Special Issue

Smart Water Management: Improving Crop Physiology, Resilience, and Productivity Under Limiting Climate Conditions

Message from the Guest Editors

Increasing climate instability has posed serious challenges to agriculture, especially regarding water availability and efficient use. In this context, smart water management emerges as an essential strategy to improve plant physiology, promote crop resilience, and sustain productivity even under adverse climate conditions. This Special Issue aims to publish manuscripts that address innovative water management practices and technologies that optimize water use in soil and plants, favoring physiological mechanisms such as water use efficiency, stomatal regulation, and resistance to water stress. The integration of knowledge of physiological responses, monitoring tools and precision irrigation systems is seen as a promising path towards more sustainable agriculture that is resilient to climate change.

Guest Editors

Dr. Sidnei Deuner

Dr. João Paulo Barbosa

Prof. Dr. Filipe Selau Carlos

Deadline for manuscript submissions

31 March 2026



an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.7



mdpi.com/si/252131

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

mdpi.com/journal/agronomy





an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.7



About the Journal

Message from the Editor-in-Chief

Agronomy draws together researchers from diverse areas of agricultural research with a common aim of enhancing agricultural productivity globally. The journal provides unlimited free access to all those interested in advancing agricultural science from both the research and general community. Papers are released immediately after acceptance through the internet. Agronomy is supported by our authors and their institutes through low article processing charges (APC) for accepted papers. We hope you will support the journal by becoming one of our authors.

Editor-in-Chief

Prof. Dr. Leslie A. Weston

Gulbali Centre for Agriculture, Water and Environment Research, Charles Sturt University, Wagga Wagga, NSW 2678, 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, and other databases.

Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Agronomy and Crop Science)

