

Special Issue

Microbial and Nutrient Interactions as Remediation Tools in Plant Ecosystems

Message from the Guest Editors

Soils are dynamic environments where interactions between plants, microbes, and nutrients drive ecosystem health and resilience. These ecosystems play a key role in carbon sequestration, soil stabilization, water purification, and nutrient cycling, all of which are influenced by complex plant-soil-microbe relationships. Microbes are essential in decomposing organic matter, cycling nutrients, and forming symbiotic partnerships with plants, enhancing soil fertility and ecosystem stability. Despite their significance, the potential of these natural processes as tools for remediation and sustainable management remains underexplored. This special issue aims to investigate these interactions, exploring their application in restoring degraded lands, combating pollution, and promoting sustainable plant management. Topics of interest include microbial community dynamics, nutrient cycling, bioremediation and phytoremediation, soil structure, plant-microbe interactions, restoration ecology, biodiversity, ecosystem services, and innovative approaches for studying plant-soil interactions.

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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, and conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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