

Special Issue

Applications of Bioinformatics in Agriculture

Message from the Guest Editor

Bioinformatics is playing an increasingly important role in modern agriculture by providing advanced tools for the analysis of complex biological and environmental data. This Special Issue focuses on the applications of bioinformatics in agricultural research, with particular emphasis on soil science, environmental microbiology, and plant–soil interactions. The articles featured in this Special Issue include metagenomic analyses of soil microbiomes, studies of microbial genomes relevant to soil fertility, identification of functional microbial groups, and the integration of omics data in the context of soil health and productivity. Special attention is given to the use of bioinformatics tools in uncovering novel ecological relationships and supporting knowledge-based agricultural practices. The aim of this Special Issue is to highlight the potential of bioinformatics as a key tool for sustainable soil resource management and the advancement of agricultural sciences.

Guest Editor

Dr. Anna Marzec-Grządziel

Microbiology Department, Institute of Soil Science and Plant Cultivation, 24-100 Puławy, Poland

Deadline for manuscript submissions

30 November 2025



Agriculture

an Open Access Journal
by MDPI

Impact Factor 3.6
CiteScore 6.3



mdpi.com/si/242761

Agriculture
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
agriculture@mdpi.com

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





Agriculture

an Open Access Journal
by MDPI

Impact Factor 3.6
CiteScore 6.3



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



About the Journal

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.

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

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)