

# Topical Collection

## Crop Genomics and Breeding

### Message from the Collection Editors

With the advent of next-generation sequencing technology, genomics has been receiving intensive attention for the last two decades. In fact, since the *Arabidopsis* genome was completed, draft sequences of pseudomolecules have been published for more than 100 plant genomes, including green algae, in large part due to advances in sequencing technologies. Advanced DNA sequencing technologies have also conferred new opportunities for high-throughput low-cost crop genotyping, based on single-nucleotide polymorphisms (SNPs). However, the recurring complication in crop genotyping that differs from other taxa is a high level of DNA sequence duplication, noting that all angiosperms are thought to have polyploidy in their evolutionary history. Nonetheless, advanced genomics technologies have facilitated new opportunities for breeders with a cost-effective, genome-wide scanning, and multiplexed sequencing platform, being able to contribute to many crop breeding programs.

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## Plants

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### Message from the Editor-in-Chief

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