



Rhizosphere Microorganisms and Beneficial Interactions with Plants

Guest Editors:

Dr. Martha Helena Ramírez-Bahena

Didactics of Experimental Sciences, University of Salamanca, 37007 Salamanca, Spain

Dr. Daniel Muller

Univ Lyon, Université Claude Bernard Lyon 1, CNRS, INRAE, VetAgro Sup, UMR 5557 Ecologie Microbienne, F-69622 Villeurbanne, France

Dr. Zaki Saati-Santamaría

Microbiology and Genetics Department, University of Salamanca, 37007 Salamanca, Spain

Deadline for manuscript submissions:

closed (25 November 2022)

Message from the Guest Editors

Many soil microorganisms are attracted by root exudates and colonize the rhizosphere, influencing the development of the host plant itself, and other microorganisms are incorporated into the plant to an endophytic lifestyle forming the so-called plant microbiome, which has an essential role in the plant health and homeostasis. Some bacteria and fungi cooperate with the plant by various mechanisms, improve the mineral nutrition of the plant, synthesize phytohormones that influence the phenotypes of the plant or stimulate the ISR or the control of pathogens (competition-inhibition). These beneficial microorganisms of the rhizosphere belong to many different genera and species.

With this Special Issue of *Agronomy*, we seek to present recent advances in the study of these interactions, encompassing both genomic analyses of phytobeneficial microorganisms and meta-analyses that attempt to decipher the functioning of the phytobeneficial microbiome in the context of the impacts related to agricultural practices.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Leslie A. Weston

Gulbali Centre for Agriculture,
Water and Environment
Research, Charles Sturt
University, Wagga Wagga, NSW
2678, Australia

Message from the Editor-in-Chief

Agronomy draws together researchers from diverse areas of agricultural research with a common aim of enhancing agricultural productivity globally. The journal provides unlimited free access to all those interested in advancing agricultural science from both the research and general community. Papers are released immediately after acceptance through the internet. *Agronomy* is supported by our authors and their institutes through low article processing charges (APC) for accepted papers. We hope you will support the journal by becoming one of our authors.

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), PubAg, AGRIS, and other databases.

Journal Rank: JCR - Q1 (Plant Sciences) / CiteScore - Q1 (Agronomy and Crop Science)

Contact Us

Agronomy Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/agronomy
agronomy@mdpi.com
X@Agronomy_Mdpi