Department of Botany

Faculty of Science / University of Peradeniya



Prof. W.A.M. Daundasekera

B.Sc. (Perad.), Ph.D. (Cranfield, UK)

Professor in Botany

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About Me

Graduated from University of Peradeniya, Sri Lanka in 1993, obtained B.Sc. Special degree with a First Class Honours, and joined the Department of Botany, Faculty of Science of the same university as a Probationary Lecturer in June 1994. Having secured an Asian Development Bank-funded Scholarship, I proceeded to Ph.D. degree at the Cranfield University, UK in 1999. Having awarded the Ph.D. in the field of Postharvest Pathology, joined Peradeniya University as a Senior Lecturer in 2003. Promoted to the post of Professor in Botany in 2018 & Served as a Visiting Lecturer at the Faculty of Allied Health Sciences at University of Peradeniya; Faculty of Applied Sciences at Rajarata University of Sri Lanka and at the Postgraduate Institute of Science. Served as the Secretary, Chairperson or a member of University and national level committees in the field of Plant Sciences. Authored about 23 peer reviewed journal publications and more than 50 conference papers and have been awarded a Presidential Award for Scientific Research in 2010. My areas of research interest are postharvest physiology/pathology of tropical fruits and vegetables, postharvest technology of cut flowers and decorative foliage and sustainable disease management in crop plants.

Higher Education Qualifications

PhD

Cranfield (England)
(2003)

BSc

Peradeniya (Sri Lanka)
(1993)

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Awards, Scholarships, Memberships & Fellowships

- Presidential Award for Scientific Research - 2003
- ADB-sponsored scholarship for a Split-PhD programme granted by the Ministry of Science and Technology, Sri Lanka, under the Science and Technology Personnel Development Project – 1999
- M.D. Dassanayake Gold Medal for Botany -1993
- University of Peradeniya Scholarship – 1993
- Sub-committee on Civil Works, IRQUE Project, Faculty of Science, University of Peradeniya 2006-2008
- Sub-committee on Strengthening of Soft Skills of students, Higher Education for the Twenty First Century (HETC) Project, Faculty of Science, University of Peradeniya 2010 – 2013
- Board of Study in Plant Sciences, Postgraduate Institute of Science, University of Peradeniya 2008 – 2017
- Coordinating Committee, Postgraduate Institute of Science, University of Peradeniya 2008 – 2014; 2016 – 2017
- Board of Management, Postgraduate Institute of Science, University of Peradeniya October 2016 to April 2017
- University of Peradeniya Science Alumni Association
- Alumni Association, Cranfield University, UK
- Life Member, Sri Lanka Association for the Advancement of Science
- Sri Lanka Association for Mycology and Plant Pathology 2007 to date
- Associate Member, Sri Lanka National Institute of Professional Counselors 2019
- Certificate of Commendation for Agriculture and Food Research : National Science Foundation 2019
- Excellence in Teaching Award of the Faculty of Science, University of Peradeniya 2021

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Positions Held

- Treasurer, Botanical Society, University of Peradeniya- (2016 - 2018)
- Chairperson, Board of Study in Plant Sciences, Postgraduate Institute of Science, University of Peradeniya- (2016 September – 2017 April)
- Secretary, Science Teachers' Association, University of Peradeniya- (2010)
- Coordinator, QEF/IRQUE Project Science Study Programme Faculty of Science, University of Peradeniya- (2009-2010)
- Deputy Coordinator, QEF/IRQUE Project Science Study Programme, Faculty of Science, University of Peradeniya- (2008-2009)
- Programme Coordinator, M.Sc. Programme in Postharvest Technology of Fruits and Vegetables, Postgraduate Institute of Science, University of Peradeniya- (2008-2009)
- Treasurer, Sri Lanka Association for Mycology and Plant Pathology- (2007 todate)
- Programme Co-coordinator, M.Sc. Programme in Postharvest Technology of Fruits and Vegetables, Postgraduate Institute of Science, University of Peradeniya- (2004 – 2005)
- Academic Sub warden, Sangamiththa Hall of residence, University of Peradeniya- (1994)
- Chairperson, Curriculum Revision Committee, Faculty of Science, University of Peradeniya- (2020)

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My Teachings

- APS4172: Food and Fresh produce Technology
- BOT3012: Bioinstrumentation
- BOT3042: Plant Pathology (Undergraduate Course)
- BOT3102: Developmental Physiology and Postharvest Technology (Undergraduate course)
- BOT4042: Advanced Plant Pathology (Undergraduate course)
- MIC4062: Biosecurity
- SE523: Microbiology and Plant Pathology (Postgraduate course)

Research Interests (Research Fields/ Projects)

Postharvest Technology/pathology of tropical fruits, vegetables and ornamental plants.
Natural and induced defense mechanisms against pathogens in tropical plants.
Sustainable disease management in crop plants.

Ongoing Research and Projects

Diversity of seed-borne fungal pathogens of cereal crops in Sri Lanka

Use of nutmeg pericarp extracts to control postharvest fungal diseases in banana

Nutmeg pericarp, an agricultural waste is tested for antifungal activity against major postharvest pathogens causing anthracnose and stem end rot in banana fruit

Effect of soluble silica and micro-biosilica against sclerotium rolfsii and disease suppression and growth promotion in tomato

Effect of different silica sources are screened for their ability to suppress growth of Sclerotium rolfsii, the Collar Rot pathogen, in vitro and on tomato plant, as a sustainable approach for disease management.

Diversity of foliar fungal pathogens of nutmeg (Myristica fragrans) in Kandyan home gardens

Postharvest fungal pathogens of arecanut sold in Kandy area

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Key Publications

Australasian Plant Pathology - (2016)

Some biochemical defense responses enhanced by soluble silicon in bitter gourd-powdery mildew pathosystem.

Physiological and Molecular Plant Pathology - (2003)

Ethylene production by Colletotrichum musae in vitro.

Conferences

"The first National Symposium of Sri Lanka Association for Mycology and Plant Pathology (SLAMPP)

HELD AT : Kandy, Sri Lanka - (2019)
TOPIC : *"Ensuring safer Plant produce for human consumption"*

Peradeniya University International Research Sessions (iPURSE)

HELD AT : University of Peradeniya - (2014, 2016, 2024, 2025)

PGIS Research Congress

HELD AT : Postgraduate Institute of Science, University of Peradeniya, Sri Lanka - (2014, 2015, 2016)

National Symposium on Floriculture Research (NASFLOR)

HELD AT : Department of National Botanic Gardens, Sri Lanka - (2008, 2009, 2011, 2014)

International Research Symposium on Postharvest technology

HELD AT : Anuradhapura, Sri Lanka - (2014, 2025)

My Publications

Please goto the website.

https://sci.pdn.ac.lk/botany/staff/Malkanthi-Daundasekera

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