



## Ecological Environment and Microbial Community of Agricultural Soils

Guest Editors:

**Dr. Irina K. Kravchenko**

Winogradsky Institute of  
Microbiology, Research Center of  
Biotechnology, Russian Academy  
of Sciences, 117 901 Moscow,  
Russia

**Dr. Mikhail V. Semenov**

Laboratory of Soil Carbon and  
Microbial Ecology, Dokuchaev  
Soil Science Institute,  
Pyzhyovskiy Lane 7 Building 2,  
119017 Moscow, Russia

**Dr. Alena D. Zhelezova**

Department of Soil Biology and  
Biochemistry, Dokuchaev Soil  
Science Institute, Pyzhyovskiy  
Lane 7 Building 2, 119017  
Moscow, Russia

Deadline for manuscript  
submissions:  
**closed (15 October 2023)**

### Message from the Guest Editors

Dear Colleagues,

The agricultural soil environment is a complex system. Agricultural practices can reduce microbial diversity and alter microbial activity. Modern ecologically sound agriculture depends on the preservation of robust, diversified populations and productive microbial communities in the soil, as well as the development of management techniques that support these ecosystems.

The goals of this Special Issue are to describe the progress in the relationship between the ecological environment and the microbial community of agricultural soils, to show how the microbiome and soil function are intertwined, to examine the factors that affect crop productivity, nutrient cycling, and soil health, and to provide ecological insights into bioindicators of soil properties that are important to soil health. In this Special Issue, we invite submissions of research articles and reviews that incorporate studies from several fields (for example, agricultural sciences, biology, environmental sciences, and data science) and interdisciplinary research that expands our understanding of the complex interactions between agricultural management, soil ecology, and microbial communities.





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, cross-disciplinary and scholarly journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. We invite submissions from authors according to the aims and scope of the journal described in more detail on this page. *Agriculture* is published in an open access format – articles are published on the journal's website immediately after acceptance, giving the scientific community and the public unlimited and free access to the content.

## 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

---

*Agriculture* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/agriculture](http://mdpi.com/journal/agriculture)  
[agriculture@mdpi.com](mailto:agriculture@mdpi.com)  
[X@AgricultureMdpi](https://twitter.com/AgricultureMdpi)