

Therani Kumarasinghe

No. 830/2, 6th Lane, Jayamalapura, Gampola, Kandy, Sri Lanka

Contact No: +94 (76) 112 3541 E-mail: theraninawo@gmail.com

LinkedIn profile link: www.linkedin.com/in/therani-bandara-9b056b390

PERSONAL PROFILE

A motivated and high-achieving graduate in Agricultural Technology and Management, specializing in Animal Science and Technology, with a strong academic record and a demonstrated commitment to excellence.

Possesses proven leadership, critical decision-making, and problem-solving skills, with the ability to adapt effectively to challenging and dynamic environments. A strong team player with excellent communication and interpersonal skills.

Highly motivated to pursue advanced studies and research in food science and animal technology, with a particular interest in food safety, microbiology, and functional food innovation. Aspires to collaborate with international researchers and professionals to address global challenges in food systems and to contribute meaningfully to scientific and technological advancements.

EDUCATION

Bachelor of Science, Agricultural Technology & Management (First Class Hons.) Jan 2021 - Nov 2025

- Specialized in Animal Science and Technology
- Faculty of Agriculture, University of Peradeniya, Sri Lanka
- **Final Grade Point Average (FGPA): 3.89/4.00 (97.3%)**

Courses followed in specialization

- Applied Animal Nutrition [A]
- Dairy Product Technology [A]
- Applied Animal Physiology [A]
- Feed Processing Technology [A+]
- Wildlife and Ecosystem [A-]
- Meat, Fish & Egg Product Technology [A]
- Applied Genetics and Animal Breeding [A+]
- Animal Health Management [A+]
- Inland and Marine Fisheries Management [A+]
- Scientific Research & Communication in Animal Science [A+]

RESEARCH EXPERIENCE

- **Undergraduate research Project:**

Title: Isolation, Identification and Selection of Gamma-Amino Butyric Acid (GABA) Producing Lactic Acid Bacteria for the Development and Characterization of Functional Set-Yoghurt

Supervisor: Prof. Janak K. Vidanarachchi, Department of Animal Science, Faculty of Agriculture

RESEARCH SKILLS AND TECHNIQUES

Microbial Isolation and Characterization

- Isolated and purified lactic acid bacteria (LAB) from freeze-dried cultures using aseptic techniques.
- Conducted morphological characterization based on colony morphology.
- Performed biochemical identification tests, including Gram staining, catalase test, endospore test, and motility test.
- Grouped isolates based on morphological and biochemical properties before molecular confirmation.

GABA Screening and Qualitative Analysis

- Screened LAB isolates for Gamma-Aminobutyric Acid (GABA) production using the spectrophotometric method.
- Prepared calibration standards and constructed standard curves to ensure accurate quantification.
- Conducted paper chromatography and thin-layer chromatography (TLC) for qualitative detection of GABA.

Molecular Identification

- Extracted genomic DNA from selected LAB isolates.
- Performed PCR amplification of the 16S rRNA gene using universal bacterial primers.
- Conducted agarose gel electrophoresis to confirm PCR amplicons.
- Analyzed 16S rRNA gene sequences using BLAST for species-level identification.

Functional Set-Yoghurt Development and Quality Evaluation

- Developed functional set-yoghurt formulations by incorporating selected high GABA-producing LAB strains.
- Monitored fermentation and storage characteristics by measuring: pH, Titratable acidity, Syneresis Water-holding capacity (WHC) as Physicochemical Properties. Prepared samples for texture profile analysis (TPA) using instrumental methods.
- Assisted in sensory evaluation through sample preparation and data collection under standardized protocols.

Data Analysis

- Ensured experimental accuracy through replicates, controls, and consistent documentation. Followed sterile handling procedures to maintain culture purity.
- Conducted statistical analysis (ANOVA and significance testing) using SAS statistical software.

