W. Nipuna U. Perera (PhD)

Senior Lecturer Grade II
Department of Animal Science, Faculty of Agriculture,
University of Peradeniya, Peradeniya 20400, SRI LANKA
nipunap@agri.pdn.ac.lk
+94773414401



ResearchGate: https://www.researchgate.net/profile/W-Nipuna-Perera

Google Scholar:https://scholar.google.com/citations?user=OBZ-aAoAAAAI&hl=en

Linkedin: https://www.linkedin.com/in/nipuna-perera-5214a5b0/

Orcid: https://orcid.org/0000-0002-9360-6751

PROFILE

Being born in a village where poultry farming is the main occupation of living and in a family where commercial animal feed manufacturing was the family business (New Bernards Animal Feeds, Sri Lanka) pioneered by my father, I grew up with experiences of poultry farming and animal feed processing. Motivated by my childhood experiences, I pursued my studies in Animal Science and majored in Poultry Science. That inspiration encouraged me to pursue my higher studies up to PhD in Poultry Nutrition. I am currently working as a university lecturer and my teaching area covers monogastric nutrition, poultry husbandry and management. I am passionate about research related to alternative feed ingredients, feed processing and feed additives and working closely with both farmers and the industry.

BASIC INFORMATION

Name in full: Wellawattage Nipuna Udayani Perera

Birthday: 26th October 1989

❖ Gender: Female

* Marital status: Married

 Hobbies: Poetry (blog writing: http://senasilla.blogspot.com/), hiking, driving, organic home gardening

EDUCATIONAL QUALIFICATIONS

Tertiary Education

Doctor of Philosophy in Poultry Nutrition

Monogastric Research Centre, School of Agriculture and Environment, Massey University, Palmerston North, New Zealand

Conferred: 25.11.2020

Thesis Title: Influence of feed processing and enzyme supplementation on performance, nutrient utilization and gut morphology of poultry fed barley-based diets

Master's in Science in Poultry Science and Technology

Postgraduate Institute of Agriculture, University of Peradeniya, Peradeniya, Sri Lanka Conferred: 20.07.2016

❖ Bachelors in Science in Agricultural Technology and Management, Faculty of

Agriculture, University of Peradeniya, Peradeniya, Sri Lanka (First class honors)

Majoring module: Animal Science and Technology

Conferred: 17.12.2013

PROFESSIONAL TRAINING AND EXPERIENCES

- ❖ Teaching experience at the Department of Animal Science, University of Peradeniya as a Lecturer (October 2014 to November 2020) and as a Senior Lecturer Grade II (November 2020 to date)
- ❖ Teaching experience (Visiting Lecturer) at Postgraduate Institute of Agriculture (From January 2022 to date)
- ❖ Participated in workshop on Innovation for Climate-smart Livestock Production organized by Asian Productivity Organization 2021.
- ❖ Participated in "The 2015 Seminar on Environmental Monitoring Technologies for Officials from Asian and African Countries" held in Beijing, China, conducted by Center for Environmental Education and Communications of Ministry of Environmental Protection, China (Aug 26th-Sep 15th, 2015).
- ❖ Participated a regional training on "Molecular Genetic Characterization of Farm Animal Genetic Resources" held at NBAGR, Karnal, India during 20-26 April 2015, organized by SAARC Agriculture Centre (SAC) in collaboration with National Bureau of Animal Genetic Resources (NBAGR), Karnal, Haryana, India.
- Completed Induction Program for Academic Staff- 2015 conducted by Staff Development Centre, University of Peradeniya, Sri Lanka.

UNDERGRADUATE TEACHING

Currently teaching (including practical and field components) following subjects for undergraduates following B.Sc. in Agricultural Technology and Management and B.Sc. in Animal Science and Fisheries.

