



life



an Open Access Journal by MDPI

Genetic Basis for Rice Seed Development and Germination

Guest Editors:

Dr. Jian Zhang

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

Dr. Zhoufei Wang

College of Agriculture
Department, South China
Agricultural University,
Guangzhou 510642, China

Prof. Dr. Jiezheng Ying

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

Deadline for manuscript
submissions:

closed (22 June 2022)

Message from the Guest Editors

Rice (*Oryza sativa* L.), a semi-aquatic annual grass plant, has been serving as the staple food for over half of the world's population. Rice seed comprises a maternal caryopsis coat, a diploid embryo, and a triploid endosperm. The embryo carries the life of the progenies, while endosperm is stuffed with nutrients such as starch, protein, lipids, and other trace substances, which could be utilized for the embryo germination or human consumption. So far, quite a few QTLs or genes controlling rice seed development or germination have been identified. Nevertheless, the genetic basis and regulatory mechanism of rice seed development remain largely unclear.

The aim of this Special Issue is to collect newest fundamental discoveries on the genetic basis and regulatory mechanism of rice seed development underpinning rice grain size, yield, quality, as well as seed germination, dormancy, and vigor. We hope the findings of this Special Issue will help to address the fundamental scientific questions of plant seed development and provide means to improve crop productivity. We welcome all kinds of submissions, including original research papers, reviews, and methods.



mdpi.com/si/98461

Special Issue



life



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Lluís Ribas de Pouplana

Institute for Research in Biomedicine (IRB Barcelona), The Barcelona Institute of Science and Technology, 08028 Barcelona, Spain

Message from the Editor-in-Chief

Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

Author Benefits

Open Access: free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [PMC](#), [CAPlus / SciFinder](#), [AGRIS](#), and [other databases](#).

Journal Rank: JCR - Q1 (Biology) / CiteScore - Q1 (Paleontology)

Contact Us

Life Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/life
life@mdpi.com
[X@Life_MDPI](#)