

## Special Issue

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

### Message from the Guest Editors

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, N<sub>2</sub> 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.

### Guest Editors

Dr. Mahmoud F. Seleiman

Plant Production Department, College of Food and Agriculture Sciences, King Saud University, P.O. Box 2460, Riyadh 11451, Saudi Arabia

Prof. Dr. Markku Yli-Halla

Department of Agricultural Sciences, University of Helsinki, 00014 Helsinki, Finland

### Deadline for manuscript submissions

closed (31 December 2022)



**Sustainability**

an Open Access Journal  
by MDPI

**Impact Factor 3.3**  
**CiteScore 7.7**



[mdpi.com/si/93326](https://mdpi.com/si/93326)

*Sustainability*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[sustainability@mdpi.com](mailto:sustainability@mdpi.com)

[mdpi.com/journal/  
sustainability](https://mdpi.com/journal/sustainability)





## Sustainability

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 7.7



[mdpi.com/journal/  
sustainability](https://mdpi.com/journal/sustainability)



## About the Journal

### Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

---

### Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario  
Institute of Technology, Oshawa, ON L1G 0C5, Canada

---

### Author Benefits

#### Open Access:

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

#### High Visibility:

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPIus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1  
(Geography, Planning and Development)