Special Issue

Bioactive Secondary Metabolites of Microbial Symbionts

Message from the Guest Editor

Secondary metabolites are organic compounds that are not directly involved in the growth, development, or reproduction of an organism. Unlike primary metabolites, which are essential for basic life processes, secondary metabolites often confer adaptive roles that can help an organism to survive in its environment.

Secondary metabolites are incredibly diverse in structure and function, representing a wide variety of compounds that can be grouped into different classes based on their biosynthetic origins and chemical structures.

Many symbiotic organisms produce secondary metabolites that play roles in the mutualistic relationships that they establish. These compounds can have a wide range of functions, ranging from defense to communication. Some symbionts that produce secondary metabolites include: endophytic fungi, mycorrhizal fungi, rhizobia, marine invertebrates and their microbial symbionts, leaf-cutter ants and their fungal cultivars, lichens, et al. The production of secondary metabolites in symbiotic relationships is widespread and represents a rich field of study, especially given the clear ecological and potential pharmacological importance of these compounds.

Guest Editor

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Message from the Editor-in-Chief

Microbiology Research (ISSN 2026-7481) is an international, scientific, open access journal primarily focused on research examining the complex interplay among microorganisms and citizens, animals and the environment in a holistic one-health approach. The topics covered in the journal include, but are not limited to: Antibacterials and antimicrobials, Virology, Bacteriology, Microbiomes, Veterinary microbiology, Food microbiology, Agricultural microbiology, Yeast microbiology, Foodborne diseases, Infectious diseases, Fungal diseases. We would also like to include the topics from basic and translational medicine which aim to develop an understanding and treatment of major diseases in humans and animals.

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