

Special Issue

Physiological and Genetic Improvement of Crop Traits in Enhancing Crop Resilience

Message from the Guest Editors

Crop improvement has evolved significantly, the integration of physiological insights with genetic advancements has led to more predictable and sustainable crop improvement strategies, ultimately leading to benefits regarding food security and agricultural sustainability. Therefore, in this Special Issue, we would like to foreground scientific research papers that could assist further development in this complex field of research as follows: Plant breeding aimed at modifying one or more plant traits and exploring beneficial genes from genetic resources/crop germplasm.

Beside conventional breeding and selection methods, the discussion of new trends like digital applications, remote sensing, etc., is also welcome.

Plant physiology, which focuses on improving responses to stresses or adapting to agricultural and industrial requirements.

Genetic transformation and modification, which may affect plant stress responses, hormonal regulation, disease resistance, and yield.

Genes which are regulators of physiological components such as yield and relate to specific processes that help determine crop yield.

Guest Editors

Dr. Dong-Hong Wu

Crop Science Division, Taiwan Agricultural Research Institute, Ministry of Agriculture, No.189, Zhongzheng Rd., Wufeng Dist., Taichung City 413008, Taiwan

Dr. r Szekely

Research Center for Irrigation and Water Management, Institute of Environmental Sciences, Hungarian University of Agriculture and Life Sciences, Anna-Liget Str. 35, 5540 Szarvas, Hungary

Deadline for manuscript submissions

closed (28 February 2026)



Agronomy

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.7



mdpi.com/si/230258

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

[mdpi.com/journal/
agronomy](https://mdpi.com/journal/agronomy)





Agronomy

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.7



[mdpi.com/journal/
agronomy](https://mdpi.com/journal/agronomy)



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), GEOBASE, PubAg, AGRIS, and other databases.

Journal Rank:

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