

Resume

Dr. W.A. Palitha Weerakkody

Affiliation: (1) Senior Professor in Horticulture, Faculty of Agriculture, University of Peradeniya, Peradeniya, Sri Lanka

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1. Educational Career

1.1 Educational qualifications

University:

- (1) PhD - University of Peradeniya, Sri Lanka, in 1999 (Field of Study: Horticulture)
- (2) MAgri. - Hiroshima University, Japan, in 1994. (Field of Study: Plant environmental Sci.)
- (3) B.Sc. (Agric.) - 2nd class (Honours) – University of Peradeniya, Sri Lanka, in 1988 (Field of Study: Agriculture)

School:

- (1) Secondary – GCE (O.L.) and GCE (A.L.); Ananda College, Colombo, Sri Lanka
- (2) Primary – Pass; Primary School, Mawanella, Sri Lanka

1.2 Academic Experience

1. Teaching and training of undergraduates of BSc (Agric.) on general horticulture, fruit and vegetable crop production and protected culture (CEA) and conducting graduate courses for the MSc program on vegetable production, protected culture (CEA), Sustainable gardening and Physiology of horticultural crops.
2. Supervision of research projects: Nearly 130 undergraduate dissertations from 1995 to 2022; Nearly 75 MSc directed study reports from 1999 to 2022; 13 MPhil/ PhD thesis (MSc and 03 PhD projects from 2004 to 2022).

2. Professional Career

2.1 Employment

2.1.1 Employment Records: Full-time

(in the Department of Crop Science, Faculty of Agriculture, University of Peradeniya, Sri Lanka)

1. Senior Professor, from 2017 to date,
2. Professor, from 2009 to 2017
3. Senior Lecturer, from 1995 to 2009
4. Lecturer, from 1990 to 1994

2.1.2 Employment Records: Visiting /Short-term

1. Visiting Professor to North-west A&F University of Shannxi, China (for conducting a summer course on soilless culture) - July – Aug, 2019.
2. Visiting Scientist to University Bologna, Bolona, Italy in September, 2013
3. Research Fellow in Faculty of Biology, Agriculture, Food, University of Sydney, N.S.W., Australia - Nov., 2008 – April, 2009.

4. Research Fellow in HRI Wellesbourne, University of Warwick, Warwick, U.K. - [Sept., 2007 – Feb., 2008.](#)
5. Research Fellow in Faculty of Biological Science, Shizuoka University, Shizuoka, Japan, [Sept., 2003 – Dec., 2003.](#)

2.1.3. Employment Records: [Part-time](#)

1. Visiting Professor, National Institute of Postharvest Management, Anuradhapura, Sri Lanka – [2020-todate.](#)
2. Deputy Director-Research/ Centre for Environmental Studies, University of Peradeniya [2014-17.](#)
3. Lecturer-in-charge/ University Experimental Farm [2006-2009.](#)

3. Research Career

3.1. Main Research Projects undertaken (*Last 10 years*)

3.1.1 As the principal investigator:

- Life-cycle analysis of banana in Sri Lanka for reducing postharvest losses and mitigating GHG emissions, [Funded by GRA and Ministry of Primary Industries of New Zealand \(2020 – 22\).](#)
- Development of organic fertigation options for greenhouse vegetable crops, [funded by Sri Lanka Council for Agricultural research Policy \(SLCARP\), Sri Lanka \(Completed in 2018\).](#)
- Development of ecological vegetable based cropping systems for sandy soils in Kalpitiya, Sri Lanka, [Funded by the University of Peradeniya \(Completed in 2017\).](#)
- Follow-up Research and Development Program leading to commercialization of university research output: Hydroponics Fertilizer Package, [funded by the HETC-QIG-4 of the Ministry of Higher Education, Sri Lanka. \(Completed in 2017\).](#)
- Development of protected crop technologies for improving yield and post-harvest quality of roses and gerbera, [funded by SLCARP \(Completed in 2013\).](#)

