



Plant Beneficial Microorganisms as Novel Additives for Sustainable Agriculture

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Message from the Guest Editor

Dear Colleagues,

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.





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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 disciplines 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.

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