Special Issue

Plant Hormone Signaling: Molecular Mechanisms and Integrated Functions

Message from the Guest Editors

Plant hormones are pivotal orchestrators of virtually every aspect of plant life, from embryogenesis to senescence. They regulate growth, development, and metabolism, and are central to plants' adaptive responses to a constantly changing environment. This Special Issue, titled "Plant Hormone Signaling: Molecular Mechanisms and Integrated Functions." explores the sophisticated molecular networks through which plant hormones coordinate growth, development. and stress adaptation. The contributions included will highlight recent advances in understanding canonical and non-canonical signaling pathways-from hormone perception and transmembrane transduction to transcriptional reprogramming and post-translational regulation. Emphasis is placed on the integration of multiple hormone signals, revealing how crosstalk between auxin, cytokinin, abscisic acid, jasmonate, and other hormones fine-tunes physiological outcomes.

Guest Editors

Dr. Zhijuan Wang

National Key Laboratory of Crop Genetic Improvement, College of Plant Science and Technology, Huazhong Agricultural University, Wuhan 430070, China

Dr. Hongtao Zhao

College of Life Science, Hebei Normal University, Shijiazhuang 050024, China

Deadline for manuscript submissions

31 March 2026



Plants

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/255656

Plants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
plants@mdpi.com

mdpi.com/journal/ plants





Plants

an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 7.6 Indexed in PubMed



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, 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)

