

Special Issue

Beyond Mendel's Laws

Message from the Guest Editors

The experiments of Gregor Mendel determined the formation and grandiose success of genetics in the 20th century. As this science developed with the use of new methods, evidence appeared that not all facts could be described on the frame of the patterns discovered by this scientist, and ideas about the so-called “non-Mendelian heredity” appeared. Paying tribute to the inquisitive mind of Mendel, we present a Special Issue devoted to the study of such phenomena. Since the main idea of the Issue is to present and discuss various aspects of non-Mendelian, non-canonical heredity and variability:

- Mobile elements of plants as a factor of variability and evolution;
- Cytoplasmic inheritance in plants;
- Epigenetic variations and their role in plant adaptation and evolution;
- Gene silencing;
- Genome methylation;
- Polyploidy and genome transformations in plants;
- Supernumerary chromosomes;
- Aspects of chromosomal and genomic evolution of plants;
- Ontogenetic and genetic changes during vegetative hybridization;
- Genetics of sex and its regulation;
- Non-canonical measurements in cell culture and somatic hybridization;
- Polygenic inheritance and environmental effects.

Guest Editors

Prof. Dr. Alex Troitsky

Dr. Giorgio Perrella

Dr. Francisco Fuentes

Dr. Sujan Mamidi

Prof. Dr. Jan Dvorak

Deadline for manuscript submissions

closed (20 December 2023)



Plants

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CiteScore 7.6
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About the Journal

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, and 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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