As a Co-investigator/ Research coordinator

- Commercialization of the Research Outcome of the Faculty of Agriculture (Coordinator), [funded by the World Bank sponsored AHEAD Project of the University Grants Commission of Sri Lanka \(UGC\) - \(On-going\).](#)
- IOT based micro-climate control in tropical greenhouses and its influence on growth, yield and gene expression of tomato, [funded under Early Career Fellowship Program of the Organization for Women in Science for Developing World \(OWSD\) \(On-going\).](#)
- Investigations on eco-friendly weed management in tea cultivation as an alternative for synthetic herbicide use, [funded by National Research Council \(NRC\), Sri Lanka - \(Completed in 2021\)](#)
- Molecular and biochemical characterization of Sri Lankan pomegranate germplasm and expression analysis of major hydrolysable tannin genes under different environmental conditions and maturity stages to popularize cultivation in Sri Lanka, [funded by NRC, Sri Lanka - \(completed in 2016\).](#)

4. PUBLICATIONS (on Protected culture and Horticultural crops during last 10 years)

4.1 In Refereed Journals: [International/ Indexing](#)

1. Kamalakannan S., Wasala W.M.C.B., Kulatunga A.K, Gunawardana C.R., Bandara D.M.S.P., **Weerakkody W.A.P.** (2022). “Life cycle Assessment of Food Loss Impacts: Case of Banana Postharvest Losses in Sri Lanka”, *Science Direct Procedia CRISP* 105, PP 859-864.
2. Erabadupitiya, H. R. U. T., **Weerakkody, W. A. P.**, & Nandasena, K. A. (2022). Carryover effect of nitrogen and potassium on subsequent growth stages of tomato grown in hydroponics. *Journal of Plant Nutrition*, 1-11. Published online: 14 Jun 2022.
<https://www.tandfonline.com/doi/abs/10.1080/01904167.2022.2086880?journalCode=ipla2>
3. Gunaratne, L.H.P., Hemachandra, K.S., Kumudumali, Y.M.K., Manawasinghe, N.K.G.K.R., Sathischandra, H.G.A.S., Soorasena, J.M., Thelasinghe, T. H. M. U. M., Upali, W. S. P. Y., **Weerakkody, W. A. P.**, Weerasinghe, K.W.L.K. and Weerawarna, S. B. A. (2021).

Comparative assessment of vegetable crop performances and ecological indicators during, transition from conventional to ecological agriculture. *Asian Research Journal of Agriculture* 14(1): 1-9.

