





an Open Access Journal by MDPI

Microbial Mechanisms of Soil Nutrient Cycles in Agricultural Systems

Guest Editors:

Dr. Fazhu Zhao

Department of Environmental Science and Engineering, Northwest University, Xi'an, China

Prof. Dr. Jun Wang

College of Urban and Environmental Science, Northwest University, Xi'an 710127, China

Prof. Dr. Chengjie Ren

College of Agronomy, Northwest A&F University, Yangling 712100, China

Deadline for manuscript submissions:

closed (20 April 2022)

Message from the Guest Editors

Dear Colleagues,

Microbes are the most diverse organisms on earth, which play critical roles in maintaining ecosystem multifunctionality, such as nutrient cycling, litter decomposition, primary production, climate regulation, biodiversity, etc. However, how soil microbes regulate biogeochemical functions remains one of the fundamental challenges for understanding terrestrial ecosystems under the changing environment.

The aims of this Special Issue are to describe and explain the fundamental microbial features and processes occurring in soil systems. This Special Issue encourages submissions with mechanisms of microbes in regulating soil biogeochemical functions in a changing world. The ecological and biochemical processes of soil microorganisms under global change are major topics, including carbon and nutrient cycles under climate change, nitrogen deposition, land-use change, elevated carbon dioxide, etc. The applications of new molecular techniques to exploring the microbe population and community dynamics are of great interest.

Dr. Fazhu Zhao Prof. Dr. Jun Wang Dr. Chengjie Ren Guest Editors









an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Les Copeland

Sydney Institute of Agriculture, School of Life and Environmental Sciences, The University of Sydney, Sydney, NSW 2006, Australia

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, crossdisciplinary and scholarly open access journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. Agriculture is published in an open access format – research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the public have unlimited and free access to the content as soon as it is published.

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, RePEc, and other databases.

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

Contact Us