Akila Wijerathna Yapa

Postgraduate researcher | Ph.D. | AFHEA (UKPSF)

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LinkedIn ResearchGate Google Scholar ORCID

Summary

Experience in Agriculture, Crop Science, Molecular Biology, Biochemistry, Omics Biology, and Biotechnology research with over 12 years of in designing, planning, and performing experiments, and functioning research lab.
Enabler of prolific collaborations at international research institutes in Australia, China, Israel, and Sri Lanka.

Education

2017–2020 **Ph.D. (Plant Physiol. Biochem.) |The University of Western Australia, Australia**
Thesis: *Unravelling the underlying components of autophagy-mediated photomorphogenesis of Arabidopsis thaliana*.

I completed the experiments at three research laboratories:

The University of Western Australia: *LC-MS/MS Proteomics: targeted and shotgun, Bioinformatics, Biochemistry, Isotope labelling, Physiology*
The Australian National University: *NGS– RNASeq, Bioinformatics*
The Harry Perkins Institute of Medical Research: *Microscopic studies*

2014–2016 **M.Sc. Agric. (Plant Sciences) |The Hebrew University of Jerusalem, Israel**
Thesis: *Analysis of constitutively Active PYRABACTIN RESISTANCE1/ PYR1 LIKE (PYL) receptors in the early development of Arabidopsis thaliana*.
Side Project: *Identifying the function and biological role of novel protein (ABA receptor-like protein) and its interactor proteins by Y2H screen with Arabidopsis thaliana cDNA library*.

2008–2012 **B.Sc. Agric. (Hons) [Biotechnology] |Wayamba University of Sri Lanka**
Research Project: Screening of traditional rice (Oryza sativa L.) varieties for salt tolerance and molecular genetic screening of fragrant gene (badh2.1).
In-Plant Training: Application of Biotechnology in Intra Cellular Pathogen Diagnostic of Coconut (Cocos nucifera L.) in Sri Lanka.

Employment

Research Analyst (Casual)| Minderoo Foundation, Tattarang Pty Ltd, Australia |Dec 2020 – Jul 2021

- Examining and analyzing the metadata, literature management for plastic exposure on human health and plastics pollution in the water.
- Promote weekly Newsletters, Effect change in environment protection.

Achievements

- Learned to use DistillerSR software for screening and data extraction
- Created a digital library for scientific literature using Zotero software and learned to manage literature database.
- Gained skills in Scoping review and Meta data analysis

Doctoral Researcher | The University of Western Australia, Australia. |Jan 2017- Nov 2020

- Analyzed plant protein recycling under high light and low light stressed, phosphate deficiency conditions with molecular biology, biochemistry, LC-MS/MS, proteomics, transcriptomics, and physiology studies.
- Led a project funding application and method development for transcriptomics and proteomics study.
- Utilized a variety of statistical computer programs like R, Graphpad for data analysis and visualization.

- Reviewed scientific literature and prepare annual progress reports, research grants, and journal articles for publication in peer-reviewed journals and presentations to scientific organizations.

Achievements

- Developed and evaluated new proteomic and RNA biomarkers for early detection of autophagy (cellular nutrients recycling process) during seed germination, early seedling development, and leaf senescence.
- Discovered the role of autophagic protein turnovers under phosphate deficiency conditions through plant physiologic and biochemical studies.
- Established collaborations at international research institutes the Australian National University, Nankai University China, The Harry Perkins Institute of Medical Research, and the University of Western Australia.
- Worked in Controlled Environments Plant Growth Analysis Facility (BioSTEM, MTPS plant growth room, Conviron Indoor Growing) to Study Plant Growth Systems.
- Gained skills in hydroponics plants growing, soilless cultivation method.

Laboratory Technical Officer| The University of Western Australia | Jul 2020 – Nov 2020

- Instrument calibration, maintenance, cleaning and writing user manuals.
- Led and coordinated undergraduate students during biological chemistry practicum sessions.

Achievements

- Maintained all equipment with zero downtime.
- Adequate preparation of chemicals for weekly practicals for 200 students

Activations Officer | The University of Western Australia. |Mar 2020 – Sep 2020

- Coordinated the administrative and logistical aspects for chemical delivery and store management.
- Conduct post-activation evaluation by data entry and analysis and reporting to Chief Operating Officer.

Achievements

- During the covid-19 outbreak, supported the outreach and engagement goals of the ARC Center and the School of Molecular Sciences, delivery, and stores units through providing a centralized, coordinated event and activation logistics and delivery function.

