Department of Zoology

Faculty of Science / University of Peradeniya



Prof. T.C. Weeraratne

B.Sc., M.Phil. (Perad.), Ph.D. (Perad.)

Professor in Zoology

malavi@pdn.ac.lk
spkmlv@gmail.com
+94 81 239 (4474)
+94 77 725 8829
#

About Me

I earned my Ph.D. in 2017 from the University of Peradeniya, Sri Lanka, with a distinguished period spent at the Liverpool School of Tropical Medicine, U.K., courtesy of the prestigious Commonwealth Split-site scholarship. This international exposure and collaborative experience have enriched my academic journey, contributing to a global perspective in my research. My academic journey commenced with a B.Sc. (Hons.) in Zoology from the University of Peradeniya in 2005, followed by an M.Phil. in 2012. I have expertise in medical and molecular entomology research, with a primary focus on mosquito-borne diseases. My research spans across diverse domains, including molecular taxonomy of insects, insecticide resistance, and resistance mechanisms of vectors and pests, as well as plant-derived biopesticides, aiming to control vectors and pests sustainably. As an academic dedicated to both research and teaching, I deliver undergraduate courses including Comparative Anatomy and Animal Physiology, Insect Pest Management, Histology, Invertebrate Diversity, and Applied Entomology.

Higher Education Qualifications

PhD	MPhil	BSc
University of Peradeniya Sri Lanka (2017)	University of Peradeniya Sri Lanka (2012)	University of Peradeniya Sri Lanka (2005)

 © 2022, Faculty of Science, UoP

Awards, Scholarships, Memberships & Fellowships

- President's Award for Scientific Research 2018 (DNA barcoding of morphologically characterized mosquitoes belonging to subfamily Culicinae from Sri Lanka. Parasites & Vectors, 11 (1), 266)
- President's Award for Scientific Research 2018 (Genetic diversity and population structure of malaria vector mosquitoes Anopheles subpictus, Anopheles peditaeniatus, and Anopheles vagus in five districts of Sri Lanka. Malaria journal, 17(1), 271)
- President's Award for Scientific Research 2017
- Commonwealth Split-Site Scholarship 2014 (for One year), tenable at Liverpool School of tropical Medicine (funded by the Commonwealth Scholarship Commission, United Kingdom)
- NRC Merit Award for Scientific Publication - 2013
- Prof. Felix Prashantha Amerasinghe Memorial Research Award for the best research contribution in the field of Zoological Sciences 2013/2017
- University Award for Academic Excellence 2004/2005
- Commonwealth Scholarships Association Alumni (2016 to present)
- Sri Lanka Association for the Advancement of Science (Life member 2015 to present)
- Sri Lankan Vector Biology Society (2017 to present)
- ? Award of Excellence in Research, Faculty of Science, University of Peradeniya, 2019
- Award of Excellence in Research, Faculty of Science, University of Peradeniya, 2021
- Principle Investigator- University Research Grant- UGC/2018/40/S (2018-2019)- Classification and phylogeny of mosquitoes based on external morphology of adults, male genitalia and DNA barcoding (Rs. 434,090.00)- Completed
- Principle Investigator- PGIS Research Grant- (PGIS/2020/12)- Insecticide Resistance levels and resistant mechanisms in insect pests of stored grains in Sri Lanka (Rs. 993750.00)- Completed
- Co-investigator- Multidisciplinary Research Grant 2022 (Grant No.136)- "Microbial control of mosquitoes: Microbes as Bio-larvicides and Fitness indicators of Dengue Vector Mosquitoes" (Rs. 2,409,500.00)- Completed
- Principle investigator of ? University Research Grant 2023 - URG/2023/31/S- Effects of physiochemical characteristics of "Breeding sites and blood meal type on body morphology and fitness of dengue vector mosquitoes" (Rs. 368,300.00) - Completed

