

DR. (Mrs.) H .M. THEJA HERATH

Principal Research Scientist

Food Technology Section



Qualifications

B Sc Special Degree in Chemistry (Peradeniya, 1993)

M Phil – Food Chemistry (University of Sri Jayewardenepura, 2004)

P hD – Food Chemistry and Nutrition (University of Kelaniya, 2013)

Research Fellowship - Bio-active functional food factors (NFRI, **Japan** -one year: 8/2000-9/2001).

Chartered Chemist - designations offered by the Institute of Chemistry (I Chem), Sri Lanka

Contacts

Tel: 071 4433288; 0112797342

E-mail: theja@iti.lk

Specialized Fields

Food Science and Technology majoring Food Chemistry, Research and development

Food product and processes development

Food Analysis; physical, chemical and sensory properties of food products, Nutritional labeling

Nutrition and Bio- Chemistry, Enzyme Technology

Functional Food formulation and analysis of functional food factors

Grain processing and cereal based products development

Interest Areas

Starch chemistry, Modified /functional starch and product development

Protein activity and bio chemistry, enzyme technology, Functional Foods

Awards and Recognition

- a. International **Best Researcher Award-2024**, in New Science Inventions – Subdomain in Food Technology and Chemistry -
- b. International **Women Research Award-2023**, International Research Awards on computer vision.
- c. Achieved **Silver Medal winning award** for “Dulme Precooked Cereal Mixture for Children and Adults” in the field of Food Technology in Open Caterogy at **Sahasak Nimavum-2021** national invention and innovation competition.
- d. Achieved **Bronze Medal winning award** for “Isotonic Nas Narang Sport Drink” in the field of Food Technology in Open Caterogy at **Sahasak Nimavum-2021** national invention and innovation competition.
- e. Achieved **Silver Medal winning award** for ‘Low added sucrose nutritious scone/Flat bread’ in the technical field of Food Technology at **Sahasak Nimavum -2018** national invention and innovation competition.
- f. Received the **NRC merit award** for scientific publication 2015.
- g. Received the **NRC merit awards** for scientific publication 2017.
- h. **Achievement Award** was obtained for the best commercialized product/ technology transfer at 5th Biennial Research Symposium, ITI 2021.
- i. **Achievement Award** was obtained for the Best commercialized product / technology Award at 3rd Biennial Research Symposium – 2017, ITI, Sri Lanka.
- j. Received the **Appreciation Awards** for publishing research articles in SCI/SCI expanded journals at the 3rd Biennial Research Symposium 2017, ITI, Sri Lanka.
- k. Achieved the **Best innovative technology transfer Award** during the period June 2015 –

September 2017 at 3rd Biennial Research Symposium – 2017, ITI, Sri Lanka.

- l. The Best **Innovative Product Award** at Western Provincial Best Innovative Product Exhibition.
- m. An **Appreciation Award** for publishing research articles in SCI/SCI expanded journals at the 4th Biennial Research Symposium 2019 ITI, Sri Lanka.
- n. Received an **Appreciation Award** in recognition of award winning academic and research excellence at the 4th Biennial Research Symposium-2019, ITI, Sri Lanka.

Publications

A. RESEARCH PUBLICATIONS

Publications in peer reviewed journals (International)

1. **Herath H. M. T.**, Ishikawa Y. T. and Yamaki K. (2003). Inhibitory Effect of Some Flavonoids on Tumor Necrosis Factor - ∞ Production in Lipopolysaccharides – Stimulated Mouse Macrophage Cell Line J774.1. **Journal of Medical Food** 6 (4): 365-370. (SCI)
2. **Herath H. M. T.**, Rajapakse D., Wimalasena S. and Weerasooriya M. K.B. (2011). Iron content and bio-availability studies in some Sri Lankan rice varieties. **International Journal of Food Science and technology** 46:1679-1684. (SCI)
3. Dipti S. S., Bergman C., Indrasari S. D., **Herath T.**, Hall R., Lee H., Habibi F., Bassinello P. Z, Graterol E., Ferraz J.P. and Fitzgerald* M. (2012). A Review Article: The potential of rice to offer solutions for malnutrition and chronic diseases. **Rice** 5 (16): 1-18. (SCI)
4. Gunathilake K.G.T., **Herath H. M. T.** and Wansapala M. A. J. (2016). Comparison of nutritional and functional properties of mung bean (*Vigna radiata*) and cowpea (*Vigna unguiculata*) protein isolates processed by isoelectric precipitation. **International Journal of Innovative Research in Technology** 3(2): ISSN:2349-6002, 139-148.
5. Kulasooryage Gangani Tharuka Gunathilake, **Theja Herath** and Jagath Wansapala (2016). Comparison of physico-chemical properties of selected locally available legumes varieties (Mung bean, cowpea and soy bean). **Potravinarstvo® Scientific Journal for Food Industry** 10 (1) 424-430. doi:10.5219/631.
6. Samaraweera S.A.P.U., Aruma B.G.C.J. De Silva, Madara D.W. Samaranayake, Katudeni V.T. Gunawardhane and **Herath Mudiyansele T. Herath** (2016). Potential application of locally grown Sri Lankan corn varieties to utilize in the food industry; Corn Starch and Corn Syrup. **International Journal of Innovative Research in Technology & Science** 4(6)17-22.
7. Eashwarage I. S., **Herath H. M. T.** and Gunathilake K. G. T. (2017). Dietary fibre, Resistant Starch and In-vitro starch digestibility of selected eleven commonly consumed legumes. **Research Journal of Chemical Sciences** 7 (2) 1-7.
8. Keerthana Sivakumaran, Jagath Wansapala M A, **Theja Herath H M.** (2017). Comparison of contents of phytates and saponins and the effect of processing in some selected edible beans in Sri Lanka. **International Journal of Food Science and Nutrition** 2 (2) 96-100. (SCI)

