



an Open Access Journal by MDPI

Effects of Abiotic Stresses on Gene Expression and Physiology of Field and Tree Crops

Guest Editors:

Dr. Antonio Giovino

Council for Agricultural Research and Economics (CREA), Research Centre for Certification (CREA-DC), 90011 Bagheria, Italy

Dr. Annalisa Marchese

Department of Agricultural, Food and Forest Sciences, University of Palermo, Viale delle Scienze 13, Building 4, 90128 Palermo, Italy

Dr. Giovanna Sala

Department of Agricultural, Food and Forestry Science, University of Palermo, 90128 Palermo, Italy

Deadline for manuscript submissions: closed (15 March 2024)

Message from the Guest Editors

Dear Colleagues,

Unfavourable environmental factors adversely affect plant growth and reduce yield. Abiotic stresses - extreme high and low temperatures, changing rainfall patterns, drought, flooding, salinity, metal stress, and nutrient deficiency negatively reduce crop production, representing a food security threat, particularly in areas where water supplies are already under pressure, and they also reduce the productivity and quality of forest products and services. In recent years, climate changes represent a global menace for agriculture and forestry sectors, and for the biodiversity. Plant "omic" progress can help in understanding the molecular, physiological and biochemical mechanisms underlying plant abiotic stress responses and in planning new selection, breeding and crop and forestry protection strategies to overcome these threats. This special issue aims to publishes high-quality and innovative papers on these topics.









an Open Access Journal by MDPI

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

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, crossdisciplinary 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.

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)

Contact Us

Agriculture Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/agriculture agriculture@mdpi.com X@AgricultureMdpi