Special Issue

Molecular Biology of Chloroplast: Structure, Function and Development— 2nd Edition

Message from the Guest Editors

Chloroplasts are essential organelles specific to plants. The structure, function, development and propagation of chloroplasts are important for the growth and development of plants and their interactions with the environment. Chloroplasts are the main site of photosynthesis. They also participate in the synthesis of amino acids, fatty acids, pigments and hormones. Chloroplast division maintains the stability of chloroplast numbers in cells, ensuring the normal running of various physiological processes in chloroplasts. Chloroplasts are reported to have avoidance movement in response to intense light. In recent years, chloroplast movement has also been reported to be involved in plant immunity. Stromules, structures that emanate from chloroplasts, function in plant development and defense. Exploring the diverse roles of chloroplasts in plants will help to improve the yield of crops and enhance the stress tolerance of plants. However, there are still many unknowns worth discovering, for example, how chloroplasts respond to environmental signals. This Special Issue of Plants will highlight the structure, function, development and propagation of chloroplasts in plants.

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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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