



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

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Message from the Guest Editor

Dear Colleagues,

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.





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Message from the Editor-in-Chief

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