

## Special Issue

# Function, Mechanism, and Application of ROS and Phytohormones in Plants under Hostile Conditions

### Message from the Guest Editors

Since the development of photosynthesis, cellular emergences of reactive oxygen species (ROS) have played a vital role in the evolution and development of plants. Therefore, this leads us to compile a Special Issue on ROS and phytohormone signaling during plant development as well as in stress acclimation. The following main themes will be covered in this Special Issue:

- Regulation of seed dormancy, germination, and seedling development by ROS and phytohormones;
- Regulation of the root system architecture by ROS and phytohormones;
- Regulation of stomatal movement, circadian rhythm, flowering establishment, fruit development, and ripening by ROS and phytohormones;
- Regulation of adaptation of plants to varied abiotic and biotic stress establishment by ROS and phytohormones;
- Phytohormonal signaling and redox regulation, and interface with ROS and RNS, under changing environmental conditions;
- Regulation of ion transport and signaling;
- ROS crosstalk with Ca<sup>2+</sup> signaling;
- Other related topics.

---

### Guest Editors

Dr. Mohsin Tanveer

Dr. Lei Wang

Prof. Dr. Mirza Hasanuzzaman

---

### Deadline for manuscript submissions

closed (25 July 2024)



## Antioxidants

---

an Open Access Journal  
by MDPI

---

Impact Factor 6.6  
CiteScore 12.4  
Indexed in PubMed



[mdpi.com/si/192738](https://mdpi.com/si/192738)

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

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





# Antioxidants

---

an Open Access Journal  
by MDPI

---

Impact Factor 6.6  
CiteScore 12.4  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

It has been recognized in medical sciences that in order to prevent adverse effects of “oxidative stress” a balance exists between prooxidants and antioxidants in living systems. Imbalances are found in a variety of diseases and chronic health situations. Our journal *Antioxidants* serves as an authoritative source of information on current topics of research in the area of oxidative stress and antioxidant defense systems. The future is bright for antioxidant research and since 2012, *Antioxidants* has become a key forum for researchers to bring their findings to the forefront.

---

### Editor-in-Chief

Prof. Dr. Alessandra Napolitano  
Department of Chemical Sciences, University of Naples “Federico II”,  
Via Cintia 4, I-80126 Naples, Italy

---

### 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, FSTA, PubAg, CAPIus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q1 (Chemistry, Medicinal) / CiteScore - Q1 (Food Science)