



Recent Advances in Modelling Climate Change Impacts on Cropping Systems

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closed (20 February 2024)

Message from the Guest Editors

Climate change and variability can be characterized by an increasing CO₂ level, rising temperatures, and altered regional precipitation patterns, accompanied by more frequent and intense extreme weather events. This brings numerous risks to agricultural and crop production. Crop and climate models are essential tools to assess climate change impacts and explore possible adaptation options, providing vital information for decision-making by local stakeholders. However, uncertainties in choosing appropriate future greenhouse gas emissions, climate model projections, downscaling methods, and crop model structures and parameters, make climate risk assessment highly uncertain. Accurate and robust assessments require innovative approaches to quantify and reduce these uncertainties.

This Special Issue seeks interdisciplinary studies using novel methods to address uncertainties during climate change risk assessments. We especially welcome submissions exploring climate projections at different spatial-temporal scales and considering interactions between crop genotype, environmental and management factors. The call is open for original research articles and reviews.





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Message from the Editor-in-Chief

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