



Dr. (Ms.) Sachini Jayawardana

Research Scientist

Food Technology Section

Qualifications

B.Sc. Special (Honors) in Food Science and Technology (University of Sri Jayewardenepura, 2012)

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Specialized Fields

Food Science and Technology, Biochemistry

Interest Areas

Functional foods, Food analysis, Bio assays, Food processing

Publications

1. **Jayawardana, S. A. S.**, Samarasekera, J. K. R. R., Hettiarachchi, G. H. C. M., Gooneratne, J., Datta Mazumdar, S. & Banerjee, R. (2019). Dietary fiber components, starch fractions and mineral composition of finger millet varieties of Sri Lanka, *Journal of Food Composition and Analysis*, 82, <https://doi.org/10.1016/j.jfca.2019.103249>.
2. Abeysekera, W. K. S. M., **Jayawardana S. A. S.**, Abeysekera W. P. K. M., Yathursan S., Premakumara G. A. S. and Ranasinghe, P. (2017) Antioxidant potential of selected whole grain cereals consumed by Sri Lankans: A comparative *in vitro* study. *Sri Lankan Journal of Biology*, 2(2), pp. 12-24.
3. **Jayawardana, S. A. S.**, Nawarathna, S. B. and Ranaweera, K. K. D. S. (2014) Replacement of artificial colourings of a carbonated soft drink with natural colour pigments from Red-layered Hibiscus. *Tropical Agricultural Research & Extension*, 16(4), pp. 130-135.

Communications

1. **Jayawardana, S. A. S.**, Samarasekera, J. K. R. R., Hettiarachchi, G. H. C. M. and Gooneratne, J. (2018) Anti- α -amylase, anti- α -glucosidase, antiglycation and glycation reversing potential of Sri Lankan finger millet (*Eleusine coracana*) varieties, *Proceedings of 5th International Conference on Multidisciplinary Approaches*, University of Sri Jayewardenepura, pp. 174.
2. **Jayawardana, S. A. S.**, Samarasekera, J. K. R. R., Hettiarachchi, G. H. C. M. and Gooneratne, J. (2017) *In vitro* anti-inflammatory properties of Finger millet (*Eleusine coracana*) varieties from Sri Lanka, *Proceedings of International Symposium on Traditional and Complementary Medicine*, Ministry of Health, Nutrition and Indigenous Medicine and Department of Ayurveda, pp. 105.
3. **Jayawardana, S. A. S.**, Samarasekera, J. K. R. R., Hettiarachchi, G. H. C. M. and Gooneratne, J. (2017) Nutritional and sensory properties of Finger millet (*Eleusine coracana*) flour incorporated biscuits, *Proceedings of 4th International Conference on Multidisciplinary Approaches*, University of Sri Jayewardenepura, pp. 56.
4. **Jayawardana, S. A. S.**, Samarasekera, J. K. R. R., Choudhary, M. I., Imad, R., Hettiarachchi, G. H. C. M. and Gooneratne, J. (2017) Cytotoxic properties of Sri Lankan varieties of Finger millet (*Eleusine coracana*), *Proceedings of PGIS Research Congress*, Postgraduate Institute of Science, University of Peradeniya, pp. 85.
5. **Jayawardana, S. A. S.**, Samarasekera, J. K. R. R., Choudhary, M. I., Maharjan, R., Hettiarachchi, G. H. C. M. and Gooneratne, J. (2017) Antimicrobial properties of finger

millet (*Eleusine coracana*) varieties of Sri Lanka, *Proceedings of the Basic and Applied Sciences Session of 10th International Research Conference*, General Sir John Kotelawala Defence University, pp. 34.

