

Special Issue

Crop-Water Relations: Improving Water Use Efficiency in a Changing Climate

Message from the Guest Editors

Increasing drought events and heat waves affect vegetation physiology, impacting plant–water relations, as well as photosynthesis, carbon allocation and seed germination fate on overall seedling growth and even survival. All this, in turn, severely impacts agricultural productivity. According to projections, water use demand will only increase in the future as a consequence of further global warming, higher water scarcity and increases in food demand. In-depth studies on the drought-triggered physiological mechanisms of crops as a function of water deficit time and intensity are crucial to better understand crop response to drought stress, and are also the theoretical basis for scientific and rational regulation of irrigation water use. This Special Issue aims to collect studies: advances in knowledge on crop–water relations under limited water availability and on strategies aiming to achieve sustainable water use, preventing, or at least limiting as much as possible, losses in crop yield. Also welcome studies investigating species-specific resistance mechanisms enhanced by applying exogenous plant biostimulants.

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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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