

## Special Issue

# Photosynthesis under Climatic Extremes

### Message from the Guest Editors

Photosynthesis is the major process leading to primary production on Earth. The process of photosynthesis is very dependent on environmental variables such as photoactive radiation, water availability, temperature, CO<sub>2</sub>, salinity, etc. For most crop plants, change in the temperature and CO<sub>2</sub> extremes leads to considerable changes in leaf morphology and structure, dry matter of roots, stems, leaves, and whole plant, as well as the photosynthetic rate, transpiration, and stomatal conductance. Under climatic extremes such as temperature, drought, and CO<sub>2</sub>, there is a need for thorough improvement in photosynthetic key limiting factors such as stomatal conductance, mesophyll conductance, biochemical capacity combined with RuBisCo, Calvin–Benson cycle, thylakoid membrane electron transport, non-photochemical quenching, and carbon metabolism or fixation pathways. This Special Issue deals with different approaches to detecting, understanding, and improving the photosynthetic activity of different crops under extreme environmental conditions.

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### Guest Editors

Dr. Sajad Hussain  
Dr. Anshu Rastogi  
Prof. Dr. Marian Brestic

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### Deadline for manuscript submissions

closed (31 December 2023)



## Plants

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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, 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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### Editor-in-Chief

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