9. Perera O.D.A.N, Eashwarage I.S. and **Herath H.M.T.** (2017). Development of Dietary Fibre Rich Multi legumes Flake Mix. ***Journal of Pharmacognancy and Natural products*** 3 (1). DOI: 10.4172/2472-0992.1000135.
10. Samaranayake M.D.W., De Silva A.B.G.C.J, Ranitha Fernando, Gunawardhane K.V.T and **Herath H. M. T.** (2017). Optimization of liquefaction and saccharification times for laboratory scale production of glucose syrup from Cassava starch and scaling up process of optimized conditions at pilot scale. ***Research Journal of Chemical Sciences*** 7 (7): 1-5.
11. Sivakumaran K., Wansapala M.A.J. and **Herath H.M.T.** (2017). Total phosphorus, Phytate phosphorus contents and the correlation with amylose in selected edible beans in Sri Lanka. ***International Journal of Science and Research*** 6(9): 2002-2006.
12. **Herath H. M. T.**, Bhagya Shanaki K. M., Dineshka Priyangani, De Silva M. S. W. (2018). Formulation and physico-chemical properties of dietary fiber enhanced low glycemic multi-grain Noodles for adults using locally available cereals and legumes. ***Research Journal of Chemical Sciences*** 8 (4):1-9.
13. **Herath H. M. T.**, Dinesha Tharangani Rupasinghe, K. M, Dineshka Priyangani, De Silva M. S. W. (2018). Formulation and physico-chemical properties of dietary fiber enhanced low glycemic multi-grain Crackers for adults using locally available cereals and legumes. ***Research Journal of Chemical Sciences*** 8(8):1-8.
14. **Herath H. M. T.**, Gunathilake K.G.T., Eashwarage I.S, Keerthana Sivakumaran and Ranathunga R.A.A. (2018). Physico-chemical and *In-Vitro* Glycemic Indices of Popular Pulse Varieties Grown in Sri Lanka. ***International Journal of Food Science and Nutrition***3(5):137-143. (SCI)
15. **Herath H. M. T.** and Samaranayak M.W. D. (2019). A Pilot Scale Study - Rice Flour Fortification Programme in Sri Lankan Practice. ***Research Journal of Chemical Science*** 9 (4); 1-10.
16. **Theja Herath H. M.**, Samaranayake M. D. W. Liyanage S. and Abeysekera W. K. S. M. (2020). Horse Gram: an incredible food grain as a potential source of functional and nutritional food ingredient. ***International Journal of Food Science and Nutrition*** 5 (4): 93-101. (SCI)
17. Lokuge L. L. P. S., **Herath H. M. T.**, Samaranayake M. D. W., Liyanage S. L., Ratnayake R. H. M. K. and Abeysekera W.K.S.M. (2020). A Comparative Study on Potential Antioxidants and Antioxidant Activity in Raw and Cooked Selected Locally Grown Legumes in Sri Lanka. ***Asian Food Science Journal*** 17 (4): 14-27.
18. Abeykoon, A. M. C. N., **Herath, H. M. T.** and Jayasinghe, M. A. (2021). In-vitro Analysis of Trypsin and Alpha - Amylase Inhibitory Activities in Selected Legume Varieties in Sri Lanka. ***Asian Food Science Journal*** 20(1), 1-9.
19. Navoda N. P. G. D., Samaranayake M. D. W., Liyanage S. L., **Herath H. M. T.** and Jayasinghe J. M. J. K. (2021). Determination of Functional Properties of Sri

Lankan Ambarella (*Spondias dulcis* Forst. syn. *Spondias cytherea* Sonn.) Fruit and Development of Vacuum Dried Ambarella Fruit Powder and Incorporated Soup Mix. **Asian Food Science Journal** 20(11): 113-122.