- ❖ AS 1101: Principles and Practices of Animal Production
- ❖ AS 2102: Principles of Animal Nutrition
- ❖ AS 2202: Poultry and Swine Production
- * ASF 2107: Pet Animal Nutrition
- * AS 3201: Applied Animal Nutrition
- ❖ AS 3204: Feed Processing Technology
- ❖ AS 4111: Integrated Animal Production

POST-GRADUATE TEACHING

Currently teaching (including practical and field components) following subjects for postgraduate students following M.Sc. in Animal Science in Post-graduate Institute of Agriculture, University of Peradeniya, Sri Lanka

- ❖ AS 5121: Monogastric Nutrition
- ❖ AS 5218: Non-ruminant Animal Management

RESEARCH GRANTS

- * Received a research grant (USD 4,000 by August 2016) from the Ministry of Mahaweli Development and Environment under the project on Strengthening capacity to control the introduction and spread of invasive alien species (IAS) in Sri Lanka (funded by GEF/UNDP) for the research on Improvement of fatty acid profile of broiler chicken meat and eggs using scavenger fish meal (*Pterygoplichthys multradiatus*) supplement diet.
 - Research collaborators: J.K. Vidanarachchi, **W.N.U. Perera**, S.M.C. Himali, A.R.S.B. Athauda, S. Premaratne, K. Samarasinghe
- ❖ Received a research grant (USD 2280 by August 2021) "Development of chicken foregut for an efficient feed utilization: Use of insoluble fibre in broiler starter diets". Grant No. URG/2021/48/Ag.

Research Collaborators: W.N.U. Perera, J.K. Vidanarachchi, P.R.M.K. Fernando, W.L.B. Perera.

CONTRIBUTIONS IN SCIENTIFIC EVENTS/ACTIVITIES

- Project on Sustainable Poultry Sector in Sri Lanka Collaborators: The government of the Netherlands, Q-Point B.V., HollandDoor, Loek's Feed, Vetworks (The Netherlands), Trouw Nutrition (India), University of Peradeniya (Sri Lanka). March 2022 – 31 December 2023
- ❖ Contribution to the preparation of the Food and Agriculture Organization (FAO) Country Programming Framework (CPF) 2023-2027 as a national expert (27th September 2022).
- Peer reviewer for following journals
 - o Animals
 - o British Poultry Science
 - Animal
 - O The International Journal of Animal Biosciences
 - Animal Production Science
 - Poultry Science
- ❖ Contribution as the speaker to the international webinar at Cholistan University of Veterinary & Animal Sciences, Bahawalpur, Pakistan on 'Use of Alternative Feed ingredients in Poultry Diets' on 29th July 2021.

APPOINTMENTS

- Member, Board of Study in Animal Science, Postgraduate Institute of Agriculture, University of Peradeniya, Sri Lanka
- Secretary of the Publications and Public Relations Committee- Faculty of Agriculture, University of Peradeniya
- Secretary to the organizing committee of the Faculty of Agriculture Undergraduate Symposium (FAuRS 2020), Faculty of Agriculture, University of Peradeniya, Sri Lanka
- Member of the editorial committee for the Faculty Newsletter, Faculty of Agriculture, University of Peradeniya
- Vice Secretary, Sri Lanka Association of Animal Production (SLAAP), Sri Lanka

- * Member, World Poultry Science Association (WPSA), Sri Lanka branch
- ❖ Faculty of Agriculture representative for the University Safety Committee- University of Peradeniya, Sri Lanka
- Member of the Curriculum Development Committee, Faculty of Agriculture, University of Peradeniya
- * Full member- The Organization for Women in Science for the Developing World
- ❖ Coordinator- Pre-congress workshop on 'Presenting Science Online' for the postgraduate students and other scientists, 05th November 2021, Post-graduate Institute of Agriculture, University of Peradeniya, Sri Lanka.
- ❖ Academic Coordinator (Venue) of the Technical Sessions of Peradeniya University International Research Sessions (iPURSE 2021)- 12th November 2021. University of Peradeniya, Sri Lanka.
- Chief Examiner in Advanced Level Examination- Answer paper evaluation. Subject -Agricultural Science Evaluation Centre- Swarnamali Balika Maha Vidayalaya, Kandy, Sri Lanka.
- Member of Peradeniya University Agriculture Teachers' Association, University of Peradeniya, Sri Lanka
- * Member of Federation of University Teachers' Associations, Sri Lanka
- Alumni Association University of Peradeniya, Sri Lanka

