Special Issue

Genetics, Genomics and Biotechnology of Plant Cytoplasmic Organelles

Message from the Guest Editors

Chloroplasts and mitochondria are essential plant organelles involved in many fundamental processes. They are semi-autonomous organelles; hence, their function is dependent upon cross-talk between nuclear and organelle genetic systems. Chloroplasts and mitochondria are also known as stress sensors, since any dysfunction in their activity, caused by both biotic and abiotic factors, leads to a global defense response of the plant involving hormone, ROS, and other metabolic pathways' activation. The goal of this Special Issue is to provide new advances in the field of the genetics, genomics, and biotechnology of plant cytoplasmic organelles: - Sequencing of organellar genomes/transcriptomes aimed at providing insight into the evolution of plant species, developing new molecular markers suitable for the study of genetic diversity, analyzing gene expression and maturation, etc.; - Discovering novel gene functions and deciphering unknown mechanisms, as well as uncovering the molecular mechanisms at the basis of important processes in which chloroplasts or mitochondria are somehow involved; - Engineering of plastid DNA.

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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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