© 2022, Faculty of Science, UoP

Positions Held

- Professor in Zoology- (Since April 2023)
- Chairperson/Faculty Safety Committee- (April 2023 to April 2026)
- Chairperson of Board of Study in Zoological Sciences, Postgraduate Institute of Science, University of Peradeniya- (April 2023 to October 2024)
- Chairperson/Postgraduate Institute of Science, Annual Research Congress (RESCON) 2023
- Chairperson of the Science Undergraduate Research Symposium 2022
- Center Coordinator for the National Biology Olympiad Examination conducted by the Institute of Biology, Sri Lanka- (2018 to present)
- Part-time Senior Student Counselor, Faculty of Science, University of Peradeniya- (2020 - 2022)
- Member of Quality Assurance Cell, Faculty of Science- (2016 to 2024)
- Member of Board of Study in Zoological Science, Postgraduate Institute of Science- (April 2020 to April 2026)
- Member of Faculty Safety Committee- (2019 to present)
- Executive Committee member of the Science Teachers' Association (UPSTA), Faculty of Science, University of Peradeniya- (2015 to 2019)
- Coordinator for the Foundation courses (Biology component), Faculty of Science, University of Peradeniya, Sri Lanka- (2010/2011, 2013/2014, 2021/2022)
- Secretary/University of Peradeniya, Science Teachers Association (UP-STA)- (2021/2022)
- Secretary of Quality Assurance Cell, Faculty of Science- (2018 to 2021)
- Co-coordinator/Biomedical Sciences Degree Programme, Department of Zoology, Faculty of Science, University of Peradeniya- (2021 to Present)
- Member of the Faculty Web Committee, Faculty of Science- (2023 to 2026)
- Member of the Administrative Staff of the Committee Unit for Excellence in Biodiversity Research- (2020 to present)
- ...

<< See more on the Web >>

 © 2022, Faculty of Science, UoP

My Teachings

- BIO1002: Basic Life Sciences
- BL116: Introductory Environmental Biology
- SCI1011: Laboratory Safety
- ZL216: Invertebrate Diversity
- ZL302: Comparative Anatomy and Animal Physiology
- ZL307: Fish Biology
- ZL322: Insect Pest Management
- ZOO2192: Functional Histology

Research Interests (Research Fields/ Projects)

Medical and Pest Entomology, Molecular taxonomy

Ongoing Research and Projects

Effect of parasitoid-pest interactions and insecticide resistance development on optimizing rice pest control strategies

National Science Foundation, Competitive Research Grants Grant No. NSF/2025/BT/01 Ongoing

Integrating insecticide resistant parasitoids and herbivore-induced plant volatiles for sustainable Plutella xylostella control in Sri Lanka.

Multidisciplinary Research Grants 2025 Grant No. MRG/09 Ongoing

Parasitoids in Controlling Lepidopteran Pests of Key Vegetables in Sri Lanka: Investigating Diversity, Life History and Herbivore-Induced Plant Volatiles for Enhanced Biocontrol

National research Council Research Grants, Investigator-Driven Research grants Grant No. IDG 24-021 Ongoing

Insecticide Resistance and Field Evaluation of Pesguard FG 161 in Selected Aedes albopictus Populations

Undergrduate Research Project Ongoing

abundance, insecticide resistance, and metabolic resistance mechanisms of a selected brinjal pod borer (Leucinodes orbonalis) population in Kandy District , Sri Lanka

Undergraduate Research Project Ongoing

Insecticide resistant levels and resistant mechanisms in insect pests of stored grains and, use of plant products in their control

PGIS Research Grant No. PGIS/2020/12 Completed

 © 2022, Faculty of Science, UoP

Classification and phylogeny of mosquitoes based on external morphology of adults, male genitalia and DNA barcoding

University Research Grants (URG/2018/40/S) Completed

LARVICIDAL ACTIVITY OF GARLIC (Alivum sativum) EXTRACT AGAINST MOSQUITO GENUS Aedes

Undergraduate Research Project Completed

Breeding site characterization and fitness of dengue vector mosquitoes

University Research Grants Grant No. URG/2023/31/S Completed

Effects of physiochemical characteristics of breeding sites and blood meal type on body morphology and fitness of dengue vector mosquitoes

University Research Grant URG/2023/31/S Completed

PARASITOIDS OF RICE PESTS: NATURE OF PARASITISM AND HOST MANIPULATION BY A SELECTED LARVAL PARASITOID

Undergraduate Research Project Completed

Cinnamon and Citronella Essential Oils Encapsulated in Zeolite Structures as a Repellent System for the Dengue Vector, Aedes albopictus

Undergraduate Research Project Completed

Impact of Age on Pyrethroid and Organochlorine Resistance and Glutathion S transferase Activity in Culex quinquefasciatus

Undergraduate Research Project Completed

Toxicity and Repellency of Olax zeylanica Leaf Extract on the Stored Product Pest Sitophilus zeamais (Coleoptera: Curculionidae)

Undergraduate Research Project Completed

Larvicidal and Growth-Regulatory Potential of the Traditional Sri Lankan Plant Croton aromaticus for Sustainable Control of Aedes albopictus

Undergraduate Research Project Ongoing

 © 2022, Faculty of Science, UoP

Key Publications

Nothing to show under this subheading !!!

Conferences

Nothing to show under this subheading !!!

My Publications

Please goto the website.

https://sci.pdn.ac.lk/zoology/staff/Thilini-Weeraratne

© 2022, Faculty of Science, UoP