

Special Issue

Genetics and Breeding of Edible Mushroom

Message from the Guest Editor

Edible mushrooms, well known for their high nutritional and medicinal value, have been widely cultivated across the globe. Studies involving germplasm resources, molecular markers, genetics, breeding systems, and cultivation techniques have been extensively performed over the last few decades and have greatly promoted the mushroom industry. However, both mushroom development and the formation of nutritional and medicinal characteristics are complicated systems involving gene regulatory networks and environmental stimulations. With breakthroughs regarding high-throughput sequencing and omics, genetic transformation, gene editing technologies, etc., more and more researchers have focused on the molecular genetic mechanisms of mushroom yield and quality and have made some progress. This Special Issue focuses on the field of both basic research and technological applications in mushroom genetics and breeding. Authors are welcome to submit articles in the areas of omics analysis, gene identification, genetic engineering, marker-assisted breeding, environmental response, formation mechanisms of nutritional and medicinal value, and other related areas.

Guest Editor

Dr. Xiangli Wu

Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences, Beijing 100081, China

Deadline for manuscript submissions

closed (31 March 2025)



Agriculture

an Open Access Journal
by MDPI

Impact Factor 3.6
CiteScore 6.3



mdpi.com/si/194559

Agriculture
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
agriculture@mdpi.com

[mdpi.com/journal/
agriculture](https://mdpi.com/journal/agriculture)





Agriculture

an Open Access Journal
by MDPI

Impact Factor 3.6
CiteScore 6.3



[mdpi.com/journal/
agriculture](https://mdpi.com/journal/agriculture)



About the Journal

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, scholarly and scientific open access journal publishing peer-reviewed research papers, review articles, communications and short notes that reflect the breadth and interdisciplinarity of agriculture.

Editor-in-Chief

Prof. Dr. Les Copeland
Sydney Institute of Agriculture, School of Life and Environmental
Sciences, The University of Sydney, Sydney, NSW 2006, Australia

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), GEOBASE, PubAg, AGRIS, RePEc, and other databases.

Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Plant Science)