Teaching Assistant | The University of Western Australia. | Jul 2018 – Jul 2019

- Trained 200 undergraduate students per semester in biochemistry and molecular techniques.

Achievements

- Associate Fellowship is awarded by the UK Professional Standards Framework (UKPSF) for teaching and supporting learning in higher education.
- Associate Fellowship is awarded by the Educational Enhancement Unit of the University Of Western Australia for teaching and supporting learning in higher education.

Research Assistant | The Hebrew University of Jerusalem, Israel. | Aug 2014 – Sep 2016

- Identifying the function and biological role of a novel protein responsible for crop abiotic stress tolerance and abscisic acid hormonal signaling with a group of researchers at the Hebrew University of Jerusalem and the Weizmann institute of science.
- Created ten (PYL3-12) different stress-resistant transgenic plants for drought tolerance.

Achievements

- Created four different drought stress-resistant single copy, homozygous transgenic plants.
- Gained skills in large scale Yeast Two Hybrid assays, Western Blotting, Colony PCR, Gene transformation, Floral dip method, Agarose Gel Electrophoresis.

- Worked in diverse controlled environment agriculture facility (Phytotron, Indoor Growing, Greenhouse, Glasshouse) to study plant growth systems.

Research Assistant | Coconut Research Institute, Sri Lanka. | Jan 2014 – Aug 2014

- Developed PCR and 2D PAGE based molecular diagnosis method for CCCVd viroid disease

Visiting Research Scholar | Chinese Academy of Agricultural Sciences, China. | Aug – Nov 2013

- Studied about industrialized Chinese agriculture system in protected agriculture, vertical farming, organic farming, Genetically Modified Crops, and Food safety.

Biotech Content Coordinator | Calcey Technologies, Sri Lanka. | Oct 2012 – Aug 2013

- Create life science products reports directly to the content scientists of the data offshoring partner in the USA, Compare Networks Inc, California.

Graduate Laboratory Trainee | Intertek Testing Laboratories, Sri Lanka. | Jul – Oct 2012

- Physical and Chemical Testing to determine the nutritional value, pesticides, antibiotics, and contaminants of rice, tea, spices, wheat testing of ISO Standards for Black tea (ISO 3720:2011), Green Tea (ISO 11287:2011).

Undergraduate Research Assistant | Coconut Research Institute, Sri Lanka. | Jan – Jun 2012

- Developed PCR and 2D PAGE based molecular diagnosis method for CCCVd viroid disease and Phytoplasma.
- Assisted to Coconut germplasm conservation by embryo tissue culture.

Undergraduate Research Assistant | Rice Research Institute, Sri Lanka. | Jan – Dec 2011

- Screening of 90 different traditional rice varieties for salt tolerance and molecular genetic screening of fragrant gene collaborating with the Plant Genetic Resource Center and the Wayamba University of Sri Lanka.

Tech Skills

Project proposal formulation, Project Management
Scientific and Technical Writing
Statistical Data Analysis and Data Visualization: R Programming, JMP Pro (SAS), Minitab, SPSS, and GraphPad Prism
Liquid Chromatography with Tandem Mass Spectrometry (LC-MS/MS): for proteomics analysis I used Shotgun and Targeted Proteomics (LC- Q-TOF, QqQ), Label-free quantification, 15N labeling of protein, Skyline targeted proteomics analysis, MaxQuant, Perseus data analysis.
Gas Chromatography with Tandem Mass Spectrometry (GC-MS/MS): for plant metabolite analysis. MS-DIAL, metaboAnalyst data analysis, MetaboShiny R Program
Atomic absorption spectrometry (AAS): determining the concentration of specific mineral in soils, plant, and food samples
Transcriptomics: RNA extraction, cDNA library preparation, RNASeq, and data analysis
Bioinformatics: R Programming/Bioconductor, UNIX, MEGA, Genome Compiler, and Geneious
Molecular biology and Biochemistry: Experienced in all common molecular biology and genetic engineering techniques and methods – DNA (genomic and bacterial plasmids), RNA and Protein extractions, PCR (multiplex, cDNA), agarose gel, PAGE electrophoresis, and ethidium bromide staining and silver staining, 2D-PAGE, Western Blotting, Yeast Two-Hybrid system, GIBSON Cloning, Molecular Cloning, Colony PCR, Chromatography, Preparation of molecular biological solvents, buffers, dyes and safe handling of reagents and equipment according to the safety guidelines.
Plant Pathology: RNA viroid (CCCVd), virus (TMV), and Phytoplasma molecular detection.
Plant tissue culture: Media preparation, Transformation, and Transgenic *Arabidopsis*, coconut and banana tissue culture (leaf, meristem, embryo), Chromosome staining and counting, specimen preparation
Basic Microbiology culture techniques

