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Role of Synthetic Communities (SYNCOM) in Shaping the Soil and Plant Microbiome

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Message from the Guest Editor

Dear Colleagues,

Recent studies have revealed that plant-associated microbiomes and specifically the rhizospheric microbiome should be considered as an extended genome for plants. Studies have shown that delinking the rhizospheric microbiome from plants may lead to a decrease in plant health and fitness. The utilization of benign microbes as biofertilizers and bio-fungicides has become an attractive agricultural commodity. Beneficial microbes (mainly bacteria) have been tried as lone or in consortium (SYNCOM) to elevate the plant yield and protection. However, the application of SYNCOM on soil and plants may reflect different effects on the resident microbiome. The information pertaining to how SYNCOM application changes the diversity of soil and plant microbiomes is still not known. It is important to elucidate how those SYNCOM influence the assembly of the rhizosphere microbiome and what effects those changes can result in on plant development, growth, and fitness. This Special Issue highlights research works that emphasize the role of SYNCOM in modulating and shaping the soil and plant microbiome.



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Special Issue



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Message from the Editor-in-Chief

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