Topical Collection

Modeling Impacts of Changing Environmental Conditions on Plant Growth

Message from the Collection Editor

Mathematical models allow addressing complex real world phenomena by simplification. Model building is a constant back and forth of assuming, assessing and adjusting modeling concepts and input parameters. Bringing together various modeling approaches within the field of plant growth modeling can stimulate and expedite this process. Predicting effects of changing environmental conditions on plant growth is one of these complex phenomena that models can help to get a grip on. Whether these changes are short- or long-term or whether they occur in a controlled environment or in the field, plants do react. Modeling and predicting these reactions on different stimuli can increase the biological understanding and open up new strategies on how to react to future challenges in plant growth. Ideally, while demonstrating the use of different modeling techniques, cross-realations between environmental factors might be revealed and mechanisms of plant responses can be adapted. The Special Issue will explore various modeling approaches to study environmental changes affecting plant growth, including mechanistic and empirical models; from classical methods to machine learning methods.

Collection Editor

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Plants

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed

mdpi.com/si/52588

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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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