

# CURRICULUM VITAE PABODHA WETHTHASINGHE

#### **Senior Lecturer**

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# **ACADEMIC QUALIFICATIONS**

October 2018 to December 2021

#### PhD in Fish Nutrition

Thesis title: Nutritional, health, and technical properties of black soldier fly (*Hermetia illucens*) in Atlantic salmon (*Salmo salar*) feeds.

Norwegian University of Life Sciences, Norway.

September 2016 to August 2018

MSc in Aquaculture and Marine Resource Management (Specialization: Aquaculture)

Thesis title: Effect of bile supplementation on fat digestibility in rainbow trout fed non-starch polysaccharides containing diets.

Wageningen University and Research, The Netherlands.

October 2009 to December 2013

## **BSc (Honors) in Animal Science and Fisheries**

Thesis title: Hypolipidemic and hypoglycemic potential of raw and processed cowpea (*Vigna Unguiculata* L. Walp.) in Wistar rats (*Rattus Norvegicus*).

University of Peradeniya, Sri Lanka.

### **PROFESSIONAL EXPERIENCES**

Since December 2021

### **Senior Lecturer**

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

Since June 2022

#### **Visiting Lecturer**

Post Graduate Institute of Agriculture (PGIA), University of Peradeniya, Sri Lanka.

Since October 2014

#### Lecturer

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

#### **ACADEMIC AWARDS**

- Best Poster Award of Fish Nutrition Workshop 2021, Wageningen University and Research, The Netherlands.
- **Best Presenter** of the 6<sup>th</sup> International Conference on Agriculture & Fisheries; Systems & Technology 2020 (AgriFish2020).
- **Tjeerd de Jong Award 2017** (1, 000 euro), Wageningen University and Research, The Netherlands.
- NRC (National Research Council, Sri Lanka) Merit Award 2015 for the scientific publication.
- The Aquatic Resources Development Project Award for the Best Performance in BSc. in Animal Science and Fisheries degree program (2013), Department of Animal Science, Faculty of Agriculture, University of Peradeniya, Sri Lanka.
- The University Scholarship for Academic Excellence at Final Year Examination (2013), University of Peradeniya, Sri Lanka.

## **SCHOLARSHIPS**

- Netherlands Fellowship Program (NFP), Nuffic for the MSc degree program Aquaculture and Marine Resource Management at the Wageningen University and Research, The Netherlands.
- **PhD Scholarship** for 3-year PhD program at Norwegian University of Life Sciences, Norway.

#### **CERTIFICATES**

- Diploma on "Laboratory Animal Science for Research Workers". 2018. Section for Experimental Biomedicine, Faculty of Veterinary Medicine and Centre for Continuing Education, Norwegian University of Life Sciences, Norway.
- "The Certificate Course in Human Resource Management" conducted by IPM (Institute of Personnel Management), Sri Lanka (2012) Merit Pass.

## PAPER PRESENTATIONS IN INTERNATIONAL SCIENTIFIC CONFERENCES

- Oral presentation at Aquaculture Europe 2021, Madeira, Portugal (4-7 October 2021).
- Oral presentation at 6<sup>th</sup> International Conference on Agriculture and Fisheries: Systems and Technology 2020 (6 November 2020 Online), Colombo, Sri Lanka.
- Oral presentation at **Aquaculture Europe 2019**, Berlin, Germany (7-10 October 2019).
- Oral presentation at Peradeniya University International Research Session (IPURSE 2015), University of Peradeniya, Sri Lanka (5-6 November 2015).
- Oral presentation at Tomorrow People Organization's Public Health Conference (2014), Bangkok, Thailand (12-14 July 2014).
- Oral presentation at the 2<sup>nd</sup> International Symposium on Driving Research Towards Economy, Opportunities and Challenges (2014), The National Institute of Fundamental Studies, Kandy, Sri Lanka (13-14 November 2014).

