

Special Issue

Genomics-Assisted Breeding for Cotton Improvement

Message from the Guest Editors

Cotton breeders are facing challenges for cotton improvement in yield and fiber quality under a rapidly changing climate. The effectiveness of traditional breeding is often limited because quantitative traits are polygenic and because of their interactions with biotic and abiotic stresses. In recent years, genomic-assisted breeding has emerged as an effective approach to help breeders in selecting desirable lines to increase breeding efficiency. In this Special Issue, we aim to demonstrate new tools in biotechnology and molecular studies and their applications in cotton breeding for improvement. We accept original research articles or reviews relating to the proposed title, as defined in the following: (1) Development of genomic resources including but not limited to identification of quantitative trait loci (QTLs) using molecular markers and transcriptome assembly and analysis of candidate genes; (2) Genomic-assisted breeding, including marker-assisted selection of desirable parents and further selection of breeding lines based on marker genotypes; (3) Genomic selection for accelerating selection efficiency in molecular breeding; (4) Development of new databases.

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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.

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