Publications

In Review

Wijerathna-Yapa, A. and Pathirana, R. 2021. Climate Change, Food Security and Sustainable Food Systems. In Wong, M. H., Purchase, P. and Dickinson, N. (Eds.), Food Waste as a Resource: Food, Feed, Fertilizer, Fuel. World Scientific. (In Press)

Pri-Tal, O., Zimran, G., Sun, Y., Fürst-Jansen, J., Michaeli, D., **Wijerathna-Yapa, A.**, Merilo, E., Yarmolinsky, D., Efroni, I., de Vries, J., Kollist, H., Mosquna, A. 2021. Regulation of transpiration hinges on spatial differences in abscisic acid perception. In Proceedings of the National Academy of Science. National Academy of Sciences. *(Manuscript submitted for review)*

Li, L., Duncan, O., Ganguly, D.R., Lee, C.P., Crisp, P., **Wijerathna-Yapa, A.**, Pogson, B.J., Salih, K., Trosch, J., Millar, A.H., and Pogson, B.J. 2021. Metabolic enzymes degraded under high light stress maintain their proteostasis by coupled transcriptional regulation in Arabidopsis. The Plant Cell. *(Manuscript submitted for review)*

Peer-reviewed Scientific Journal Articles

Wijerathna-Yapa, A., Signo, S., Fenske, R., Ganguly, D.R., Stroeher, F., Li,L., Pogson, B.J., Duncan, O., and Millar. H. 2021 Autophagy mutants show delayed chloroplast development during de-etiolation in carbon limiting conditions. The Plant Journal. DOI: 10.1111/tpj.15452

Li, L., Lee, C. P., **Wijerathna-Yapa, A.**, Broda, M., Otegui, M. S., Ganguly, D.R., Pogson, B.J., and Millar. H. 2021. Defects in autophagy lead to selective in vivo changes in turnover of cytosolic and organelle proteins in roots and shoots of Arabidopsis doi.org/10.1101/2021.04.29.441983.

Wijerathna-Yapa, A., Signo, S., Fenske, R., Ganguly, D.R., Stroeher, F., Li,L., Pogson, B.J., Duncan, O., and Millar. H. 2021 Autophagy promotes photomorphogenesis during seedling development in Arabidopsis in carbon limiting conditions. bioRxiv. doi.org/10.1101/2021.03.25.437007.

Wijerathna-Yapa, A., Stroeher, E., Fenske,R., Li, L., Duncan, O., and Millar, H. 2020. Proteomics for Autophagy Receptor and Cargo Identification in Plants. J. Proteome Res. American Chemical Society. doi.org/10.1021/acs.jproteome.0c00609

Sun, Y., Harpazi, B., **Wijerathna-Yapa, A.**, Merilo, E., de Vries, J., Michaeli, D., Gal, M., Cuming, A., Kollist, H. and Mosquna, A., 2019. A ligand-independent origin of abscisic acid perception. In Proceedings of the National Academy of Science. National Academy of Sciences. 116 (49) 24892-24899.

Wijerathna-Yapa, A. 2017. Effect on Biodrying and Rapid Drying of Food Wastesfor Biochar Manufacturing. Agri Res & Tech 7 (5), 555722.

Kumarihami H.M.P.C., **Wijerathna, Y.M.A.M.,** Beneragama, C.K. 2017. Extending the postharvest life of cut flowers with floral preservative: mini-review. Proceedings of the National Symposium on Floriculture Research, Department of National Botanic Gardens, Sri Lanka. 52-60.

Wijerathna-Yapa, A. 2017. Transgenic plants: resistance to abiotic and biotic stresses. JAEID, 111 (1): 245-275.

Wijerathna, Y.M.A.M. and Kumarihami H.M.P.C. 2016. Effects of Different Hormonal Concentrations and Culture Medium on Multiplication and Rooting of Stage II Banana *(Musa cavendishii)*. Not Sci Biol, 8(1):69-72.

