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Special Focus: Germplasm and Molecular Breeding in Horticultural Crops

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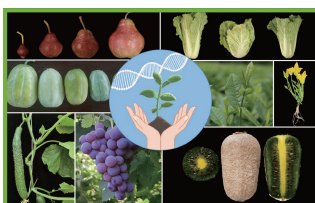
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COVER



Horticulture is an important part of agricultural planting and production, which is of great significance for enriching human nutrition and beautifying and transforming the human living environment. With the rapid development of science and technology in recent years, genomics, proteomics, metabolomics, transcriptomics, epigenetics and other bioinformatics techniques facilitate the genetic improvement of horticultural crops on yield and tolerance to disease and abiotic stress. Understanding the genomics and mechanisms underlying the important agronomic traits of each species will greatly promote access to molecular breeding and the utilization of germplasm resources for horticultural crops. Therefore we organized this special focus to briefly review the applications of biotechnology in horticultural crop breeding and germplasm evaluation, in order to provide a reference for the subsequent research on horticultural crop breeding. The cover image is a combination of the main research subjects, including fruit, vegetables, melons and tea, which were provided by the corresponding authors of the studies in this special focus. See pages 3237–3379 for more details.