S.H. Nuwan Priyashantha de Silva, Ph.D.

Academic Resume Residential Address: 405E, Pahala Eriyagama, Peradeniya SRI LANKA Telephone: +94 76 125 4765 (mobile) E-mail: sssnuwanp@yahoo.com



1.0: EDUCATION

Ph.D. in Agricultural Development (2018) The University of Tokyo, Japan. Dissertation Title "Optimizing Productivity and Quality of Wheat through Modeling Approach"

Advisors: Prof. Kensuke Okada, Dr. Taro Takahashi

Course work followed

- Plant Improvement
- Sustainability and Crop Production
- Advanced Research Seminars

Masters of Science in Agriculture (2014). The University of Tokyo, Japan. (Two years by research). Dissertation Title: "Application of APSIM Crop Model to the Decision Support in Nitrogen Management for Wheat Cultivation in Japan"

Advisors: Prof. Kensuke Okada, Dr. Taro Takahashi

Course work followed

- Food Resources
- Insect Ecology
- Economics
- Development Studies
- Crop Modelling
- Crop Modelling Advanced
- Soil Fertility Management
- Statistics
- Research Seminars
- Case Studies

B.Sc. (Agriculture) (2005) - University of Peradeniya, Sri Lanka. Specialisation in Animal Science.

2.0: EMPLOYMENT/WORK HISTORY

Senior Lecturer – Department of Crop Science, University of Peradeniya, Sri Lanka (October 2020 to date)

Lecturer – Sri Lanka Technological Campus, Padukka, Sri Lanka (October 2019 to October 2020)

Teaching Assistant - Laboratory of Agricultural Development Studies, Graduate School of Agricultural and Life Sciences, University of Tokyo, Japan (October 2013- September 2017)

Executive and regional office in-charge - David Pieris Group of Companies, Sri Lanka (June 2006 - April 2011)

Assistant District Officer - United Nations Food and Agriculture Organization (FAO), Sri Lanka (June 2005 - June 2006)

3.0: LANGUAGES

Sinhala (Native), English (Fluent), Japanese (Conversational)

4.0: SPECIAL TRAINING

Foundation Course in Human Resource Management at Institute of Personnel Management, Sri Lanka

Training on **ISO quality management systems and preparation of quality manual** conducted by Sri Lanka Standard Institution, Sri Lanka

5.0: AWARDS AND PROFESSIONAL HONORS

The University of Tokyo Fellowship – awarded for the PhD studies (highly competitive fellowship and offered for one student per year from each graduate school)

M.P.M Ibrahim Memorial Award for the best research presentation at the14th Annual Students Research Session held on 18th March 2005, Department of Animal Science, Faculty of Agriculture, University of Peradeniya

The President award for scouting (awarded by the president of Sri Lanka)

6.0: PROFESSIONAL EXPERIENCE

6.1: TEACHING

Senior Lecturer – Department of Crop Science, University of Peradeniya, Sri Lanka (October 2020 to date)

Lecturer – Sri Lanka Technological Campus, Padukka, Sri Lanka (October 2019 to October 2020)

Teaching Assistant (Part time), Laboratory of Agricultural Development Studies, Graduate School of Agricultural and Life Sciences, University of Tokyo, Japan (October 2013 - March 2018)

 Conducting teaching and field practices – Winter Crop Management and Summer Crop Management (International Program in Agricultural Development Studies-IPADS), Advanced Crop Modeling (Joint course of the University of Bonn, Germany and IPADS master program).

English Teaching (Part time), ISA Inc., Japan (August 2015 - March 2018)

6.2: RESEARCH

PhD and Master Research (October 2012 – April 2018)

6.3: MANAGEMENT

Executive and regional office in-charge - David Pieris Group of Companies, Sri Lanka (June 2006 - April 2011)

Duties and Responsibilities

- Responsible for the overall operation of the Kandy Regional Office, Sri Lanka including achieving targets, smooth operation of the regional office liaised with all stake holders of the business
- Areas under operation vehicle sales and marketing and achieving targets, stock management, debtor management, advertising and outdoor promotions and human resource management and CSR projects.