Wijerathna, Y.M.A.M. 2015. Marker-Assisted Selection: Biotechnology Tool for Rice Molecular Breeding. Adv Crop Sci Tech 3: 187. doi:10.4172/2329- 8863.1000187.

Wijerathna, Y.M.A.M. 2015. Application of Biotechnology in Coconut (*Cocos nucifera L.):* Sri Lanka. Plant Tissue Cult. & Biotech. 25(1): 103-116.

Wijerathna, Y.M.A.M., Perera, A.N.K.,Hamamah,I.B. and Hoang Long. 2015. Application of PCR and MAS: Potential Use for Assessment of Genetic Diversity of Rice Germplasm in Breeding Programs in Developing Countries. Pertanika J. Trop. Agric. Sci. 38 (2): 161 – 174.

Wijerathna, Y.M.A.M., Kottearachchi, N.S.,Gimhani, D.R. and Sirisena, D.N. 2014. Exploration of Relationship between Fragrant Gene and Growth Performances of Fragrant Rice *(Oryza Sativa L.)* Seedlings under Salinity Stress. Journal of Experimental Biology and Agricultural Sciences. 2 (1):7-12.

Wijerathna, Y.M.A.M. 2012. Advances of Basic Molecular Biology Techniques: Potential to Apply in Plant Viroid Detection in Sri Lanka. eSci J. Plant Pathol. 01: 88 – 93.

Wijerathna, Y.M.A.M., Kottearachchi, and Attanayaka, D.P.S.T.G. 2012. Assessment of Inter and Intra Cultivar Genetic and Phenotypic Variation in Grain Quality Characteristics of Sri Lankan Traditional Aromatic Rice *(Oryza Sativa L.)*. Tropical Agriculturist. 160: 123 - 133.

Wijerathna, Y.M.A.M. 2012. Application of Biotechnology in Intra Cellular Pathogen Diagnostic of Coconut *(Cocos nucifera L.)* in Sri Lanka. Report on In-plant Training Programme. Wayamba University of Sri Lanka.

Conference Papers

Wijerathna-Yapa, A., Fenske, R., Li, L., Petereit, P., Cao, H., Stroher, E., Duncan, O,
Millar, A.H. 2019. Application of Proteomics Techniques to Organelle Abundance Profiling of Arabidopsis thaliana Autophagy Mutants. Abstract presented at the ARC CoE in Plant Energy Biology Annual Forum 2019. The Alpine Hotel Thredbo– Australia. June 4th - 6th 2019.

Duncan, O., **Wijerathna-Yapa, A.,** Millar, A.H. Protein synthesis and degradation in the night and day: how cycling abundances are established and maintained. 2019. Abstract presented at the ARC CoE in Plant Energy Biology Annual Forum 2019. The Alpine Hotel Thredbo– Australia. June 4th - 6th 2019.

Wijerathna-Yapa, A., Fenske, R., Li, L., Millar, A.H. 2018. Targeted Proteomics for Organelle Abundance Profiling of *Arabidopsis thaliana* Autophagy Mutants. **Abstract** presented at the ARC CoE in Plant Energy Biology Annual Forum 2018. Novotel Swan Valley Vines Resort – Australia. September 11th - 13th 2018.

Wijerathna-Yapa, A., Mosquna, A. 2015. Screening an Arabidopsis cDNA Library for Interactor Proteins of Cyclase. The 2nd Pears Foundation Alumni Symposium in Plant Sciences. The Robert H. Smith Faculty of Agriculture, Food & Environment in Rehovot, Israel, from September 7th - 9th 2015.

Wijerathna, Y.M.A.M., Kottearachchi, N.S., Gimhani, D.R. and Sirisena, D.N. 2011. Sri Lankan Fragrant Rice (*Oryza Sativa* L.) Varieties are Associated with Decreased Salt Tolerance. In: Proceedings of 11th Agricultural Research Symposium, 20th -21st September 2011, Wayamba University of Sri Lanka, 51-55.

Magazine Article Publications

Akila Wijerathna. Bio-based farm economy. LMD Sri Lanka. September 2021. 132.

Akila Wijerathna. Bridging the Gender Gap — emphasises the need to empower female smallholder farmers. LMD Sri Lanka. August 2021. 138.

Akila Wijerathna. Climate Crisis and Farming. LMD Sri Lanka. July 2021. 174.

Akila Wijerathna. Indoor Farming Takes Root. LMD Sri Lanka. June 2021. 126.

Akila Wijerathna. Green Energy for Crops. LMD Sri Lanka. May 2021. 144.