## **RESEARCH PUBLICATIONS (h-index - 10)**

### Full length research papers in peer-reviewed journals

- 1. Weththasinghe, P., Rocha, S.D.C., Øyås, O., Lagos, L., Hansen, J.Ø., Mydland, L.T. and Øverland M. "Modulation of Atlantic salmon (*Salmo salar*) gut microbiota composition and predicted metabolic capacity by feeding diets with processed black soldier fly (*Hermetia illucens*) larvae meals and fractions". *Animal Microbiome*. 4, 9, 2022.
- 2. Melenchón, F., de Mercado, E., Pula, H.J., Cardenete, G., Barroso, F.G., Fabrikov, D., Lourenço H.M., Pessoa, M., Lagos, L., Weththasinghe, P., Cortés, M. and Tomás-Almenar, C. Fishmeal "Dietary replacement up to 50%: A comparative study of two insect meals for rainbow trout (*Oncorhynchus mykiss*)". *Animals*. 12(2), 179, 2022.
- 3. Weththasinghe, P., Hansen, J.Ø., Rawski, M., Józefiak, D., Ghimire, S., Øverland, M. "Insects in Atlantic salmon (*Salmo salar*) diets Comparison between full-fat, defatted, and de-chitinized meals, and oil and exoskeleton fractions". *Journal of Insects as Food and Feed.* 2021.
- 4. Weththasinghe, P., Hansen, J.Ø., Mydland, L.T., Øverland, M. "A systematic meta-analysis based review on black soldier fly (*Hermetia illucens*) as a novel protein source for salmonids". *Reviews in Aquaculture*. 2021.
- 5. Weththasinghe, P., Lagos, L., Cortés, M., Hansen, J.Ø., Øverland, M. "Dietary inclusion of black soldier fly (*Hermetia Illucens*) larvae meal and paste improved gut health but had minor effects on skin mucus proteome and immune response in Atlantic salmon (*Salmo Salar*)". Frontiers in Immunology. 12, 114, 2021.
- 6. Weththasinghe, P., Hansen, J., Nøkland, D., Lagos, L., Rawski, M., Øverland, M. "Full-fat black soldier fly larvae (*Hermetia illucens*) meal and paste in extruded diets for Atlantic salmon (*Salmo salar*): Effect on physical pellet quality, nutrient digestibility, nutrient utilization and growth performances". *Aquaculture*. 530: 735785, 2021.
- 7. Staessen, T.W.O., Verdegem, M.C.J., Weththasinghe, P., Schrama J.W. "The effect of dietary non-starch polysaccharide level and bile acid supplementation on fat digestibility and the bile acid balance in rainbow trout (*Oncorhynchus mykiss*)". *Aquaculture*. 523: 735174, 2020.
- 8. Liyanage, R., Perera, O., Lakmini, G.W.A.S., **Weththasinghe, P.**, Visvanathan, R., Jayathilake, C., Jayawardana, B.C., Vidanarachchi, J.K., Sivakanesan, R. "**Boiled, sprouted and raw cowpea incorporated diets modulate High-Fat-Diet induced hypercholesterolemia in rats**". *Food Science & Nutrition*. 1-8, 2018.
- 9. Liyanage, R., Kiramage, C., Visvanathan, R., Jayathilake, C., **Weththasinghe, P.**, Bangamuwage, R., Jayawardana, B.C., Vidanarachchi, J.K. "Hypolipidemic and hypoglycemic potential of raw, boiled, and sprouted mung beans (*Vigna radiata* L. Wilczek) in rats". *Journal of Food Biochemistry*, e12457, 2017.
- 10. Liyanage, R., Gunasegaram, S., Visvanathan, R., Jayathilake, C., Weththasinghe, P., Jayawardna, B.C., Vidanarachchi, J.K. "Banana blossom (*Musa acuminate* Colla) incorporated experimental diets modulate serum cholesterol and serum glucose level in Wistar rats fed with cholesterol". *Cholesterol*. Article ID 9747412, 2016.
- 11. Perera, O.S., Liyanage, R., **Weththasinghe, P.**, Jayawardana, B.C., Vidanarachchi, J.K., Fernando, P.S., Sivakanesan, R. "Cowpea incorporated diets modulate serum lipids and serum antioxidant activity in Wistar rats". *Journal of the National Science Foundation of Sri Lanka*. 44 (1): 69-76, 2016.
- 12. Chandrasiri, S.D., Liyanage, R., Vidanarachchi, J.K., Weththasinghe, P., Jayawardana, B.C. "Does processing have a considerable effect on the nutritional and functional properties of mung bean (*Vigna Radiata*)?". *Procedia Food Science* (2016). 6: 352-355, 2016.

