Natural bio-active product from marine resources

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Marine forms - bacteria, actinobacteria, cyanobacteria, fungi, microalgae, seaweeds mangroves and other halophytes are extremely important oceanic resources and constitute over 90% of the oceanic biomass. The marine natural products have lead to the discovery of many compounds considered worthy for clinical applications. The marine sources have the highest probability of yielding natural products. Natural derivatives play an important role to prevent the cancer incidences as synthetic drug transformation in mangroves. 28.12% of anticancer compound extracted from the mangroves. *Exchocaria agollocha* has the anti-cancer compounds. The present investigation reveals the potential of the *Exchocaria agollocha* with biotechnological applications for anti cancer, antimicrobial drug discovery, environmental remediation, and developing new resources for the industrial process. The anti-cancer activity of *Exchocaria agollocha* was screened from 3.906 to 1000 µg/ml of concentration with the dilution leads to 1:1 to 1:128 following methanol and chloroform extracts. The cell viability in the *Exchocaria agollocha* was maximum at the lower concentration where as low at the higher concentration of methanol and chloroform extracts when compare to control. At 3.906 concentration, 85.32 and 81.96 of cell viability was found at 1:128 dilution of methanol and chloroform extracts respectively. At the concentration of 31.25 following 1:16 dilution, the cell viability was 65.55 in methanol and 45.55 in chloroform extracts. However at the higher concentration, the cell viability 22.35 and 8.12 was recorded in the extracts of methanol and chloroform. The cell viability was more in methanol when compare to chloroform extracts at lower concentration. The present findings gives current trends in screening and the activity analysis of metabolites from mangrove resources and to expose the models to bring a new sustain for tackling cancer. Bioactive compounds of *Exchocaria agollocha* have extensive use in treatment of many diseases and serve as a compound and templates for synthetic modification.

Biography

S Ahmed John, Molecular Genetist, Graduated from Botany Department University of Madras in 1981, Post Graduated from Botany Annamali University in 1983, Master of Philosophy from Botany Annamali University in 1985 and obtained his Doctor of Philosophy from Botany Bharathidasan University in 1991. Now he has published more than 112 papers (Impact Factors-57.292) in the international journals, presented 87 papers in the international/national seminars and conducted 8 UGC Sponsored National Seminars. He has 27 years of Teaching and 28 years of Research Experience in Molecular Genetics. He is the recognized research advisor of Botany, Biotechnology, Biochemistry and Microbiology for 7 Universities. He is the Editorial Board Member and Reviewer for two international Journals. He was awarded Best NSS Officer in 1992.

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