Special Issue

Genomics of Nitrogen-Fixing Plant Symbiotic Bacteria

Message from the Guest Editors

During the last two decades, the development of high-throughput technologies to explore the structure and function of bacterial genomes has revolutionized our understanding of nitrogen-fixing symbioses at a fundamental level, providing new opportunities for a more rational biotechnological exploitation of the different systems. This Special Issue has been conceived to update the most recent insights into the biology of the plant symbiotic nitrogen-fixers from a holistic genomic perspective. The issue will gather review and research articles addressing different aspects of plant symbiotic diazotrophs genomics including but not limited to the following:

Structure of genomes and pangenomes of the different species

Population and evolutionary genomics Genetic, metabolic and regulatory networks

The non-coding transcriptome and regulation of gene expression by RNA

Novel functional genomics approaches to understand plant symbioses

Genomics-based engineering of bioinoculants and nitrogen-fixation

Guest Editors

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Deadline for manuscript submissions

closed (30 September 2021)



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About the Journal

Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.2 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).