Assistant District Officer - United Nations Food and Agriculture Organization, Sri Lanka (June 2005 - June 2006)

Duties and Responsibilities

- Back the District Officer to Confirm/ validate the FAO district-based plan for the rehabilitation of the fisheries, Agriculture and Livestock sectors
- Assist FAO technical staff in identifying needs for the implementation of district's plan
- Carry out field supervision and monitoring of the programme, field activities and appraise the overall programme progress and performance

6.4: MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS

Professional member: Sri Lanka Institute of Agriculture (SLIAg) Member of Crop Science Society of Japan

6.5: STATISTICS SOFTWARE PACKAGES

R statistical Package

7.0: PUBLICATIONS AND PRESENTTAIONS

7.1: ACADEMIC DISSERTATIONS/THESISES

Optimizing Productivity and Quality of Wheat through Modeling Approach (2018). Ph.D. dissertation submitted to The University of Tokyo, Japan.

Application of APSIM Crop Model to the Decision Support in Nitrogen Management for Wheat Cultivation in Japan (2014). Master thesis submitted to The University of Tokyo, Japan.

Ulcerative Disease Condition in Guppy (*Poecilia reticulata*): A study on the causative agent and establishment of a treatment schedule (2005). Undergraduate Research Report submitted to the University of Peradeniya, Sri Lanka.

7.2: REFEREED RESEARCH PAPERS AND PUBLICATIONS

De Silva S.H.N.P., Takahashi T., Okada K. (2018). Controlling Yield and Grain Protein Content of Wheat in Japan through Pre-Anthesis Nitrogen Application to Maximize the Producers' Profit. Japan Agricultural Research Quarterly (JARQ), 52(3), 205-217.

Chamara, R.M.S.R., Senevirathne, S.M.P., Samarasinghe, S.A.I.L.N., Premasiri, M.W.R.C., Sandaruwani, K.H.C., Dissanayake, D.M.N.N., **De. Silva, S.H.N.P**., Ariyaratne, W.M.T.P and Marabe, B. (2020). A review on the role of artificial Intelligence in achieving global food security: a promising technology for future. Sri Lankan Journal of Food and Agriculture, 6(2), 43-70

De Silva S.H.N.P., Takahashi T., Okada K. (2021). Evaluation of APSIM-Wheat to simulate the response of yield and grain protein content to nitrogen application on an Andosol in Japan. Plant Production Science, 24(4), 454-465. DOI: 10.1080/1343943X.2021.1883989.

Rajapaksha, R., Ojha, R., Islam, T., **De Silva, N**., Pushpakumara, G., & Bussmann, R. W. (2023). Ethnobotany of Lasia spinosa (L.) Thwaites: the spiny edible aroid in Asia. Genetic Resources and Crop Evolution, 1-14. https://doi.org/10.1007/s10722-023-01574-z.