AWARDS

- 2020 Recipient of Helen E Akers Doctoral Scholarship- Massey University New Zealand
- 2020 Recipient of The Massey University Alumni Doctoral Completion Bursary
- 2016 Recipient of Massey University Doctoral Scholarship
- 2013 A. S. B. Rajaguru Memorial Gold Medal for Animal Science
- 2013 Prof. R. R. Appadurai Memorial Award for the best performance in Animal Science of the B.Sc. Agricultural Technology and Management degree program
- 2013 University Prize for Academic Excellence for final Examination in Agricultural Technology and Management

PUBLICATIONS

Journal Papers

- 1. **Perera, W.N.U.,** Abdollahi, M.R., Zaefarian, F., Wester, T.J., Ravindran, V. (2022). Barley, an undervalued cereal for poultry diets: Limitations and opportunities. Animals. 12(19):2525. https://doi.org/10.3390/ani12192525
- 2. Tari, L. M., **Perera, W. N. U.,** Zaefarian, F., Abdollahi, M. R., Cowieson, A. J., & Ravindran, V. (2022). Influence of barley inclusion method and protease supplementation on growth performance, nutrient utilisation, and gastrointestinal tract development in broiler starters. Animal Nutrition. 8 (1), 61-70.
- 3. **Perera, W. N. U.,** Abdollahi, M. R., Zaefarian, F., Wester, T. J., & Ravindran, V. (2021). High steam-conditioning temperature during the pelleting process impairs growth performance and nutrient utilization in broiler starters fed barley-based diets, regardless of carbohydrase supplementation. Poultry Science, 101166.

- 4. **Perera, W. N. U.**, Abdollahi, M. R., Zaefarian, F., Wester, T. J., & Ravindran, V. (2020). The interactive influence of barley particle size and enzyme supplementation on growth performance, nutrient utilization and intestinal morphometry of broiler starters. Poultry Science, 99(9), 4466-4478.
- 5. **Perera, W. N. U.**, Abdollahi, M. R., Zaefarian, F., Wester, T. J., & Ravindran, V. (2020). The effect of graded inclusions of waxy starch hull-less barley and a multi-component exogenous carbohydrase on the growth performance, nutrient digestibility and intestinal morphometry of broiler chickens. British poultry science, 61(4), 442-453.
- 6. **Perera, W.N.U.,** Abdollahi, M.R., Zaefarian, F., Wester, T.J., Ravindran, G. & Ravindran, V. (2019) Influence of inclusion level of barley in wheat-based diets and supplementation of carbohydrase on growth performance, nutrient utilisation and gut morphometry in broiler starters, British Poultry Science, 60(6), 736-748.
- 7. **Perera, W.N.U.**, Abdollahi, M.R., Ravindran, V., Zaefarian, F., Wester, T. J., & Ravindran, G. (2019). Nutritional evaluation of two barley cultivars, without and with carbohydrase supplementation, for broilers: metabolisable energy and standardised amino acid digestibility. British Poultry Science, 60(4), 404-413.
- **8. Perera, W.N.U.** & Dematawewa, C.M.B. (2017). Thermal comfort differences in poultry houses and its influence on growth performance of broiler strains. Acta Horticulturae. 1152, 415-420.

