



Meiosis in Plant Interspecific Hybrids and Polyploids

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Message from the Guest Editors

Dear Colleagues,

Polyploidy is pervasive and represents a major mechanism of speciation in plants. According to their genome composition, polyploids have been classified into two types: autopolyploids and allopolyploids. The polyploid condition implies that each chromosome has two or more potential partners to undergo synapsis and recombination during meiosis. Meiotic programs of polyploid species are often in the focus of research trying to understand how these organisms overcome the chromosome competitive behavior in order to produce balanced gametes. Two main reasons underpin the study of meiosis in interspecific hybrids. One is to shed light on the mechanisms underlying chromosome duplication to form allopolyploids, the other is that hybridization can be used to transfer genes controlling useful agronomical traits from wild species to crops. This Special Issue will cover research works concerning the origin of polyploid species, the adaptive modification of their meiotic behavior to ensure balanced chromosome segregations, and the use of induced homoeologous recombination in interspecific gene transfer with implications in breeding related programs.





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Message from the Editor-in-Chief

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