Special Issue

Gene Regulation in Flower and Fruit Development

Message from the Guest Editors

Flowers and fruits, as key structures in plant reproduction and propagation, have been a major focus in breeding, production, and basic biology research. Well-developed flowers represent the basis for the formation of rounded flowers, and the proper development of flowers directly affects the quality of fruits. From a flower blooming to the fruit ripening, each stage is regulated by a complex network of genes. These genes not only determine the morphological characteristics of the flower and fruit but also influence the quality and nutritional value of the fruit, such as its pigments, sugars, organic acids, and vitamins. These components determine the appearance, flavor, and nutritional value of fruits, which directly affect market competitiveness and consumer satisfaction. A deeper understanding of gene regulatory mechanisms would allow for valuable insights into plant reproductive development and offer new strategies for agricultural breeding and fruit quality improvement.

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Deadline for manuscript submissions

31 May 2026



Plants

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/229948

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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.

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