Special Issue

Genetics and Molecular Breeding of Cucurbitaceous Crops

Message from the Guest Editor

Cucurbitaceae stands out as one of the most economically important fruit and vegetable crop families, following the Solanaceae family. Cucurbitaceae includes diverse crop species such as cucumber, melon, watermelon, zucchini, pumpkin, and several different gourds.

The genome assembly of most of these cucurbit crops has been completed, playing a pivotal role in the development of molecular markers and the discovery of new functional genes, essential for precision breeding. There are a wide range of breeding traits in these crops, including resistance to abiotic and biotic stress, functional components, flowering habits, fertility, taste and texture of edible parts, and fruit size and shape. Recent trends in breeding focus on genomics and bioinformatics analysis, as well as precision breeding relying on genome editing technologies for functional genes.

We welcome innovative research articles and review papers that explore not only germplasm resources and conventional breeding but also diverse molecular and genomic approaches.

Guest Editor

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closed (31 October 2024)



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Message from the Editor-in-Chief

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