Conference proceedings

- 1. Jayarathna, Y.V.A.H.M., **Perera, W.N.U.**, Vidanarachchi, J.K., Himali, S.M.C. and Priyankarage, N., 2021, Comparative Efficacy of a phytogenic product and an antibiotic growth promoter in improving the growth performance and meat quality. Proceedings of the Young Scientists' Conference on Multi-disciplinary Research- 2021. (pp.41). Kandy, Sri Lanka. 21st October 2021.
- 2. Liyanagamage, I., **Perera, W.N.U**. and Korale-Gedara, P.M, 2021, Risk in Layer Industry: Responses by Farmers and Their Determinants. Proceedings of the 7th Faculty of Agriculture Undergraduate Research Symposium held in Faculty of Agriculture. (pp. 56.) University of Peradeniya, Peradeniya, Sri Lanka, 13th August 2021
- 3. Jayarathna, Y.V.A.H.M., **Perera, W.N.U.**, Vidanarachchi, J.K., Himali, S.M.C. and Priyankarage, N., 2021, Can Essential Oils be used as an Alternative for Antibiotic Growth Promoters in Improving Growth Performance and Meat Quality in Broilers? Proceedings of the 7th Faculty of Agriculture Undergraduate Research Symposium held in Faculty of Agriculture (pp. 120) University of Peradeniya, Peradeniya, Sri Lanka, 13th August 2021.
- 4. Pathmasiri D.P.T.M., Korale-Gedara P.M. and **Perera W.N.U.**, 2021, Impact of Import Ban of Maize on Chicken Meat and Egg Prices. Proceedings of the 7th Faculty of Agriculture Undergraduate Research Symposium held in Faculty of Agriculture. (pp. 194). University of Peradeniya, Peradeniya, Sri Lanka, 13th August 2021.
- 5. Kawvindi W.D.S., Perera W.N.U. and Kumara S.M.S.P., 2021, Influences of Demographic Characteristics, Consumer Preferences and Misconceptions on Meat and Eggs Consumption in Sri Lanka. Proceedings of the 7th Faculty of Agriculture Undergraduate Research Symposium held in Faculty of Agriculture. (pp. 195) University of Peradeniya, Peradeniya, Sri Lanka, 13th August 2021.
- **6. Perera, W. N. U.,** Abdollahi, M. R., Zaefarian, F., Wester T. J., & Ravindran, V. (2021). Barley in pelleted broiler starter diets: effects of carbohydrase supplementation and steam-

