

## CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

### 3.3 Research Publications and Awards

3.3.2.1 Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years

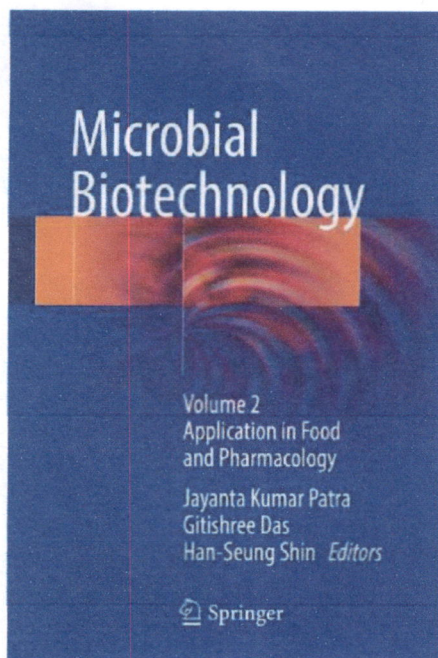
Index for supporting documents for the year 2018

S. No	Name of the author	Title of the book/chapters published	Title of the paper	Page No
1	Sudipta Kumar Mohanty	Application in Food and Pharmacology	Endophytic Fungi and Bioactive Metabolites Production: An Update	1-2



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Jayanta Kumar Patra, Gitishree Das, Han-Seung Shin (Eds.)

# Microbial Biotechnology

Volume 2. Application in Food and Pharmacology

- Offers up-to-date biotechnological applications
- Addresses key microbial technologies in food and pharmacology
- Evaluates a wide range of microbial interactions

This edited book, is a collection of 25 chapters describing the recent advancements in the application of microbial technology in the food and pharmacology sector. The main focus of this book is application of microbes, food preservation techniques utilizing microbes, probiotics, seaweeds, algae, enzymatic abatement of urethane in fermentation of beverages, bioethanol production, pesticides, probiotic biosurfactants, drought tolerance, synthesis of application of oncolytic viruses in cancer treatment, microbe based metallic nanoparticles, agro chemicals, endophytes, metabolites, antibiotics etc. This book highlighted the significant aspects of the vast subject area of microbial biotechnology and their potential applications in food and pharmacology with various topics from eminent experts around the World. This book would serve as an excellent reference book for researchers and students in the Food Science, Food Biotechnology, Microbiology and Pharmaceutical fields.

1st ed. 2018, XVIII, 537 p. 122 illus., 33 illus. in color.

## Printed book

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199,99 € | £160.00 | \$239.00

<sup>[1]</sup>213,99 € (D) | 219,99 € (A) | CHF 220,00

## eBook

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<sup>[2]</sup>166,59 € (D) | 166,59 € (A) | CHF 176,00

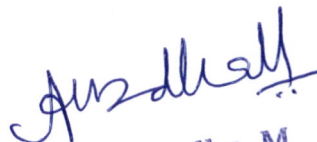
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# Chapter 21

## Endophytic Fungi and Bioactive Metabolites Production: An Update

Ramesha Alurappa, Srinivas Chowdappa, Radhakrishnan Narayanaswamy,  
Uma Rani Sinniah, **Sudipta Kumar Mohanty**, and Mallappa Kumara Swamy

### 21.1 Introduction

Alexander Fleming invented world's first antibiotic penicillin on 28th September 1928, which revolutionized the class of anti-bacterial drugs. Since then more number of antibiotics were discovered towards the treatment of infectious diseases. But, there is no end for new discoveries due to the drug resistance in bacteria (Xing et al. 2011). Provision of drugs has always been a challenge in medicinal field, seeking therapeutic drugs from natural products. Research in natural products for drug discovery methods are competitive with other synthetic drugs, due to lesser toxicity and broad spectrum activities in less quantity of compound administration. Research on plant based products requires continuous improvements in the screening process, extraction, isolation and structure interpretation. Moreover, various issues related to large-scale supply of novel compounds should be addressed in order to evaluate

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