Special Issue

Improving Nutritional and Functional Quality of Horticultural Crops Through Biofortification Approaches

Message from the Guest Editors

Biofortification has become a key strategy for enhancing the nutritional and functional value of horticultural crops, contributing to food security, sustainability, and human health. While agronomic biofortification through the application of mineral fertilizers and biostimulants offers a practical method for improving micronutrient content and crop performance, conventional breeding and genome editing (e.g., CRISPR/Cas) are expanding opportunities to achieve more targeted and durable enhancements. This Special Issue focuses on biofortification strategies which use either agronomic, genetic, biotechnological tools, or a combination thereof to improve yield, resilience and the accumulation of health-promoting compounds in horticultural crops. We welcome original research and reviews addressing nutrient dynamics, soil–plant interactions, genotype × environment × management (G × E × M) interactions, and innovative fertilization or genome-based techniques. Potential topics may include enhancement of micronutrients and phytochemicals, metabolic and transcriptional responses, improvement of postharvest quality, and contributions to the development of functional foods.

Guest Editors

Dr. Rachele Tamburino

Institute of BioEconomy (IBE), National Research Council (CNR), Via P. Gobetti 101, 40129 Bologna, Italy

Dr. Paolo Iovieno

Division of Florence, CNR IBBR (National Research Council Institute of Bioscience and BioResources), Polo Scientifico CNR, Via Madonna del Piano, 10, 50019 Sesto Fiorentino, FI, Italy

Deadline for manuscript submissions

30 April 2026

Agronomy

an Open Access Journal by MDPI

Impact Factor 3.4
CiteScore 6.7

mdpi.com/si/254157

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

mdpi.com/journal/agronomy

Agronomy

an Open Access Journal by MDPI

Impact Factor 3.4
CiteScore 6.7

mdpi.com/journal/agronomy

MDPI

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)