

K.D. Ryan Rienzie

Department of Agricultural Biology, Faculty of Agriculture, University of Peradeniya, Peradeniya 20400, Sri Lanka
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HIGHER EDUCATION

2016-2018

MSc in Plant Protection Technology (FGPA: 3.83/4.00), Postgraduate Institute of Agriculture, University of Peradeniya 20400, Sri Lanka.

Directed (Research) study: Nanoclay encapsulated antimicrobial formulations with sustained release properties to control soil borne plant pathogens.

2017 Sep-Nov

Postgraduate Research Practice: Department of Chemistry, University of Cambridge, UK

Research Project: Agrochemical cocrystal formulations with controlled release properties under Prof. W. Jones (Cambridge) and Dr. N.M. Adassooriya (Sri Lanka).

2008- 2012

BSc in Agricultural Technology and Management (Upper Second-Class Honors, FGPA 3.36/4.00), University of Peradeniya, Peradeniya 20400, Sri Lanka

Dissertation: Biological and molecular characterization of virus causing bean yellowing disease in Sri Lanka

PROFESSIONAL QUALIFICATIONS IN HIGHER EDUCATION

2023

Certificate in Teaching in Higher Education (CTHE) with Staff and Educational Development Association of the United Kingdom (CEDA-UK) accreditation, Staff Development Centre, University of Colombo (to be commenced).

2022

Certificate in Developing E-Learning modules in Moodle LMS, organized under the AHEAD-ELTA-ELSE Project, Faculty of Agriculture, University of Peradeniya.

2022

Certificate in Leading and Managing Universities (CLMU), Staff Development Centre, University of Peradeniya, Peradeniya.

TEACHING EXPERIENCE IN HIGHER EDUCATION

2022 onwards

Lecturer (Probationary), Department of Agricultural Biology, Faculty of Agriculture, University of Peradeniya, Peradeniya

AB 2111 Postharvest Biology (BSc. FST Degree)

AB 3102 Diseases of Crops (Core program)

AB 3212 Plant Pathology (Advanced program)

AB 3214 Clinical Plant Pathology (Advanced program)

AB 4115 Virology (Advanced program)

AB 4120 Nematology (Advanced program)

AB 4118 Practicum in Molecular Microbiology (Advanced program)

2015–2022

Temporary Lecturer, Agribusiness Centre, Faculty of Agriculture, University of Peradeniya, Sri Lanka.

Responsibilities: Writing grant proposals, project coordination, monitoring and curriculum development in short courses, undergraduate tutoring

2020-2022

Visiting Lecturer/Examiner, Faculty of Technology, University of Sri Jayewardenepura, Sri Lanka.

BTA 2042 Agricultural Development and Policy

BTC 2182 Economics and Financial Management

2019-2021

Visiting Lecturer/ Examiner, University of Vocational Technology, University College, Kuliapitiya, Sri Lanka.

EMPM 04 Problem Solving and Decision Making

EMPM 02 Manage Workplace Communication

2019 onwards

Academic Consultant, Joseph Vaz institute For Higher Education & Vocational Training, Kurunegala, Sri Lanka.

2018-2020 **Visiting Lecturer/ Examiner/ Moderator**, Sri Lanka Institute of Advanced Technological Education
AG 1109 Principles of Plant Protection
AG 2213 Principles of Biotechnology
AG 2105 Soil and Water Management
AG 1106 Agricultural Economics
AG 2107 Farm and Resource Management

2016-2019 **Residential Academic Staff Member**
Responsibilities: Teaching assisting at student residential facilities, University of Peradeniya

ACADEMIC ENGAGEMENT ROLES AND RESPONSIBILITIES

2023 Onwards **Member**, Time table committee, Faculty of Agriculture, University of Peradeniya
2023-2024 **Voluntary Student Counselor**, Faculty of Agriculture, University of Peradeniya
2022 Onwards **Academic Advisor**, Faculty of Agriculture, University of Peradeniya
2022 Onwards **Coordinator of In-Plant Training**, Dept. of Agric. Biology, Faculty of Agriculture
2022 Onwards **Coordinator of Student Engagements**, Faculty of Agriculture

PROJECT RELATED EXPERIENCE

I have been worked under 13 projects funded by IFPRI, WFP/UNDP, World Bank, International Universities that include commissioned studies, research and consultancies during 2015-2022.