6. **Jayawardana, S. A. S.**, Divisekera, D. M. W. D., De Silva, A. B. G. C. J., Yathursan, S., Samarasekera, J. K. R. R. and Gooneratne, J. (2017) Ensuring Human Health, Food and Nutritional Security through Novel Cereal and Fruit based Prebiotics and Probiotics. *Proceedings of 1st Symposium of Indo-Sri Lanka Joint Research Program*, Ministry of Science, Technology and Research, pp. 12-13.
7. **Jayawardana, S. A. S.**, Samarasekera, J. K. R. R., Hettiarachchi, G. H. C. M. and Gooneratne, J. (2016) *In vitro* antioxidant properties of Sri Lankan Finger millet (*Eleusine coracana*) varieties, *Proceedings of 3rd International Conference on Multidisciplinary Approaches*, University of Sri Jayewardenepura, pp. 34.
8. Uthpala, T. G. G., Marapana, R. A. U., Pathirage, A. C. and **Jayawardana, S. A. S.** (2016) Effect of the nutritional composition on the textural quality of two gherkins (*Cucumis sativus* L.) varieties (Ajax & Vlasset) on brine fermentation, *Proceedings of 72nd Annual Sessions, Sri Lanka Association for the Advancement of Science*, pp. 102.
9. De Silva, A. B. G. C. J., **Jayawardana, S. A. S.**, Samarasekera, J. K. R. R. and Gooneratne, J. (2016) Assessment of physicochemical and functional properties of Sri Lankan Finger millet (*Eleusine coracana*) flour, *Proceedings of 3rd International Conference on Multidisciplinary Approaches*, University of Sri Jayewardenepura, pp. 107.
10. **Jayawardana, S. A. S.**, Samarasekera, J. K. R. R., Hettiarachchi, G. H. C. M., Choudhary, M. I., Jabeen, A. and Gooneratne, J. (2016) Anti-inflammatory effect of finger millet (*Eleusine coracana*) varieties of Sri Lanka on zymosan induced oxidative burst in phagocytes, *Proceedings of 9th International Research Conference*, General Sir John Kotelawala Defence University, pp. 214.
11. De Silva, A. B. G. C. J., **Jayawardana, S. A. S.**, Yathursan, S., De Silva, P. H. L. U., Aponso, D. M. K., Samarasekera, J. K. R. R. and Gooneratne, J. (2016) Assessment of physicochemical properties of Banana (*Musa* spp.) flour in selected varieties in Sri Lanka, *Proceedings of 9th International Research Conference*, General Sir John Kotelawala Defence University, pp. 213.
12. **Jayawardana, S. A. S.**, Abeysekera, W. K. S. M., Ranasinghe, P., Abeysekera, W. P. K. M. and Premakumara, G. A. S. (2016) Antioxidants rich whole grain cereals in Sri Lanka: Potential functional substitute to wheat in food industry, *Proceedings of NSF Research Summit*, National Science Foundation, pp. 77.
13. **Jayawardana, S. A. S.**, Samarasekera, J. K. R. R., Hettiarachchi, G. H. C. M., and Gooneratne, J. (2016) Nutritional composition of Sri Lankan Finger millet (*Eleusine coracana*) varieties, *Proceedings of 3rd Ruhuna International Science and Technology conference*, University of Ruhuna, pp. 49.
14. **Jayawardana, S. A. S.**, Abeysekera, W. K. S. M., Sutharsana, R., Ranasinghe, P., Abeysekera, W. P. K. M. and Premakumara, G. A. S. (2015) A comparative antioxidant properties of selected whole grain cereals: A preliminary *in vitro* study, *Proceedings of 2nd Biennial Research Symposium*, Industrial Technology Institute, pp. 1.
15. **Jayawardana, S. A. S.**, De Silva, A. B. G. C. J., Samarasekera, J. K. R. R. and Gooneratne, J. (2015) Physicochemical and functional properties of Finger millet (*Eleusine coracana*) flour and its potential use in food product development, *Proceedings of 2nd Biennial Research Symposium*, Industrial Technology Institute, pp. 14.
16. De Silva, A. B. G. C. J., Yathursan, S., **Jayawardana, S. A. S.**, Aponso, D. M. K., Samarasekera, J. K. R. R. and Gooneratne, J. (2015), Study on amylose content, rheological properties and particle size distribution of Sri Lankan banana (*Musa* spp) flour, *Proceedings of 2nd Biennial Research Symposium*, Industrial Technology Institute, pp. 7.

