# Supun Madhumadhawa Pawuluwage

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# **EDUCATIONAL QUALIFICATIONS**

- Masters in Ecology (2019-2021) University of Québec in Abitibi-Témiscamingue, Canada (GPA= 3.78/4.0)
- B.Sc. (Special Degree in Plant Science) Second upper Honors (Overall GPA = 3.29/4.00, Last two years GPA= 3.40/4.0) - University of Colombo, Sri Lanka, (2013- 2017)

# **INTERNSHIPS & CAREER DEVELOPING ACTIVITIES**

- Two months internship program related to Next Generation Sequencing related to the mycorrhizal identification, The University of Toulouse III Paul Sabatier, France, (October 2019 to December, 2019).
- A one-month internship program related to courses covered in special degree was completed in Hakgala Botanical Garden (2016).
- Researcher of 'Hill top flora project', National Herbarium, Department of National Botanic Gardens, Peradeniya (July,2016 to February,2017).
- Successfully completed the two weeks training program on Developing Leadership and Positive thinking Conducted by Ministry of Higher Education.
- Successfully completed the three days' workshop on Bioinformatics, Next generation and Whole genome sequencing in University of Sri Jayewardenepura, Sri Lanka.

### AWARDS AND SCHOLARSHIPS

- Best Presenter award (Botany Section)- Proceedings of the 38th annual sessions of the Institute of Biology, Sri Lanka (2018).
- Mahapola Scholarship for four-year undergraduate degree based on high performance on GCE Advanced Level (2013-2017).

# **RESEARCH INTERESTS**

I aspire to engage myself in research that involves Plant Ecology and Taxonomy with special emphasis on Conservation of Biodiversity.

## **CURRENT RESEARCH ACTIVITIES**

- Effect of water quality, canopy openness, disturbances and substrate heterogeneity on bryophyte communities
- Situation and gap analysis of Sri Lankan seagrass: historical and current status conservation, and distribution of seagrass.
- National Scale-up & Mapping of Environmentally Sensitive Areas of Sri Lanka Phase II: Preparation of a website on ESA for Ministry of Environment
- Forest disturbances in tropical rain forests: Review Article.
- Floristic diversity and vegetation composition of lowland and montane rainforest areas in Peak Wilderness Nature Reserve, Sri Lanka: the conservation importance.
- Knowledge, Attitude, and Perception (KAP) of University Students towards Mangrove Ecosystems Conservation; A Lesson from Sri Lanka.

### WORK EXPERIENCE

- Lecturer (on contract) at the Department of Botany, Open University of Sri Lanka (01.05.2025 - present)
- Visiting lecturer at the Department of Forestry and Environmental Science, University of Sri Jayewardenepura (17/07/2024- present)
- Research assistant on restoration of riparian buffer zones in Quebec, Canada (15/10/2022 26/04/2024)
- Junior scientist on seagrass research in Blue Resources Trust(01/12/2021 10/10/2022)
- An expert to floristic data in Environmental Sensitive Area (ESA) project under Ministry of Environment (01/05/2021 - 30/11/2021)
- Teaching assistant, Department of Botany, Open University of Sri Lanka (01.02.2018 17.12.2018) on course units related to,
  - ✓ Systematics of higher plants and animals
  - ✓ Plants and man
  - ✓ Plant Diversity
- Teaching assistant, Department of Plant Sciences, University of Colombo (01.02.2017 -31.01.2018) on course units related to,
  - ✓ Plant Systematics and Taxonomy
  - ✓ Cell Biology
  - ✓ Principles of Microbiology
  - Molecular Biology and Recombinant DNA Technology

# **RESEARCH AND PUBLICATIONS**

## Full publications

- Bellanthudawa, B. K. A., Pawuluwage, S. M., Nawalage, N. M. S. K., Rathnasooriya, D. D. K. N., Dissanayake, O. D. I. P., Perera, I. J. J. U. N., ... & Tennakoon, A. (2025). Climate Change, Sustainable Food Systems, and Community-Based Adaptation: Resilience Strategies in the Global South. In *Climate Change, Food Security, and Land Management: Strategies for a Sustainable Future* (pp. 1-30). Cham: Springer Nature Switzerland. DOI: 10.1007/978-3-031-71164-0 16-1
- Rathnayake, R.M.N., Bellanthudawa, B.K., **Pawuluwage, S.M**. *et al.* Unlocking the potential: an exploratory analysis of knowledge, attitudes, and perceptions (KAP) of University students towards sustainable mangrove conservation. *Environ Dev Sustain* (2024). https://doi-org.acces.bibl.ulaval.ca/10.1007/s10668-024-04691-6
- Deraniyagala, N.H.P., Dhamsara, K.K.M.M., Bandara, A.G.G.C., Bellanthudawa, B.K.A., Nawalage, N.M.S.K., **Pawuluwage, S.M.**, Ranasinghe, N., de Silva, C.(2021), Dragonfly and damselfly (odonata) species diversity assessment to promote urban ecology in wetland parks, colombo, Sri Lanka, Urban Ecosystems journal, (submitted and under the review process).
- **Pawuluwage, S.M**., Atapattu, K.A.M.R.P., Nawalage, N.M.S.K., Ranathunga, W. R.,. Neththipola, M.M.T.D., Udayanga, K.A.S., Kumarapeli, K.A.D.V., Viduranga, W.A.A.D.M., Weththasinghe, B. T., Bellanthudawa, B.K.A. (2023). Unveiling the Dynamics of Forest Disturbances in Tropical Rainforests: A Systematic Review on Types, Impacts, and Effective Management. Environmental Sustainability. (submitted and under the review process).
- Alwis, R.H.N.S., Amarathunga, A.A.D., Halwatura, D., Bellanthudawa, B.K.A., Perera, IJJUN., Pawuluwage, S.M., Nawalage, N.M.S.K. (2023). Vegetation structure and above/below ground Carbon as a measurement of blue carbon stock of the Malgasovitadeniya Mangrove Conservation Forest associated with the Benthara River Basin, Sri Lanka. (submitted and under the review process).

