



Optimizing Crop Management Strategies for Climate Resilience Using Advanced Modeling Techniques

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Message from the Guest Editor

The climate is already changing, increasing the likelihood of multiple climate-induced risks affecting agricultural production. With more frequent and severe extreme weather, the challenge for 21st-century agriculture is achieving food security for a growing world population. Addressing agricultural challenges and managing agroecosystems will impact several Sustainable Development Goals (SDGs), including Zero Hunger (SDG 2), No Poverty (SDG 1), Good Health and Well-being (SDG 3), and Climate Action (SDG 13). Optimizing crop management can achieve higher productivity and economic efficiency than conventional methods. Proposing and evaluating strategies to improve crop climate resilience is crucial. Modelling, as a tool for understanding climate impacts and adaptation options, is essential for exploring agricultural adaptations to climate change.

This Special Issue links experiments with statistics and ecophysiological crop modelling for comprehensive assessments of agricultural impacts and adaptations. It covers optimizing crop management strategies for climate resilience, considering biophysical and socioeconomic factors. All article types are welcome.





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Message from the Editor-in-Chief

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