

Special Issue

Recent Advances in Rice and Tomato Molecular Breeding

Message from the Guest Editors

World population growth, climate change, global warming, and carbon neutrality profoundly impact food productivity. Rice and tomato are two major crops, representing monocot grains and eudicot vegetables. Through the development of molecular breeding, plant transformation, and genome editing for decades, the agricultural traits of rice and tomato have been dramatically improved and the latest high-throughput phenotyping tools enable the interpretation of new crop characteristics that have not been discovered and analyzed before. In particular, plant breeding goals are constantly changing due to environmental shifts. Plant breeding, thus, is required to adapt to new environments and cultivation methods in addition to traditional breeding goals for field-based cultivation. This Special Issue aims to introduce the novel discoveries within rice and tomato breeding and the development of biological and computational tools regarding genetics, genomics, and phenomics areas. Original research articles, reviews, perspectives, and methods focusing on molecular breeding and cutting-edge technology for crop improvement are all welcome.

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Deadline for manuscript submissions

closed (31 December 2022)



Plants

an Open Access Journal
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Impact Factor 4.0
CiteScore 6.5
Indexed in PubMed



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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, and conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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