Special Issue

Edible Mushrooms: Genetics, Genomics, and Breeding

Message from the Guest Editors

Edible mushrooms exhibit remarkable morphological and genetic variability across both domesticated species with established cultivation practices and wild-harvested varieties. They play pivotal roles in numerous facets of our lives, significantly contributing to ecological balance, enhancing human health, and fostering socio-economic development. To unravel the mysteries surrounding their growth, development, and the genetic determinants of beneficial traits, molecular biology has emerged as a pivotal discipline. It can offer profound insights into the intricate genetic mechanisms regulating processes in these mushrooms, unlocking a vast treasure trove of potential innovation. Advances in genetics, genomics—particularly pan-genomics—and gene-editing technologies are presenting unprecedented opportunities to enhance agronomic traits, improve cultivation efficiency, and optimize nutritional profiles in edible mushrooms. Our objective for this Special Issue is to publish contributions in the form of research articles, reviews, and short communications focused on the application of genetics and genomics across diverse domains related to edible mushrooms.

Guest Editors

Dr. Junjie Yan
Dr. Jie Chen
Prof. Dr. Mingwen Zhao

Deadline for manuscript submissions

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Message from the Editor-in-Chief

Horticultural plants and their products provide sustenance, health, and beauty. A confluence of factors is putting increasing pressure on horticultural production to evolve, and innovative research is addressing these challenges. *Horticulturae* provides a venue to communicate research results in a rapid manner with open access, allowing everyone the opportunity to stay abreast of leading research addressing horticulture. I invite you to consider publishing the results of your research in this high quality, peer-reviewed journal.

Editor-in-Chief

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