

MAHESHIKA S. KURUKULASURIYA

SENIOR LECTURER (GR II)

MPhil (Peradeniya), MSc (Peradeniya), Postgrad Dip in App. Stats. (Peradeniya), BVSc (Peradeniya)

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EVENTS/ UPDATES

AREAS OF EXPERTISE

Animal Science

RESEARCH INTEREST

- Farm Animal Diseases
- Indigenous Farm Animal Genetic Resources
- Farm Animal Production

MEMBERSHIPS

Committees

Member of Faculty Board, Faculty of Animal Science and Export Agriculture, Uva Wellassa University

Professional Bodies

- Member of Sri Lanka Veterinary Association
- Member of Sri Lanka Association of Animal Production
- Member of International Goat Association

PUBLICATIONS

Full papers

- H.M.N.P. Nandasena, J.M.D.R. Jayawardana and Maheshika S. Kurukulasuriya (2019).
 Characterization of goat production systems in Badulla district of Sri Lanka. Sri Lanka Journal of Animal Production, 11: 7-15.
- Maheshika S. Kurukulasuriya, Pradeepa Silva, C.M.B. Dematawewa, H.B.S. Ariyaratne, R.P.V.J. Rajapakshe, S.H.G. Wickramaratne, L.J.P.A.P. Jayasooriya, D.M.S. Munasinghe, L.G.S. Lokugalappatti and D. R. Notter, (2018). Responses of Sri Lankan indigenous goats and their Jamnapari crosses to artificial challenge with *Haemonchus contortus*. Veterinary Parasitology: Regional Studies and Reports, 11: 41-48.
- **Kurukulasuriya**, **M.S.**, Silva, G.L.L.P, Dematawewa, C.M.B., Ariyarathne, H.B.S. Rajapakshe, R.P.V.J., Wickramaratne, S.H.G., Jayasooriya, L.J.P.A.P, Munasinghe, D.M.S. Lokugalappatti, L.G.S. Notter, D.R. (2017). Phenotypic Marker Based Evaluation of Resistance to *Haemonchus contortus* in Sri Lankan Indigenous Goats and Their Jamnapari Crossbreds. Tropical Agricultural Research, 29(1): 68-79.
- M.S. Kurukulasuriya, L.S.H.S. Harshana and G.L.L.P. Silva, (2017). Phenotypic characteristics and production systems of local goats and their crossbreds in Anuradhapura and Batticaloa districts of Sri Lanka. Sri Lanka Journal of Animal Production, 9: 21-29.
- K.K.T.N. Ranaweera, **M.S. Kurukulasuriya**, N. Priyankarage and U.L.P. Mangalika, (2017). Milk Urea Nitrogen: A Tool to Evaluate Dairy Cow Rations. International Journal of Research in Agricultural Sciences, 4(6): 300-303.
- Pradeepa Silva, C.M.B. Dematawewa, Maheshika Kurukulasuriya, Yuri T. Utsunomiya, José Fernando Garcia, Rudolf Pichler, A.K. Thiruvenkadan, Saravanan Ramasamy, Jian-Lin Han, Kathiravan Periasamy, (2016). Genetic diversity analysis of major Sri Lankan goat populations using microsatellite and mitochondrial DNA D-loop variations. Small Ruminant Research, 148: 51-61.

Abstracts (recent)

- S. Tharanja and Maheshika S. Kurukulasuriya, (2020). A Study on Gastrointestinal Strongyle
 Parasitism of Free Grazing Jaffna Local Sheep. Accepted for 4th International Conference of
 Uva Wellassa University, Sri Lanka.
- T.H.M.S.N. Thelisinghe, K.V.I.N. Kumaravithana, M.G.S. Gamage and **Maheshika S. Kurukulasuriya**, (2020). Identification of Common Pathogenic Bacteria and Suitable Antibiotics for Treatment of Bovine Mastitis in Badulla District. Accepted for 4th International Conference of Uva Wellassa University, Sri Lanka.
- D.K.L. Madushika, M.S. Kurukulasuriya, E.D.N.S. Abeyrathne and G.L.L.P. Silva, (2019).
 Antimicrobial effect of Immunoglobulin Y (IgY) extracted from Village Chicken Eggs and Farm Chicken Eggs Against Salmonella. Proceedings of the International Research Conference of Uva Wellassa University, 2019, 7th February 2019 to 9th February 2019, Badulla, Sri Lanka, P: 516.
- H.M.N.P.Nandasena, J.M.D.R. Jayawardana and M.S. Kurukulasuriya, (2019). Characterization of Goat Production Systems in Badulla District of Sri Lanka. Proceedings of the International Research Conference of Uva Wellassa University, 2019, 7th February 2019 to 9th February 2019, Badulla, Sri Lanka, P: 529.