20. Pushpakumara A. G. S. K., Madage S. S. K., Gunasekara N., Samaranayake M. D. W. and **Herath H. M. T.** (2022). Designing of Ready to Eat Convenient Mid - Day Meal for Children (5- 10 yrs) and Adolescents (11-19 yrs) of Sri Lanka Based on Nutritional Perspective. **European Journal of Nutrition & Food Safety** 14 (7): 1-12.
21. Idangodage I. P. A., De Siva A. B. C. G. J., **Herath H. M. T.** and Jayasinghe J. M. J. K. (2023). Development and Physico-chemical Evaluation of an Isotonic Nas Narang (*Citrus madurensis*) Sports Drink. **Journal of Advances in Food Science & Technology** 10 (2): 75-85.
22. Pushpakumara A.G.S.K. Gunasesakara N., **Herath H. M.T.** and T. Madhujith (2023). Impact of Partial Replacement of Wheat Flour with Chickpea Flour on Physico-Chemical and Sensory Properties of Tea Buns. **International Journal of Food Properties** 26 (1): 1522-1533. (SCI)
23. Wickramaarachchi L. A., Rajawardana D. U., Gunasekara M.M.N.P., **Herath H.M.T.** and Jayasinghe M. A. 2024. Development and evaluation of physico-chemical, sensorial, and shelf- life of grain-milk beverages. **Journal of Cereal Science** 116: 1-8. (SCI)
24. Hansika G. D. R., Herath H. M. T. and Perera O.D.A.N. (2024). Impact on Incorporation of Purple Yam Flour (*Dioscorea alata* var. *Purpurea*) in Development of Multi-Grain Nutri Bar. **European Journal of Medical and Health Research** 2 (5): 206-216.
25. Kariyawasam K.P., Herath H.M.T., Gunasekara M.M.N.P., Jayawardana T.M.D.A. and Pushpakumara A.G.S.K. (2025). Assessing the Effect of Temperature on Nutrient Retention in Canistel Fruit (*Pouteria campechiana*) and Coconut Milk Formulation. **Current Functional Foods**.3: 78-88.

Publications in peer reviewed journals (Local)

1. **Herath H. M. T.**, Rajapakse D., Wimalasena S. and Weerasooriya M. K.B. (2016). Zinc content and prediction of bio-availability of zinc in some locally grown rice (*Oryza sativa* L.) varieties in Sri Lanka. **Journal of National Science Foundation** 44(30):291-299. (SCI)
2. **2.**Samaranayake M.D.W., Yathursan S., Abeysekera W.K.S.M. and **Herath H.M.T.** (2017). NUTRITIONAL AND ANTIOXIDANT PROPERTIES OF SELECTED TRADITIONAL RICE (*Oryza sativa* L.) VARIETIES OF SRI LANKA, **Sri Lankan J. Biol.** 2 (2): 25-35.
3. Ranaweera N.I., Pitippanarachchi R.C., **Herath H. M. T.** and Chandramali D.V.P. (2022). Development of vacuum-dried powder and drinking yoghurt from Soursop fruit (*Annona muricata* L.) and evaluation of their physico-chemical and functional properties. **Journal of National Science Foundation Sri Lanka** 50 (2): 489 – 502.

(SCI)

4. Wickramarachchi L. A., Jayasinghe M. and Herath H. M. T. (2022). Review Article; Cereal Based Beverages for Nutrition Security: An Integrative Review. *Journal of the University of Ruhunu* 10(2):35-45.

COMMUNICATIONS

International communications

1. Alagiyawannage S., **Herath H.M.T.** and Rajapakse D. (2009). Fermentation as a tool to enhance bio-availability of nutrients from rice based products. 4th International Conference on “Fermented Foods Health Status and Social Well Being”, pp. 12-13.
2. **Herath H.M.T.**, Gunasekara V. V. and Rajapakse D. (2010). Evaluation of grain quality parameters in some Sri Lankan rice varieties.” Proceedings 3rd Inter Rice Congress (IRC2010), pp176.
3. Wickramarachchi L. A., **Herath H. M. T.**, Rajawardene D. U. and Jayasinghe M. (2022). Development of a grain-milk functional beverage and evaluation of physico-chemical and sensory properties. proceedings of *Vingnanam Research Conference (VRC)*, Track C: Biological, Food Science and Technology, Jaffna University International Research Conference-2022, Sri Lanka, pp 41.
4. Wickramarachchi L. A., **Herath H. M. T.**, Rajawardene D. U. and Jayasinghe M. (2022). Development of a milk-grain food supplement and determination of physico-chemical properties. Proceedings of Vingnanam Research Conference (VRC). Track C: Biological, Food Science and Technology, Jaffna University International Research Conference-2022, Sri Lanka, pp 44

Local communications

- 01 **Herath H.M.T.**, Sampath L.B.L. and Gooneratne J. (1996). Some problems related to the quantification of iron in iron fortified wheat flours. Proceedings Sri Lanka Asso. Advmt of Sci, pp 211-212.
- 02 Gooneratne J., Premakanthie A.S. and **Herath,H.M.T.** (1996). Sensory evaluation trials on products using iron-fortified wheat flours. Proceedings Sri Lanka Asso. Advmt of Sci. pp. 90.
- 03 **Herath H.M.T.**, Gooneratne J. and Abeysekara A. M. (2000). Chemical characterization of Pectic substances from *Cucurbita* cultivar. Proceedings Sri Lanka Asso Advmt of Sci. pp. 252.
- 04 **Herath H.M.T.**, Gooneratne J. and A.M. Abeysekara. (2002). Characteristics of pectic polysaccharides of cell walls of Wattakka.Cultivar (*Cucurbita moschata*). Proceedings Sri Lanka Asso. Admnt of Sci. pp. 260.
- 05 **Herath H.M.T.**, Rajapakse D., Ediriweera N. and BentotaA. P. (2007). Screening of traditional rice varieties of Sri Lanka for micro-nutrients; Iron and Zinc and Phosphorus. Proceedings Sri Lanka Asso. Advmt of Sci. pp 132

