



Crop Yield Improvement in Genetic and Biology Breeding

Guest Editors:

Dr. Zhiyong Li

State Key Laboratory of Rice
Biology and Breeding, China
National Rice Research Institute,
Hangzhou 311400, China

Dr. Jie Huang

State Key Laboratory of Rice
Biology and Breeding, China
National Rice Research Institute,
Hangzhou 311400, China

Deadline for manuscript
submissions:

15 March 2025

Message from the Guest Editors

Food security is threatened, due to the burgeoning world population, increasing individual demands and degrading farmland. Additionally, over the past two decades, climate change is becoming more challenging in crop field improvement, especially given the incidences of elevated atmospheric CO₂, as well as changing temperature and rainfall patterns. Crop breeding has been greatly accelerated by the enhanced knowledge of plant genomics and genetics, and the development of modern biotechnologies. However, crop yields have stabilized in recent years. To keep up with the future food demand, it is imperative to explore the genetic basis of plants and apply modern genetic engineering and breeding biotechnologies.

The goal of this Special Issue is to present an overview of the latest fundamental discoveries in crop genomics, genetics and crop germplasm resources, as well as the potential utilization of biotechnologies in crop yield improvement. All original research papers and reviews are welcome for submission to this research topic, and we believe your contribution will have a significant influence on future crop breeding.





an Open Access Journal by MDPI

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

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, crossdisciplinary and scholarly open access journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. *Agriculture* is published in an open access format – research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the public have unlimited and free access to the content as soon as it is published.

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), PubAg, AGRIS, RePEc, and other databases.

Journal Rank: JCR - Q1 (Agronomy) / CiteScore - Q1 (Plant Science)

Contact Us

Agriculture Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/agriculture
agriculture@mdpi.com
X@AgricultureMdpi