

Special Issue

Plant Stress Physiology and Ecophysiological Responses to Environmental Challenges

Message from the Guest Editor

Plants' responses vary depending on plant genotype, developmental stage, and prior stress exposure. Understanding these mechanisms is key to predicting plant performance under variable environmental conditions. In agriculture, applying this knowledge helps improve crop resilience through stress-tolerant breeding, optimized resource use, and integrated management practices—critical steps for maintaining productivity in the face of climate uncertainty. This Special Issue invites original research articles, reviews, and short communications that explore plant responses to environmental stressors from a physiological and ecophysiological standpoint. While the focus is on crop species, studies involving model or wild plants that contribute to our understanding of stress responses are equally welcome. We particularly encourage multidisciplinary approaches that integrate molecular biology, genetics, biochemistry, and systems biology with classical and modern plant physiology.

Guest Editor

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Deadline for manuscript submissions

31 July 2026



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



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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

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