### **Oral and Poster Presentations**

- **Pawuluwage, S.M**., Kathriarachchi, H.S. and Attanayake, A.M.A.S. (2017), Floristic diversity of Kuruwita-Erathna trail of the Adam's Peak mountain in Sri Lanka, Proceedings of the 37th annual sessions of the Institute of Biology 2017, Abstracts, p.22.
- **Pawuluwage, S.M**., A.T.N. De Silva, Kathriarachchi, H.S. and Attanayake, A.M.A.S. (2018), Floristic diversity of Kikiliyamana mountain in Sri Lanka, Proceedings of the 38th annual sessions of the Institute of Biology 2018, Abstracts.
- **Pawuluwage, S.M**., Kathriarachchi, H.S. and Attanayake, A.M.A.S. (2018), Determination of floristic diversity in Adam's Peak mountain along the altitudinal gradient, Proceedings of the 74th annual sessions of the Sri Lanka Association for the Advancement of Science 2019, Abstracts.
- H.T. Gamhewa, Pawuluwage, S.M., Kathriarachchi, H.S. and Attanayake, A.M.A.S. (2019), Patterns of plant richness, abundance and endemism of different life forms along an altitudinal gradient in Erathna-Kuruwita and Hatton-Nallathanniya trails of the Adam's Peak Wilderness, Proceedings of the 39th annual sessions of the Institute of Biology 2019, Abstracts, p.71.
- **Pawuluwage, S.M**., P. Marchand, N. Fenton, M. Roy and B. Lafleur. (2019), Belowground facilitation between tree species in the re-vegetalization of a degraded site, Proceedings of the 01<sup>st</sup> annual sessions of the Plant Canada conference 2019, Abstracts.
- **Pawuluwage, S.M**., P. Marchand, N. Fenton, M. Roy and B. Lafleur. (2020), Are mycorrhizal fungi shared between trees recolonizing a post-mine site?

Canadian Botanical Association annual meeting 2020, Abstracts.

- **Pawuluwage, S.M**., P. Marchand, N. Fenton, M. Roy and B. Lafleur. (2019), Belowground facilitation between tree species in the re-vegetalization of a degraded site, The first annual conference of the CRSNG - UQAT Industrial Chair on biodiversity in mining 2019, Oral presentation.
- **Pawuluwage, S.M**., P. Marchand, N. Fenton, M. Roy and B. Lafleur. (2020), Are mycorrhizal fungi shared between trees recolonizing a post-mine site? The second annual conference of the CRSNG UQAT Industrial Chair on biodiversity in mining 2020, Oral presentation.
- **Pawuluwage, S.M**., P. Marchand, N. Fenton, M. Roy and B. Lafleur. (2021), Mycorrhizal communities and their impact on trees growing in a post-mining site? The third annual conference of the CRSNG UQAT Industrial Chair on biodiversity in mining 2021, Oral presentation.
- Neththipola,M.M.T.D., Bellanthudawa,B.K.A., Nawalage,N.M.S.K., **Pawuluwage,S.M**., Manorathne, M.L.I. (2021), Application of biochemical and biophysical feature extraction to assess flood Impacts on mangrove ecosystems in Kalu Ganga river basin, Sri Lanka, International Conference on Environmental Governance- ICEG 2021, Abstracts.
- Dassanayake, D.MJ.L., Bellanthudawa, B.K.A., Neththipola, M.M.T.D., Darshana, W.D., Nawalage, N.M.S.K., Pawuluwage, S.M. (2022), Insights of school water consumption and sanitation and hygiene practices among school children in Dehiovia, Kegalle district, Sri Lanka, Twenty-sixth International Forestry and Environment Symposium 2022, Abstracts.
- Abeywickrama, S. D., Pawuluwage, S.M., & Bellanthudawa, B. K. A. (2022). Myceliumbased Material Properties and 3D Printing for the Grow Fossils Structures and Crafts; A Bibliographical Review. In Annual Research Session – 2022, Faculty of Technology, Eastern University, Sri Lanka.
- Bourgeois B, Balzer J, Felipe-Lucía M, Henry A, Herrmann V, Martínez-Fernández V, Pawuluwage S, Syammach A, González-Sargas E. 2023. River restoration in the world: strategies and monitoring. RE3 conference: Reclaim, Restore, Rewild. Society for Ecological Restoration – Eastern Canada (SER-EC) and Canadian Land Reclamation Association (CLRA). Quebec, Canada, 11-15 June 2023.
- Martínez-Fernández, V., Balzer, J., Bourgeois, B., Felipe-Lucía, M., Henry, A. L., Pawuluwage, S., Syammach, A., & González-Sargas, E. (2023, June 20). IV Congreso Ibérico de Restauración Fluvial. RestauraRíos. Restauración de ríos y riberas en el mundo: estrategias y monitorización. Toledo, Spain.

