



Functional Genomics and Molecular Breeding of Root and Tuber Crops

Guest Editor:

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Message from the Guest Editor

Root and tuber crops, such as potatoes, sweet potatoes, cassava, radishes, and carrots, are important sources of food for humanity. Achieving high yields and the quality of root and tuber crops, as well as enhancing their environmental adaptability, are the primary objectives in their production. However, research on functional genomics, the exploration of key functional genes and their molecular mechanisms, and the development of genetic engineering technologies for root and tuber crops are still limited. This Special Issue focuses on the discussion of functional genomics and the molecular breeding of root and tuber crops, including the following aspects:

1. Functional genomics and omics data analysis of root and tuber crops;
2. The molecular genetic basis of root and tuber development, such as the regulation mechanisms of the swelling period, quantity, shape, quality, etc.;
3. The molecular mechanisms of the biotic and abiotic environmental adaptation of root and tuber crops;
4. The development and optimization of molecular breeding and genetic engineering technologies for root and tuber crops, such as genetic transformation and gene editing technologies.





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Message from the Editor-in-Chief

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