THIRTY-FIRST ANNUAL CONGRESS

November 21 - 22, 2019
Amaya Hills Resort, Heerassagala, Kandy

PROGRAMME

November 21, 2019

INAUGURAL SESSION
Chairperson: Prof. C.M.B. Dematawewa, Director, PGIA

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<tr>
<td>4.00 pm</td>
<td>Registration &amp; Refreshments</td>
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<tr>
<td>5.00 pm</td>
<td>National Anthem</td>
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<td>5.05 pm</td>
<td>Traditional Lighting of the Oil Lamp</td>
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<td>5.10 pm</td>
<td>Welcome Address by Dr. A.J. Mohotti Congress Coordinator – 2019</td>
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<td>5.20 pm</td>
<td>Address by Mr. W.M.M.P. Hulugalla President, Postgraduate Agriculture</td>
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<td>Students’ Association</td>
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<td>5.30 pm</td>
<td>Address by Prof. D.K.N.G. Pushpakumara Dean, Faculty of Agriculture</td>
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<td>University of Peradeniya</td>
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<td>5.40 pm</td>
<td>Address by Prof. C.M.B. Dematawewa Director, Postgraduate Institute of</td>
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<td>Agriculture, University of Peradeniya</td>
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<td>6.00 pm</td>
<td>Address by Prof. Upul B. Dissanayake Vice Chancellor, University of</td>
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<td>Peradeniya</td>
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<td>6.10 pm</td>
<td>Keynote Address by the Chief Guest</td>
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<td>“Successful scientific publishing: lessons learnt from New Phytologist”</td>
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<td>Prof. Alistair Hetherington Melville Wills Chair of Botany, University</td>
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<td>of Bristol, United Kingdom</td>
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<td>Editor in Chief, New Phytologist</td>
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<td>6.50 pm</td>
<td>Journey of the Journal “Tropical Agricultural Research”</td>
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<td>7.00 pm</td>
<td>Presentation of the Journal</td>
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<td>“Tropical Agricultural Research, Vol. 31(1)”</td>
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<td>7.10 pm</td>
<td>Research Highlights of the 31st Annual Congress</td>
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<td>7.20 pm</td>
<td>Cultural Show &amp; Fellowship Dinner</td>
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November 22, 2019

Technical Session I

Molecular Genetics & Biodiversity
Chairperson: Prof. A.L.T. Perera
Venue: Main Auditorium, Amaya Hills Resort

8.30 a.m.  Assessment of Marker Based Genotype Diversity of Saltol QTL in Relation to Seedling Stage Salinity Tolerance in Selected Rice Genotypes  

8.50 a.m.  Morphometric and Molecular Characterization of Isolates of the Root Lesion Nematode, Pratylenchus loosi Infecting Tea in Sri Lanka  
D. Amarasena, K.M. Mohotti, D.M. De Costa and J. Fosu-Nyarko

9.10 a.m.  A Morphological Index and a Key for Field Level Identification of Endemic Cinnamomum Species in Sri Lanka  
S. Bandusekara, P.C.G. Bandaranayake and D.K.N.G. Pushpakumara

9.30 a.m.  Response of Tree Community Composition, Plant Diversity and Aboveground Tree Biomass in Tropical Rainforests of Sri Lanka to Variation In Altitude  

Technical Session II

Statistics & Forecast
Chairperson: Prof. Pushpa Wijekoon  
Venue: Seminar Room A, Amaya Hills Resort

8.30 a.m.  Climate Change and Extreme Events in Ratnapura District of Sri Lanka: Implications on Coconut Production  
K.V.N.N. Jayalath, B.V.R. Punyawardane, J. Weerahewa, Pradeepa Silva and D. Hemachandra

8.50 a.m.  Unobserved Components Model for Forecasting Sugarcane Production in Sri Lanka  
B.D.S.K. Ariyawansa, N.R. Abeynayake and T. Sivanthawerl

9.10 a.m.  Equilibrium Relations in the Coconut Market: A Model of Raw, Oil and Desiccated Coconut for the Period 1956-2017  
M.G.D Abeysekara, D.V.F.Prasada and P.M.E.K. Pathiraja

9.30 a.m.  Trends and Patterns of Processed Food Exports from South Asia: An Analysis of Product and Market Diversification  
S. Sahibzada, D. Hemachandra, S. Weerasooriya and J. Weerahewa
Technical Session III

Seeds to Product
Chairperson: Prof. Deepthi Yakandawala
Venue: Seminar Room B, Amaya Hills Resort

8.30 a.m. Application of Polyphasic Ojip Chlorophill Fluorocent Transient Analysis as an Indicator for Seedling Vigour Testing in Common Bean (Phaseolus vulgaris L.)
R.A.I.S. Ariyarathne, C.K. Benaragama and S.L. Weerasena

8.50 a.m. Effect of Elevational Factor on Physiochemical Properties of Sri Lankan Instant Black Tea

9.10 a.m. Sustenance of Seed Germination Potential of Two Okra (Abelmoschus esculentus L. moench) Varieties Under Different Environmental Conditions in Sri Lanka
R.A.I.S. Ariyarathne, C.K. Benaragama and S.L. Weerasena

9.30 a.m. A Comparison of Chemical Profiles of Callus, Plant and Agarwood Extracts of Gyrinops Walla Using Thin Layer Chromatography

Téa
Main Auditorium, Amaya Hills Resort
9.50 a.m. - 10.15 a.m.

