

Special Issue

The Potential of Genetics and Plant Breeding in Crop Improvement

Message from the Guest Editors

Genetics and plant breeding are experiencing rapid progress, notably through molecular design in crop improvement. This field incorporates essential technologies such as genomics, transcriptomics, proteomics, metabolomics, gene transformation, molecular biology, biochemistry, molecular breeding, and genomic editing. These technologies have yielded notable achievements, particularly in understanding crop origins, evolution, growth, development, quality, and stress responses. This Special Issue on “The Potential of Genetics and Plant Breeding in Crop Improvement” provides a platform for researchers, breeders, and agricultural scientists to exchange the latest advancements and explore future research directions, aiming to drive scientific progress and foster innovation in crop improvement. By gaining insights into pivotal research developments in genetics, biotechnology, and molecular breeding, it advances crop breeding and optimizes the use of germplasm resources.

Guest Editors

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A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

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