## Special Issue

## Physiological and Biochemical Responses to Abiotic Stress in Cereal and Pseudocereal Crops

### Message from the Guest Editors

Abiotic stress factors such as drought, salinity, extreme temperatures, and light intensity are among the major limitations to global crop productivity. Cereal crops like wheat, rice, and maize—along with pseudocereals such as buckwheat and guinoa-are essential for food security and human nutrition. Understanding how these species respond at physiological and biochemical levels to environmental stressors is critical for developing resilient, high-yielding cultivars. Over the past few decades, advances in plant physiology, molecular biology, and stress signaling have significantly enriched our knowledge of plant adaptation mechanisms. This Special Issue aims to bring together recent findings on how cereal and pseudocereal crops respond to abiotic stress at multiple levels—from whole-plant physiology to cellular and molecular biochemistry. We invite original research articles, reviews, and short communications that address cutting-edge topics such as antioxidant responses, stress signaling pathways, omics-based insights, and breeding strategies for stress tolerance.

### **Guest Editors**

Dr. Marta Hornyák

Władysław Szafer Institute of Botany, Polish Academy of Sciences, Lubicz 46, 31-512 Kraków, Poland

### Dr. Przemysław Kopeć

The Franciszek Górski Institute of Plant Physiology, Polish Academy of Sciences, Niezapominajek 21, 30-239 Kraków, Poland

### Deadline for manuscript submissions

10 January 2026



# **Agriculture**

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 6.3



mdpi.com/si/243350

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)