Invited Presentation I
Chairperson: Prof. K. Samarasinghe
Venue: Main Auditorium, Amaya Hills Resort
10.15 a.m.

Feed and Food in a Fast Changing World: Livestock Production
YES – BUT

Prof. Caspar Wenk
Prof. Dr. Emeritus ETH Zurich, Switzerland
Technical Session IV

Material Science in Agriculture
Chairperson: Prof. BFA Basnayake
Venue: Main Auditorium, Amaya Hills Resort

11.05 a.m. Characteristics of Natural Cellulose Fibers Extracted from Sri Lankan Traditional and Technically Modified Rice Straw Varieties
A. Ratnakumar, A.M.P.B. Samarasekara, D.A.S. Amarasinghe and L. Karunanayake

11.25 a.m. Extraction of Microfibrillated Cellulose Using Waste Garment Cotton Fabrics
J.M.R. Jayasinghe, A.M.P.B. Samarasekara and D.A.S. Amarasinghe

11.45 a.m. Microcrystalline Cellulose as Reinforcing Agents for Polypropylene Composites
A. Ratnakumar, W.S.M. Rathnayake, A.M.P.B. Samarasekera, D.A.S. Amarasinghe

Technical Session V

Developmental Extension
Chairperson: Prof. C. Sivayoganathan
Venue: Seminar Room A, Amaya Hills Resort

11.05 a.m. Role of Tea Societies in the Smallholding Sector in Sri Lanka: An Assessment Based on the Perceptions of Extension Officers
J. Mahindapala, M.W.A.P. Jayathilake, K. Kopyawattage, M.P.M. De Mel and L.N.A.C. Jayawardana

11.25 a.m. Impact of Farmer Producer Companies on Marginal and Small Farmers: A Study in India
C. C. Babu and S.K.S. Patoju

11.45 a.m. Role of Women Workers Engaged in Export Oriented Agriculture- A Study of Osmanabad District in India
A. Pandhare and S.K.S. Patoju

12.05 p.m. Evaluation of Tea Smallholdedor Attitudes on the Sustainability of Tea Industry: A Cade Studdy in Pussellawa Tea Extension Officer Range
C.E. Munasinghe, U. Dissanayake and W.A.D.P. Wanigasundera
**Technical Session VI**

**Food & Nutrition**

Chairperson: Prof. Renuka Silva

*Venue: Seminar Room B, Amaya Hills Resort*

11.05 a.m. Evaluation of Implementation Fidelity in ‘Mother Supportive Group’ Intervention to Improve Childhood Nutrition in The District of Monaragala, Sri Lanka

_N.S. Gamagedara, B.E.P. Mendis and D.G.N.G. Wijesinge_

11.25 a.m. Development of Composite Flour Formulations for French Bread Using Soybean, Chickpea, Brown Rice, Wheat Flours and Quality Evaluation


11.45 a.m. Mathematical Modelling of Edible Fraction of Elabatu (*Solanum melongena* var. Insanum) Based on Physical Attributes

_P. Charithangi and D.A.N. Dharmasena_

12.05 p.m. Effect of Different Concentrations and Exposure Time of 1-Methylcyclopropene (1-mcp) on Physico-Biochemical Qualities of ‘Ambul’ Banana at Ambient Conditions


12.25 p.m. Modified Atmospheric Packing Extends the Postharvest Shelf Life of Mukunuwenna (*Alternanthera sessilis*)

_B.A.M.S. Kumara and C.K. Beneragama_

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**Lunch**

*Main restaurant, Amaya Hills Resort*

12.45 p.m. – 1.30 p.m.

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**Invited Presentation - II**

Chairperson: Prof. Missaka Wijayagunawardena

*Venue: Main Auditorium, Amaya Hills Resort*

*Time: 01.30 p.m.*

Discovering The Sunny and Dark Side of Nrf1 Transcriptional Factor and Its Utilization

_Dr. Tadayuki Tsujita_

Department of Applied Biochemistry and Food Science, Faculty of Agriculture, Saga University, Saga, Japan
Technical Session VII
Trade, Nutrition & Welfare of Animals
Chairperson: Prof. S. Premaratne
Venue: Main Auditorium, Amaya Hills Resort

2.30 p.m.  Effects of Non-Tariff Measures on Seafood Exports from Sri Lanka: A Gravity Approach
K.P.G.L. Sandaruwan, S. A. Weerasooriya and R. Sivaganeshan

2.50 p.m.  Relationship Between Management Practices and Calf Welfare in Mid-Country Dairy Farms in Sri Lanka
W. P. C.G. Weerasinghe and T.S. Samarakone

3.10 p.m.  Evaluation of Energy Balance in Tropical and Temperate Crossbred Dairy Cows at Post-Partum Transition Stage: A Case Study