PUBLICATIONS

Peer reviewed journal articles

W.M.A.S. Chamara D. M. De Costa and **Ryan Rienzie*** (2023). Variation of *Colletotrichum* isolates from forest tree species in the University of Peradeniya, Sri Lanka. (Under Preparation).

Ryan Rienzie, Lasantha Sendanayake, Devika De Costa, Akbar Hossain, Marian Brestic, Milan Skalicky, Pavla Vachová and Nadeesh M. Adassooriya (2021). Assessing the Carboxymethylcellulose Copper-Montmorillonite Nanocomposite for Controlling the Infection of *Erwinia carotovora* in potato (*Solanum tuberosum* L.). *Nanomaterials*, 11(3):283 (IF 4.034).

Ryan Rienzie, W.A.R.T. Wickramaarachchi and D.M. De Costa (2020). Transmission and host range of horsegram yellow mosaic virus (HgYMV) causing common bean yellowing disease in Sri Lanka. *Journal of National Science Foundation* 48 (1): 81-92.

W.A. Welideniya, **K.D.R.C. Rienzie**, W.A.R.T. Wickramaarachchi and A.G.B. Aruggoda (2019). Characterization of fungal pathogens causing anthracnose and their seed borne nature in banana pepper (*Capsicum annuum* L.). *Ceylon Journal of Science-Biological Science* 48 (3):131-139.

R. Rienzie, W.A.R.T. Wickramaarachchi and D.M. De Costa (2016). Molecular detection and characterization of begomovirus causing bean yellowing disease in Sri Lanka. *Journal of the National Science Foundation of Sri Lanka* 44(3): 249-255.

Book chapters

Ryan Rienzie and Wikum H. Jayasinghe (2023). Taxonomy of Family *Metaviridae*. In Taxonomy of Plant Viruses. Eds. K.S. Sastry and M.N. Gauda. Springer Nature (accepted).

Ryan Rienzie and Wikum H. Jayasinghe (2023). Taxonomy of Family *Pseudoviridae*. In Taxonomy of Plant Viruses. Eds. K.S. Sastry and M.N. Gauda. Springer Nature (accepted).

Nadun H. Madanayake, **Ryan Rienzie**, Nadeesh M. Adassooriya (2023). Chapter 8 - Electron microscopic methods for virus diagnosis. In Amal Kumar Dhara and Amit Kumar Nayak (Eds.). *Viral Infections and Antiviral Therapies*, Academic Press. Pp 121-140 (ISBN 9780323918145) <https://doi.org/10.1016/B978-0-323-91814-5.00008-8>

Ryan Rienzie and Nadeesh Adassooriya (2021). Toxicological concerns of nanomaterials used in agriculture in Nanotechnology. In Plant Growth Promotion and Plant Protection. (Ed.) A.P. Ingle. John Wiley and Sons. <https://doi.org/10.1002/9781119745884.ch15>

U. Dissanayake, **R. Rienzie**, N. Kuruppuarachchi, P. Gunaratne S. Premalal, D. Wickramasinghe, A. Jayasinghe, and V. Hettige (2021). An Agro-met Advisory System to Reduce the Climate Change Risks and Enhance Disaster Risk Resilience of Farmers in Dry and Intermediate Zones of Sri Lanka. In Amaratunga D., Haigh R., Dias N. (Eds.) Multi-hazard Early Warning and Disaster Risks. Springer https://doi.org/10.1007/978-3-030-73003-1_38

R. Rienzie (2018). Biosafety Education in the State Universities of Sri Lanka, Ministry of Mahaweli Development and Environment, Sri Lanka. An extended trilingual article in a book published by the Ministry of Mahaweli Development and Environment and the Food and Agriculture Organization of the United Nations (English: Pp15-18, Sinhalese: Pp 33-36, Tamil: Pp 54-58).

