

## Special Issue

# Development and Application of Dynamic Crop Models for Climate Change Impact Assessments

### Message from the Guest Editor

Climate change will be a major challenge to address the maintenance of food security in the coming years.

Dynamic crop models are widely used tools to quantify the response of cropping systems to the changing climate. However, crop models need to be improved to capture the complex nature of the interactions among increased temperature, CO<sub>2</sub> level, and frequency and magnitude of extreme events in crop growth processes. More robust crop models can lead to less uncertainty in model results and the development of more effective adaptation strategies. The current Special Issue will highlight “Development and Application of Dynamic Crop Models for Climate Change”. We welcome original research, review, and opinion articles covering related subjects inclusive of, but not limited to: (1) Modeling of the effects of combined changes in temperature, CO<sub>2</sub>, and soil water status on crop growth and development; (2) New modeling routines to capture the effects of abiotic stressors (in particular, multiple stress) on crop growth processes; (3) Application of crop models to test innovative adaptation strategies to climate change.

### Guest Editor

Dr. Ehsan Eyshi Rezaei

Department of Crop Sciences, Division Agronomy / Crop Science, Von-Siebold-Str. 8, D-37075 Göttingen, Germany

### Deadline for manuscript submissions

closed (31 March 2020)



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

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### Editor-in-Chief

Prof. Dr. Leslie A. Weston

Gulbali Centre for Agriculture, Water and Environment Research,  
Charles Sturt University, Wagga Wagga, NSW 2678, Australia

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