Special Issue

Advances and Applications of Genetic Transformation Techniques for Enhanced Trait Integration in Field Crops

Message from the Guest Editor

In recent years, genetic transformation techniques have rapidly been developed with the assistance of developmental regulators (WUS2, BBM, GRF-GIF, WOX5, etc.) and cut dip budding (CDB), which greatly help the increasing of transformation efficiency and the overcoming of genotype dependence limitations in the genetic transformation of many plant species. At the same time, a great number of transgenic plant lines and genome-edited mutants obtaining new traits have been generated using modified genetic transformation techniques in various field crops. To report the achievements on the development of genetic transformation techniques and their application in breeding new germplasm with enhanced trait integration in major field crops, we organize this Special Issue in this journal to promote the modified progress of these plants for variety breeding. We welcome research articles and featured mini-reviews on innovations in transformation systems and the development of genetic resources with modified or enhanced traits via genetic transformation and genome editing in wheat, rice, maize, soybean, barley, potato, tomato, cabbage, and other important field crops.

Guest Editor

Prof. Dr. Xingguo Ye
Institute of Crop Sciences, Chinese Academy of Agricultural Sciences, Beijing 100081, China

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

mdpi.com/journal/plants

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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

Editor-in-Chief

Prof. Dr. Dilantha Fernando
Department of Plant Science, University of Manitoba, Winnipeg, MB R3T 2N2, Canada

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