

Special Issue

Unravelling the Molecular Mechanisms of Different Stress Responses in Plants

Message from the Guest Editor

Plants exist in dynamic environments that frequently present conditions that are unfavorable to their growth and development. Different plant stresses significantly impair plant productivity, thereby constraining agricultural output and posing a serious threat to global food security. Plant stress responses are intricate and involve a network of molecular mechanisms to ensure survival and adaptation to various environmental challenges. These stresses trigger a cascade of signaling pathways and gene expression changes. Plants have evolved sophisticated mechanisms to perceive stress signals and mount rapid responses to these stresses by regulating molecular, physiological, metabolic, and developmental pathways. Advances in genomic and biotechnological tools have allowed researchers to identify key regulatory genes and pathways, offering new opportunities for breeding or engineering stress-tolerant plants.

This Special Issue features articles that explore the response of crops to various stresses and their molecular mechanisms. Original research and review articles on response of plants to different stresses are welcome.

Guest Editor

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Message from the Editor-in-Chief

Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

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