



Properties, Biosynthesis and Application of Antimicrobial Compounds

Guest Editors:

Dr. Inna P. Solyanikova

Regional Microbiological Center,
Belgorod National Research
University, 308015 Belgorod,
Russia

Dr. Tatiana Abashina

Federal Research Center
“Pushchino Scientific Center for
Biological Research of the
Russian Academy of Sciences”,
Skryabin Institute of
Biochemistry and Physiology of
Microorganisms, Russian
Academy of Science, 142290
Pushchino, Russia

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Message from the Guest Editors

Dear Colleagues,

When in their natural habitat, microorganisms synthesize a large number of compounds that allow them to regulate the number of both the producer strains themselves and other representatives of microbial communities. Antimicrobial agents include antibiotics, proteolytic enzymes complexes, compounds that disrupt the sense of quorum in the microbial population, and a variety of other examples. The ability of microbial strains to synthesize antimicrobial agents is widely deployed in biotechnology to obtain antibiotics, combat phytopathogens and restore the health of biocenoses.

The list of microorganisms capable of synthesizing antimicrobial agents is steadily increasing. The most promising in terms of the synthesis of antimicrobial agents are fungi, actinomycetes, bacilli, and lysobacters. It seems likely that research will enable both the obtention of new and effective strains for the production of antibiotic compounds and the development of effective technologies for the production of antimicrobial agents, as well as methods for their use to reduce the chemical load on the environment.





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Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of
Odontostomatologic and
Specialized Clinical Sciences,
Sez-Biochimica, Faculty of
Medicine, Università Politecnica
delle Marche, Via Ranieri 65,
60100 Ancona, Italy

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