

Special Issue

The Role of Sugars in Plant Responses to Stress and Their Regulatory Function during Development Volume 2

Message from the Guest Editors

Owing to their regulatory function, sugars affect all phases of the life cycle of plants, interacting with other signaling molecules, including phytohormones, to control plant growth and development. The level of sugars in plant cells and their transport, utilization, and storage are precisely regulated and strongly dependent on cell physiological activity, plant organ, environmental conditions, and plant developmental stage during ontogenesis. Moreover, saccharides such as sucrose, glucose, fructose, and trehalose function as metabolic signaling molecules in host plant cells and induce the expression of many genes, including defense genes. All papers submitted to this Special Issue will underline the central role of sugars in plant defense responses to stresses as well as the impact of climatic conditions on the relationship between sugar metabolism and yielding. Additionally, papers on the involvement of sugars as signaling molecules in the processes regulating growth and development are welcome. Original and review papers dealing with all the above aspects of sugars are welcome for inclusion in this Special Issue of the *International Journal of Molecular Sciences*.

Guest Editors

Prof. Dr. Iwona Morkunas

Prof. Dr. Philippe Jeandet

Dr. Mateusz Labudda

Dr. Magda Formela-Luboińska

Deadline for manuscript submissions

closed (31 December 2022)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/90329

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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Editor-in-Chief

Prof. Dr. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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