Special Issue

Molecular Signaling Events in Algae in Response to Abiotic Factors and Biotic Interactions

Message from the Guest Editor

Algae, including microscopic microalgae and macroalgal kelps, are important for carbon dioxide fixation and are at the bottom of food webs. Their fitness depends on abiotic factors such as light, temperature and nutrients. In addition, interactions with other organisms strongly influence their growth rates in a positive or negative manner (e.g., mutualism, antagonism). In recent years, we gained knowledge about how biotic and abiotic factors are perceived by sophisticated algal receptors and the signaling cascade events that are initiated thereafter. For example, novel types of photoreceptors have been found in algae that are absent in land plants. Despite extensive studies on selected model algae under laboratory conditions, we are only starting to understand how algae react under natural conditions. This Special Issue of *Plants* aims to provide an overview of our current knowledge on molecular receptors, signaling components and pathways that are triggered once algae perceive information about abiotic factors or interact with other (micro-)organisms.

Guest Editor

Prof. Dr. Maria Mittag

Matthias Schleiden Institute of Genetics, Bioinformatics and Molecular Botany, Friedrich Schiller University Jena, Jena, Germany

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Plants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
plants@mdpi.com

mdpi.com/journal/plants

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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.

Editor-in-Chief

Prof. Dr. Dilantha Fernando
Department of Plant Science, University of Manitoba, Winnipeg, MB R3T 2N2, Canada

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