

Special Issue

Vegetable Genomes and Genetic Breeding

Message from the Guest Editor

Vegetables play a vital role in maintaining human health by providing a rich source of essential vitamins, fiber, minerals, and nutrients. The development of new vegetable varieties of a high quality and multiple resistances to biotic and abiotic stresses is becoming increasingly important. To expedite breeding programs, it is crucial to incorporate molecular-marker-assisted and whole-genome selection technologies, which rely on the availability of vegetable genomes. In recent years, advancements in sequencing technologies have significantly simplified genome assembly and reduced the associated costs. The formation of high-quality genomes has been achieved for most major crops, greatly facilitating functional genomics research and breeding efforts. However, many vegetables, particularly orphan crops, still lack reference-level genomes. Additionally, for some vegetables with published genomes, the existing assemblies fail to encompass the breeding backbone lines that are vital for practical breeding programs. Consequently, there is an ongoing need for genome assembly and data mining across various vegetable varieties and germplasms.

Guest Editor

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Genes is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the *Genes* team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider *Genes* for your next genetics paper?

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