

Progress in Biochemistry and Biotechnology

NEW HORIZONS IN NATURAL COMPOUND RESEARCH



Edited by
**Surya Nandan Meena, Vinod Nandre,
Kisan Kodam, and Ram Swaroop Meena**



About the book

Description

New Horizons in Natural Compound Research provides the latest updates in natural compound research (plant, microbes, algae, fungi) and their novel applications in health, agriculture and environment. The book gives recent advances in the extraction of natural compounds, cutting-edge approaches for natural compound purifications, and emerging trends in natural compound screening and identification. In addition, it provides a detailed explanation of the databases and libraries of natural compounds, as well as their significance. Sections focus on research and multidisciplinary practical techniques of natural product research, encouraging young scientists to pursue unique research while also generating strong research ideas.

From a future perspective, this book acts as a guide to identify potential areas and new research opportunities in the field of natural products and their service towards human beings, animals and the environment.

Key Features

- Provides a one-stop solution for concepts, cutting-edge techniques, methods, and novel applications of natural products in health and the environment
- Focuses on current gaps in natural product research, as well as methodologies and techniques to assist researchers in resolving existing challenges and speeding up the pace of drug discovery from natural sources
- Highlights new avenues of natural product research
- Contains contributions from well-experienced researchers from academia, research institutes and top-notch young scientists from industry

Details

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Abstract

Seaweeds along with their holobionts are a unique econiche that harbor

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and biocompatibility are considered to be pharmaceutically promising. The oligosaccharides produced are known for their various biomedical properties such as antioxidant, antitumor, anti-inflammatory, anti-tyrosinase, antidiabetic, etc. These diverse properties of oligosaccharides are attributed due to the differences in degrees of polymerization and substitution groups. Analysis of these oligosaccharides for roles of specific charges and/or functional groups along with applications at the industrial levels are also being extensively studied. This chapter focuses on the enzymatic preparation and purification of marine oligosaccharides and also summarizes their biomedical applications.