- conditioning temperature. Proceedings of the Australian Poultry Science Symposium (pp. 117-120). Sydney, Australia.
- 7. **Perera, W. N. U.**, Abdollahi, M. R., Zaefarian, F., Wester T. J., & Ravindran, V. (2020). Barley particle size and supplemental enzymes: Influence on growth performance and nutrient utilisation of broiler starters. Proceedings of the Australian Poultry Science Symposium (pp. 40-43). Sydney, Australia.
- 8. **Perera, W. N. U.**, Abdollahi, M. R., Zaefarian, F., Wester T. J., Ravindran, V., & Ravindran, G. (2019). Barley in broiler starter diets: Effects of particle size and enzyme supplementation. Proceedings of 21st Massey Technical Update Conference (pp. 57-65). Palmerston North, New Zealand.
- 9. **Perera, W.N.U.,** Zaefarian, F., Abdollahi, M.R. and Ravindran, V. (2019) Influence of inclusion level of barley in wheat-based diets and supplementation of carbohydrase on growth performance and nutrient utilisation in broiler starters. Proceedings of the 30th Australian Poultry Science Symposium (pp. 200). Sydney, Australia.
- 10. Perera W.N.U., Abdollahi M.R., Zaefarian F., Wester T.J. and Ravindran, V. (2018). Influence of barley particle size and carbohydrase and phytase addition, individually or in combination, on growth performance in broiler chickens. Proceedings of School of Agriculture and Environment postgraduate symposium, Massey University. (pp. 52). Palmerston North. New Zealand.
- 11. **Perera, W.N.U.,** Abdollahi, M.R., Zaefarian, F. and Ravindran, V. (2018). Influence of carbohydrase supplementation on metabolisable energy and ileal nutrient digestibility of two cultivars of barley for broilers. Proceeding of 29th Australian poultry science symposium. (pp. 38.). Sydney, Australia.
- 12. Abdollahi, R., **Perera, N.,** Ravindran, V. and Zaefarian, F. (2018). Barley in broiler diets: Optimum inclusion and response to carbohydrase enzyme (Abstract No. 178). Proceedings of 15th European Poultry Conference. (pp.33). Dubrovnik, Croatia.
- 13. **Perera, W.N.U.,** Abdollahi, M.R., Ravindran, V., Zaefarian, F., Wester T.J. and Ravindran, G. (2018). Barley in broiler diets: The optimum inclusion level and response to carbohydrase enzyme. Proceedings of the Massey Technical Update Conference. Vol. 20 (pp. 102 114). Palmerston North, New Zealand.
- 14. **Perera, W.N.U.**, Abdollahi, M.R., Zaefarian, F. and Ravindran, V. (2017). Barley in Poultry Diets: Feed Value and Limitations. Advancing Poultry Production: Proceedings of the Massey Technical Update Conference 2017. Vol. 19 (pp. 70-83). Palmerston North, New Zealand.
- 15. Pathirana, I.U.K.S., Keerthikumara, P.M.K.A., **Perera, W.N.U.**, Nayanajith, G.R.A., Dharmarathna, N.G.S., Bandaranayake, L., Vidanarachchi, J.K., Cyril, H.W., Premaratne, S. (2016). Evaluation of Effective Microorganisms on performance, carcass quality, gut microbial population and nutrient utilization in broiler chicken. The proceedings of XXV World's Poultry Congress- 2016. (pp. 221). Beijing, China.
- 16. Rifkhan, T., Perera, W.N.U. and Silva, G.L.L.P. (2015). Morphological and production System Characteristics of Indigenous White Cattle in Sri Lanka, Proceedings of the Peradeniya University International Research Sessions, Vol. 19, (pp. 163). University of Peradeniya, Peradeniya, Sri Lanka.
- 17. **Perera, W.N.U.** and Dematawewa, C.M.B. (2014). Comparison of Growth Performance of Two Commercial Broiler Strains under Different Housing Systems in Alleviating Heat Stress, Proceedings of the Peradeniya University International Research Sessions. Vol. 18, (pp. 223). University of Peradeniya, Peradeniya, Sri Lanka.

Conference presentations (without proceedings)

- 1. **Perera, W. N. U.,** Abdollahi, M. R., Zaefarian, F., Wester T. J., & Ravindran, V. (2022, August 7-11). Influence of conditioning temperature and carbohydrase supplementation on growth performance and nutrient utilization of broilers fed barley-based diets [Conference presentation]. World's Poultry Congress, Paris, France.
- 2. Perera, W. N. U., Abdollahi, M. R., Zaefarian, F., Wester T. J., & Ravindran, V. (2022, May 31- June 1). Influence of whole barley feeding and supplemental carbohydrases on performance and nutrient utilization of broiler starters [Conference presentation]. 2nd International Feed Technology Congress, Utrecht, The Netherlands.

NON-RELATED REFEREES

Associate Professor M. Reza Abdollahi School of Agriculture and Environment

Massey University Palmerston North 4442

New Zealand

Email: M.Abdollahi@massey.ac.nz

Senior Professor G.L.L.P. Silva Department of Animal Science University of Peradeniya

Peradeniya 20400

Sri Lanka

Email: pradeepas@agri.pdn.ac.lk

Emeritus Professor Ravi Ravindran School of Agriculture and Environment

Massey University

Palmerston North 4442

New Zealand

Email: V.Ravindran@massey.ac.nz

Professor J.K. Vidanarachchi Department of Animal Science

University of Peradeniya

Peradeniya 20400

Sri Lanka

Email: janakvid@pdn.ac.lk

I do hereby acknowledge the aforementioned particulars are true and correct to the best of my knowledge.

W.N.U. Perera 27th September 2022