Special Issue

Plant Growth-Promoting Bacteria and Plant-Soil Interactions in Harsh Environments

Message from the Guest Editors

Plant-growth-promoting bacteria (PGPBs) are a diverse group of bacteria which induce beneficial effects in plants, both directly and indirectly. Many bacterial isolates have been characterized and used as inoculants to improve nutrient acquisition and mitigate environmental stress or for the biocontrol of pathogens. In a changing world, there is a need to explore new sources of PGPBs and investigate their metabolic potential, enabling plants to cope with intense drought, inundation, increasing salinity, soil degradation, etc. For this Special Issue, we especially welcome works on the following topics:

- Prospection of endophytic/rhizosphere/phyllosphere bacteria with plant-growth potential.
- Exploring the role of PGPBs on wild and cultivated plants.
- Interaction of PGPBs on the microbial communities of their host and soil.
- Validation of bacterial inoculants interacting with plants used in soil rehabilitation.
- Elucidation of new mechanisms of plant growth promotion.

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"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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