Akila Wijerathna. Mitigating farming risks. LMD Sri Lanka. April 2021. 137.

Akila Wijerathna. Protecting the Planet - reducing food waste will curtail greenhouse gases. LMD Sri Lanka. March 2021. 155.

Akila Wijerathna. The Urban-Rural Divide — How biotechnology can develop rural economy. LMD Sri Lanka. February 2021. 117.

Akila Wijerathna. Innovating for Security - Agriculture. LMD Sri Lanka. January 2021. 150.

Akila Wijerathna. Next Generation Production. LMD Sri Lanka. December 2020. 132.

Akila Wijerathna. Combating land degradation. LMD Sri Lanka. November 2020. 129.

Akila Wijerathna. Resourceful conservation in the agriculture sector. LMD Sri Lanka. October 2020. 122.

Akila Wijerathna. The Breadbasket Failures: The food system woes unearthed by the pandemic. LMD Sri Lanka. September 2020. 164.

Akila Wijerathna. Agriculture Sector: The pursuit of equality. LMD Sri Lanka. August 2020. 144.

Akila Wijerathna. Agriculture Sector: Ecological Intensification. LMD Sri Lanka. July 2020. 128.

Akila Wijerathna. The Farming Transformation: economic benefits of agricultural growth. LMD Sri Lanka. June 2020. 116.

Akila Wijerathna. Next Generation Farming: impact of new technologies on sustainability. LMD Sri Lanka. May 2020. 116.

Akila Wijerathna. Smallholder development: impact of urbanization on smallholder farmers. LMD Sri Lanka. April 2020. 150.
Akila Wijerathna. Climate Change Proofing. LMD Sri Lanka. March 2020. 160.
Akila Wijerathna. Organic Farming: dispels umpteen misconceptions associated with agriculture. LMD Sri Lanka. February 2020. 142.
Akila Wijerathna. Sustainable Collaboration to develop a sustainable global food system. LMD Sri Lanka. January 2020. 190.
Akila Wijerathna. The Smallholder Challenge. LMD Sri Lanka. December 2019. 174.
Akila Wijerathna. Agro's Digital Revolution. LMD Sri Lanka. November 2019. 176.
Akila Wijerathna. Investing in Development; notes how agricultural growth boosts the wider economy. LMD Sri Lanka. October 2019. 169.
Akila Wijerathna. Sustainable Transformation: highlights a prerequisite for innovative farming systems. LMD Sri Lanka. September 2019. 145.
Akila Wijerathna. Production To Go Bananas? unpeels the economic benefits of commercializing a fruit!. LMD Sri Lanka. August 2019. 136.
Akila Wijerathna. The Gender Gap in Farming. LMD Sri Lanka. July 2019. 193.
Akila Wijerathna. Develop Genetic Diversity: ramification of adapting crop heterogeneity. LMD Sri Lanka. June 2019. 167.
Akila Wijerathna. Genetically Engineered DNA. LMD Sri Lanka. May 2019. 171.
Akila Wijerathna. Growing Community Gardens. LMD Sri Lanka. April 2019. 139.
Akila Wijerathna. The Food Security Crunch. LMD Sri Lanka. March 2019. 155.
Akila Wijerathna. The Rise of Smart Foods. LMD Sri Lanka. February 2019. 168.
Akila Wijerathna. Rescue Act for Food Waste. LMD Sri Lanka. January 2019. 160.
Akila Wijerathna. Crop Protection Solutions. LMD Sri Lanka. December 2018. 168.
Akila Wijerathna. Untapped Biotech Potential. LMD Sri Lanka. November 2018. 197.
Akila Wijerathna. Holistic Farming Practice. LMD Sri Lanka. October 2018. 181.
Akila Wijerathna. The Maze of Biotechnology. LMD Sri Lanka. September 2018. 181.
Akila Wijerathna. The Trail of Breadcrumbs: Post Harvest Losses. LMD Sri Lanka. August 2018. 175.
Akila Wijerathna. Organic Farming: Time to defy the convention. LMD Sri Lanka. July 2018. 229.
Akila Wijerathna. Digital Farming: Agro made simple by 'E'. LMD Sri Lanka. June 2018. 172.
Akila Wijerathna. The Science of Sharing. LMD Sri Lanka. May 2018. 213.
Akila Wijerathna. Saving the Plants from Stress. LMD Sri Lanka. April 2018. 166.
Akila Wijerathna. The Future of Agriculture. LMD Sri Lanka. March 2018. 202.
Akila Wijerathna. Waste from Green Field. LMD Sri Lanka. February 2018. 172.
Akila Wijerathna. Family Farming: Breaking the Cycle. LMD Sri Lanka. January 2018. 178.
Akila Wijerathna. Floriculture Sector: The Flowering State. LMD Sri Lanka. December 2017:198.
Akila Wijerathna. Agriculture Revival: Organic Farming. LMD Sri Lanka. November 2017:235.
Akila Wijerathna. The Fruits of Agriculture. LMD Sri Lanka. October 2017:209.
Akila Wijerathna. Food Safety: Critical Conscience. LMD Sri Lanka. August 2017:182.
Akila Wijerathna. Farm Biodiversity: Shared Responsibility. LMD Sri Lanka. July 2017:165.
Akila Wijerathna. Urban Ecosystems: The Trees of City Life. LMD Sri Lanka. June 2017:206.
Akila Wijerathna. Food Safety: Better Safe Than Sorry. LMD Sri Lanka. May 2017:174.
Akila Wijerathna. Farmers' Markets. LMD Sri Lanka. April 2017:194.
Akila Wijerathna. Small Holder Agriculture: Family Farming. LMD Sri Lanka. March 2017: 182.
Akila Wijerathna. Women in Farming. LMD Sri Lanka. February 2017: 206.
Akila Wijerathna. Start-up Farming. LMD Sri Lanka. January 2017: 190.
Akila Wijerathna. Future-Ready Farming Techniques. LMD Sri Lanka. December 2016: 222.
Akila Wijerathna. The Seed of Organic Farming. LMD Sri Lanka. November 2016: 220.
Akila Wijerathna. Urban Agriculture: Food Security in the City. LMD Sri Lanka. Oct 2016: 220.
Akila Wijerathna. Smart Agriculture: Inclusive farming. LMD Sri Lanka. Sep 2016: 203.
Akila Wijerathna. Empowering Farmers: examines the nexus between agriculture infrastructure and rural development. LMD Sri Lanka. August 2016: 210.
Akila Wijerathna. Farming for Tomorrow. LMD Sri Lanka. July 2016: 236.
Akila Wijerathna. Crop Enabler: Genetic Engineering. LMD Sri Lanka. June 2016: 222.
Akila Wijerathna. Biotech Ethics: Roadblocks to Research. LMD Sri Lanka. May 2016: 187.
Akila Wijerathna. Farming Boost From Biotech. LMD Sri Lanka. April 2016: 182.