- 06 Padmananda H.A.P., **Herath H. M. T.**, Rajapakse D., Ediriweera N. and Bentota A. P. (2007). Evaluation of rice grain quality in some Sri Lankan rice varieties. Proceedings Sri Lanka Asso. Admnt of Sci. pp 126.
- 07 **Herath H.M.T.**, Rajapakse D., Wimalasena S., Bentota A. and Ediriweera N. (2009). Micronutrients; Iron, Zinc and Phytate Contents in Some Sri Lankan Rice Varieties. Proceedings Nutrition Society of Sri Lanka. pp 9.
- 08 **Herath H.M.T.**, Abeywickrama W.D.C.S., Rajapakse, D., Wimalasena S., Bentota A. and Ediriweera N. (2009) The Study on Correlation between Phosphorus and Phytic acid Contents Some Sri Lankan Rice Varieties, *Chemistry of Sri Lanka* **26** (2): 23-24.
- 09 Fernando G.S.N., **Herath H.M.T.** and Wijeratne V. (2009) Evaluation of Functional Properties of some Traditional and Improved Rice Varieties with Special Reference to Glycemic Index. Proceedings 2nd Annual Symposium, University of Ruhunu, pp.102.
- 10 **Herath H. M. T.**, Edirisooriya D.D., Rajapakse D., Wimalasena S. and Weerasooriya M.K.B. (2010). Protein, fat, iron and zinc contents of rice varieties harvested during *Maha* season of year 2005/2006. *Chemistry in Sri Lanka*, **27** (2):12.
- 11 **Herath H. M. T.**, Rajapakse D., Wimalasena S. and Weerasooriya M.K.B. (2010). Screening of endosperm iron dense rice varieties for better human nutrition. *Chemistry in Sri Lanka*, **27** (2)11.
- 12 **Herath H.M.T.**, Rajapakse D., Wimalasena S. and Weerasooriya M.K.B. (2010). Selection of endosperm iron dense rice varieties to combat iron deficiency. Proceedings Nutrition Society of Sri Lanka. pp11.
- 13 **Herath H. M. T.**, Rajapakse D., Aponso D. M. K. (2013). Formulation of a nutritious biscuit using brown rice as a functional food ingredient. Proceedings Nutrition Society of Sri Lanka. pp.32.
- 14 **Herath H. M. T.**, Rajapakse D. (2013). DPPH radical scavenging activity of rice bran obtained from five varieties of rice grown in Sri Lanka. Proceedings Sri Lanka Asso. Admnt of Sci. pp152.
- 15 Liyanage J. L., Ranaweera K. K. D. S. and **Herath H. M. T.** (2014). Study on avocado oil extraction and physico-chemical properties. Proceedings of Sri Lanka Asso. Admnt of Sci. pp 85.
- 16 Herath N. A. and **Herath H. M. T.** (2014). Iron content and *in-vitro* availability of iron in some popular consumed legumes in Sri Lanka, Proceedings of Sri Lanka Asso. Admnt of Sci. pp 140.
- 17 Dharmaratne N.U., Abeysekara W.K.S.M., Premakumara G.A.S., **Herath H.M.T.**, Sotheeswaran S., Sivapragasm N., Thavaraj D. and Thavaraj P. (2014). Rice fortification with iron fumarate by spherification: A preliminary study. Proceedings of Sri Lanka Asso. Admnt of Sci. pp 115.
- 18 Fernando W.R.D., **Herath H.M.T.** and P.M.H.D. Pathiraja (2014). Undergraduate Research Symposium, Faculty of Livestock Fisheries & Nutrition, Wayamba University, **pp 44.**
- 19 Gimanie kasunmala I.G., Jagath Wansapala and **Theja Herath H.M.** (2015). Development of a high caloric nutritional porridge formula enriches with vitamin A& iron, for the primary school children. Proceedings of the Sri Lanka Asso. Admnt of Sci, pp. 21.