4. Manawasinghe, N. K. G. K. R., Weerasekara, S. H., Karunaratne, C. S. L. M., Weerakkody, W. A. P., & Kulapala, B. (2021). Influence of substrate and supplementary LED lighting on vertical farming of basil (*Ocimum basilicum* L.) and pak choi (*Brassica rapa* var. *chinensis*). *Asian Journal of Agricultural and Horticultural Research* 7(4): 42-52.
5. Erabadupitiya, H. R. U. T., **Weerakkody, W. A. P.**, & Nandasena, K. A. (2020). Critical nitrogen ranges for growth stages of tomato in soilless culture under greenhouse conditions in the tropics. *International Journal of Vegetable Science*, 1-15.
6. Warnasooriya, P.G.A.S., **Weerakkody, W.A.P.**, Nissanka, N.A.S.P. and Vidanarachchi, J.K. (2020). Assessment of productivity and income generations from rural agricultural systems in the Mid-country Wet Zone of Sri Lanka-A Case Study. *Asian Journal of Advances in Agricultural Research*. 12(1): 11-20. <http://www.journalajaar.com/index.php/AJAAR/article/view/30069>
7. Ethulgama, W. M. D. K., Herath, H. M. N. K., **Weerakkody, W. A. P.**, Gunasena, A., and Bombuwela, D. M. D. (2019). Coco-peat effluent and organic manure based hydroponics for greenhouse crop cultivation. *Acta Hort.* 1296: 843-850.
8. Kumari, F. B. D. U., Mawalagedera, S. M. M. R., and **Weerakkody, W. A. P.** (2019). Possible use of soluble organic manure for coco-peat grown cucumber (*Cucumis sativus*). *Acta Hort.* 1296: 877-884.
9. Attanayake, R., Rajapaksha, R., **Weerakkody, P.**, & Bandaranayake, P. C. (2019). The effect of maturity status on biochemical composition, antioxidant activity, and anthocyanin biosynthesis gene expression in a pomegranate (*Punica granatum* L.) cultivar with red flowers, yellow peel, and pinkish arils. *Journal of Plant Growth Regulation*, 38(3), 992-1006.
10. Pathirana, C. K., C. H., Chandrasekara, W. M. R. B., Attanayake, S. R. M. R., **Weerakkody, W.A. P.**, Eeswara, J. P. and Bandaranayake, P. C. G. (2018). Optimization of DNA extraction and PCR protocols for plants with high Phenolics: Bael, Mango, Pomegranate as examples. *Ceylon J. of Sci.* 47(1): 43-48.
11. Attanayake, S. R. M. R., Kumari, S. A. S. M., **Weerakkody, W. A. P.**, Ranil, R. H. G., Damania, A. B., and Bandaranayake, P. C. G. (2017). Molecular diversity and genetic relationships of Sri Lankan pomegranate (*Punica granatum* L.) landraces assessed with Inter Simple Sequence Repeat (ISSR) regions. *Nordic Journal of Botany* 35: 385-394.
12. **Weerakkody, W.A.P.** and Suriyagoda, L.D.B. (2015). Estimation of leaf and canopy photosynthesis of pot chrysanthemum and its implication on intensive canopy management. *Sci. Hort.* 192: 237-243.
13. **Weerakkody, W.A.P.**, Jayasinghe, J.M.U. and Prathpasinghe, G. (2014). Combined roof and side ventilation with misting and air blowing for cooling tropical greenhouses. *Acta Hort.* (ISHS) 1037:555-561. http://www.actahort.org/books/1037/1037_69.htm
14. Wang, J., Zou, Z. and **Weerakkody, W.A.P.** (2014). Optimization of leaf photosynthesis of tomato through micro-climate control. *Acta Hort.* (ISHS) 1037: 593-597. http://www.actahort.org/books/1037/1037_75.htm
15. **Weerakkody, W.A.P.**, Kumara K.P.S.S., Samarakoon, S.J.M.V.L. and Chandrasiri, R.A.S. (2013). Media and water management for improved vegetative growth of gerbera (*Gerbera jamesonii*). *Acta Hort.* 1004: 129-134.
16. Rupasinghe, A.P.S., Gunaratne Banda, R.M., Wicramasinghe, N.A.A.K., **Weerakkody, W.A.P.** and Dissanayake, D.M.D. (2013). Effect of 1-MCP, NAA and IBA on fruit retention of gherkin (*Cucumis sativus* var. *Anguria*) under greenhouse conditions. *Acta Hort.* 1004: 189-194.

17. Mawalagedera, S.M.M.R. and **Weerakkody, W.A.P.** (2013). Plant growth of coco-peat grown tomato under enhanced fertigation in hot and humid climates. *Acta Hort.* 1004: 151-158.