Akila Wijerathna. Biodynamic Agriculture: Agriculture Take a Bow! LMD Sri Lanka. March 2016: 212.

Akila Wijerathna. Harnessing Biotech for Livestock. LMD Sri Lanka. February 2016: 195.

Akila Wijerathna. The Bio-Economy. The All-New Investment Opportunity: Sees Scope in a Biotechnology-Led Future. LMD Sri Lanka. January 2016: 185.

Akila Wijerathna. Debunking the myth: unravels the truth behind GMO. LMD Sri Lanka. December 2015: 233.

Akila Wijerathna. Sowing the seeds of productivity: weighs the ideal mix of farm seed inputs. LMD Sri Lanka. November 2015: 174.

Akila Wijerathna. Industrial Biotechnology: BIOTECH for Business. LMD Sri Lanka. October 2015: 166.

Akila Wijerathna. The Ethics of Food Supply: weighs the merits of genetic crop manipulation. LMD Sri Lanka. September 2015: 193.

Akila Wijerathna. Pest Control: Protecting the Planet Earth. LMD Sri Lanka. August 2015: 182.

Akila Wijerathna. Tree Conservation: Blooming City. LMD Sri Lanka. July 2015: 192.

Akila Wijerathna. Farm tourism: regenerating tourism. LMD Sri Lanka. June 2015: 195.

Akila Wijerathna. Nourishing Planet Earth: unearth development in rice biotechnology. LMD Sri Lanka. May 2015: 166.

Akila Wijerathna. In Search of Zero Waste: traces domestic waste management to townships. LMD Sri Lanka. March 2015: 169.

Symposia

ARC CoE in Plant Energy Biology Annual Forum 2018. "Building Tangible Improvements to Energy Use Efficiency in Plants". Novotel Swan Valley Vines Resort – Australia. September 11th -13th 2018.

