Special Issue

Plant Beneficial Microorganisms as Novel Additives for Sustainable Agriculture

Message from the Guest Editor

Microorganisms have long been known to be major contributors of soil fertility and plant nutrition as organic matter decomposers. However, in recent decades several studies have revealed that they also greatly contribute to plant health and fitness via their ability to produce molecules limiting the growth of phytopathogens belonging to various kingdoms (bacteria, fungi, insects, worms...), as well as phytohormones. They can even contribute to rescuing agricultural soils sterilized by repeated applications of pesticides or of chemical phosphorus additives often rich in heavy metals thanks to their ability to degrade xenobiotics, to solubilize immobilized phosphate and to store minerals. These interesting properties raise the question of the opportunity, efficiency and safety of the development of novel agricultural practices and the novel bio-based economy based on the large-scale cultivation of these beneficial micro-organisms for their spreading in agricultural fields as a new kind of intrans.

Guest Editor

Dr. Marie-Joëlle Virolle

Department of Microbiology, Institute of Integrative Biology of the Cell (I2BC), UMR 9198 CNRS, University Paris Saclay, 91190 Gif sur Yvette, France

Deadline for manuscript submissions

closed (15 May 2022)



an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.7 Indexed in PubMed



mdpi.com/si/71032

Antibiotics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
antibiotics@mdpi.com

mdpi.com/journal/ antibiotics





an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.7 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

There are very few fields that attract as much attention as scientific endeavor related to antibiotic discovery. use and preservation. The public, patients, scientists, clinicians, policy-makers, NGOs, governments, and supra-governmental organizations are all focusing intensively on it: all are concerned that we use our existing agents more effectively, and develop and evaluate new interventions in time to face emerging challenges for the benefit of present and future generations. We need every discipline to contribute and collaborate: molecular, microbiological, clinical, epidemiological, geographic, economic, social scientific and policy disciples are all key. Antibiotics is a nimble, inclusive and rigorous indexed journal as an enabling platform for all who can contribute to solving the greatest broad concerns of the modern world.

Editor-in-Chief

Prof. Dr. Nicholas Dixon

School of Chemistry and Molecular Bioscience, University of Wollongong, Wollongong, NSW 2522, Australia

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Infectious Diseases) / CiteScore - Q1 (General Pharmacology, Toxicology and Pharmaceutics)