RESEARCH INTERESTS

- Food Microbiology and Biotechnology
- Food Safety & Quality Assurance
- Food Packaging
- Dairy Science and Technology
- Improving GABA stability and bioavailability in food systems
- Fermentation Science & Product Development
- Animal Nutrition & Gut Health

ABSTRACT PUBLICATION

Kumarasinghe T.D.N.B., Vidanarachchi J.K., Kodithuwakku S.P., Jayathilake D.V., Wanigasekara W.M.A.P., Jayatilake J.A.M.S., Abeysinghe A.M.N.L., Bergquist J., Ubhayasekera S.J.K.A. **Isolation, Identification and Selection of Gamma-Amino Butyric Acid (GABA) Producing Lactic Acid Bacteria for the Development and Characterization of Functional Set-Yoghurt**, Faculty of Agriculture Undergraduate Research Symposium (FAuRS), University of Peradeniya, 2025.

AWARDS

Alfred Baur Memorial Gold Medal 2025 for being the “Most Outstanding Emerging Researcher”

Faculty of Agriculture Undergraduate Research Symposium (FAuRS 2025)

Faculty of Agriculture, University of Peradeniya, Peradeniya, Sri Lanka

Winner | Oral Presentation (Theme: Food Quality, Safety & Product Development)

Faculty of Agriculture Undergraduate Research Symposium (FAuRS 2025)

Faculty of Agriculture, University of Peradeniya, Peradeniya, Sri Lanka

2nd Runner Up | Scientific Merit Awards (Theme: Food Quality, Safety & Product Development)

Faculty of Agriculture Undergraduate Research Symposium (FAuRS 2025)

Faculty of Agriculture, University of Peradeniya, Peradeniya, Sri Lanka

PROFESSIONAL CERTIFICATES

Planet Pulse: Understanding Climate Action (Participating and completing the Online course)

Student Society for Climate Change Awareness (SSCCA)

Certificate ID – yaulzpqjv

Issued Date: Mar 2024

Climate Action Project under Phase 2 of the SSCCA Program which brought together students across South Asia to create a significant impact on Climate Change

Student Society for Climate Change Awareness (SSCCA)

Certificate ID – cdradc

Issued Date: Sep 2024

The 6th International Conference on Food, Nutrition, Health and Lifestyle 2024 08th- 09th November 2024 – Seoul, South Korea (Serving as a Volunteer)

The International Institute of Knowledge Management (TIKM)

Issued Date : Nov 2024

ISO 9001 : 2015 Lead Implementer (Participated and successfully completed)

Halycon (Pvt.) Ltd.,

Issued Date : Mar 2025

Application of Biotechnology (Online Certificate course)

Alison

Issued Date : Jan 2025

Inclusive Leadership: Fostering Diversity and Equity in the workplace (Student development workshop series – Virtual platform)

The International Institute of Knowledge Management (TIKM)

Issued Date : Jul 2024

PROFESSIONAL AFFILIATIONS

- Founder Vice President of Club Services** of the first Executive Committee
International Association of Students in Agricultural and Related Sciences
(IAAS) University of Peradeniya, Sri Lanka **April 2024 - May 2025**
- Member** of Rotaract Club, University of Peradeniya, Sri Lanka **Aug 2023 - Aug 2024**
- Journalism Crew Coordinator** of the Sentiero Media Unit of Faculty of
Agriculture, University of Peradeniya, Sri Lanka **Jan 2023 - Dec 2023**

