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# **Cytogenetics and Agronomic Traits of Crops**

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# **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 nondenaturing FISH methods and the use of oligo- and multioilgo 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.













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# **Message from the Editor-in-Chief**

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