

## Special Issue

# Sustainable Crop Production and Pest Control

### Message from the Guest Editors

In 2022, the world population reached a significant new milestone of 8 billion people. To meet the demand associated with this number, it is estimated that it will be necessary to increase food and fiber production by around 70%. The challenges to be faced in innovation are enormous, mainly due to phytosanitary problems caused by damage from the attack of insect pests. Currently, chemical control is the most used method; however, the search for more sustainable alternatives has intensified. In this context, the use of extracts and essential oils from bioactive plants has shown potential for the management of important pests of cultivated crops, with high efficiency and rapid degradation in the environment. In addition to these, the use of alternative measures such as behavioral control, the use of resistant varieties, and biological control using beneficial microorganisms such as fungi, bacteria, nematodes and viruses, in addition to predatory insects and parasites, constitutes a promising sustainable alternative to pest control. Therefore, this Special Issue focuses on the role of alternative control measures in the management of agricultural and forestry pests.

### Guest Editors

Prof. Dr. Leandro Bacci

Department of Agricultural Engineering, Universidade Federal de Sergipe, Sao Cristovão 49100-000, Brazil

Dr. Jefferson Elias da Silva

Departamento de Engenharia Agrônômica, Universidade Federal de Sergipe, Sao Cristovão, Brazil

### Deadline for manuscript submissions

closed (16 October 2023)



## Agriculture

an Open Access Journal  
by MDPI

Impact Factor 3.6  
CiteScore 6.3



[mdpi.com/si/138162](https://mdpi.com/si/138162)

*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)