

Special Issue

Novel and Efficient Means for Fertilizers Applications in Plant Cultivation

Message from the Guest Editors

The fertility of soils around the world is decreasing mainly due to the intensification of agricultural practices. Therefore, soils are not always able to provide enough nutrients to satisfy plants need. As a consequence, the application of fertilizers is necessary to increase the nutrient levels in soils and to meet plants' needs. However, reserves of some fertilizers, such as phosphate and potassium, are finite; consequently, it is necessary to develop new types of fertilizers and fertilization strategies. The increase in fertilizer efficiency, as well as the better definition of strategies, should be set up in order to enhance crop performances without further decreasing soil fertility. The issue is looking to receive manuscripts that propose improvements in the practices of recommending fertilization, liming, and gypsum, such as nutrient rates, application times, supply methods, etc., which can contribute to increasing the efficiency of nutrient absorption by plants, increasing productivity and food quality, with a reduction in nutrient losses to the environment. Manuscripts that evaluate the impact of new sources of nutrients on crops will also be evaluated.

Guest Editors

Prof. Dr. Gustavo Brunetto

Department of Soil Science, Federal University of Santa Maria, Santa Maria 97105-900, Rio Grande do Sul, Brazil

Dr. Elena Baldi

Department of Agricultural and Food Sciences (DiSTAL), Alma Mater Studiorum, University di Bologna, Viale Fanin 46, 40127 Bologna, Italy

Deadline for manuscript submissions

31 December 2025



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/227677

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

[mdpi.com/journal/
plants](https://mdpi.com/journal/plants)





Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



[mdpi.com/journal/
plants](https://mdpi.com/journal/plants)



About the Journal

Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

Editor-in-Chief

Prof. Dr. Dilantha Fernando

Department of Plant Science, University of Manitoba, Winnipeg, MB
R3T 2N2, Canada

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), PubMed, PMC, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Plant Sciences) / CiteScore - Q1 (Ecology, Evolution, Behavior and Systematics)