ARC CoE in Plant Energy Biology Annual Forum 2017. "Building and Extending Collaborative Projects". Adelaide Hills Convention Centre – Australia. May 8th – 11th 2017.

17th Otto Warburg symposium. "Next Generation Plant Biotechnology"**. T**he Robert H. Smith Faculty of Agriculture, Food and Environment. The Hebrew University of Jerusalem, Israel. April 11th -13th 2016.

The 2nd Pears Foundation Alumni Symposium in Plant Sciences, entitled "Knowledge Sharing - A Key for Enhancing Agricultural Productivity". The Robert H. Smith Faculty of Agriculture, Food & Environment in Rehovot, Israel, from September 7th-9th, 2015.

The 2nd International Symposium on Agriculture and Environmental Health. The Robert H. Smith Faculty of Agriculture, Food and Environment. The Hebrew University of Jerusalem, Israel. May 28th, 2015

The 5th The International Conference on Drylands, Deserts, and Desertification (DDD) conference. Ben-Gurion University of the Negev, Israel. 17th -20th November 2014.

The 11th Agricultural Research Symposium (AGRES). Wayamba University of Sri Lanka, from 20th -21st of September 2011.

Workshops

University Learning and Teaching professional development program: SPARK (Skills, Pedagogical Approaches, Resources, and Knowledge). The University of Western Australia (2019).

The Research Bazaar (digital literacy emerging at the centre of modern research) at Curtin University, Australia (2nd – 4th July 2019).

Quantitative Proteomics: Strategies and Tools to Probe Biology at the European Molecular Biology Organization (EMBO) EMBL Heidelberg, Germany (5th May – 10th May 2019).

Concept to Creation (C2C). The Centre for Entrepreneurial Research and Innovation (CERI) (21st March – 4th July 2019).

Entrepreneurial Mindset Boot Camp. The Centre for Entrepreneurial Research and Innovation (CERI) (22nd-23rd October 2018).

Unsealed Radioisotopes Handling Course. Safety, Health & Wellbeing, The University of Western Australia (24th - 26th July 2018).

Data Visualization. Centre for Applied Statistics, the University of Western Australia (17th July 2018).

R Basics. Centre for Applied Statistics, the University of Western Australia. (3rd -4th July 2018)

ANOVA, Linear regression, and Logistic Regression. Centre for Applied Statistics, the University of Western Australia (10th -12th July 2018).

Consumer and Community Involvement in Research workshop at the School of Population and Global Health, the University of Western Australia (2 July 2018).

Introductory Statistics. Centre for Applied Statistics, the University of Western Australia (26th - 28th June 2018).

Graduate Research School Workshop: Academic Writing (Science/Applied Science) at the University of Western Australia (21 March 2018).

Laboratory Safety Course. Safety, Health and Wellbeing Safety Training at the University of Western Australia (6th March 2018)

The Research Bazaar (software-carpentry) at the University of Western Australia (23rd – 25th January 2018).

Graduate Research School Workshop: THESIS AS SERIES OF PAPERS (Science/Applied Science) at the University of Western Australia.

Laboratory Safety Course. Safety, Health, and Wellbeing Safety Training at the University of Western Australia (24th July 2017).

Completed iBiology© iBio1 Certificate: Planning Your Scientific Journey.

Graduate Research School Workshop: Writing a Journal Article at the University of Western Australia.

Graduate Research School Workshop: Thesis Structures in The Sciences/ Applied Sciences at the University of Western Australia.

Graduate Research School Workshop: Using Microsoft Word for Thesis Writing at the University of Western Australia.

Israel-Canada workshop on Advanced Biofuels at The Robert H. Smith Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem, Israel. 8-9th November 2015.

National Science & Technology Commission workshop on Experimental Design at Postgraduate Institute of Agriculture, University of Peradeniya. (9th September 2014).

National Key Facility for Crop Gene Resources and Genetic Improvement. Development of Agricultural Science in China, Brassica Genome Sequencing. The Institute of Crop Science, CAAS, Beijing 100081, PR China. (September 2013 –April 2014).

Presentations

Akila Wijerathna. 06th May 2019. Determining the Contribution of Autophagy to Protein Turnover of Energy Organelles in Arabidopsis thaliana. European Molecular Biology Organization (EMBO) Practical Course: Quantitative Proteomics: Strategies and Tools to Probe Biology taking place at EMBL Heidelberg, Germany.