7.3: CONFERENCE PAPERS

- De Silva S.H.N.P., Takahashi T., Okada K. (2014). Decision Support System for Nitrogen Fertilization in Wheat using Crop Growth Model (APSIM): Model Parameterization and Validation. Annual Meeting of Japanese Society of Agricultural Informatics, the University of Tokyo, Tokyo, (pp 66-67).
- De Silva S.H.N.P., Takahashi T., Okada K. (2014). Parameterization of the APSIM Crop Growth Model for Japanese Wheat Varieties across Sowing Times and N Application Rates: Step towards a decision support system for Japanese wheat farmers. 238th Annual Meeting of Crop Science Society of Japan, Ehime University, Ehime, (pp 42).
- De Silva S.H.N.P., Takahashi T., Okada K. (2015). Validation of APSIM Crop Growth Model for Japanese Wheat Varieties across N Application Rates: Step towards a decision support system for Japanese wheat farmers. Paper presented at the 239th Annual Meeting of Crop Science Society of Japan, Nihon University, Fujisawa, (pp 63).
- De Silva S.H.N.P., Takahashi T., Okada K. (2015). Effect of Flowering Time Nitrogen Application on Grain Yield and Grain Protein Content: A comparative study between hard wheat and soft wheat in Kanto area. Paper presented at the 240th Annual Meeting of Crop Science Society of Japan, Shinshu University, Nagano, (pp 48).
- De Silva S.H.N.P., Takahashi T., Okada K. (2017). Preliminary Evaluation of Optimum N Management for Soft and Hard Wheat in Kanto Area through Crop Growth Simulation. Poster presented at the 243th Annual Meeting of Crop Science Society of Japan, The University of Tokyo, Tokyo, (pp 170).
- Vithana A., Ukwattage N.L., De Silva S.H.N.P., Dissanayake C.T.M. (2021). Effect of Coal Fly Ash and Wood Ash Soil Amendments on the Growth of *Zea mays* in Acid Sulphate Soils of Nilwala Agricultural Basin, Sri Lanka. Poster presented at the Eurosoil 2021, Geneva Virtual Congress, (PO041).
- Rathnayaka K.M.K.I., Sivananthawerl T., De Silva S.H.N.P., Herath S., Marambe B and Ariyarathne W.M.T.P. (2021). Use of Multispectral UAV Images in Precision Agriculture: Weed Control in Rice, Proceedings of the Faculty of Agriculture Undergraduate Research Symposium, August, 2021. Peradeniya, Sri Lanka. *Merit award*
- Maduwanthi S.D.C., Rankoth L.M., De Silva S.H.N.P., Ranil R.H.G. and Suriyagoda L.D.B. (2021). Identifying the Best Soil Incorporation Stage of Sunn hemp (*Crotalaria juncea* L.) as Green Manure, Proceedings of the Faculty of Agriculture Undergraduate Research Symposium, August, 2021. Peradeniya, Sri Lanka.
- Gunaratne M.D.N., **De Silva S.H.N.P.**, Amarasinghe R.K. (2022). Can NASA Power Climatic Data Fill the Gap of Climatic Data Required for Agriculture and Forest Ecosystems Modeling?. Paper presented at the 26th International Forestry and Environment Symposium, University of Sri Jayewardenepura, Sri Lanka, (pp 21). **Best presentation** *in the session*

