

Special Issue

Photosynthesis and Plant Physiology Under Climate Change

Message from the Guest Editors

- Plants are currently facing significant challenges due to climate change. Long-term shifts in global temperatures and weather patterns are altering plants' functionality. These changes limit photosynthesis, affecting plant development, growth, and productivity and leading to decreased crop yields.
- Over the last decade, extensive research has highlighted the detrimental effects of these stresses in chloroplast biosynthesis, structure, and function. Heat and drought disrupt critical photochemical reactions, including the inactivation of Photosystem II, and reduce the activity of stress-related proteins such as Rubisco, leading to redox imbalances and ultimately reducing photosynthetic efficiency.
- This Special Issue will focus on research providing insights into the mechanisms underlying plant responses to climate change, including physiological, biochemical, and molecular modifications that can identify key targets for plant acclimatization. We also encourage the submission of studies that expand our understanding of how future climate scenarios will affect plant physiology, quality, and yield, with the aim of developing more resilient crops.

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Deadline for manuscript submissions

31 August 2026



Plants

an Open Access Journal
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Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/225370

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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, and 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.

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