Special Issue

Plant Photosynthesis in Complex Climates

Message from the Guest Editor

Climate change uncertainty has prompted higher photosynthetic efficiency and yields that will ensure food security in the coming decades, and genetic manipulation and the reduction of carbon or energy losses could be beneficial for increasing photosynthetic efficiency or crop yield. In complex climates, there is an urgent need to improve key photosynthetic limiting factors such as light use efficiency, stomatal/mesophyll conductance, photorespiration losses, and Rubisco activity, as well as rates of photosynthetic electron transport, nonphotochemical quenching, and carbon metabolism or fixation pathways. In addition, the mechanistic basis for enhancements in photosynthetic adaptation to environmental variables, such as light intensity, temperature, elevated CO2 levels, and others, needs further investigation. As such, this Special Issue of *Plants* will focus on the physiological bases and strategies to improve plant photosynthesis by targeting these intrinsic photosynthetic limitations as well as external environmental factors.

Guest Editor

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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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