- A.S.M. Imras and M.S. Kurukulasuriya, (2018). A Study on Health Management Practices in Free Range Chicken Farming in Batticaloa District. Proceedings of the Second International Research Symposium 2017, 1st to 3rd February 2018, Badulla, Sri Lanka, P: 277.
- Navishka Bandara Abeyratna Kobbekaduwa Kobbekaduwa Walawwe, M.S. Kurukulasuriya and U.L.P.Mangalika, (2017). Effectiveness of Electrical Conductivity for Diagnosing Subclinical Mastitis in Dairy Cows. Proceedings of the Consortium of Biological Sciences 2017, 6th December 2017 to 9th December 2017, Kobe, Japan, P: 1278.
- Shivanjali, S., Kurukulasuriya, M.S., Samaraweera, A.M. and Jayawardena, J.M.D.R. (2017).
 Effect of Traditional Veterinary Practice: Neem (Azadirachta indica) Leaves and Tumeric (Curcuma longa) Powder on Gastrointestinal (GI) Parasitism in Goats. Proceedings of the International Research Symposium 2017, 19th and 20th January 2017, Badulla, Sri Lanka, P: 277.
- Dissanayake, C.S., Munasinghe, D.M.S., Lokugalappatti, L.G.S. and Kurukulasuriya, M.S. (2017). Study on Phenotypic Variations and Haemoparasites in Village Chicken in Cascade and Ovita Agro-eco Systems. Proceedings of the International Research Symposium 2017, 19th and 20th January 2017, Badulla, Sri Lanka, P: 36.
- Kobbekaduwa, K.W.T.N.B.A., Mangalika, U.L.P., Kurukulasuriya, M.S., Sirisena, D.M.M.C. and Weeragalle, W.A.A.P. (2017). Relationship of Electrical Conductivity (EC) with Subclinical Mastitis Detection Methods: California Mastitis Test (CMT) and Somatic Cell Count (SCC). Proceedings of the International Research Symposium 2017, 19th and 20th January 2017, Badulla, Sri Lanka, P: 278.
- Kurukulasuriya, M., Kulathunga, K., Dematawewa, C., Ariyarathne, H., Rajapakshe, R., Wickramaratne, S., Jayasooriya, L., Munasinghe, D., Lokugalappatti, L., Notter, D. and Silva, P. (2016). Level of Gastrointestinal Parasitism and Anaemia in Sri Lankan Indigenous Goats and their Jamnapari Crossbreds under the Field Conditions of Eastern Province in Sri Lanka. Proceedings of the 12th International Conference on Goats, 25th to 30th September 2016, Antalya, Turkey, P: 93.
- L.S.H.S. Harshana, **M.S. Kurukulasuriya** and G.L.L.P. Silva (2015). Morphological and Morphometric Analysis of Indigenous Goats Found in Eastern Region of Sri Lanka. Proceedings of the Peradeniya University International Research Sessions, Sri Lanka, Vol. 19, 5th and 6th November 2015, P: 148.
- U.A.C. Priyadarshana, **M.S. Kurukulasuriya**, L.D.B. Suriyagoda, B.V.R. Puyawardena and G.L.L.P. Silva (2015). A Case Study on Infectious Bursal Disease and Newcastle Disease in Relation to Climatic Pattern in Poultry in North Central Province of Sri Lanka. Proceedings of the Peradeniya University International Research Sessions, Sri Lanka, Vol. 19, 5th and 6th November 2015, P: 166.
- M.S. Kurukulasuriya, K.M.G.M.K.K. Kulathunga, H.B.S. Ariyarathne, R.P.V.J. Rajapakshe, C.M.B. Dematawewa, S.H.G. Wickramaratne, L.J.P.A.P. Jayasooriya, D.M.S. Munasinghe, L.G.S. Lokugalappatti and G.L.L.P. Silva (2014). Accuracy of FAMACHA® Scoring System for Detection of Anaemia in Sri Lankan Indigenous Goats under Field Conditions. Proceedings of the Peradeniya University International Research Sessions, Sri Lanka, Vol. 18, 4th and 5th July 2014, P: 218.
- L.S.H.S. Harshana, G.L.L.P. Silva and **M.S. Kurukulasuriya** (2014). Morphological Parameter Analysis of Indigenous Goat Populations in Batticaloa District of Sri Lanka. Proceedings of the 1st Faculty of Agriculture Undergraduate Research Symposium held in Faculty of Agriculture, University of Peradeniya, peradeniya, Sri Lanka. 23rd December 2014. P: 98.
- K.K.T.N. Ranaweera, **Maheshika S. Kurukulasuriya**, A.M. Samaraweera, N. Priyankarage and U.P.L. Mangalika (2015). A preliminary study on Milk Urea Nitrogen values of the Ambewela farm. Proceedings of the 5th Research Symposium of Uva Wellassa University, January 29-30, 2015, Animal Science Degree Programme, Sri Lanka. Pp. 21-23.

