Special Issue

Plant Extracts and Essential Oils: Biocontrol Approaches for Pest, Disease, and Weed Management

Message from the Guest Editor

In agricultural production practices, common issues such as crop diseases, insect pests, and weeds are often addressed through control measures including manual and chemical methods. Manual control is timeconsuming, labor-intensive, and prone to recurrence. while chemical control not only poses risks of environmental pollution but also often induces resistance and results in unsatisfactory outcomes. With growing emphasis on sustainable agricultural development, the use of natural products for biological control has emerged as a new trend in the modern management of crop diseases, pests, and weeds. We invite original research, reviews, short communications, and case studies on a broad range of topics focusing on the utilization of natural substances as biocontrol agents in agricultural practice for the purpose of controlling pests, pathogens and weeds. This Special Issue aims to provide insights into the current state of biocontrol in agriculture, offering valuable information for researchers and farmers that are interested in sustainable agriculture.

Guest Editor

Prof. Dr. Hua Shao

Key Laboratory of Biogeography and Bioresource in Arid Land, Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences, Urumqi 830011, China

Deadline for manuscript submissions

25 March 2026



Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 6.3



mdpi.com/si/256269

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

mdpi.com/journal/agriculture





Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 6.3



About the Journal

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, scholarly and scientific open access journal publishing peer-reviewed research papers, review articles, communications and short notes that reflect the breadth and interdisciplinarity of agriculture.

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)

