



an Open Access Journal by MDPI

# Advances in Environmental Stress Resistance on Morpho-Physiological Characters in Plants

Guest Editors:

#### Prof. Dr. Yang-Rui Li

Key Laboratory of Sugarcane Biotechnology and Genetic Improvement (Guangxi), Ministry of Agriculture and Rural Affairs/Guangxi Key Laboratory of Sugarcane Genetic Improvement/Sugarcane Research Institute, Guangxi Academy of Agricultural Sciences, Nanning 530007, China

#### Prof. Dr. Othmane Merah

1. Laboratoire de Chimie Agro-Industrielle (LCA), Institut National de la Recherche Agronomique, Université de Toulouse, CEDEX 4, 31030 Toulouse, France 2. Département Génie Biologique, IUT Paul Sabatier, Université Paul Sabatier, 32000 Auch, France

Deadline for manuscript submissions: closed (31 March 2023)



mdpi.com/si/106632

### **Message from the Guest Editors**

Dear colleagues,

There is an interest in understanding the mechanisms of plant adaptation and tolerance strategies to unfavorable environmental conditions. Plants are continuously exposed to changing environmental variables, such as high light, UV radiation, nutrients, wind, gasses, oxidative stress, dehydration, salt, excessive temperatures, metal toxicity, and other factors are among them.

This Special Issue aims to bring together current knowledge on the plant morphological, physiological, biochemical, and molecular/genetic mechanisms for resistance and associated problem of environmental stresses in arid and semi-arid areas.

Researchers from the globe are warmly invited to submit original research and review articles on the related topics as:

Physiological, biochemical, and molecular studies assessing the impact of unfavorable environmental variables on plant morphology, water relations, photosynthetic leaf gas exchange, enzymatic and nonenzymatic antioxidant, metabolites, and productivity effect of environmental stress on the development of plants. Studies on the molecular responses to stress related genes and pathways for trait growth regulation and stress

assie

resistance capacity





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

### 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 community.

## **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)

## **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\_MDPl