4.2 In Refereed Journals: [National/ Sri Lankan](#)

18. Erabadupitiya, H.R.U.T., Weerakkody, W.A.P. and Nandasena, K.A., 2021. Potassium application rates for tomato grown in soilless culture under hot and humid greenhouse conditions. *Trop. Agric. Res*, 32: 462-470.
19. Erabadupitiya, H. R. U. T., Weerakkody, W. A. P., & Nandasena, K. A. (2019). Determination of optimum nitrogen concentrations in hydroponics for tomato grown in coir medium in tropical greenhouse. *Tropical Agricultural Research*, 30(3): 97-103.
20. Attanayake, S., Weerakkody, W.A.P., Ranil, R.H.G. PCG Bandaranayake, P.C.G. (2016). Genetic diversity of *punica granatum* (L.) germplasm in several major cultivation areas of sri lanka assessed with issr markers. WILDLANKA Journal of the Department of Wildlife Conservation of Sri Lanka 4 (3): journals.dwc.gov.lk/page.php?t=c&f=showArticle&id=68
21. Ekanayake EMBP, Gunawardena NP, Mawalagedera SMMR and **Weerakkody WAP.** 2016. Influence of different spectral filters on the colour of foliage of *Codiaeum variegatum* L. Var. Sunny star (croton) during two distinct seasons. pp 90-93. *In: Proc. International Research Symposium, Rajarata University of Sri Lanka.*
22. Karunarathne, C. L. S. M., Chamindika, B. G. L., Weerakkody, W.A.P., Weerasinghe, K., & Hettiarachchi, H. (2015). Influence of supplemental lighting on reducing pre-mature fruit drop and increasing fruit yield of greenhouse gherkins. pp. 82-89. *In. Proceeding of the 2nd International Conference on Agriculture and Forestry* (Vol. 1).
23. Wijerathna, M., **Weerakkody, W.A.P.** and Kirindigoda, A. (2014). Factors affecting the discontinuation of protected culture enterprises in Sri Lanka. *J. Agri. Sci.* 9(2): 77-86.
24. Hemachandra, K.S., Bandara, B.P.U.R., **Weerakkody, W.A.P.** Wasantha, J.K.S., Sirisena, U.G.A.I., Priyadarshani, T.D.C. and Soorasena, J.M. (2013). Diversity of abundance of ground beetles (*Carabidae: coleoptera*) in eco-friendly home gardens in comparison with conventional home gardens in southern dry zone of Sri Lanka. pp. 257-260. *In. Proc. International Symposium on Agriculture and Environment, University of Ruhuna, Matara, Sri Lanka.*

4.3 Short communications: [International Symposia](#)

1. Peiris, P.U.S. and **Weerakkody, W.A.P.** (2015). Effect of Organic Based Liquid Fertilizers on Growth Performance of Leaf Lettuce (*Lactuca Sativa* L.). pp. 39-41. *In Proc. International Conference on Agricultural, Ecological and Medical Sciences, April 7-8, 2015 Phuket (Thailand).*
2. Jayani, K.L.D.S., Mohotti, A.J. and **Weerakkody, W.A.P.** (2012). Suitability of vermiwash as an alternative fertigation option for tea (*Camela sinensis* (L.) Kuntz) and citrus (*Citrus aurantifolia*) . pp. 25 *In. X. Li (ed.) Proc. Conference and Exhibition on Soilless Culture, May 22-26 at Shanghai Academy of Agricultural Science, Shanghai, China.*

4.4 Short communications: [National \(Sri Lankan\) Symposia](#)

1. Mawalagedara, S.M.M.R., Vanderpooten, P.N.M., Warnasooriya, P.G.A.S., Weerakkody, W.A.P., Soorasena, J.M., Upali, W.S.P.Y., Rajapakse, C. (2018). Agro-climatic and seasonal variability of soil fertility measures in organic farm soils. pp: 84. *In. Proc. International Agriculture Research Symposium of the Sri Lanka Council for Agricultural Policy (SLCARP), Colombo (Sri Lanka).* (ISBN: 978-955-9224-69-3)