Akila Wijerathna. 13th September 2018. Targeted Proteomics for Organelle Abundance Profiling of *Arabidopsis thaliana* Autophagy Mutants. ARC CoE in Plant Energy Biology Annual Forum 2018. Novotel Swan Valley Vines Resort – Australia. September 13th, 2018.

Harvey Millar, Lei Li, Martyna Broda, **Akila Wijerathna**. 04th April 2018. Autophagy: Bringing together divergent topics in organelle biology? ARC Centre of Excellence in Plant Energy Biology Seminar, the University of Western Australia.

Harvey Millar, Lei Li, Karzan Salih, **Akila Wijerathna**. 04th August 2017. Studying the First Derivative of Proteomics: What is protein turnover tells us and what are the challenges ahead? ARC Centre of Excellence in Plant Energy Biology Seminar, the University of Western Australia.

Akila Wijerathna. 26th June 2017. Determining the contribution of autophagy to protein turnover rate of energy organelles in the model plant Arabidopsis. Ph.D. Proposal Symposium. School of Molecular Sciences, the University of Western Australia.

Akila Wijerathna. 06th September 2016. Screening an Arabidopsis cDNA Library for Interactor Proteins of Cyclase. The 2nd Pears Foundation Alumni Symposium in Plant Sciences: "Knowledge Sharing - A Key for Enhancing Agricultural Productivity" at the Robert H. Smith Faculty of Agriculture, Food & Environment in Rehovot, Israel.

Akila Wijerathna. 20th September 2011. Sri Lankan Fragrant Rice (*Oryza Sativa* L.) Varieties are Associated with Decreased Salt Tolerance. The 11th Agricultural Research Symposium (AGRES), Wayamba University of Sri Lanka.

Awards & Funding

Associate Fellowship from the University of Western Australia's Academy Fellowship Scheme for teaching and supporting learning in higher education. (2021).

Associate Fellowship from the Higher Education Academy (AFHEA), The UK Professional Standards Framework (UKPSF) for teaching and supporting learning in higher education. (2020).

ARC Centre of Excellence in Plant Energy Biology Collaboration Award for Identifying the underlying components of autophagy-mediated protein turnover during photomorphogenesis of Arabidopsis thaliana using RNA-seq (2019) (Team: **Akila Wijerathna Yapa**, Dr. Diep Ray Ganguly, Prof. Barry J. Pogson, Prof. A. Harvey Millar).

The Centre for Entrepreneurial Research and Innovation (CERI) Concept to Creation (C2C) scholarship (2019).

European Molecular Biology Laboratory (EMBL) Corporate Partnership Programme Financial Assistance for European Molecular Biology Organization (EMBO) Practical Course: Quantitative Proteomics: Strategies and Tools to Probe Biology taking place at EMBL Heidelberg, Germany (2019).

International Travel Award (2019) by the University of Western Australia.

The Centre for Entrepreneurial Research and Innovation (CERI) boot camp participant scholarship (2018).

International Postgraduate Research Scholarship, UWA Safety Net Top-up Scholarship, Research Training Scheme Stipend - International Student (1/2017 -1/2020) by the University of Western Australia.

The Pears Foundation Scholarship (London, UK) and International School of Agricultural Sciences of Hebrew University of Jerusalem (HUJI) Scholarship (2015/2016) To follow M.Sc. thesis in plant science at HUJI.

The Pears Foundation Scholarship (London, UK) (2014/2015) To follow the international M.Sc. program in plant science at HUJI.

Travel Award from The Pears Foundation (London, UK) (2014 and 2015)

Green Super Rice Scholarship under the Institute of Crop Science, The National Key Facility for Crop Gene Resources and Genetic Improvement, Chinese Academy of Agricultural Sciences. (2013).

Extracurricular

The organizer of the first Bayliss Data Bazaar at the School of Molecular Sciences, the University of Western Australia. August 28th – 30th 2018.

Chair at the Concurrent Session "New Trends in Organelle Dynamics", ARC CoE in Plant Energy Biology Annual Forum 2018, Australia. September 13th, 2018.

Organizing committee member. ARC CoE in Plant Energy Biology Annual Forum 2018. Novotel Swan Valley Vines Resort – Australia. September 13th, 2018.

Science Cafe 2017, National Science Week, University of Western Australia

The administrator of Science is Amazing @scienceweek, knowledge sharing Facebook page of the ARC CoE in Plant Energy Biology.

Youth Member of the SRI LANKA RED CROSS SOCIETY –Kurunegala Branch.

Referees

Upon Request

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