Kannan RR Rengasamy

33 – 06/05/1980

Marine Biotechnology

INDIA

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I obtained my Ph.D. degree in 2011 where my thesis entitled “Evaluation of Bioactive potential of Seagrasses of the Gulf of Mannar, India”. Thus, I have reported medicinal properties of marine algae and seagrasses and have published my findings in refereed journals. Currently, I am working in the field of Marine Biotechnology under Prof. Johannes Van Staden at the Research Centre for Plant Growth and Development, School of Life Sciences, University of KwaZulu-Natal. I was awarded a Claude Leon Foundation Post-Doctoral Fellowship from 2012-2013 for my post-doctoral research. I am interested in investigating biomolecules from marine algae towards the development of new functional foods and pharmaceutical leads.

CURRENT RESEARCH

Topic	Methodology	Application
Biomolecules from Marine plants: towards the development of new pharmaceutical leads	• Biomolecules • Spectroscopy • Target identification • Molecular studies • Toxicity screening	New source of functional foods. New pharmaceutical leads. Profiling of South African marine plants.

UKZN Publications

1. **Kannan, RR Rengasamy.,** Aderogba, M., Amoo, SO., Van Staden, J. 2013. *Macrocystis angustifolia* is a potential source of enzyme inhibitors linked to type 2 diabetes and dementia. *Journal of Applied phycology* DOI: 10.1007/s10811-013-0171-8 (**Impact Factor: 2.326**).
2. **Kannan, RR Rengasamy.,** Aderogba, M., Amoo, SO., Van Staden, J. 2013. Potential antiradical and alpha glucosidase inhibitors from *Ecklonia maxima. Food Chemistry* 141: 1412-1415. (**Impact Factor: 3.334**).
3. Mutalib A. Aderogba, Ashwell R. Ndhlala, **Kannan R. R. Rengasamy**, Johannes Van Staden. 2013. *In Vitro* Antimicrobial and Selected Enzyme Inhibitory Effects of Leaf Extracts, Flavonols and Indole Alkaloids Isolated from *Croton menyharthii*. *Molecules* 18:12633-12644. (**Impact Factor: 2.429**).
4. **Kannan, RRR.,** Aderogba, M., Ndhlala, AR., Stirk, WA., Van Staden, J. 2013. Acetylcholinesterase inhibitory activity of phlorotannins from the edible brown alga, *Ecklonia maxima* (Osbeck) Papenfuss. *Food Research International* 54: 1250-1254. (**Impact Factor: 3.005**).
5. **Kannan, RRR.,** Stirk, WA., Van Staden, J. 2013. Synthesis of silver nanoparticles using the seaweed *Codium capitatum* P.C. Silva (Chlorophyceae). *South African Journal of Botany* 86: 1-4. **(Impact Factor: 1.409).**
6. **Kannan RR Rengasamy**, Manoj G Kulkarni, Wendy A Stirk, Johannes Van Staden. 2014. Bioactive metabolites and value added products from marine macroalgae (Chapter 21), In: Seafood processing by-products: Trends and applications, Kim, S.K (Ed.) Springer Publications.530p. (**ISBN: 978-1-4614-9590-1**). http://www.springer.com/food+science/book/978-1-4614-9589-5.

Past Researches

1. Marine angiosperms : Ecology, Chemistry and pharmacology
2. Marine Microalgae: Culture, identification and toxicology
3. Marine macroalgae: Culture and biotechnology

Future Interests

1. Marine Natural Product Chemistry
2. Algal Biotechnology