- Koswatta.D.D.K., Weerakkody W.A.P., De Silva S.H.N.P., Bandaranayake P. (2022). Estimation of Consumptive-Use of Tomato Grown in Tropical Greenhouse Conditions using Evapotranspiration Models. Proceedings of the Faculty of Agriculture Undergraduate Research Symposium, December, 2022. Peradeniya, Sri Lanka.
- Alagiyawanna A.M.A.A.M., Hemachandra E.M.G.P., **De Silva S.H.N.P.**, Ranil R.H.G. (2022). Feasibility of Clove (*Syzygium aromaticum* (L.) Merr. & L.M. Perry) Cultivation in Gampaha District. Proceedings of the Faculty of Agriculture Undergraduate Research Symposium, December, 2022. Peradeniya, Sri Lanka.
- Senevirathna A.G.U.N., **De Silva S.H.N.P.**, Dissanayaka D.M.S.B. (2022). Growth and Yield Responses in Finger Millet-Mung Bean Intercropping under Moisture-Limited Conditions. Proceedings of the Faculty of Agriculture Undergraduate Research Symposium, December, 2022. Peradeniya, Sri Lanka.
- Dissanayake D.M.R.L., Ranil R.H.G., **De Silva S.H.N.P.** and Rankoth L.M. (2022). Identifying the Best Soil Incorporation Stage of Horse Gram [*Macrotyloma uniflorum* (Lam.) Verdc.] as a Green Manure Crop. Proceedings of the Faculty of Agriculture Undergraduate Research Symposium, December, 2022. Peradeniya, Sri Lanka.
- Wickramasinghe K.G.G.M., De Silva S.H.N.P., Dissanayaka D.M.S.B. (2022). Root Growth Dynamics and Nutrient-Use Efficiency of Grevillea robusta Grown under Nitrogen and Phosphorus Co-limitation. Proceedings of the Faculty of Agriculture Undergraduate Research Symposium, December, 2022. Peradeniya, Sri Lanka.
- Sandeepani R.I., Udawela U.A.K.S., Ariyaratne M., De Silva S.H.N.P., Jayatilake D.V., Marambe B. (2022). Root Morphological Variation and Molecular Screening of DEEPER ROOTING 1 in Selected Rice Varieties in Response to Drought. Proceedings of the Faculty of Agriculture Undergraduate Research Symposium, December, 2022. Peradeniya, Sri Lanka. *Merit award*
- Nisana R., Priyantha M.G.D.L., Athukorala A.R.J., Samaranayake J.W.K., Sivananthawerl T., **De Silva S.H.N.P.** and Rankoth L.M. (2022). Priming Techniques for Seed Quality Enhancement of Selected Oil Seed Crops. Proceedings of the Faculty of Agriculture Undergraduate Research Symposium, December, 2022. Peradeniya, Sri Lanka.
- Kumara N.V.K.P., Wijerathna R.M.S., **De Silva S.H.N.P**., Sivananthawerl T., Ranil R.H.G. (2022). A Situational Analysis of Wild Animal Damage in *Kandyan* Homegarden System. Proceedings of the Faculty of Agriculture Undergraduate Research Symposium, December, 2022. Peradeniya, Sri Lanka.
- Kithsiri U.A.M.T., Kumarasinghe P.G.S.A., Janaranjana U.G.T.N., Gunawardhena G.M.W.L., De Silva S.H.N.P. Ranil R.H.G. (2022). Mapping of Eco-geographic Distribution of Native Medicinal Plants of Sri Lanka: The Basis of Study, Conservation and Utilization. Proceedings of the Faculty of Agriculture Undergraduate Research Symposium, December, 2022. Peradeniya, Sri Lanka. Best presentation, Theme IV: Community, Environment and Management.

8.0 RESEARCH

8.1 RESEARCH INTEREST

Improving crop productivity by integrating agronomy and crop modeling.

9.0: RESEARCH AND PROFESSIONAL SOCIAL MEDIA

LinkedIn

Research gate: https://www.researchgate.net/profile/Nuwan-De-Silva-2

Google scholar: https://scholar.google.com/citations?user=fdDzBCwAAAAJ

10.0: GENERAL DETAILS

Name in full: Salpadoru Hewawasam Nuwan Priyashantha De Silva

Official Address: Department of Crop Science, Faculty of Agriculture, University of Peradeniya, Peradeniya 20400, Sri Lanka

7

Date of Birth: 25th April 1978

Civil Status: Married

I do hereby certify that above particulars are true and accurate to the best of my knowledge.



S.H. Nuwan P. de Silva

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Date: 01/04/2023

10.0: REFEREES

Prof. Kensuke Okada

Department of Global Agricultural Sciences,

Graduate School of Agricultural and Life Sciences,

The University of Tokyo,

Yayoi, Bunkyo, Tokyo 113-8657, Japan

Tel : +81 3 5841 0770

Email: akokada@mail.ecc.u-tokyo.ac.jp

Dr. Taro Takahashi

School of Veterinary Sciences, University of Bristol,

Langford, Somerset BS40 5DU, UK

Sustainable Agricultural Sciences Department, Rothamsted Research,

Okehampton, Devon EX20 2SB, UK

Tel : +44 (0) 117 903 4400

Email: taro.takahashi@bristol.ac.uk

taro.takahashi@outlook.com