

# Special Issue

## Microorganisms from Terrestrial Extreme Environments: Exploration and Exploitation Towards Sustainable Plant Production

### Message from the Guest Editors

Global climate change (GCC) is generating several issues at present, especially limitations regarding water and food security with an enormous impact on a growing population. In this scenario, it is urgent to develop sustainable alternatives. Noticeably, the existence of plant communities in extreme environments, such as hyper-arid deserts, Arctic and Antarctic areas, salt flats, high mountains, or soils with a high presence of phytotoxic elements, among others, represents a unique opportunity for the study of microorganisms highly adapted to these limiting conditions. Studying such kinds of microorganisms opens avenues to their potential for plant growth promotion, highlighting them as a valuable tool to be used in plant production.

This Special Issue aims to gather current and relevant information on the microbiological components present in diverse extreme terrestrial environments, specially oriented to the characterization and corroboration of microbial capacity to increase the plant tolerance to the main limitations that the GCC is generating in plant production.

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### Guest Editors

Dr. Pablo Cornejo

Prof. Dr. Cledir Santos

Dr. Catalina Vidal

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### Deadline for manuscript submissions

closed (30 April 2025)



## Microorganisms

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**CiteScore 7.7**  
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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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### Editor-in-Chief

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