Special Issue

Effects of Trehalose Biosynthesis on Crop Yield

Message from the Guest Editor

Plant metabolism is highly regulated, and it appears that part of this regulation is modulated through the trehalose pathway. Trehalose regulates metabolism in light of carbon availability and can result in metabolic reprogramming between anabolic or catabolic pathways, as well as the overall regulation of growth and development. The ubiquity of this pathway in plants has been known for the better part of two decades, and for those working on carbon metabolism, it has been a major revelation. Recent studies of the trehalose biosynthesis pathway have uncovered exciting metabolic, genetic, and evolutionary roles of trehalose, and demonstrated huge potential for trehalose metabolism to be a key player in maximizing crop yields and stress resilience. This Special Issue of *Plants* will highlight the function and evolution of trehalose pathway in plants, but also how this pathway is pivotal for shaping future crop yields, resilience, and, ultimately, global food security.

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.

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