



plants



an Open Access Journal by MDPI

What Makes the Life of Stressed Plants a Little Easier? Defense Mechanisms against Adverse Conditions

Guest Editors:

Dr. Ewa Muszyńska

Department of Botany, Institute of Biology, Warsaw University of Life Sciences-SGGW, 159 Nowoursynowska St., 02-776 Warsaw, Poland

Dr. Kinga Dziurka

The Franciszek Górski Institute of Plant Physiology, Polish Academy of Sciences, Warsaw, Poland

Dr. Mateusz Labudda

Department of Biochemistry and Microbiology, Institute of Biology, Warsaw University of Life Sciences-SGGW, Nowoursynowska 159, 02-776 Warsaw, Poland

Deadline for manuscript submissions:
closed (30 September 2022)



mdpi.com/si/77070

Message from the Guest Editors

Plants experience a wide array of environmental stimuli, have a negative impact on their metabolism and growth. As motionless organisms, plants require various mechanisms to recognize and cope with the circumstances. The adjustments in amino acids, proteins, and carbohydrate metabolism, the maintenance of redox balance as well as structural adaptation seem to be the basis of survival in harsh conditions. All defense require signaling involving different molecules. There is a need for intensive research into transcription factors, regulators of gene expression during growth and development. An explanation of roles in stress responses remains fragmentary. Many molecules have the potential to act as priming agents or protectants, whose application constitutes a possible method against a range of stressors and provides intracellular acclimatization. Considering the interest in the multiple approaches to stress, the concept of this Special Issue is to broaden and summarize the knowledge of the stress biology. In particular, original and review papers related to structural, transcriptomics, metabolomics, proteomics, and other integrated stress aspects and their interactions

Special Issue



plants

Indexed in:
PubMed

CITESCORE
5.4

IMPACT
FACTOR
4.5

an Open Access
Journal by MDPI

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 (*Plant Science*)

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.

Contact Us

Plants Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/plants
plants@mdpi.com
[X@Plants_MDPI](#)