Special Issue

Integrating Fertilizers and Fungi to Enhance Horticulture Crop Resilience

Message from the Guest Editors

In modern horticulture, enhancing crop resilience against biotic and abiotic stresses is vital for ensuring sustainable production and food security. Among the emerging strategies, the integration of fertilizers with beneficial fungi, such as mycorrhizal fungi and Trichoderma species, has shown great potential in plant production. Fertilizers are crucial for supply of essential nutrients, while fungi improve nutrient uptake efficiency, stimulate plant growth, and boost natural defense mechanisms. This synergy not only promotes plant growth and development but also enhances tolerance to drought, salinity, temperature, heat, disease, and pathogen attacks. Recent advances in soil microbiology, plant nutrition, and biotechnology have expanded our understanding of plant-microbe-soil interactions, enabling innovative approaches for integrated nutrient and microbial management. Such techniques can reduce chemical input dependency, improve soil health, and contribute to climate change adaptation in horticultural plant systems.

Guest Editors

Dr. Muhammad Khalid Hameed

School of Agriculture and Biology, Shanghai Jiao Tong University, Shanghai 200240, China

Dr. Domenico Ronga

Pharmacy Department (DIFARMA), University of Salerno, Via Giovanni Paolo II 132, 84084 Fisciano, Italy

Deadline for manuscript submissions

10 August 2026



Horticulturae

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 5.1



mdpi.com/si/255278

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

mdpi.com/journal/ horticulturae





Horticulturae

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 5.1



About the Journal

Message from the Editor-in-Chief

Horticultural plants and their products provide sustenance, health, and beauty. A confluence of factors is putting increasing pressure on horticultural production to evolve, and innovative research is addressing these challenges. *Horticulturae* provides a venue to communicate research results in a rapid manner with open access, allowing everyone the opportunity to stay abreast of leading research addressing horticulture. I invite you to consider publishing the results of your research in this high quality, peer-reviewed journal.

Editor-in-Chief

Prof. Dr. Luigi De Bellis

Department of Biological and Environmental Sciences and Technologies (DiSTeBA), Salento University, Lecce, Italy

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, FSTA, and other databases.

Journal Rank:

JCR - Q1 (Horticulture) / CiteScore - Q1 (Horticulture)