- 20 Thanushan S., **Herath H.M.T.** and Perera O.D.A.N. (2015). Formulation of cereal based instant mix from locally available whole grain cereals with “Good Dietary Fiber source” for elderly population. Undergraduate Research Symposium, Faculty of Livestock Fisheries & Nutrition, Wayamba University, pp. 35.
- 21 Rupasinghe K.M.D.T., **Herath H.M.T.** and De Silva M.S.W. (2015). Formulation of dietary fibre enhanced cracker for adults using selected locally available whole grain cereals and legume flours. Undergraduate Research Symposium, Faculty of Livestock Fisheries & Nutrition, Wayamba University, pp. 44.
- 22 Samaranyake M.D.W., De Silva A.B.G.C. J., **Herath H. M. T.**, Gunawardhana K.V.T. and Fernando W. R. D. (2015). Optimization of liquefaction and saccharification times for laboratory scale production of glucose syrup from Sri Lankan cassava starch, 2nd Biennial Research Symposium – 2015, ITI, Sri Lanka, pp.6.
- 23 Sutharsana Y., Samaranyake M.D.W., Abysekera W.K.S.M. and **Herath H.M.T.** (2015). Nutritional composition, fatty acid profile and antioxidant activity of selected traditional rice (*Oryza sativa L.*) varieties of Sri Lanka. Proceedings of the Institute of Biology, pp 55.
- 24 Shanaki K.M.B., **Herath H.M.T.** and De Silva M.S.W (2016). Formulation of dietary fibre enhanced multi-grain noodles for adults using selected locally available whole grain cereals and legumes. Undergraduate Research Symposium-2016, Faculty of Livestock Fisheries & Nutrition, University of Wayamba, pp.51.
- 25 Eashwarage I.S., Perera O.D.A.N. and **Herath H.M.T.** (2016). Development of dietary fibre rich multi-grain legumes flake mix. Undergraduate Research Symposium-2016, Faculty of Livestock Fisheries & Nutrition, University of Wayamba, pp.28.
- 26 **Herath H. M.T.** and Samaranyake M. W. D. (2017). Rice flour fortification with iron and the acceptability of the traditional food products made from fortified flour. Proceedings of the Sri Lanka Asso. Admnt of Sci, pp. 193.
- 27 Wathsala. L.H.A.G., **Herath H.M.T.** and Wansapala M.A.J. (2017). Study on physico chemical and fatty acid profile of Sri Lankan Ground nuts (*Arachishypogaea L.*). Proceedings of the Sri Lanka Asso. Admnt of Sci, pp. 97.
- 28 Perera O.D.A.N., Eashwarage I.S. and **Herath H.M.T.** (2017). Development of a flake mix using legumes with high total dietary fibre, resistant starch and low glycemic index. Proceedings of the Sri Lanka Asso. Admnt of Sci, pp. 32.
- 29 De Silva A.B.G.C. J., Samaranyake, M.W.D., Kariyawasam K.D.K.D.L., Gunawardhana K.V.T. and **H. M. T. Herath** (2017). Establishment of laboratory scale processing for glucose syrup manufacturing using broken rice grains. 3rd Biennial Research Symposium – 2017, ITI, Sri Lanka, pp.45.
- 30 Wijesekara G.P., Perera O.D.A.N. and **Herath H.M.T.** (2017). Cereal based, high energy product for children under five years with moderate acute mal nutrition. Undergraduate Research Symposium, Faculty of Livestock Fisheries & Nutrition, Wayamba University of Sri Lanka, pp. 80.
- 31 Lokuge L.L.P.S., **Herath H.M.T.**, Liyanage S.L., Samaranyake M.D.W., Ratnayake R.H.M.K. and Abeswekara W.K.S.M. (2018). Determination of Antioxidant Potential and Polyphenol Content of Selected Pulses in Sri Lanka. *Proceedings of 17th Agricultural Research Symposium*. University of Wayaba, pp. 290-294.

- 32 Kathirgamanathar S., Medawatta H.M.U.L., Priyangani A.W.D., Arawwawala L.D.A.M., **Herath H.M.T.** and Jayasinghe G.D.D.R. (2018). Antioxidants properties and nutritional value of leafy vegetables used in herbal porridges. Asian Symposium on medical plants, Spices and other natural products XVI -2018. pp. 220.
- 33 Himasari H. N., **Herath H. M. T.**, Silva M. S. W. De.and Jayawardana T. M. D. A.(2019). Development of Horse Gram Based Ready To Serve Nutritious Drink. Extended Abstract-Food Techno 2019 (5th Annual Session of the IFSTSL), pp. 47-51.
- 34 **Herath H.M.T.**and P. Yashora Ransilu (2019). Development and quality evaluation of nutritious scones. Proceedings of the Sri Lanka Asso. Advmt of Sci, pp 37.
- 35 Abeykoon A.M.C.N., Gunasekara M.A., **Herath H.M.T.**, Liyanage S. L. and Jayasinghe M. (2019). Effect of Pressure Cooking on Trypsin Inhibitor Activity of Locally Grown Legume Varieties in Sri Lanka. Proceedings of 4th Biennial Research Symposium – 2019, ITI, Sri Lanka, pp.5.
- 36 **Herath H.M.T.**, Yashora Ransilu P. and Mahanama H.A.H.M. (2019). Horse Gram; A Source of Functional Food Ingredient. Proceedings of 4th Biennial Research Symposium – 2019, ITI, Sri Lanka, pp.11.
- 37 Kathirgamanathar S., Medawatta H.M.U.L., **Herath H.M.T.**, Ransilu P.Y., Arawwawala L.D.A.M., and Priyangani A.W.D., (2019). Antioxidants rich instant herbal porridges from leafy vegetables. Proceedings of 4th Biennial Research Symposium – 2019, ITI, Sri Lanka, pp.13.
- 38 Navoda N.P.G.D., Samaranyake M.D.W., Liyanage S.L., Pitipanaarachchi, R.C., **Herath H.M.T.** and Jayasinghe J.M.J.K. (2020). Determination of functional properties of Sri Lankan Ambarella (*Spondiasdulcis* Forst. syn. &*Spondiascytherea* Sonn.) fruit and development of value-added products. Proceedings of the Sri Lanka Asso. Advmt of Sci, pp 11.
- 39 Ranaweera N.I., Pitipanaarachchi R.C., **Herath H.M.T.** and Chandramali D.V.P. (2020). Evaluation of physicochemical and functional properties of soursop (*Annona muricata*) incorporated drinking yoghurt and soursop fruit powder. Proceedings of the Sri Lanka Asso. Advmt of Sci, pp 15.
- 40 Pushpakumara A. G. S. K., Samarawickrama D.S., Jayawardana S.A.S., **Herath H.M.T.** and Madhujith T. (2021). A Preliminary Study on Food Consumption Patterns and Preferences of Children and Adolescents in the Colombo District, Proceedings of 77th Annual Session of Sri Lanka Asso. Advmt of Sci, pp 108.
- 41 Pushpakumara A. G. S. K., Samarawickrama D.S., Jayawardana S.A.S., **Herath H.M.T.** and Madhujith, T. (2021). A Study on Consumer Perception and Purchasing Behaviour toward Ready-to-Eat Food among Students and Parents in Colombo District, Sri Lanka. *Proceeding of 77th Annual Session of Sri Lanka Asso. Advmt of Sci*, pp 15.
- 42 Idangodage I.P.A., De Siva A.B.C.G.J., **Herath H.M.T.** and Jayasinghe J.M.J.K. (2021). Determination of physical, chemical and functional properties of Nas Narang fruit (*Citrus madurensis*) juice and development of an “Isotonic Nas Narang sports drink” Proceedings of 5th Biennial Research Symposium – 2021, ITI, Sri Lanka, pp.2.
- 43 Asanka W.G.K.L., Pitipanaarachchi R.C., **Herath H.M.T.** and Jayasinghe J.M.J.K. (2021). Development of Veralu (*Elaeocarpus Serratus*) fruit incorporated Pudding and investigation