Ryan Rienzie, A.T.D. Perera and Nadeesh M. Adassooriya (2019). Biorecovery of precious metals from e-waste, in Electronic Waste Management and Treatment Technology M.N.V. Prasad and Meththika Vithanage (Eds.). Elsevier USA. Pp 133-152. <https://doi.org/10.1016/B978-0-12-816190-6.00006-6>

Ryan Rienzie and Nadeesh M. Adassooriya (2018). Toxicity of Nanomaterials in Agriculture and Food, in Nanomaterials: Ecotoxicity, Safety, and Public Perception, Mahendra Rai and Jayanta Kumar Biswas (Eds.) Springer Nature Switzerland: Pp: 207-234 https://doi.org/10.1007/978-3-030-05144-0_11

Ryan Rienzie, Sammani Ramanayaka and Nadeesh M. Adassooriya (2019). Nanotechnology applications for removal of environmental contaminants from pharmaceutical and personal care products in Pharmaceuticals and Personal Care Products Waste Management and Treatment Technology, M.N.V. Prasad (Ed). Elsevier USA: Pp: 279-296 <https://doi.org/10.1016/B978-0-12-816189-0.00012-3>

Sathika G.G. Arachchige, **Ryan Rienzie** and Nadeesh M. Adassooriya (2019). Nanocarrier mediated drug delivery systems for neurodegenerative diseases in Nanobiotechnology in Neurodegenerative Diseases. Mahendra Rai, and Alka Yadav (Eds.), Springer Nature Switzerland, Pp: 267-287 <https://link.springer.com/book/10.1007/978-3-030-30930-5>

Nadun H. Madanayaka, **Ryan Rienzie**, Nadeesh M. Adassooriya (2019). Nanoparticles in nanotheranostics applications in Nanotheranostics : Applications and Limitations. Mahendra Rai and Bushra Jamil (Eds.), Springer Verlag Germany Pp: 19-40 <https://link.springer.com/book/10.1007/978-3-030-29768-8>

Nadun H. Madanayaka, **Ryan Rienzie**, Nadeesh M. Adassooriya (2020). Nanotechnology applications for removal of disinfection by-products (DBPs) from water in Disinfection Byproducts [DBP] M.N.V. Prasad and P. Singh (Eds.), Elsevier (Butterworth-Heinemann), 2019 (In press). <https://www.elsevier.com/books/disinfection-byproducts-in-drinking-water/prasad/978-0-08-102977-0>

Conference proceedings/ Presentations (foreign and local)

W.M.A.S. Chamara, **K.D.R.C. Rienzie** and D.M. De Costa (2022). Identification of tree diseases and their probable causal organisms associated with forest cover of the University of Peradeniya. Faculty of Agriculture Undergraduate Research Sessions, 14th December, 2022, Department of Agric. Biology University of Peradeniya, Sri Lanka.

U. Dissanayake, S. Premalal, D. Wickramasinghe, P. Gunaratne, A. Jayasinghe, **R. Rienzie**, N. Kuruppuarachchi and V. Hettige (2020). Decision support weather advisory system for Dry Zone farmers in Sri Lanka. International Symposium on Multi-Hazard Early Warning and Disaster Risk Reduction. 16-18 March, Cinnamon Grand Hotel, Colombo, Sri Lanka.

KANL Kuruppuarachchi, LHP Gunaratne and **R. Rienzie** (2019). Marketing strategies to increase utilization of products at the BFN sites. Symposium on agrobiodiversity for climate change adaptation, food and nutrition, Plant Genetic Resources Center, Gannoruwa, Peradeniya, 25th and 26th April 2019.

R. Rienzie, LHP Gunaratne, RHG Ranil, KANL Kuruppuarachchi (2019). Development of a participatory guarantee system for small scale biodiversity to support food and nutrition crop producers. Symposium on agrobiodiversity for climate change adaptation, food and nutrition, Plant Genetic Resources Center, Gannoruwa, Peradeniya, 25th and 26th April 2019.

Ryan Rienzie, Nadeesh Madusanka and Devika de Costa (2017). In-vitro antimicrobial properties of carboxymethylcellulose spray coated copper-montmorillonite nanocomposites. 10th International Conference on Agriculture and Horticulture, London, United Kingdom, 2-4 Oct, 2017.

