Special Issue

Application of Aeroponics System in Horticulture Production

Message from the Guest Editors

We are excited to present studies focused on cuttingedge aeroponic research.

- 1. Optimization of Nutrient Delivery in Aeroponics: This Special Issue encompasses the meticulous study of how various nutrient mixtures influence plant metabolism, growth patterns, and overall yield.
- Integration of Al, Machine Learning, and IoT in Aeroponics: This Special Issue delves into the development of predictive models that harness the power of artificial intelligence and machine learning.
- 3. Sustainable Aeroponic System Design: This Special Issue addresses the critical need for sustainability in aeroponic systems. It includes studying the reuse and recycling of nutrient solutions, the implementation of energy-efficient misting technologies, and the development of closed-loop systems.
- 4. Aeroponic Production of Specialty Crops: The application of aeroponics in the cultivation of high-value specialty crops, such as medicinal plants and rare herbs, is the subject of this Special Issue.

We invite you to explore these topics and contribute your insights and research to the advancement of aeroponic technologies and practices.

Guest Editors

Dr. Jianmin Gao

School of Agricultural Engineering, Jiangsu University, Zhenjiang 212013, China

Prof. Dr. Yanyou Wu

State Key Laboratory of Environmental Geochemistry, Institute of Geochemistry, Chinese Academy of Sciences, Guiyang 550081, China

Deadline for manuscript submissions

15 January 2026



Horticulturae

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 5.1



mdpi.com/si/224822

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)

