



Ecophysiological Mechanism and Simulation Model of Plant Phenology in Response to Climatic Change

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Message from the Guest Editors

Plant phenology is an indispensable and important indicator for climate change research. In particular, the improvement of phenology simulation capabilities can significantly improve the accuracy of ecosystem productivity and carbon budget simulation, the ability to prevent agro-meteorological disasters, and the level of climate prediction. However, the existing phenological studies mainly focus on influencing mechanisms from single or a few climatic factors, and the phenological model simulation is insufficient.

The latest research shows that plant phenology is determined by the total climatic production factors determining plant productivity. It is necessary to reveal the mechanism of phenological changes driven by total climatic production factors as well as ecophysiological mechanisms of phenological changes, study the phenological trigger thresholds of total climatic production factors, and develop a new phenological model driven by total climatic production factors.

Original research papers are encouraged in this Special Issue. Topics may include (but are not limited to) the ecophysiological mechanism and simulation model of plant phenology in response to climatic change.





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