Special Issue

Nutrient Cycle in Hydroponic Cultivation

Message from the Guest Editor

Hydroponic cultivation stands at the forefront of sustainable agricultural practices, offering a promising solution to the challenges of modern farming. This Special Issue is dedicated to showcasing the latest breakthroughs and in-depth analyses that are shaping the future of hydroponics, including the following topics: Improventive Strategies for Nutrient Management: Exploring new methodologies for optimizing nutrient solutions that can lead to significant improvements in crop health and yield. (2) Closed-Loop Systems and Nutrient Recycling: Examining the integration of advanced closed-loop systems that promote the efficient reuse of nutrients, minimizing waste and environmental impact. (3) Nutrient Dynamics in Hydroponic Environments: Investigating the interplay between nutrient availability, uptake, and utilization in hydroponic systems and its direct correlation with crop growth and yield. (4) Advanced Technologies in Hydroponics: Highlighting the role of technology in precision agriculture, from sensor-based monitoring to automated control systems for nutrient delivery.

Guest Editor

Dr. Dandan Tang College of Horticulture, Sichuan Agricultural University, Chengdu 611130, China

Deadline for manuscript submissions

20 November 2025



Agronomy

an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.7



mdpi.com/si/232573

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

mdpi.com/journal/

agronomy





an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.7



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)