Special Issue

Molecular and Genetic Mechanisms of Plant Senescence

Message from the Guest Editors

Plant senescence is a complex process regulated by genetic and molecular networks, impacting agricultural productivity and environmental adaptation. Understanding its molecular basis offers potential for enhancing sustainability and food security. Advances in high-throughput omics, single-cell sequencing, and CRISPR-Cas9 genome editing have revealed key regulators, including non-coding RNAs, protein turnover mechanisms, and redox signaling pathways. This Special Issue highlights cutting-edge research on senescence regulation, from chromatin remodeling and alternative splicing to post-translational modifications and organelle-nucleus communication. Submissions on leaf, flower, fruit, and stress-induced senescence using multi-omics, CRISPR-based gene editing, and systems biology are encouraged.

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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

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