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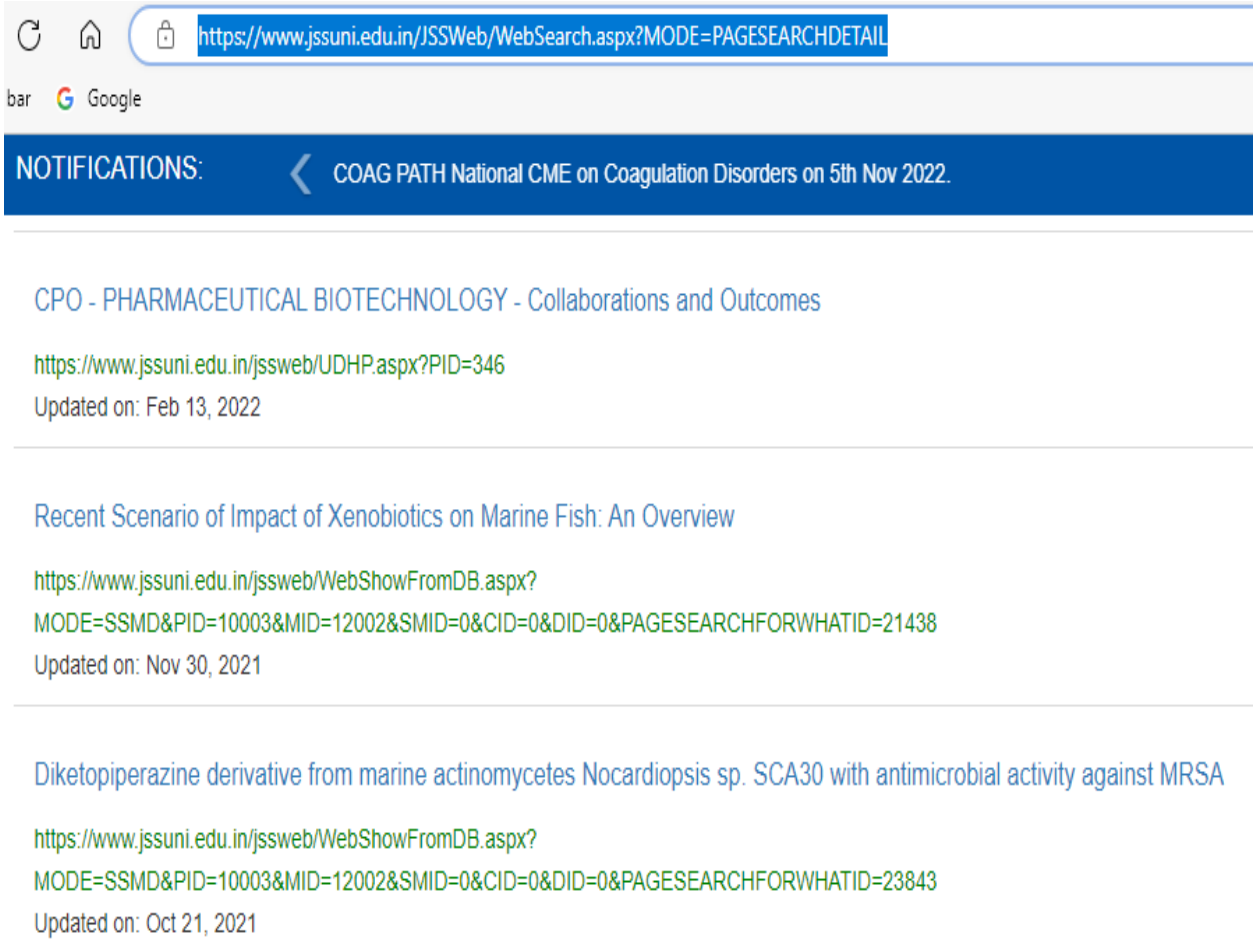

Recent Scenario of Impact of Xenobiotics on Marine Fish: An Overview

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Abstract:
Xenobiotics from chemicals to plastics have seriously interfered with the biological process of living system. Their impact on aquatic ecosystem, fish in precise is studied with significant interest. However, studies on impact of xenobiotics on marine fish are limited. This literature review integrates and summarizes the impact of xenobiotics on marine fish. The review tries to understand the impact of macro and micro litters,

microplastic, metals like mercury and nanoparticles. Finally, we conclude with the ways to regulate the presence and distribution of these xenobiotics in marine environment.

Diketopiperazine derivative from marine actinomycetes *Nocardiopsis* sp. SCA30 with antimicrobial activity against MRSA

- Saket Siddharth,
- Jamuna Bai Aswathanarayan,
- Mahadevaswamy G. Kuruburu,
- Subba Rao V. Madhunapantula &
- Ravishankar Rai Vittal

Abstract

Actinobacteria isolated from marine sources are a potential source of novel natural products. In this study, we report isolation, biological activity and characterization of secondary metabolites from strain *Nocardiopsis* sp. SCA30, isolated from marine sediments of Havelock Islands, Andaman and Nicobar, India. The ethyl acetate extracts of the isolate on screening for biological activity demonstrated antibacterial potency and antiproliferative activity. The extracts showed anticancer activity in a panel of cell lines, including HCT 15, HT 29, MCF 7 and MDA-MB 468, at concentrations ranging from 62.5 to 1000 µg/ml. A dose-dependent reduction in cell viability was observed in all the tested cell lines. The extract at 15 µg/ml and 30 µg/ml inhibited growth of methicillin-resistant *Staphylococcus aureus* ATCC NR-46071 and NR-46171 with MIC's of 15.62 and 7.81 µg/ml, respectively. LC–MS and NMR studies revealed that the antibacterial and anticancer compound isolated from *Nocardiopsis* sp. SCA30 is 1-acetyl-4-4(hydroxyphenyl)piperazine.

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10.	Effect of different physicochemical parameters on pectinase production by marine bacteria https://in.linkedin.com/in/harshitha-m-d-bb65971b5

Assessment of ^{210}Po and ^{210}Pb in marine biota of the Mallipattinam ecosystem of Tamil Nadu, India
Author links open overlay panel
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https://doi.org/10.1016/j.jenvrad.2010.06.003 Get rights and content

Abstract

To provide baseline data on background radiation levels for the future assessment of the impact of nuclear and thermal power stations, a systematic study was carried out in the Mallipattinam ecosystem of Tamil Nadu, India. Mallipattinam is located between the Kudankulam and Kalpakkam nuclear power plants and near to Tuticorin thermal power plant. Water, sediments, seaweeds, crustaceans, molluscs, and fish were collected to measure the concentrations of ^{210}Po and ^{210}Pb. The concentrations of ^{210}Po and ^{210}Pb in most samples are comparable to values reported worldwide. In fish, the concentrations of ^{210}Po and ^{210}Pb are in the range 16–190 Bq kg^{-1} and 8–153 Bq kg^{-1}, respectively. The concentration factors of ^{210}Po and ^{210}Pb for the biotic components ranges from 10^3 to 10^6.