Special Issue

Innovative Strategies in Potato Cultivation: Enhancing Agronomic Performance, Nutritional Quality, and Post-Harvest Stability

Message from the Guest Editors

Modern potato cultivation strategies focus on integrating advanced agrotechnical and biological technologies to increase yields, tubers' nutritional value, and post-harvest shelf life. The use of precision farming, including soil sensors, GPS systems, and satellite data analysis, allows for the optimization of fertilization and irrigation, while the selection and engineering of varieties resistant to biotic and abiotic stresses, such as drought, pathogens, or salinity, affects the stability of production. Biostimulants and soil microorganisms, e.g., mycorrhiza and rhizobacteria, improve mineral utilization and support plant health. In addition, genetic modifications make it possible to enrich potato tubers with nutrients such as mineral salts (Fe, Zn) or antioxidants, and storage strategies using controlled atmospheres and natural germination inhibitors extend tuber life without the need for chemicals. Integrating these approaches can significantly increase the efficiency of potato production while reducing environmental impact.

Guest Editors

Dr. Jarosław Pobereżny
Prof. Dr. Elżbieta Wszelaczyńska
Prof. Dr. Wiesław Szulc

Deadline for manuscript submissions

20 December 2025

Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6
CiteScore 6.3

mdpi.com/si/242600

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

mdpi.com/journal/agriculture

MDPI

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)