Special Issue

Cytogenetics and Agronomic Traits of Crops

Message from the Guest Editors

During the breeding process, new forms of plants with higher adaptability, productivity and quality arise, which is associated with significant changes at various levels of chromatin. Chromosome engineering is a method that makes it possible to carry out prebreeding of the initial material, monitor the inheritance of chromosomal rearrangements, determine the probability of transferring valuable chromatin into the genome of a cultivated species, and control the dosage of alien chromatin introgressions. Thanks to the development of Next Generation Sequencing technologies and associated bioinformatics analysis, the improvement of non-denaturing FISH methods and the use of oligo- and multi-oilgo probes cytogenetic approaches have made significant progress in recent years and are in demand in the breeding improvement of crops. A Special Issue "Cytogenetics and Agronomic Traits of Crops" is dedicated to achievements in the field of chromosomal engineering of cultivated plants, the study of the influence of the state of chromosomes and chromatin on agronomically valuable traits, as well as the development of tools for the cytogenetic characterization of crop plants.

Guest Editors

Dr. Mikhail Divashuk

All-Russia Research Institute of Agricultural Biotechnology, 127550 Moscow, Russia

Dr. Pavel Yu. Kroupin

All-Russia Research Institute of Agricultural Biotechnology, 127550 Moscow, Russia

Deadline for manuscript submissions

closed (15 September 2023)



Plants

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/123325

Plants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
plants@mdpi.com

mdpi.com/journal/plants





Plants

an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 7.6 Indexed in PubMed



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, 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

Prof. Dr. Dilantha Fernando

Department of Plant Science, University of Manitoba, Winnipeg, MB R3T 2N2, Canada

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Plant Sciences) / CiteScore - Q1 (Ecology, Evolution, Behavior and Systematics)