Ryan Rienzie, Nadeesh Madusanka and Devika de Costa (2017). Metalaxyl intercalated-montmorillonite nanocomposites for controlling soil borne plant pathogens. International Conference on Nanoscience and Nanotechnology, Colombo, Sri Lanka, 14-15 December 2017.

Ryan Rienzie, Nadeesh Madusanka and Devika de Costa (2017). Thiram intercalated/surface adsorbed montmorillonite nanocomposites for controlling soil borne plant pathogenic fungi. Peradeniya University International Research Sessions, 24 Nov 2017.

Rienzie KDRC, Wickramaarachchi WART and Costa DM de (2017). Partial molecular characterization and transmission of Horsegram yellow mosaic virus causing soybean yellowing disease, 6th Young Scientists' Forum, National Science and Technology Commission, Sri Lanka (ext. abst) Pp. 102-106.

Gunaratne LHP and **Rienzie KDRC** (2016). Views of farmers and grass root level government officers on the present fertilizer subsidy program in Sri Lanka. Workshop on fertilizer policy in South Asia: A comparative assessment and lessons learned, 26th-27th July 2016, Royal Kandyan Hotel, Kandy (Invited presentation) http://agri.pdn.ac.lk/centers%20&%20units/ABC/images/News/FP_South_Asia/8.pdf (Findings were published in *Sunday Observer*, 07th August 2016 "Farmer woes still awaiting fertilizer grant, water; Going against the grain; University study reveals crisis looming" by Rukshana Rizwie).

Rienzie R. and Herath V. (2016). Homology modeling and validation of replication associated protein (Rep) of Sri Lankan cassava mosaic virus (SLCMV). International conference on multidisciplinary approaches, Faculty of Graduate Studies, University of Sri Jayewardenepura, Sri Lanka.

Rienzie KDRC, Wickramaarachchi WART, and Costa DM de (2013). Transmission studies and molecular characterization of the virus causing bean yellowing disease in Sri Lanka., Peradeniya University Research Sessions.

Rienzie KDRC, Wickramaarachchi WART and Costa DM de (2012). Biological and molecular characterization of virus causing bean yellowing disease in Sri Lanka. Proceedings of the annual student research sessions. Department of Agricultural Biology, Faculty of Agriculture, University of Peradeniya. Pp.123-126.

Books (International)

Nadeesh M. Adassooriya, Ryan Rienzie, Nadun H. Madanayake (2023). Nanoscale Technologies in Plant Sciences Principles and Applications CRC Press. ISBN 978-103-238-792-5

Books and documentaries (Local)

බිම්මල් වගාව සඳහා අන්තර්ජාලය මූලික කරගත් මග පෙන්වීම (A web based guide for mushroom growers) (2022). A publication by the Agribusiness Center, Faculty of Agriculture, University of Peradeniya, Sri Lanka. Eds. L.H.P. Gunaratne, Ryan Rienzie and K.P. Samarasinghe (Eds.).

කෘෂි ප්‍රවර්ධන විවිධත්ව බෝග හා නිෂ්පාදන අලෙවිකරණය (Marketing of Agrobiodiversity Crops and Products) (2019). A publication by the Agribusiness Center, Faculty of Agriculture, University of Peradeniya, Sri Lanka. Eds. LHP Gunaratne, S. Seneviratne (Eds.), R. Rienzie, N. Kuruppuarachchi (Ass. Eds.) ISBN 978-955-589-278-0

Rice Fortification: A Study to assess its Acceptability, Production and Utilization in Sri Lanka (2019): A Narrative Report produced by Agribusiness Centre, University of Peradeniya, Sri Lanka and World Food Programme of Sri Lanka ISBN 978-955-589-277-3

නිරසාර ගොවිතැනකට ප්‍රවේශ පොත (Bio fertilizers for sustainable farming) (2016). Sinhalese extension video documentary, (HETC/QIGW4 project), Agribusiness Centre, Faculty of Agriculture, University of Peradeniya, Peradeniya 20400. Served as the Assistant Director of the documentary ISBN 978-955-589-279-7

Other publications (extension papers/ magazine articles etc.)