Technical Session VIII
Land & Soils
Chairperson: Dr. D.B. Wickramasinghe
Venue: Seminar Room A, Amaya Hills Resort

2.30 p.m.  Impact of Agricultural Land-Use on the Soil Organic Carbon Sequestration at Sub-Catchment Scale
E. Hemamali, U.W.A. Vitharana, B.L.W.K. Balasooriya, C. P. Attanayake and W.S. Dandeniya

2.50 p.m.  Exploring the Response of Paddy (Oryza sativa L.) under Varying Levels of Soil Nitrogen, Phosphorus and Potassium
H.P.G.I.N. Kulasinghe, U.W.A. Vitharana and R.S. Dharmakeerthi

3.10 p.m.  Variations in Soil Chemical Parameters of Long term Sugarcane-growing Alfisols under Contrasting Cropping Conditions at Sevanagala, Sri Lanka
Technical Session XI

Agricultural Pests & Diseases
Chairperson: Dr. Priyanthi Fernando
Venue: Seminar Room B, Amaya Hills Resort

2.30 p.m.  Mass Rearing of Mealybug Predator Cryptolaemus montrouzieri Mulsant (Coleoptera: Coccinellidae) on Two Mealybug Species, Planococcus minor and Pseudococcus viburni
D.U.M. Gunawardhana and K.S. Hemachandra

2.50 p.m.  Effect of the Leaf Lamina Epicuticle Wax Level on the Behavioural Characteristics of Deltocephalus menoni (Hemiptera:Cicadellidae); Vector of Sugarcane White Leaf Disease

3.10 p.m.  Field Performance of Mixtures of Pseudomonas and Bacillus Spp. in Managing Papaya Ringspot Virus Disease and Their Ability to Induce Host Plant Defence
C. Ranasinghe and Costa D.M

Téa
Main Auditorium, Amaya Hills Resort
3.30 p.m.
Diversity and Distribution of Fin-fish and Prawn species assemblages of the catch in Five Perennial Reservoirs in Northern Province, Sri Lanka
*R.Rajeevan, U. Edirisinghe and A.R.S.B. Athauda*

Effect of Weed Density on Severity of the Crop Damage Caused by Field Rodent Pests in Sri Lanka

Crop Insurance in Tea: Analysis of Willingness to Pay in Badulla
*Y.S.M.M.P. Yallarawa and D. V. P. Prasada*

Impact of Urban Development Authority Legislation on Land Values in Kandy Municipal Council Area
*R.M.H. Rathnayaka and D.V.P. Prasada*

Density changes and associated species replacement along an altitudinal gradient in two white-eye species (Passeriformes: Zosteropidae) in sympatry
*C. Wijesundara, S. Yatigammana and G.L.L.P. Silva*

Relationship of NAGase enzyme activity and other indicators of sub-clinical mastitis in a group of crossbred cows of Sri Lanka
*R. Rahularaj, R.M.C. Deshapriya and R.M.S.B.K. Ranasinghe*

Cost Assessment of Milk Production in Commercial Farms Established Under the Dairy-Cattle Importation Project Implemented in 2017
*M. H. M. M. T. Maddegora, P.M. Korale Gedera, H. Kothalawala and S.P. Kodithuwakku*

Small Pelagic Fish Value Chain and Its’ Contribution to Local Food Security in Southern Sri Lanka
*K.K.L. Hasini, W.N.de Silva and J. Santos*

Factors Associated with Premenstrual Syndrome [PMS] among Young Females [19-25 Years] in an Urban Sample Population and an Approach for an anti-PMS Nutritional Intervention
*M.S. Fawmiya, A.H.M. Mowjood, B.E.P. Mendis, R.P.N.P. Rajapakse and R. Sivaganeshan*

Detection of trends in rainfall in North Western and Eastern Coastal Lines of Sri Lanka Using Non – Parametric Analysis
*W.W.U.I. Wickramaarachchi, T.U.S. Peiris and S. Samita*
### Panel Discussion

**Dairy Industry and Its Potential to Achieve Self-Sufficiency**

*Moderator: Dr. H M Gunathileka*

*Main Auditorium, Amaya Hills Resort*

4.00 p.m. – 5.00 p.m.

### Closing Session

*Main Auditorium, Amaya Hills Resort*

5.00 p.m.

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### Closing Session

**Chairperson:** Dr. A.J. Mohotti  

**Venue:** Main Auditorium, Amaya Hills Resort

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| 4.00 p.m. | Invited Presentation by Distinguished PGIA Alumnus                   | **Mr. Andrew Samuel**  
Head of Micro Finance / Chief Continuous Improvement Officer at  
Alliance Finance Co PLC |
| 4.30 p.m. | Presentation of Awards                                               |                                                                        |
| 5.00 p.m. | Vote of Thanks                                                       | **Ms. S.M.D. Demini**  
Secretary, Postgraduate Agriculture Students’ Association, PGIA |
| 5.10 p.m. | Closing Remarks                                                      | **Dr. A.J. Mohotti**  
Congress Coordinator-2019 |