3. Wijeratne, D.G.K.P. and **Weerakkody, W.A.P.** (2017). Economic and technical feasibility of upcountry vegetable production in Halmillewa (IL1a). *Tropical Agricultural Research*, 28(4): 490-495.
4. Jayasekara, C.K., **Weerakkody, W.A.P.** and Gunasena, A. (2016). High quality compost production using wastes from coco-peat manufacturing process. *Abst. I-PURSE*, University of Peradeniya S.L. pp. 81.
5. Ratnayake, R.M.A.N., **Weerakkody, W.A.P.**, Kodikara, K.M.S. and Chandrasiri, R.A.S. (2015). Growth Stage Based Fertilizer Application of Petunia to Adjust EC and Ph of the Growing Media. pp.04 *In. Proc. NASFLOR*, Sri Lanka Council for Agricultural Policy (SLCARP), Wijerama Mawatha, Colombo.
6. Sangakkara, B.N.K., **Weerakkody, W.A.P.**, Thrikawala, B.S. and Amarasekara, P. (2012). Effect of exogenous NAA and 1-MCP on reducing immature fruit drop and enhancing the quality of yield of bell pepper (*Capsicum annual L.*). pp. 33-35. *In. Proc. Annual Academic Research Sessions of Open University of Sri Lanka*.
7. Aluvihare, W.B.W.M.R.C.P., Bandaranayake, P.R.S.D., Senanayake, N. and **Weerakkody, W.A.P.** (2012). Adaptability of popular rose varieties under greenhouse conditions in the mid-country wet zone. pp. 9 *In. Padmini, CMP and Wijesundara, S. (eds.) In. Proc. NASFLOR*, Sri Lanka Council for Agricultural Policy (SLCARP), CARP, Wijerama Mawatha, Colombo.(Sri Lanka).

4.5 Books/ Chapters/ CD ROMs

1. Weerakkody, W.A.P. (2021). Controlled Environment Agriculture in Sri Lanka: Challenges and Opportunities. pp. 309-346. *In. R. Senarantne R. (Ed.), The Future of Agriculture and Agriculture of the Future: From Beaten Tracks to Untrodden Paths (1st ed.)*. Tharanjee Prints, Maharagama (Sri Lanka).
2. **Weerakkody, W.A.P.**, and Mawalagedera, S.M.M.R. (2020). Recent Developments in Vegetable Production Technologies in Sri Lanka. pp. 189-214. *In. Agricultural Research for Sustainable Food Systems in Sri Lanka (Vol. 1)*. Springer, Singapore.
3. Ranil, R.H.G., Pushpakumara, G., Fonseka, R.M., Fonseka, H., Bandaranayake, P.C.G., **Weerakkody, W.A.P.**, Ariyaratne, W.M.T.P., De Silva, A.N. and Gunawardena, N.P.T., 2020. Utilizing neglected crop genetic resources for food and nutritional security: special reference to indigenous vegetables of Sri Lanka. pp. 39-66. *In. Agricultural Research for Sustainable Food Systems in Sri Lanka (Vol. II)*. Springer, Singapore.
4. Weerakkody, S.B., **Weerakkody, W.A.P.** and Soorasena, J.M. (2013). Interactive User-friendly Software on Designing Nutritional Home Gardens for Tropical Low-input Farmsteads, Faculty of Agriculture, University of Peradeniya, Peradeniya, Sri Lanka.
5. **Weerakkody, W.A.P.** (2008) Plant growing structures. pp. 53-67. *In: C. Samamaranayake (Ed.), Introduction to Horticulture*, Open Univ. of Sri Lanka, Nawala, S.L. 83p. (ISBN: 978-955-23 1091-1)
6. **Weerakkody, W.A.P.** (2008). Hydroponics. pp. 68-83. *In: C. Samamaranayake (Ed.), Introduction to Horticulture*, Open Univ. of Sri Lanka, Nawala, S.L. S.L. 83p. (ISBN: 978-955-23 1091-1)

4.6 Popular articles on national/ global development

Nearly 20 popular articles in newspapers, having a wider circulation and dealing with subjects encompassing, agriculture, food, higher education, fuel scarcity, and productivity.

