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Plant-Microbe Interactions and Soil Fertility Status for Enhancing Sustainable Agriculture

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Deadline for manuscript submissions: closed (31 December 2022)

Message from the Guest Editors

Dear Colleagues,

Many studies have shown that microbes can help to mobilize sparingly soluble nutrient reserves by various mechanisms. Mycorrhizae, symbiotic associations between a fungus and a plant, increase the effective rooting volume and dissolve sparingly soluble sources of phosphorus (P). Decomposition of organic matter and organic residues can be regarded as plant-microbe-soil interaction, possibly being quantitatively the most important in the recycling of nutrients. Plant-microbe-soil interaction can also play a role in the phytoremediation of contaminated soils.

Salinity problems are increasing in many parts of the world. In many developing countries with a strongly negative nutrient balances in soil, N2 fixation may be hampered by the deficiency of other nutrients and micronutrients. There is a need for more knowledge about the soil properties that result in favorable interactions between the different organisms in the agroecosystem.

In this Special Issue, authors are encouraged to submit papers at the cutting edge of plant–microbe interaction, particularly with applications to sustainable agriculture.

Specialsue



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