17. **Jayawardana, S. A. S.**, Samarasekera, J. K. R. R., Gooneratne, J. and Hettiarachchi, C. (2015) Arabinoxylans contents of Sri Lankan Finger Millet (*Eleusine coracana*) varieties, *Proceedings of 71st Annual Sessions, Sri Lanka Association for the Advancement of Science*, pp. 110.
18. **Jayawardana, S. A. S.**, Samarasekera, J. K. R. R., Hettiarachchi, G. H. C. M., Gooneratne, J., Datta Mazumdar, S. and Banerjee, R. (2015) *In-vitro* Starch Digestibility, Resistant Starch and Amylose contents of Sri Lankan Finger Millet (*Eleusine Coracana*) varieties, *Proceedings of 8th International Research Conference*, General Sir John Kotelawala Defence University, pp. 171.
19. De Silva, A. B. G. C. J., **Jayawardana, S. A. S.**, Aponso, D. M. K., Samarasekera, J. K. R. R. and Gooneratne, J. (2015) Rheological properties and particle size distribution of Sri Lankan finger millet (*Eleusine coracana*) flour, *Proceedings of 8th International Research Conference*, General Sir John Kotelawala Defence University, pp. 196.
20. Srimali, H. P. D., Somawathi, K. M., Abeysekera, W. K. S. M., **Jayawardana, S. A. S.** and Premakumara, G. A. S. (2015) Enhanced physicochemical and antioxidant properties of rice extracts added yoghurts in comparison to plain yoghurt. *Proceedings of 16th Annual Research Sessions*, Faculty of Applied Sciences, Sabaragamuwa University of Sri Lanka, pp. 11.
21. Sutharsana, R., **Jayawardana, S. A. S.**, Samarasekera, J. K. R. R., Gooneratne, J., Priyanka, D., Bagade, P., Mazumdar, S. D. and Banerjee, R. (2015) *In vitro* starch digestibility and resistant starch content of selected banana varieties from Sri Lanka, *Chemistry in Sri Lanka*, Institute of Chemistry Ceylon, pp. 25.
22. Amunugoda, P. N. R. J., Pitipanaarachchi, R., **Jayawardana, S. A. S.** and Walliwala, S. G. (2015) Development of Ready To Serve Curry Leave Beverage, *Proceedings of 5th International Research Symposium on Engineering Advancements*, South Asian Institute of Technology and Medicine, pp. 281-282.
23. Sutharsana, R., **Jayawardana, S. A. S.**, Ratnayaka, A. A. W., Divisekera, D. M. W. D., Samarasekera, J. K. R. R. and Gooneratne, J. (2014) Soluble, insoluble and total dietary fiber content of selected banana varieties (*Musa species*) from Sri Lanka. *Proceedings of the 70th Annual Sessions - Part 1, Sri Lanka Association for the Advancement of Science*, pp. 34.
24. Ratnayaka, A. A. W., **Jayawardana, S. A. S.**, Sutharsana, R., Divisekera, D. M. W. D., Samarasekera, J. K. R. R. and Gooneratne, J. (2014) Determination of dietary fibre and free sugar content in three cultivars of Finger Millet (*Eleusine coracana*) *Proceedings of the 2nd International Symposium, Sri Lankan Academy of Young Scientists*, pp. 47.
25. Sutharsana, R., **Jayawardana, S. A. S.**, Ratnayaka, A. A. W., Divisekera, D. M. W. D., Samarasekera, J. K. R. R. and Gooneratne, J. (2014) Dietary fiber, uronic acid and sugar content of selected banana varieties (*Musa species*) from Sri Lanka. *Proceedings of the 34th Annual Sessions*, Institute of Biology, Sri Lanka, pp. 39.

Patents

An inventor of the patent owned by Industrial Technology Institute, Sri Lanka titled "Manufacture of Ready-To-Serve Curry Leave Beverage" (Patent number: 18319, International Patent Classification: A23L/38).

Major Projects Undertaken

- **Co-Researcher**-Ensuring Human Health, Food and Nutritional Security through Novel Cereal and Fruit based Prebiotics
- **Co-Researcher** -Evaluation of bioactive properties of Sri Lankan Finger millet and determination of *in vitro* cholesterol assimilation effect of potential probiotics isolated from Finger millet

- **Co-Reseacher**-Comprehensive utilization of Sri Lankan grown *Moringa oleifera* in developing health food and herbal medicinal products to startup the *Moringa oleifera* industry in Sri Lanka