# FIELD BASED ACTIVITIES

# 2021-2024

- A teaching program at Sinharaja World Heritage site for 3<sup>rd</sup> year plant science special degree students, UOC, on plant families and ecological significance of the Sinharaja.
- Conducted an environmental screening field survey in Mahaweligama, Kothmale, Sri Lanka, to identify biodiversity and potential threats due to an upcoming water sanitation project.
- Conducted an Initial Environmental Examination (IEE) by undertaking a reconnaissance survey to document the flora in Mayaoya, Ampara, Sri Lanka, in preparation for the construction of a new lake.
- Conducted summer field surveys in riparian buffers within agroecosystems of southeastern Quebec, Canada, aimed at determining species compositional and functional patterns in treeplanted riparian zones.

### 2017-2019

- Conducted plant and soil sampling in Beatie mine tailing's site, Duparquet, Quebec.
- Demonstrator-in-charge: Providing a field training for 1<sup>st</sup> year undergraduate students on tropical plant families and services of forests and a teaching program about plant systematics to the 3<sup>rd</sup> year plant science special degree students at Sinharaja World Heritage site.
- Field assistant: A teaching program at Sinharaja World Heritage site for wildlife officers on plant families and ecological significance of the Sinharaja.
- Field Assistant: A field research work at Adam's Peak, Morey estate and Bogawanthalawa for identification of *Memecylon* spp. for molecular genome studies.
- Demonstrator-in-charge: Conducted a Taxonomic Field Survey at Pidurutalagala Forest Reserve with 3<sup>rd</sup> year plant science special degree students to identify plant species present in the fragmented forest patches within the forest reserve.
- Demonstrator-in-charge: Conducted a Taxonomic Field Survey at Awissawella Wewe-Kele Forest Reserve with 3<sup>rd</sup> year plant science special degree students.
- Conducted a floristic survey at Kuruwita -Erathna trail of the Adam's Peak Mountain to determine the floristic diversity, structure, and identify the floristic communities under the final year research project.
- Conducted a survey at montane regions of Sri Lanka to identify the existing and potential treats to the montane vegetation in Sri Lanka.

# 2015-2016

- Field based teaching program at Hambantota and Bundala area on vegetation description analysis and conservation of mangrove ecosystems and dry zone forests.
- Performed a Taxonomic Field Survey in Ekgaloya Forest Reserve and Nelli-Kele Man and Biosphere reserve in Ampara, Sri Lanka.
- Plant Systematic study program on tropical plant families at Sinharaja World Heritage site.

# **PROFESSIONAL MEMBERSHIPS**

- Member of Center d'études de la forêt, Quebec, Canada
- Member of Institute of Biology-Sri Lanka •
- Member of Sri Lanka Association for the Advancement of Science
- Member of Ecological Society of America •
- Member of Canadian Botanical Society

# **OTHER SKILLS**

- DNA Barcoding
- Proficient in statistical analyses (R)

Ability to work well under pressure and meet deadlines

- ArcGIS
  - Plant Identification
- Presentation skills

# **EXTRA CURRICULAR ACTIVITIES**

- Societies
  - Vice President of Botanical Society University of Colombo
  - Member of youth club under Youth affairs skills development department.

• Member of school music group, science society, Buddhist society at Dharmasoka College

#### **COMMENDABLE PERFORMANCES**

- Completed National Music and dancing examination in Diploma level (2014)
- Completed Sangeet diploma in Bhatkhande University, Lucknow India (2005)

#### REFERANCES

Prof. H.S. Kathriarachchi Senior Lecturer, Head of the department, Department of Plant Sciences Faculty of Science University of Colombo Sri Lanka Tel: +94714406235 E-Mail: <u>hashi@pts.cmb.ac.lk</u>

Prof. Sudheera Ranwala, Senior Lecturer, Department of Plant Sciences Faculty of Science University of Colombo Sri Lanka Tel: +94773483182 E-Mail: ranwala@pts.cmb.ac.lk

I hereby certify that the information given above is true and accurate to the best of my knowledge. Supun Madhumadhawa Pawuluwage (25/03/2025)

