

## Special Issue

# Recent Advances in Modelling Climate Change Impacts on Cropping Systems

### Message from the Guest Editors

Climate change and variability can be characterized by an increasing CO<sub>2</sub> 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.

---

### Guest Editors

Dr. Chenyao Yang

Dr. Andrej Ceglar

Dr. Joao Carlos Andrade dos Santos

---

### Deadline for manuscript submissions

closed (20 February 2024)



## Agriculture

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.6  
CiteScore 6.3



[mdpi.com/si/170642](https://mdpi.com/si/170642)

*Agriculture*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[agriculture@mdpi.com](mailto:agriculture@mdpi.com)

[mdpi.com/journal/  
agriculture](https://mdpi.com/journal/agriculture)





# Agriculture

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.6  
CiteScore 6.3



[mdpi.com/journal/  
agriculture](https://mdpi.com/journal/agriculture)



## About the Journal

### Message from the Editor-in-Chief

*Agriculture* (ISSN 2077-0472) is an international, cross-disciplinary and scholarly journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. We invite submissions from authors according to the aims and scope of the journal described in more detail on this page. *Agriculture* is published in an open access format – articles are published on the journal's website immediately after acceptance, giving the scientific community and the public unlimited and free access to the content.

---

### Editor-in-Chief

Prof. Dr. Les Copeland

Sydney Institute of Agriculture, School of Life and Environmental Sciences, The University of Sydney, Sydney, NSW 2006, Australia

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubAg, AGRIS, RePEc, and other databases.

#### Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Plant Science)