Special Issue

Physiological Basis and Genetic Regulation of Plant Photosynthesis: For Higher Efficiency

Message from the Guest Editors

Photosynthesis is the most important reaction in plant physiology and is the main source of food and energy. Improving crop yield is closely related to photosynthetic efficiency, which may be realized at any of the levels of organization at which photosynthesis is normally measured (e.g., enzyme, protein complex, thylakoid, chloroplast, leaf, and canopy). Photosynthetic performance can be improved by either capturing more light energy or using each unit of absorbed light energy to more efficiently fix CO2 under some set of environmental conditions. In addition, quantitative and molecular genetics can also help to reveal natural genetic variation in photosynthetic traits and establish the identity and function of the genes involved. This Special Issue of *Plants* will highlight the physiological basis for improving photosynthetic efficiency in plants, and genetic modification approaches to improve the photosynthetic performance of crops.

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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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