

Special Issue

Plant Membrane Proteins and Solute in Response to Stress

Message from the Guest Editor

Plant cells are full of inorganic ions and low-molecular-mass organic molecules, and expend considerable amounts of energy and resources in incorporating or synthesizing these solutes. The transport of such solutes across cell membranes is of the utmost importance to re-establish and maintain ion and cellular homeostasis in response to biotic and abiotic stress. Additionally, plant-protective molecules like secondary metabolites may be produced in plant tissues in response to extreme climate conditions or after pathogen infection. Furthermore, encouraging reports have shown that the exogenous application of protective compounds like glycine betaine, kaolin based particle film or silicon (Si) may promote stress tolerance in several crops. This Special Issue aims to attract contributions on breakthrough discoveries concerning plant solute homeostasis systems in response to stress and stress mitigation approaches. This deepened knowledge will pave the way for the improvement of plant productivity through the optimization of agricultural practices or through biotechnological approaches.

Guest Editor

Dr. Hernâni Gerós

Department of Biology, Universidade do Minho, 4710-057 Braga, Portugal

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MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstrasse 48, D-48149 Münster, Germany

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