



The Metabolic Adaptations of Plants to Climate Change

Guest Editors:

Dr. Kenneth J. Olejar

Pueblo, Chemistry Department,
Colorado State University -
Pueblo, 2200 Bonforte Blvd.,
Pueblo, CO 81001-4901, USA

Dr. Stewart Field

Viticulture and Wine Department,
Nelson Marlborough Institute of
Technology, 85 Budge Street,
Blenheim 7240, New Zealand

Deadline for manuscript
submissions:

closed (1 June 2021)

Message from the Guest Editors

Dear Colleagues,

A plant's ability to adapt to stressors is limited to changes metabolically (rapid), phenotypically (mid), and migratorily (long). Plants may enact more than one response in an attempt to mitigate multiple stressors resulting in complex metabolic changes.

Climate change presents a unique set of challenges to plants. These challenges range from temperature and climatic stressors, to changes in predation and invasive species. The plant's first-line of defense is to metabolically address the oxidative stress; however, while secondary metabolite production may be appropriate for one stressor, the metabolites produced may not be appropriate for multiple stressors.

In this Special Issue, we aim to present papers on plant adaptations to climate change, metabolic pathways activated within plants due to climate change, how shifts in metabolite production affect agricultural systems, plant metabolic implications for predators and pollinators, and plant adaptations to invasive species in a changing climate.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Luigi De Bellis

Department of Biological and Environmental Sciences and Technologies, Università del Salento, Centro Ecotekne, via Provinciale Lecce Monteroni, 73100 Lecce, Italy

Message from the Editor-in-Chief

Horticultural plants and their products provide sustenance, health, and beauty. A confluence of factors is putting increasing pressure on horticultural production to evolve, and innovative research is addressing these challenges. *Horticulturae* provides a venue to communicate research results in a rapid manner with open access, allowing everyone the opportunity to stay abreast of leading research addressing horticulture. I invite you to consider publishing the results of your research in this high quality, peer-reviewed journal.

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, FSTA, and other databases.

Journal Rank: JCR - Q1 (Horticulture) / CiteScore - Q2 (*Horticulture*)

Contact Us

Horticulturae Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/horticulturae
horticulturae@mdpi.com
X@Horticul_MDPI