PROJECTS

- Climate Action Project Phase 2 of the Student Society for Climate Change Awareness Program - Developing Biodegradable Cups from Sugarcane: A Sustainable Solution for a Greener Future** **Sep 2024**
Project focuses on providing an innovative and eco-friendly alternative to conventional plastic and paper cups, which heavily contribute to pollution and global deforestation. By developing biodegradable cups made from sugarcane fibers, we aim to reduce environmental harm, support climate action, and promote sustainable resource use.
- Climate Action Project Phase 2 of the Student Society for Climate Change Awareness Program - Community Workshop & Poster Competition** **Sep 2024**
We conducted an interactive workshop at Wimaladharmasooriya Maha Vidyalaya, engaging students in meaningful discussions on sustainable packaging solutions. To further inspire creativity and environmental awareness, we organized a poster competition, encouraging young learners to express innovative ideas for reducing plastic waste and promoting sustainability
- Project Initiator & Organizer – Plant Distribution Program** **Jun 2024**
Related to celebration of World Environment Day 2024, The IAAS at the University of Peradeniya Successfully led a plant distribution and awareness program featuring C. cavendish banana plants, as well as areca and pepper plants.
- Project coordinator – Orientation Program IAAS SL Peradeniya for the 2020/2021 batches** **Oct 2024**
Welcoming and integrating new students in to the academic and extracurricular culture of the Faculty of Agriculture, University of Peradeniya, Sri Lanka.
- Project Initiator & Main Coordinator - Plates of Promise** **Nov 2024**
A Signature World Food Day initiative by IAAS SL Peradeniya that addressed food equity, awareness, and the importance of balance diet. Successfully led a meaningful awareness program, shining a light on sustainable food practices and the journey from farm to table. Gathering over 100+ students at the Faculty of Agriculture and took look in to the theme of “Right to food for a Better Life and Better Future”.
- Organizing Committee Member - Table Talk Board Discussion IAAS SL Peradeniya** **Jan 2025**
A platform to engage students in critical discussions about agricultural challenges and youth participation.
- Project Coordinator - Community Training Program (CTP) IAAS SL Peradeniya** **Mar 2025**
The flagship outreach project encouraging student led community development and practical learning.

Organizing Committee Member - WAVES Project IAAS SL Peradeniya

April 2025

An awareness campaign in recognition of World Water Day emphasizing sustainable water management practices.

Project Coordinator Beyond the shell - Community Nutrition program (2025)

Nov 2025

Nuwara Eliya, Sri Lanka focused on two highly vulnerable groups in Sri Lanka: School aged adolescents and Pregnant women aimed at improving community nutrition, promoting egg based dietary interventions and addressing prevailing misconceptions through scientifically grounded communication.

VOLUNTEER EXPERIENCE

Conference Volunteer - The 06th International Conference on “Food, Nutrition, Health and Lifestyle 2024”, Seoul, South Korea (The International Institute of Knowledge Management (TIKM)). **Nov 2024**

Project Volunteer - We Lead Career Fiesta “23” of University of Peradeniya, Sri Lanka

This programme aimed at providing our undergraduates a chance to meet professionals from corporates, discuss the potential job and/or internship opportunities and enlighten the undergraduates about higher education opportunities and other professional qualifications. The event was successfully conducted with 30 companies and 1500+ undergraduates and 500+ school leavers. **Feb 2023**

Project Volunteer - Eco Walk “24” of University of Peradeniya, Sri Lanka

Volunteer, Environmental Clean-Up Program - Rotaract Club, University of Peradeniya, Sri Lanka: Participated in campus clean-up activities and sustainability awareness initiatives to promote environmental responsibility. **Mar 2024**

SKILLS

- Communication skills
- Organizational and time-management skills
- Analytical and problem-solving skills
- Technical and computer skills
- Interpersonal skills
- Adaptability and professional attitude
- Creativity and innovation

REFEREES

Prof. J. K. Vidanarachchi

Professor,
Department of Animal Science,
Faculty of Agriculture,
University of Peradeniya,
Sri Lanka.
E-mail: janakvid@agri.pdn.ac.lk
Contact No.: +94 (71) 4430552

Prof. S.P. Kodithuwakku

Professor,
Department of Animal Science,
Faculty of Agriculture,
University of Peradeniya,
Sri Lanka.
E-mail: surangap@agri.pdn.ac.lk
Contact No.: +94 (71) 4567676

I hereby certify that all the information provided in this document is true and correct to the best of my knowledge and belief.



.....
Therani Kumarasinghe,
Department of Animal Science,
Faculty of Agriculture,
University of Peradeniya,
Peradeniya 20400,
Sri Lanka.