Special Issue

The Role of Fertilizers in Boosting Plant Adaptation to Biotic and Abiotic Stresses

Message from the Guest Editor

In general, any substance that contributes to the growth of plants and fertility of the planting bed is called a fertilizer. Fertilizers are divided into several general categories including biological, organic, and chemical fertilizers. Biotic and abiotic stresses commonly induce changes in plant performance. However, fertilizers enhance nutrient use efficiency as well as biotic and abiotic stress tolerance in plants.

In this Special Issue, we focus on contributions about the effective techniques to alleviate the destructive effects of biotic and abiotic stressors on plant growth and development, related to, but not exclusively limited to, the following topics:

Physiological, biochemical, and molecular functions of fertilizers in plants to alleviate the detrimental effects of stresses;

Impact of fertilizers on plant development;

Impact of fertilizers on plant–microbe interaction;

Impact of fertilizer application on plant susceptibility to pathogen infection;

Impact of fertilizers on nutrient transformations in soil toward mitigation of stress in plants;

Genetic and epigenetic modifications in plants due to continuous use of fertilizers.

Guest Editor

Prof. Dr. Arafat Abdel Hamed Abdel Latef

Botany and Microbiology Department, Faculty of Science, South Valley University, Qena 83523, Egypt

Deadline for manuscript submissions

closed (31 October 2023)

Plants

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.5
Indexed in PubMed

mdpi.com/si/95445

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

mdpi.com/journal/plants

Plants

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.5
Indexed in PubMed

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)