Special Issue

Water Deficit and Its Impact on Crop Yield

Message from the Guest Editors

Water deficit is one of the most devastating abiotic stresses, severely limiting agricultural productivity worldwide. Research has consistently shown that insufficient water supply during specific phases of crop development decreases crop growth, reduces yield, and causes significant economic losses as well as threatened food security. With drought frequency and severity projected to rise under climate change, understanding water deficit impacts has become an important theme in agricultural sciences. The main aim of this Special Issue is to present work on research on the mechanisms, assessment, and management of water deficit stress in crops. This Special Issue may include both general overview papers and original research papers addressing physiological responses; modelling and simulation of yield variability and response under water deficit; remote sensing and data-driven approaches and adaptation strategies at field, regional, and global scales. Through these contributions, this Special Issue seeks to provide insights into sustainable water-use efficiently and improve crop productivity under changing climates.

Guest Editors

Dr. Cristina Patanè

Consiglio Nazionale delle Ricerche (CNR), Istituto per la BioEconomia (IBE), 95126 Catania, Italy

Dr. Nenghan Wan

Department of Agronomy, 2004 Throckmorton Plant Sciences Center, Kansas State University, Manhattan, KS 66506, USA

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Agronomy
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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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