- A.M.T.B. Alahakoon, S.C. Jayamanne, M.S. Kurukulasuriya and A.J.M. Gunasekara, 2015.
 Assessment of Microbiological Water Quality in West Coast Sea Bathing Sites of Sri Lanka.
 Proceedings of the First International Symposium on "Environment Management and Planning 2015" held in Waters Edge, Battaramull, Sri Lanka. 24th February 2015. P: 25.
- Krishnasanth, S., Kulatunga, K.M.G.M.K.K., Kurukulasuriya, M.S. and Silva, G.L.L.P. (2013).
 Goat Farming Systems and occurence of *Haemonchus contortus* in Indigenous Goats in Kalmunai. Proceedings of the Twenty Third Annual Students Research Sessions, Department of Animal Science, University of Peradeniya, Peradeniya, Sri Lanka, pp: 59-60.
- Thennakoon, T.M.A.P., Kulatunga, K.M.G.M.K.K., Kurukulasuriya, M.S. and Silva, G.L.L.P. (2013). Chatacteristics of Goat Farming System and its Association with the Prevalence of Haemonchus contortus Infection in Jampari Crossbreds in Ampara District, Sri Lanka. Proceedings of the Twenty Third Annual Students Research Sessions, Department of Animal Science, University of Peradeniya, Peradeniya, Sri Lanka, pp: 35-36.
- A.M.G.U. Gunasekara, M.G.I.S. Parakrama, P.P.M. Heenatigala, R.M.G.N. Rajapaksha and M.S. Kurukulasuriya (2013). Immunostimulant activity and growth performance of Cyprinus carpio fed with Coriandum sativum through diet enrichment. Proceedings of the NARA Scientific Sessions 2013, Sri Lanka, 29th November 2013, P: 12.
- Silva, P., Ranwela S., Weerakoon, D., Marambe, B., Wijesundara, S., Manawadu, L., Atapattu, N., Gunawardena, J. and **Kurukulasuriya M.** (2011). The Alien Invasive Fauna in Si Lanka. Veich, C.R., Clout, M.N. and Towns, D.R. (eds). Island Invasives: Eradications and Management. Proceedings of the International Conference on Island Invasives. Gland, Swezerland: IUCN and Auckland, New Zealand, CBB. xii + 542pp.
- Galgamuwa, G.K.I.N., Vidanarachchi, J.K., **Kurukulasooriya**, **M.**, Thavaraja, P. and Thavarajah, D. (2011). Positive effect of lentils (*Lens culinaris* L.) and Cassava leaves (*Manihot esculenta* C.) incorporation into meat systems on the iron bioavailability of blood profile of guinea pigs (*Cavia porcellus*). Proceedings of the Twenty First Annual Students Research Sessions, Department of Animal Science, University of Peradeniya, Peradeniya, Sri Lanka, pp: 13-14.

Books/Book chapters

- Janak K. Vidanarachchi, **Maheshika S. Kurukulasuriya** and W.M.N.M. Wijesundara (2013). Biological and Biomedicinal Applications of Marine Nutraceuticals. In Se-Kwon Kim (Ed.), Marine Nutraceuticals: Prospects and Perspectives, (pp. 345-392): Taylor & Francis, NW.
- Janak K. Vidanarachchi and **Maheshika S. Kurukulasuriya**, A. Malshani Samaraweera and K.F.S.T. Silva (2012). Applications of Marine Nutraceuticals in Dairy Products. In Se-Kwon Kim (Ed.), Marine Medicinal Foods: Implications and Applications: Animals and Microbes, Advances in Food and Nutrition Research: Volume 65, (pp. 457-478): Elsvier Inc, UK.
- Janak K. Vidanarachchi and **Maheshika S. Kurukulasuriya** (2011). Industrial applications of marine cosmeceuticals. In: Se-Kwon Kim (Ed.), Marine Cosmeceuticals: Trends and prospects, (pp. 335-370): Taylor & Francis, NW.
- Malshani Samaraweera, J.K. Vidanarachchi and Maheshika S. Kurukulasuriya (2011).
 Industrial Applications of Macroalgae. In Kim, S.K. (Ed), Handbook of Marine Macroalgae:
 Biotechnology and Applied Phycology, (pp. 500-521): JohnWiley & Sons, Ltd. West Sussex,
 England.
- Marambe, B., Silva, P., Ranwala, S., Gunawardena, L., Weerakoon, D., Wijesundara, S., Manawadu, L., Atapattu, N. and Kurukulasuriya, M. (2011): Invasive alien fauna in Sri Lanka: National list, impacts and regulatory framework. In: Island Invasives: Eradication and Management. (Eds: C.R. Veitch, M.N. Clout, and D.R. Towns). pp 445-450. International Union for Conservation of Nature, Gland, Switzerland.

