



Precision Breeding Technologies of Rice

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Message from the Guest Editors

Rice is the staple food of more than 3.5 billion people worldwide and plays an important role in ensuring future food security, especially in Asia, parts of Africa and Latin America. Thus, it is extremely important to develop new rice cultivars with high yield, high quality, multiresistance and wide adaptability. However, balancing yield, cooking and taste quality and disease resistance is a daunting challenge in crop breeding due to the antagonistic relationship among these traits. Therefore, it is difficult to generate novel elite rice cultivars balancing multiple agronomic traits through traditional breeding. However, at present, with the rapid development of multi-omics, computational biology, synthetic biology and other basic sciences, precision breeding techniques have appeared. This Special Issue of *Agronomy* seeks to offer a platform for researchers to publish high-quality reviews, opinions and research articles on the precision breeding technologies of rice through genetic engineering, GWAS, functional marker-assisted selection and artificial intelligence in the context of improving grain yield, disease resistance, quality and the eurytopic characteristic of rice.





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