



plants



an Open Access Journal by MDPI

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

Guest Editor:

Dr. Harsh Bais

Department of Plant and Soil
Sciences, University of Delaware,
Newark, DE, USA

Deadline for manuscript
submissions:

closed (1 August 2024)

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.



mdpi.com/si/180200

Special *Issue*



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Dilantha Fernando
Department of Plant Science,
University of Manitoba, Winnipeg,
MB R3T 2N2, Canada

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, 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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Plant Sciences) / CiteScore - Q1 (Ecology, Evolution, Behavior and Systematics)

Contact Us

Plants Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/plants
plants@mdpi.com
[X@Plants_MDPI](https://twitter.com/Plants_MDPI)