nearly 205 exhibitors involved in processed food, packaging and agriculture. The University of Peradeniya stall showcased novel food products developed by the students based on their innovative ideas under the supervision of academic staff members. The food products displayed by the students were admired by both the local and international visitors.

Parallel to the exhibition, the Institute of Food Science & Technology Sri Lanka (IFSTSL) organized an inter-university quiz competition and the FoodTechno research session. The students from the Department of Food Science and Technology, Faculty of Agriculture, University of Peradeniya took part in both events and were the winners of the inter-university quiz competition 2023. Ms. Kavindi Nagasinghe won the second place with the second highest individual score at the competition. Mr. Vidheesha Abeysinghe won the awards for the best research paper and best presenter of the FoodTechno research session.



Turning Waste into Cash: Program on Waste Recycling

The Plantation Society of the Faculty of Agriculture organized a training program for the students to get hands on experience on techniques for waste recycling. The aim of the program was to educate students on techniques to recycle wastes such as grass, flowers, leaves and crop waste into fresh enticing papers. Prof. P.C.G. Bandaranayake, Director, Agricultural Biotechnology Center served as the resource person. The program was conducted under the guidance of Prof. J.M. Mohotti, Senior Treasure of the Plantation Society.



Alumni Corner



Dr. D.M.J.B. Senanayake
Director
Rice Research and Development
Institute - Batalagoda

Feature Article

Rice Improvement, Self-sufficiency and Way Forward in Sri Lanka

Rice has been the major food crop of Sri Lanka over thousand years. Until late 1950s, traditional rice varieties which gave comparatively low yields were cultivated in the country. Improved rice varieties such as H-4, which are known as old improved varieties, were bred and introduced to Sri Lanka in late 1950s. These varieties had higher yields than traditional varieties but they were tall and susceptible to lodging. In late 1960, new improved rice varieties, which were having short plant structures, high response to fertilizers and bearing very high yields, were introduced. With these high yielding varieties along with the other developed technologies, the country became self-sufficient in rice from 2005 onwards. In 2021, the country showed 4.75 Mt/ha paddy productivity and it was behind only to Bangladesh (4.8 Mt/ha) and well above the rest of the countries in the south Asian region. Rice per capita consumption in the country is 107 kg per year and the annual rice requirement is 2.4 million Mt.

The most cultivated varieties of the country belong to 3 ½ moth age class (75 %) followed by the varieties of 3 month age class (19%), 4-4½ month age class (4.5 %). The “Nadu” type rice varieties are cultivated in the country followed by the “Samba” type. Around 850,000 ha of lands are cultivated with paddy in the wet season (“Maha”) and 450,000 ha in the dry season (“Yala”). In the Maha season, around 46 % of paddy lands in the country are cultivated under major irrigation schemes, 26 % under minor irrigation systems and 28% under rain-fed cultivation. In the Yala season, these numbers change roughly as 62%, 24 % and 14%, respectively. The total water requirement for paddy cultivation ranges from 3 – 5 acre feet.

Paddy self-sufficiency level of the country is challenged by various biotic and abiotic stresses. Among those stresses, the impact of drought on rice production in the country has been significant. The drought condition in late 2016 and in 2017 led the country to import 747,800 Mt of rice in 2017. The annual rice demand is expected to increase by 2.9 % considering the current population growth rate in the country. To feed the nation with this increasing demand, it is essential to develop high yielding rice varieties with multiple biotic and abiotic stress tolerance through accelerated breeding programmes, which involve biotechnology tools. Development of agronomic packages, increasing the use efficiency of inputs, developing environmental friendly pest, diseases and weed control methods are also essential towards more eco-friendly and sustainable paddy production systems in the country. The other areas to which the attention should be paid involve varietal development for improved qualities such as nutrition and industrial purposes, promotion of new cropping systems, new technologies and mechanization, value addition, integration of technologies developed in other institutes, quality seed paddy availability, in-situ organic manure production, diversification of unproductive paddy lands for other essential food crops while increasing the productivity levels of paddy lands with high and medium potentials. Increasing the profitability and living standard of farmers in the country through these developments are expected in the future.