- 13. Jayawardana, B.C., Liyanage, R., Lalantha, N., Weththasinghe, P. "Antioxidant and antimicrobial activity of drumstick (*Moringa oleifera*) leaves in herbal chicken sausage". *LWT Food Science and Technology*. 64: 1204-1208, 2015.
- 14. Liyanage, R., Perera, O.S., **Weththasinghe, P.**, Jayawardana, B.C., Vidanarachchi, J.K., Sivakanesan, R. "Nutritional properties and antioxidant content of commonly consumed cowpea cultivars in Sri Lanka". *Journal of Food Legumes*. 27 (3): 1-4, 2014.

## **Abstract publications**

- 1. Weththasinghe, P., Rocha, S.R., Hansen, J.Ø., Øyås, O., Lagos, L., Mydland, L.T., Øverland, M. "Downstream processing of black soldier fly (*Hermetia illucens*) larvae: effects on growth performance and gut microbiota of Atlantic salmon (*Salmo salar*)". XX International Symposium on Fish Nutrition and Feeding Towards Precision Fish Nutrition and Feeding. 5-9 June 2022, Sorrento, Italy.
- 2. Weththasinghe, P., Lagos, L., Hansen, J.Ø., Mydland, L.T., Øverland, M. "Full-fat meal and fractions of black soldier fly *Hermetia illucens* larvae in diets for Atlantic salmon *Salmo salar*: effects on nutrient digestibility, growth performance and gut health". Aquaculture Europe 21 Abstracts. 4-7 October 2021, Madeira, Portugal. pp 1369-1377.
- Melenchón F., Larrán A.M., de Mercado E., Weththasinghe P., Lagos L., Mercado L., Cortés M.S., Tomás-Almenar C. "Insect-based diets for rainbow trout (*Oncorhynchus mykiss*) and its impact on gut health and protein utilization". Aquaculture Europe 20 Abstracts. 12-15 April 2020. AE 2020 online. pp 368-369.
- 4. Weththasinghe, P., Liyanage, R., Thathsarani, R., Jayawardana, B.C. "Effect of dietary Spirulina (Spirulina platensis) supplementation on growth performance, skin coloration and gut microbiology in goldfish (Carassius auratus)". Abstracts of 6th International Conference on Agriculture & Fisheries; Systems & Technology 2020 (E-volume). 6 November 2020 Online, Colombo, Sri Lanka. pp 18.
- Weththasinghe, P., Lagos, L., Hansen, J.Ø., Mydland, L.T., Øverland, M. "The effect of dietary black soldier fly larvae Hermetia illucens meal and paste on growth performances and immune parameters in Atlantic Salmon Salmo salar". Aquaculture Europe 19 Abstracts. 7-10 October 2019, Berlin, Germany. pp 1628-1629.
- Weththasinghe, P., Lagos, L., Hansen, J.Ø., Mydland, L.T., Øverland, M. "The effect of dietary black soldier fly larvae Hermetia illucens meal and paste on growth performances and immune parameters in Atlantic Salmon Salmo salar". Aquaculture Europe 19 Abstracts. 7-10 October 2019, Berlin, Germany. pp 1628-1629.
- 7. Jayawardana, B.C., Liyanage, R., Vidanarachchi, J.K., Keerthikumara, A., Weththasinghe, P. "Dietary supplementation of dried *Spirulina Platensis* on growth performances of broiler chicken". Proceedings of the Peradeniya University International Research Session (IPURSE 2015). 5-6 November 2015, University of Peradeniya, Sri Lanka. Vol. 19, pp. 143.
- 8. Jayawardana, B.C., Liyanage, R., Vidanarachchi, J.K., Chandrasiri, D., Weththasinghe, P. "Comparison of nutritional and functional properties of raw and processed mung bean (*Vigna Radiata*)". Proceedings of the Peradeniya University International Research Session (IPURSE 2015). 5-6 November 2015, University of Peradeniya, Sri Lanka. Vol. 19, pp. 144.
- 9. Liyanage, R., Kiramage, C., Weththasinghe, P., Rizliya, V., Jayathilake, C., Jayawardana, B.C., Vidanarachchi, J.K. "Investigate the effect of processed mung bean (*Vigna Radiata L.*) powder incorporated experimental diets on serum lipid and glucose concentrations in Wistar rats (*Rattus Norvegicus*)". Proceedings of the Peradeniya University International Research Session (IPURSE 2015). 5-6 November 2015, University of Peradeniya, Sri Lanka. Vol. 19, pp. 146.

