



## Genomics-Assisted Breeding: Strategies, Advances and Challenges

Guest Editor:

**Prof. Dr. Kun Lu**

College of Agronomy and  
Biotechnology, Southwest  
University, Chongqing, China

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### Message from the Guest Editor

Crop improvement has become the most effective way to boost global food security. Compared with conventional breeding approaches, marker-assisted selection has greatly enhanced the efficiency of plant breeding and crop improvement. Recently, several novel genomics-assisted breeding (GAB) tools/approaches have been extensively studied and achieved significant progress in plant science. However, their successful implementation in practical breeding for the improvement of complex traits has rarely been explored.

This Special Issue is dedicated to research articles and reviews which cover recent progress in the identification of quantitative trait loci, quantitative trait nucleotides, and functional markers associated with complex traits in agronomically important crops, and functional characterization of a causative gene. New tools and methodologies and their breeding applications involved in high-throughput phenotyping and genotyping, association and linkage mapping, GS and phenotype prediction, gene and genome editing, de novo domestication, genome design for future crops, artificially synthesized crops, and integrative GAB approaches are also of particular interest.





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*Biomolecules* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
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