- of Physico-chemical and Functional Properties. *Proceedings of 5th Biennial Research Symposium – 2021*, ITI, Sri Lanka, pp.3.
- 44 Kathirgamanathar S. *, **Herath H.M.T.**, Medawatte H.M.U.I., Arawwawala L.D.A.M. and Priyangani A. W.D. (2021). Development of an instant herbal porridge having functional properties and its shelf life evaluation. *Proceedings of 5th Biennial Research Symposium 2021*, ITI, Sri Lanka, pp.1.
- 45 Wickramarachchi L. A., Herath **H. M. T.**, Rajawardene D. U. and Jayasinghe M. (2022). Development of a grain-milk functional beverage and evaluation of physico-chemical and sensory properties. *proceedings of Vingnanam Research Conference (VRC), Track C: Biological, Food Science and Technology, Jaffna University International Research Conference-2022*, Sri Lanka, pp 41.
- 46 Wickramarachchi L. A., **Herath H. M. T.**, Rajawardene D. U. and Jayasinghe M. (2022). Development of a milk-grain food supplement and determination of physico-chemical properties. *Proceedings of Vingnanam Research Conference (VRC). Track C: Biological, Food Science and Technology, Jaffna University International Research Conference-2022*, Sri Lanka, pp 44.
- 47 Grero K. M. U., Pathirage P.M.T.D. and **Herath H.M.T.** (2022). Nutritional information and healthiness of ready-to-eat/cook packaged food products available for children in Sri Lanka and attitudes of parents living in western province toward purchasing. *Proceedings of the International Conference on Applied and Pure Sciences -2022*. University of Kelaniya. pp. 91.
- 48 Wickramarachchi L. A., **Herath H. M. T.**, Rajawardene D. U. and Jayasinghe M. (2022). Development of a grain-milk pasteurized functional beverage and evaluation of physico-chemical and microbial properties. *Proceedings of 78th Annual Session of Sri Lanka Asso. Advmt of Sci*, pp 108.
- 49 Hansika G.D.R., **Herath H.M.T.** and Perera O.D.A.N. (2022). Formulation of Purple yam (*Dioscorea alata* var. *Purpurea*) and Kaluheenati rice (*Oryza sativa* L.) based multigrain nutri-bar. *Proceeding of 9th Undergraduate Research Symposium-URoS. Faculty of Livestock, Fisheries & Nutrition, Wayaba University of Sri Lanka*. pp 55.
- 50 Pushpakumara A. G. S. K., Wickramaarachchi L. A. and **Herath H.M.T.** (2023). Development and Nutritional Analysis of Purple Yam (*Dioscorea alata* L.) Flour Based Healthy Pudding Mix. *Proceedings of the Annual Scientific Sessions of the Nutrition Society of Sri Lanka – 2023*.pp 55.
- 51 Wickramaarachchi L. A., Kuruppu A.I., Ranasinghe P., **Herath T.** and Samarakoon K.W. (2023). Antioxidant Potential of Some Selected Underutilized Fruit Species Grown in Sri Lanka. *Proceedings of 16th International Research Conference. General Sri Kotelawala Defence University*. pp 34.
- 52 Pushpakumara A.G.S.K., Wickramaarachchi L.A., Kariyawasam K.P. and **Herath H.M.T.** (2023). A comparative study on physico-chemical, nutritional and antioxidant properties of Purple Yam (*Dioscorea alata* Linn) based pudding developed from cow's milk and coconut milk. *Proceedings of 6th Biennial - International Research Symposium – 2023*, Industrial Technology Institute, Sri Lanka. pp 16.
- 53 Kariyawasam K.P., **Herath H.M.T.**, Gunasekara N. and Pushpakumara A.G.S.K. (2023). Physico-chemical, nutritional, antioxidant and sensory properties of Canistel Fruit (*Pouteria*