රයන් රියෙන්සි (2023). නැනෝතාක්ෂණය; කෘෂිකාර්මික නිරසාරත්වයට සහ ආහාර නිෂ්පාදන ක්ෂේත්‍රයේ ඵලදායීතාවය ඉහළ නැංවීම උදෙසා (Nanotechnology: For Agricultural Sustainability and increasing the productivity of food production industry) ගොවිජන, හෙක්ටර් කොබ්බෑකඩුව ගොවි කටයුතු පුහුණු කිරීමේ සහ සංවර්ධන ආයතනය. කොළඹ.

ජෛව පොහොර (Bio fertilizers) (2016) (Sinhalese extension brochure; HETC/QIGW4 project), Agribusiness Centre, Faculty of Agriculture, University of Peradeniya.

Rienzie, K.D.R.C. and Peiris, S.E. (2012). How to present your products? From customer point of view. *Garden Living*. Volume 10, Pp. 56-57.

Presentations (authored/ conducted) at various national level programs/ workshops

Gunaratne LHP and **Rienzie KDRC** (2015). "Biofertilizers and ecological agriculture". Workshop on promoting ecofriendly practices among farmers in Sri Lanka for middle level government Agrarian and Extension Officers. 7th October 2015, University of Peradeniya.

Gunaratne LHP and **Rienzie KDRC** (2015). "Biofertilizers for greenhouse applications". Farmer awareness workshop on new fertilizer mixtures for protected agriculture, 11th March 2015, University of Peradeniya.

DISSERTATION SUPERVISION

BSc Dissertation (2022): Identification of probable pathogens of diseases in the forest cover of the University of Peradeniya. Mr. W.M.A.S. Chamara, Faculty of Agriculture, University of Peradeniya

SOCIAL SERVICES/ VOLUNTEER EMPLOYMENT

2015-present **Co-Chair:** Protect Sri Lanka Foundation (A local non-profit organization currently working on ecofriendly agriculture, environment and health)

PREVIOUS EMPLOYMENT, FIELD AND RESEARCH EXPERIENCE

2018-2019	Program Consultant (Agriculture/ Environment): World Vision Sri Lanka
2013-2015	Design Monitoring and Evaluation Officer: World Vision Sri Lanka
Jan-Mar, 2013	Research Assistant: School of Computing, University of Colombo, Sri Lanka
Nov-Dec, 2012	Research Assistant: Department of Agricultural Economics and Business Management, Faculty of Agriculture, UoP, Sri Lanka
Oct- Dec, 2010	Research Team Member: "Study on health and environmental impact of mid-canal of Kandy" Center for Environmental Studies, UoP, Sri Lanka
Jan – Apr, 2012	Research Assistant: "Investigating potential parasitoids of house fly (<i>Musca domestica</i>)" funded by The National Science Foundation (NSF), Sri Lanka
Apr – May, 2012	Trainee: Plant Genetic Resources Centre, Peradeniya 20400, Sri Lanka
Jul – Oct, 2012	Research Student: BSc research project, Horticultural Crop Research and Development Institute, Peradeniya 20400, Sri Lanka
Jul – Oct, 2012	Research Student: Characterization and screening of fungicides against <i>Colletotrichum</i> spp. associated with capsicum anthracnose
Jul – Oct, 2012	Technical Facilitator (Plant Pathology and Entomology): Horticultural Crop Research and Development Institute; Supported farmer advisory activities, facilitated fungicide trials, crop clinics and exhibitions

PLACEMENTS IN ACADEMIC/ SCIENTIFIC EVENTS

Reviewer: Young Scientist's Forum Symposium, January 2023, National Science and Technology Commission.

