

Special Issue

Effects of Plant Growth Regulators from Natural or Synthetic Sources on Horticultural Plants

Message from the Guest Editors

Plant growth regulators (PGRs) are natural or synthetic compounds with hormone-like activities. Like hormones, PGRs act as chemical messengers for intercellular signaling and play a fundamental role in plant growth and development and response mechanisms to a wide range of abiotic and biotic stresses. They are naturally synthesized by plants and microorganisms or can be produced from organic or chemical sources, and can be grouped into classes of compounds such as auxins, gibberellins, cytokinins, abscisic acid, ethylene, brassinosteroids, etc. The mechanisms underlying the effects of PGRs, and their roles in plant growth and development, the interaction or independence of their mode of action, and hormonal cross-talk under biotic and abiotic stresses are crucial for horticultural plant sustainable management and needs to be investigated using innovative approaches. Therefore, the Special Issue aims to collect research articles, reviews, short notes, and opinion articles focusing on the effects and the mode of action of the PGRs from organic and synthetic sources and their effectiveness in improving plant growth and tolerance to biotic and abiotic stresses.

Guest Editors

Dr. Alessandra Moncada

Dr. Alessandro Miceli

Dr. Filippo Vetrano

Deadline for manuscript submissions

closed (30 November 2021)



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/81253

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)