- campechiana) incorporated beverage. Proceedings of 6th Biennial - International Research Symposium – 2023, Industrial Technology Institute, Sri Lanka. pp 18.
- 54 Wickramaarachchi L.A., Ranasinghe P, **Herath H.M.T.**, Samarakoon, K.W. and Samarawickrama D.S. (2023). Antioxidant potential of fruit powders developed from selected underutilized fruit species in Sri Lanka. Proceedings of 6th Biennial - International Research Symposium – 2023, Industrial Technology Institute, Sri Lanka. pp 28.
- 55 Samudrika T.D.Y., Priyangani A.W.D., Samaranayake M.D.W., Jayawardhana T.M.D.A., Binduhewa A.M.C.U., Medawatte H.M.U.I., Kathirgamanthar S., **Herath, H.M.T.**, Menike A.A.I.S., Piratheepkumar R. and Paheerathan V. (2023). Asparagus racemosus Willd instant porridge: Supplementary food development for diabetes mellitus patients. Proceedings of 6th Biennial - International Research Symposium – 2023, Industrial Technology Institute, Sri Lanka. pp 20.
- 56 Anupama W.W., **Herath H.M.T.**, Rajawardana D.U., Gunasekara M.M.N.P. and Jayasinghe J.M.J.K. (2023). Development of milk-grain food supplements and determination of fatty acid profile. Proceedings of ICIET/Food Security, Nutrition and Processing Technology 2023, Faculty of Technology, University of Sri Jayewardenepura, Sri Lanka.
- 57 Anupama W.W., **Herath H.M.T.**, Rajawardana D. U. and Jayasinghe J.M.J.K. 2024. Development of Milk-Grain Food Supplements and Determination of the Trypsin Inhibitory Factor and Texture Profile Analysis. Proceedings of National Symposium on Agriculture and Life Sciences 24 (NSALS'24). pp 109.
- 58 Wickramaarachchi L.A., Kariyawasam K.P., **Herath H.M.T.** 2024. Evaluation of Food Colour Regulations Persist in Sri Lanka with Comparison of the Global and Comparative Food Colour Regulations. Proceedings of Annual Scientific Sessions of the Nutrition Society Sri Lanka (NSSL'24). pp 51.
- 59 Jayawardana T.M.D.A.*, Rajawardana D.U., **Herath H.M.T.**, Nanayakkara C.M., Liyanage c. S.L. and Samaranayake M.D.W. (2024). Prebiotic potential of the finger millet variety, "Oshadha" on Lactobacillus acidophilus (LA 5). Proceedings of the International Symposium on Agriculture and Environment (ISAE). pp74.
- 60 Anupama W.W., **Herath H.M.T.**, Rajawardana D. U. and Jayasinghe J.M.J.K. (2024). Development of a Ready To Eat (RTE) multi-grain milk product and analysis of microbial shelf-life of the developed product. Proceedings of the International Symposium on Agriculture and Environment (ISAE). pp96.
- 61 Wickramaarachchi L.A., Kuruppu A.I., Ranasinghe P., **Herath H.M.T.** and Samarakoon K.W. (2024). Formulation of an Antioxidant Nutraceutical through the Optimization of Mixing Ratio of Antioxidant-Rich Underutilized Fruit Based on Experimental Mixture Design. Proceedings of 17th International Research Conference of the KDU, pp 17.
- 62 Kariyawasam K.P., Wickramaarachchi L.A. and **Herath H.M.T.** (2024). A Comparative Nutritional Analysis of Chick Pea Based and Wheat Flour Based Meat Analogue Formulations. Proceedings of 8th Annual Research Session of FoodTechno 2024, pp 18.
- 63 Kariyawasam K.P., Wickramaarachchi L.A. and **Herath H.M.T.** (2024). Development of Grain- Based Meat Analogue and Analysis of Sensorial and Physical Properties. Proceedings of 8th Annual Research Session of FoodTechno 2024, pp6.
- 64 Dilini Jayawardana*, Upeka Rajawardana, **Theja Herath**, Chandrika Nanayakkara, Savida Liyanage and Madara Samaranayake (2024). Evaluation of probiotic fermentative capacity of Sri Lankan traditional rice variety "Sudu Heenati"; compositional and physico-chemical

characterization. Proceedings of the 5th International Electronic Conference on Foods. pp322.