5. CONSULTANCIES/OUT-REACH ACTIVITIES

- a) Resource person in improving sustainability of minor irrigation tanks in the upcountry of Sri Lanka, sponsored by Climate Resilient Agriculture project of the Ministry of Environmental Science of Sri Lanka (2019-20)
- b) As an Environmental Consultant to Jiffy-S.L. PLC. Industrial Zone, Meerigama, Sri Lanka since 2015 (*On-going*)
- c) Greenhouse Horticultural Consultant to InteFarm (Pvt.) Ltd., Colombo 03 (2018-2021)
- d) Feasibility study conducted on “homegardening and urban agriculture” to MAS (Pvt) Ltd., Colombo. (in 2018)
- e) As a Consultant on Developing Production Horticulture and Agro-tourism Unit at Maduravi island of Maldives for Ocean Ridge Investments Pvt. Ltd. Of Male, Maldives in 2014.
- f) As a Consultant on Horticulture and Agro-tourism to Aitken Spence PLC (315, Vauxhall St., Col. O2, Sri Lanka) under the Island Development Project - Ekastudhoo, Maldives during 22 and 23, Nov. 20013.
- g) As the coordinator of IT based Designing and validation of a Nutritional Home Garden for agro-ecological region, LCIZ, sponsored by for AUSAID – Sri Lanka in 2013.
- h) Consultant Horticulturist to the “Reawakening Project” of the Ministry of Economic Development of Sri Lanka on designing plant house structures for variable agro-climatic conditions (2011).
- i) As a Horticulturist to FAO for “Developing Home garden and Commercial Horticulture in the Maldivian Islands of Gadhdhoo and Gan (under the Ministry of Fisheries, Agriculture and Marine Resources in Maldives) from 4th to 18th August, 2008.

6. PRIZES/AWARDS (*Last 5 years*)

1. 2nd Price under non-plantation sector for Best Agricultural Research in 2019, awarded by Sri Lanka Council for Agricultural Research Policy, Colombo, Sri Lanka.
2. Gold Medal Research in the Undergraduate Research Symposium in the Faculty of Agriculture in University of Peradeniya in Dec., 2014 (*Co-Author*).
3. Presidential (merit) Awards for publications in the High-impact Factor journals in 2010/11 and 2013/14 by the National Research Council of Sri Lanka.

7. POSITIONS/MEMBERSHIPS/OFFICE IN COMMITTEES (*Last 10 years*)

- Deputy Director (Research) Center for Environmental Studies, UoP (2014-17)
- Member of the Advisory Board (on Fruits and Vegetables) to the Chairman of the Export Development Board, Navam Mawatha, Colombo 02, S.L. (2005-07; 2013-15).
- Coordinator of the MSc program in Floriculture and Landscape Architecture, offered by the Postgraduate Institute of Agriculture, University of Peradeniya, Sri Lanka, 2010/12.
- Chairman / Research, Development and Ethical Review Sub-committee of the Faculty of Agriculture in 2010 and 2011.
- Coordinator of the Research Program of the Department of Crop Science (2010-12).

8. Contributions to Other Academic/ Professional Activities

- Institutional Reviewer of the Uva Wellassa University of Sri Lanka, University of Ruhuna, Horticulture Research and Development Institute (HORDI) and National Institute of Fundamental Studies (NIFS) (during 2015 -2021) under the directions of Ministries of Higher Education and Science and Technologies QAAC project of the University Grants Commission (UGC) of Sri Lanka during 2015-18.
- Member of the Project monitoring panels – Under SLCARP, Ministry of Mahaweli & Environment, etc.
- Contribution as a consultant, Journal editor, paper reviewer and an examiner.
- Many Participation in training programs (on technology/management) – 07 foreign and many local training programs.
- Participation in symposia – 06 international and many local symposia.
- Committee Memberships – in several academic boards and steering committees

Hereby I Certify that the above particulars are true and accurate to the best of my Knowledge.

Signature: _____



Date: January 16th, .2023