- 10. Weththasinghe, P., Liyanage, R., Thotawattage, G.H., Jayawardana, B.C. "Anti-oxidant effects of black tea extracts in pork sausages". Proceedings of international conference: "Public Health Conference 2014". 12-14 July 2014, Bangkok, Thailand. pp. 6-7.
- 11. Perera, O.S., Liyanage, R., **Weththasinghe, P.**, Jayawardana, B.C., Vidanarachchi, J.K., Fernando, P.S., Sivakanesan, R. "**Raw and processed cowpea** (*Vigna Unguiculata* **L. Walp.**) incorporated experimental diets modulate serum cholesterol and serum antioxidant activity in Wistar rats (*Rattus Norvegicus*)". Proceedings of the 16<sup>th</sup> Food Innovation Asia Conference 2014. 12-13 June 2014, BITEC, Bangkok, Thailand. pp. 1.
- 12. Perera, O.S., **Weththasinghe**, **P.**, Liyanage, R., Jayawardana, B.C., Vidanarachchi, J.K., R. Sivakanesan. "**Nutritional properties and antioxidant content of commonly consumed cowpea cultivars in Sri Lanka**". Proceedings of the Peradeniya University International Research Session, Sri Lanka. 12-14 July 2014, University of Peradeniya, Sri Lanka. Vol. 18, pp. 205.
- 13. Gunasegaram, S., **Weththasinghe, P.**, Liyanage, R., Vidanarachchi, J.K., Jayawardana, B.C. "**Investigating** *in vivo* **hypolipidemic, hypoglycemic and antioxidative capacity of banana blossom** (*Musa spp.*) incorporated experimental diets in Wistar rats fed with cholesterol". Proceedings of 2<sup>nd</sup> International Symposium on Driving Research towards Economy, Opportunities & Challenges 2014. 13-14 November 2014, The National Institute of Fundamental Studies, Kandy, Sri Lanka. pp. 25.

#### **RESEARCH GRANTS**

**University Research Grant Year-2022**, University of Peradeniya, Sri Lanka. New Project – Grant No. URG/2022/03/Ag.

Project title: Development of an omega-3 enriched sustainable feed ingredient – Tailoring of fatty acid composition of black soldier fly (*Hermetia illucens*) larvae using fish offal and seaweed.

**University Research Grant Year-2016**, University of Peradeniya, Sri Lanka. New Project – Grant No. URG/2016/02/Ag.

Project title: Effect of dietary Spirulina (Spirulina platensis) supplementation on growth, fertility, coloration, and leucocyte count in Goldfish (Carassius auratus).