- Pradeepa Silva and Maheshika Kurukulasuriya (2010). Invasive Alien Fauna in Sri Lanka –
 Introduction, Spread, Impacts and Management. In: B. Marambe, S. Wijesundara, P. Silva, D.
 Weerakoon, S. Ranwala, N. Atapattu and L. Manawadu (Eds.), Strengthening Capacity to
 Control the Introduction and Spread of Invasive Alien Species in Sri Lanka (pp. 39-61): Ministry
 of Environment and Natural Resources of Sri Lanka and United National Development
 Programme, Sri Lanka.
- Janak K. Vidanarachchi, Maheshika S. Kurukulasuriya and Se-Kwon Kim (2009). Chitin, chitosan and their oligosaccharides in Food Industry. In: Se-Kwon Kim (Ed.), Chitin, Chitosan, Oligosaccharides and Their Derivatives: Biological Activities and Applications (pp. 539-556): Taylor & Francis, NW.

RESEARCH PROJECTS

Completed

- Association between Pathology of Disease Caused by Aeromonas sp. in Freshwater Ornamental Fish and the virulence of Pathogen. (UWU/RG/2018/018), Principal investigator – Maheshika S. Kurukulasuriya
- Development of Colorimetry Based Portable Device for Detection of Hypocalcemia in Cattle. (UWU/RG/ST/2019/018), Principle investigator Maheshika S. Kurukulasuriya

AWARDS AND SCHOLARSHIPS

- Prof. S.T. Fernando Memorial Gold Medal for the best performance in Veterinary Medicine 2007, Awarded at the General Convocation, University of Peradeniya, Sri Lanka
- Best Presenter; Animal Science and Mariculture Session, Twenty Ninth Annual Congress,
 Postgraduate Institute of Agriculture, University of Peradeniya, Sri Lanka 2017

CAREER HISTORY

| Duration | | Capacity | Institute |
|----------|---------|-----------------------------------|---|
| From | То | | |
| 2019 | Present | Senior Lecturer (Gr II) | Department of Animal Science, Faculty of Animal Science and Export Agriculture, Uva Wellassa University |
| 2013 | 2019 | Lecturer (Probationary) | Department of Animal Science, Faculty of Animal Science and Export Agriculture, Uva Wellassa University |
| 2009 | 2013 | Research Assistant | Department of Animal Science, Faculty of Agriculture, University of Peradeniya |
| 2008 | 2009 | Veterinary Internee | Department of Animal Production and Health, Sri Lanka |
| 2007 | 2008 | Assistant Lecturer (Temporary) | Department of Veterinary Clinical Sciences, Faculty of Veterinary Medicine and Animal Science, University of Peradeniya |

TEACHING

Uva Wellassa University

- ANS 113-2 Basic Farm Animal Anatomy and Physiology (Old Curriculum)
- ANS 102-3 Farm Animal Anatomy and Physiology (New Curriculum)
- ANS 241-2 Basic Farm Animal Hygiene (Old Curriculum)
- ANS 221-2 Farm Animal Hygiene (New Curriculum)
- ANS 232-2/ ANS 213/2 Reproduction and Lactation in Farm Animals
- AQT 202-2 Ornamental Fish Breeding and Production
- AQT 231-2 Fish and Shrimp Health Management
- ANS 224-3 Poultry Management and Breeding
- ANS 212-3 Ruminant Management
- ANS 321-2/ ANS 312/2 Microlivestock Production
- ANS 341-2 Major Farm Animal Diseases (Old Curriculum)
- ANS 321-3 Farm Animal Diseases (New Curriculum)
- ANS 331-1 Animal Biotechnology (Old Curriculum)
- ANS 441-1 Animal Products and Public Health
- ANS 421-1 Public Health

SUPERVISION

Undergraduate research supervised (Selected)

2019:

- A Study on Gastrointestinal Strongyle Parasitism of Free Grazing Jaffna Local Sheep
- Investigation on the Prevalence of *Aeromonas* sp. from the Aquarium Water in Uva Province and Most Suitable Antibiotics for *Aeromonas* sp.

