Special Issue

Role of Abscisic Acid in Plant Stress Response

Message from the Guest Editor

The phytohormone abscisic acid (ABA) is a major player in fine-tuning plants' responses to adverse environmental conditions, including water deficiency, extreme temperatures, salinity, heavy metals, flooding, or pathogen attack. Tight control of ABA levels, which are constantly modulated by synthesis, degradation. (de)conjugation, and transport, is therefore crucial for a plant to adapt to its environment. The plant's response to ABA stimuli is determined by its perception and transmission of downstream signals that trigger a cascade of relevant molecular, biochemical, physiological, and morphological responses, enabling the plant to cope with stress. Despite extensive research leading to significant progress being made in understanding the mechanisms of ABA-mediated response and adaptation to stress, our knowledge of many crucial pieces of this multifaceted puzzle is still lacking. This Special Issue aims to collate recent advances addressing the role of ABA in plant responses to stress, which have emerged from the implementation of a wide range of approaches, from molecular/genetic approaches to whole plant physiology studies.

Guest Editor

Dr. Edyta Zdunek-Zastocka

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

Deadline for manuscript submissions

closed (20 March 2025)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/202982

International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

mdpi.com/journal/ ijms





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, 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, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

