Special Issue

Regulation of Central Carbon and Amino Acid Metabolism in Plants

Message from the Guest Editors

Over the past few decades, considerable effort has been made to understand plant primary metabolism. While the biochemistry and the underlying genetics of central carbon and nitrogen metabolism have been thoroughly studied, there is still a lack of knowledge on how these metabolic branches are regulated and regulate and interact with each other. Improving our current understanding of such regulatory loops is of particular interest given that all oxygenic phototrophs are frequently exposed to environmental changes, including periods of unfavorable conditions that distinctly lower plant growth and yield. This Special Issue of *Plants* aims to highlight the metabolic acclimation and signaling mechanisms of plant central carbon and nitrogen metabolism towards environmental changes, particularly involving alterations in CO2 and O2 concentration, light availability and intensity, as well as fluctuations in temperature and water supply during different stages of plant development. Thus, the major focus will be on the acclimation and the regulatory interplay that, among others, involve the operation and interaction of photosynthesis, photorespiration and respiration.

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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.

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