

## Special Issue

# The Important Role of Gut Microbiota Modulation through Animal Nutrition on Health, Production and Welfare

### Message from the Guest Editors

A balanced gut microbiota is crucial for the host's health. The digestive tract does not only constitute the protective intestinal barrier, but also has the function of absorbing nutrients from feed, which has the strongest influence on animal health, welfare, and products. Given that the diet has a critical role in modifying the microbiome, therefore, nutritional strategies may be among the effective solutions to counteract intestinal damage caused by oxidative stress and other factors. Thus, due to the antioxidant, antibacterial, and anti-inflammatory effects of some dietary bioactive compounds, such as polyphenols, prebiotics, and fatty acids, they can influence microbial populations, restoring the balance of intestinal microflora. Therefore, the intestinal microbial composition, mechanism of action, and their effects in animals will be investigated to provide advances in research into newly discovered nutrient sources with health benefits. The fields relevant to this Special Issue include, but are not limited to, agriculture, animal nutrition, and biotechnology. This Special Issue will comprise original research and reviews on the abovementioned research fields.

---

### Guest Editors

Dr. Mihaela Saracila

Dr. Arabela Elena Untea

Dr. Petru Alexandru Vlaicu

---

### Deadline for manuscript submissions

closed (15 December 2023)



## Agriculture

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.6  
CiteScore 6.3



[mdpi.com/si/143345](https://mdpi.com/si/143345)

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