



plants



an Open Access Journal by MDPI

Plant Floral Induction Mechanisms and Molecular Genetics with Developmental Plasticity

Guest Editors:

Dr. Horim Lee

Department of Biotechnology,
Duksung Women's University,
Seoul 01369, Korea

Dr. Jeong Hwan Lee

Division of Life Sciences, Jeonbuk
National University, Jeonju
54896, Korea

Deadline for manuscript
submissions:

30 November 2024

Message from the Guest Editors

Flowering time (also known as floral induction) is one of the most important developmental changes in plants. After floral induction in the shoot apical meristem (SAM), the vegetative phase containing leaf primordia as lateral organs is transited into the reproductive phase containing floral meristems to produce the next generation seeds. Numerous genetic and physiological studies using model plants such as *Arabidopsis* and rice have revealed that optimized flowering time is determined through complicated genetic regulatory networks in which diverse internal and external signaling pathways such as photoperiod, vernalization, ambient temperature, phytohormones, and developmental age are integrated. In addition, as plants are sessile organisms and constantly encounter environmental stresses, flowering time as one of ecologically important traits must be controlled precisely for plastic development and adaptation. Therefore, investigating the underlying molecular genetic mechanisms of floral induction and the regulation of flowering time against unfavorable conditions has a significant impact on this field.



mdpi.com/si/137220

Special Issue



plants



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Dilantha Fernando

Department of Plant Science,
University of Manitoba, Winnipeg,
MB R3T 2N2, Canada

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.

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, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

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

Contact Us

Plants Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/plants
plants@mdpi.com
[X@Plants_MDPI](https://twitter.com/Plants_MDPI)