Special Issue

Genetic and Genomic Strategies for Enhancing Seed Quality and Grain Nutrition in Cereal Crops

Message from the Guest Editors

Given the increasing global population growth and climate change, enhancing grain quality and nutrition of staple crops (such as rice, maize, and wheat) has become pivotal for ensuring food security. Advances in genetic research and genomic breeding technologies provide innovative solutions for developing green, high-yield, and superior cereal varieties. This initiative aims to improve the nutritional value of rice grains, address the severe health problem of malnutrition, and relieve the pressure on high-yield targets by minimizing resource depletion and environmental impact. This Special Issue of *Plants* will highlight the latest advances in leveraging multi-omic approaches to decipher the genetic variation in various nutrients, metabolites, and bioactive substances. The issue will also cover the efficient exploration of valuable green and nutritional traits (genes), the elucidation of the genetic basis and molecular regulatory networks of multiple nutrients in whole grains, and the optimization of breeding strategies for developing new varieties of cereal crops with enhanced adaptability, high yield, and nutrient density.

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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, 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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