

Special Issue

Application of In Vitro Technology to Improving the Yield and Quality of Common and Alternative Crops

Message from the Guest Editor

In vitro culture-based techniques became valuable tools in basic and applied research and found practical applications. In vitro cultures are also expensive and laborious. Therefore, further research on in vitro technology is still needed as it is essential not only in the case of common crops but also in alternative crops. The latter can be beneficial for small farms in the context of climate change and in sustainable agriculture. Papers on various aspects of in vitro cultures for common and alternative crops will be warmly welcomed:

- Optimization of long-term storage and micropropagation of common and alternative crops;
- Micropropagated plants as a source of propagules in conventional propagation;
- Early detection of and prevention of the formation of somaclonal variants;
- Improvements to the health status and quality of micropropagated plants (in vitro therapy, biotization);
- Genetic improvement of crops with the application of in vitro techniques combined with other conventional and biotechnological tools;
- Detection of the relationship between in vitro technologies and the field performance of crops to improve in vitro selection.

Guest Editor

Dr. Wojciech Litwinczuk

University of Rzeszów, Institute of Agricultural Sciences, Land Management and Environmental Protection, Rzeszow, Poland

Deadline for manuscript submissions

25 October 2025



Agronomy

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.7



mdpi.com/si/208648

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), PubAg, AGRIS, and other databases.

Journal Rank:

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