2018:

- Characterization of goat production systems in Badulla district of Sri Lanka
- Development of colorimetry based portable device for detection of hypocalcemia in cattle
- Prevalence of five virulence factors in *Aeromonas* species affect on freshwater aquarium fish in Uva Province

2017:

- Determination of differences in antimicrobial activity of immunoglobulin Y extracted from village chicken and farm chicken eggs
- Determination of sex ratio and success rate of artificial insemination in smallholder dairy cattle farms at Kuliyapitiya veterinary division

2016:

- Effect of traditional veterinary practice: Neem (Azadirachta indica) leaves and turmeric (Curcuma longa) powder on gastrointestinal parasitism in goats
- Effectiveness of electrical conductivity (EC) on the diagnosis of subclinical mastitis in dairy cows and its relation with other mastitis detection methods

2015:

• Production of goat farming systems in Kinniya veterinary division

2014:

- Utilizing Milk Urea Nitrogen to evaluate dairy cow diets in Ambewela farm
- Assessment of Microbiological Quality of Water in Sea Bathing Sites in the West Coast of Sri Lanka

2013:

- Investigation of Antibiotic Usage for Dairy Cattle and Antibiotic Residues in Milk in Coconut Triangle
- Effect of *Coriandrum sativum* (Kotthamalli) enriched feed on immunity enhancement and growth performance in koi carp fingerlings

RESOURCE PERSON

- Resource person in the workshop on Climate Change Adaptation and Disaster Risk Management in Agriculture – 2017 organized by the Asian Productivity Organization along with the Ministry of Agriculture, 12th September 2017.
- Resource person for 100-hr Short Course on Selected Topics of Agriculture and Bio-system Technology – 2016 organized by Centre for Open and Distance Learning (CODL) of Uva Wellassa University with the collaboration of Uva Provincial Department of Education.
- Resource person in the workshop for Resource Person SLAAP/ Bopaththalawa Tea Estates
 PLC One-Day Training Programme on "Mastitis Control and Clean Milk Production in Dairy
 Cattle", organized by Sri Lanka Association of Animal Production, 20th August 2016.
- Editorial Board Member of Sri Lanka Journal of Animal Production

PROFESSIONAL TRAINING

- Participated in training Programme on "Advanced Course for Marine Microbiology Techniques", 21/07/2019 to 06/08/2019 at Yushan Campus, Ocean University of China, Qingdao, China.
- "Online Foot and Mouth Disease Investigation Training Course for South Asia" organized by European Commission for the Control of Foot and Mouth Disease in February 2019.
- Attended consultancy meeting on "Bioinformatics Analysis of Nuclear Related Molecular Data for Genome Wide Association and Characterization of Livestock Breeds to Increase Productivity", 08/10/2018 to 19/10/2018 at International Atomic Energy Agency Laboratories in Seibersdorf, Austria.
- Participated training on "Molecular Genetic Characterization of Sri Lankan Cattle Population", 20/11/2017 to 19/12/2017, Animal Genetic Resources Research Centre, National Institute of Animal Science, Republic of Korea.
- Participated internship training, 16/03/2015 to 08/06/2015, Animal Production and Health Division, Animal Production and Health Section, Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture, Department of Nuclear Sciences and Applications, Seibersdorf Laboratories, International Atomic Energy Agency, Austria.
- Participated in workshop on outcome based curriculum design and development, external degree programme in agriculture in 2015 conducted by Uva Wellassa University of Sri Lanka.
- Participated in workshop on molecular diagnostics in 2014 conducted by the Agriculture Biotechnology Centre, University of Peradeniya, Sri Lanka.

- Participated in workshop on outcome based and student cantered curriculum development and revision in 2014 conducted by staff development centre, Uva Wellassa University of Sri Lanka.
- Participated in short course on health and anaesthesia in captive Elephants in 2008 conducted by the Postgraduate Institute of Science, University of Peradeniya, Sri Lanka.
- Participated in workshop on identification of snakes and management of snake bites in 2006 conducted by the Postgraduate Institute of Science, University of Peradeniya, Sri Lanka.