Book Publications

- 01 Rajapakse D., Premakumara G. A. S., **Herath T.**, Bentota A. P. and Wijesundara S. M. (2011). Properties of some traditional rice varieties of Sri Lanka. Industrial Technology Institute and Department of Agriculture, Ceylon Shipping Lines Ltd. Sri Lanka.
- 02 **Herath H.M.T.**, Ranathunga R.A.A. and Samaranyake M.D.W. (2016). Important Nutrition Information of Popular Grain Legume Varieties in Sri Lanka. Department of Agriculture and Industrial Technology Institute, Agriculture Publication Unit, Gannoruwa.

Book Chapter publication

- 01 Kasunmala I.G.G., Wickramasinghe I. and **Theja Herath**. (2018). Food as Nutritional Source to prevent Malnutrition among Developing Countries. *In: Trends and Prospects in Technology, Processing and Preservation*. (Eds. Paul P.K., Mahawar M.K., Arghya M., Abobatta W & Panja payel). Today and Tomorrow's Printers and Publishers, New Delhi, India. pp 457-479.

Major Projects Undertaken

Research Grants served as a Principal Investigator Wining

Research Grants

- Production of Glucose Syrup and High Protein Concentrates from locally available raw materials of broken rice, maize and manioc -2013-2016(NRC project-13-095 / SLR 3.5 Mn).
- Development of Nutritious and Healthy Food Corners for the Children/Adolescents-2020-2023 (NRC project 19-007 -Total budget – SLR 5.0 Mn).

Treasury grants

- Formulation of High Iron and High Protein Containing Rice Based Product – 2005-2006 (Treasury Grant -SLR 1.0 Mn).
- Formulation of high fibre and low sugar products -2015-2016 (Treasury Grant -SLR 1.0 Mn).
- Screening of Anti-Nutritional Factors (ANFs) and activity of bio-active proteins in locally grown edible legume varieties -2018-2019 (Treasury Grant –SLR 3.0 Mn).

Development and upgrading of technologies of value added products from selected underutilized fruits and investigation of their functional properties- 2019-2020 (Treasury Grant –SLR 5.0 Mn)

Research projects served as Co-Investigator

Wining Research Grants

- Utilization of *Cucurbita spp* for food Industry -1999-2000 (National Science Foundation - SLR 0.5 Mn).
- Wheat flour fortification programme in Sri Lanka -1996-1998 (Ministry of National Planning -SLR 4.0 Mn)

Treasury Grants

- Investigation of Health Promoting Functional Properties of Rice -2006-2008 (Treasury Grant-SLR 4.0 Mn).
- Market basket study -2013-2015 (Treasury Grant -SLR 1.5 Mn).
- Development of Shelf Stable High Energy Instant Food Products from Locally Available Raw Materials using Gamma Irradiation -2015-2017 (Treasury Grant -SLR 1.5 Mn).
- Development of nutritional instant porridge as a supplementary food for the patients with diabetic mellitus and cholesterol -2018-2019 (Treasury Grant SLR -0.7Mn)

Research project submitted

- “Improving nutritional status of people by introducing healthy agro and Fish based products: Scaling up and Commercialization of market ready products to ensure food security” was submitted to National Science Foundation for funding-2020 (Fund request: Rs. 2.5Mn).
- “Shelf life and Toxicity studies of Herbal Porridge as an Immune Booster” was submitted to NRC for continuation of ongoing project TG18/138-2020 (Fund Request: Rs. 2.5 Mn).
- “Development of a prebiotic based supplement from underutilized crops as an adjuvant in protein energy malnourished (PEM) murine model: mechanistic insights in perturbations in gut microbiota” was submitted to Indo-Sri Lanka Joint Research Programme initiated from MOTR -2020(Fund request: Rs. 8.5 Mn).
- “Development of lactic fermented milk-millet/cereal (Indian & Sri Lankan Origin) products with antihypertensive attribute, nutritional superiority and process scaling up for commercialization” was submitted to -Indo-Sri Lanka Joint Research Programme initiated from MOTR- 2017 (Fund request: Rs. 11 Mn).

Paper Articles Published

“Traditional rice based products” in Vidya Paper (2018).

“Vesak week and vegetarian nutrition” in Vidya Paper (2018).

“Multi -grain products and health properties” in Vidya Paper(2019).

Services to professional bodies

1. Board of Directors - Sri Lanka Thripasha Limited.
2. A member of the Sectoral Committee on Food Products- SLSI.
3. Technical Advisory Committee Member of the Moderate Acute Malnutrition Treatment /Nutrition Coordination Division, Ministry of Health.
4. Reviewing journal articles in *Ceylon J. of Science*, Department of Botany, Faculty of Science, University of Peradeniya, Sri Lanka.
5. Reviewing journal articles in PGIA, University of Peradeniya, Sri Lanka.
6. Reviewing journal abstracts in 2nd International Conference on ‘Food Quality, Safety and Security FOOD QUALSS 2018’, organized by University of Sri Jayewardenepura.

7. Reviewing journal articles in BOI Scientific Sessions.
8. Reviewing of Drafts of Sri Lankan Standards -SLSI.
9. A team member in the National Micro-Nutrient Fortification Programme in Sri Lanka.