Organizing Committee: Faculty of Agriculture Undergraduate Research Symposium, 28th December 2022, Faculty of Agriculture, UoP

Treasurer: Felicitation Event, Faculty of Agriculture, UoP 6th December, 2022

Organizing Committee: Faculty of Agriculture Undergraduate Research Symposium, 16th December 2016, Faculty of Agriculture, UoP

Organizing Committee: Annual Congress, Postgraduate Institute of Agriculture, 17th-18th November 2016, Plant Genetic Resources Centre, Gannoruwa, Peradeniya

Technical Program Committee: 26th Asian Economic Symposium, 20th August 2016, International Research Centre, UoP

Organizing Committee: Sri Lanka Forum of University Economists, 24th June 2016, Faculty of Agriculture UoP

Organizing Committee: Workshop on Fertilizer Policy in South Asia: A comparative assessment and lessons learned, 26th – 27th July, 2016, Royal Kandy Hotel, Kandy

Organizing Committee: 9th Annual Research Forum, Sri Lanka Agricultural Economics Association. 26th-27th November, 2015. Faculty of Agriculture, University of Peradeniya

MEMBER ASSOCIATES

Institute of Biology, Sri Lanka (MIBiol)
Soil Science Society of Sri Lanka/ No. 364
Association of the Applied Biologists, United Kingdom (Former)

SPECIAL TRAININGS/ CONFERENCES AND SEMINARS ATTENDED

22 nd July 2022	Procurement Workshop for Researchers, University Research Council, UoP
2 nd Dec 2022	Academic Advisor Training Session 02", Student Advisory, Welfare and Grievance Committee, Faculty of Agriculture, UoP
22 nd Jul 2022	Procurement Workshop for Researchers", University Research Council, UoP
30 th Sep 2017	Conference on Materials Chemistry, University of Cambridge
15 th Sep-20 th Oct 2017	Training on applications of solid-state characterization techniques (PXRD, TGA, DSC, FTIR and Microscopy) Dept. of Chemistry, University of Cambridge
4-5 th Sep, 2015	Short Course on PCR based DNA Fingerprinting Data Analysis, UoP
Jul, 2014	Seminar on Research Methods: Institute of Applied Statistics, Sri Lanka
29 th Jun – 3 rd Jul, 2012	Short Course on Research Design for Field Biologists, UoP
May, 2012	Short Course on ISO and Environmental Management Systems, UoP
Aug, 2012	Short Course on Environmental Monitoring, UoP
Oct – Dec, 2012	Practical Training Program on Mushroom Production: Horticultural Crop Research and Development Institute, Sri Lanka
May-Aug, 2012	Certificate Course on Human Rights, UoP
Oct – Dec, 2010	Certificate Course on Environmental Awareness, UoP

AWARDS

Merit Presenter: Young Scientists' Forum, National Science and Technology Commission, 20th Jan. 2017, UoP

GRANTS

Multidisciplinary Research Grants. Development of fungal elicitor-based products to trigger plant immunity as a safer strategy to control selected soil-born plant diseases caused by fungal pathogens (2023) (LKR 2,500,000.00).

University Research Grants (URG/2022/06/Ag). Identification of candidate pathogens associated with diseases of forest tree species in the Central Province of Sri Lanka (2022) (LKR 539,300.00)

Ministry of Environment Workshop Grant: Workshop on biodiversity conservation (2012) (LKR 50,000.00).

PERSONAL INFORMATION

Date of birth	24 September, 1986	Marital status	Married
Gender	Male	Nationality	Sri Lankan

REFEREES (NON-RELATED)

Devika M. De Costa PhD Senior Professor & Chair Department of Agricultural Biology Faculty of Agriculture University of Peradeniya Sri Lanka Office: (+94)-812-395-238 Mobile: (+94)-714-430-542 Email: dmdecosta@agri.pdn.ac.lk	Sarath Kodithuwakku PhD Senior Professor Department of Agric. Economics and Business Management Faculty of Agriculture University of Peradeniya Sri Lanka Office: (+94)-812-395-500 Mobile: (+94)-777-801-710 Email: dean@agri.pdn.ac.lk	Nadeesh M. Adassooriya PhD Senior Lecturer Department of Chemical and Process Engineering Faculty of Engineering University of Peradeniya Sri Lanka Office: (+94)-812-393-977 Mobile: (+94)-712-816-581 Email: nadeeshm@eng.pdn.ac.lk
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I hereby affirm and declare that the particulars submitted in this resume are true and accurate to the best of my knowledge and belief.

16th April 2023

Ryan Rienzie