

## Special Issue

# The Regulatory Role of Nitric Oxide in Plant Growth and Development

### Message from the Guest Editors

Nitric oxide (NO) is a signaling molecule involved in a variety of physiological processes during plant growth and development and an important regulator of stress response. Extensive research in the last two decades has shown that NO is involved in seed germination, leaf expansion, root growth, stomatal closure and fruit maturation, et al. NO is a signaling molecule with multiple different regulatory functions in plant physiology and is one of the major players in plant signaling networks. In addition to its direct effects on metabolic enzymes and signaling proteins, NO can fulfill its signaling function via modification of the transcription machinery and chromatin structure. In this Special Issue of *Plants*, recent advances in the study of NO biology and biochemistry in plants will be presented, providing an overview of current understanding of the NO actions involved in plant growth and development. This includes NO-dependent signaling, molecular adjustments, and targets as key elements in plant physiology. The interaction between stress response and growth and development and the crosstalk between signaling pathways of NO and phytohormones will be highlighted.

---

### Guest Editors

Dr. Christian Lindermayr  
Dr. Zsuzsanna Kolbert  
Dr. Yuliya A. Krasylenko

---

### Deadline for manuscript submissions

closed (31 January 2022)



## Plants

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.1  
CiteScore 7.6  
Indexed in PubMed



[mdpi.com/si/85302](https://mdpi.com/si/85302)

*Plants*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[plants@mdpi.com](mailto: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, and 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)