Special Issue

Agricultural Microbiology

Message from the Guest Editors

Agroecosystems and yields depend on microbial activity. Microorganisms are involved in all biogeochemical cycles, and the assemblage of microbial communities is the main driver of nutrient pools in soils. Rhizosphere microbiomes play a role in plant growth promotion, with intimate contact with symbionts, and their activity establishes the level of soil fertility. There is a lot of research on microbial pathogens but, by way of comparison, only a small amount on microbial biocontrol potential. Until now, a large number of microbial strains have been collected from agricultural soils and the most efficient ones have been synthetized into bioproducts with multiple roles in agronomy. They are used to control or improve solubilization and fixation of nutrients, in order to raise the native values in the soils; for biocontrol processes as additional or even complete crop protection; for conversion and decomposition of residual biomass; and for ecosystem resilience and soil suppressiveness.

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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, 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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