



Effects of Non-thermal Plasma Treatment on Plant Physiological and Biochemical Processes II

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Message from the Guest Editors

The potential of cold plasma-based applications in sustainable agriculture is supported by numerous studies which have gathered experimental evidence that plasma treatment of seeds, water, or plants can be used to improve yields, increase the size and the robustness of plants, and reduce the need of antifungal agents, as well as other chemicals. However, the development of reliable and manageable agro-biotechnologies is ultimately based on the understanding of the molecular mechanisms underlying such effects. Short plasma treatments of plant materials can induce various changes in plant development and metabolism that persist for a long time. It is likely that investigations of plasma-induced changes in plant physiological and biochemical processes may reveal new facts of both fundamental and applied importance.

This Special Issue of *Plants* aims to present the most recent findings on changes in plant signal transduction, metabolism, development, and physiological processes induced by the exposure of seeds or plants to cold plasma or plasma-activated water and leading to increased plant productivity.





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Message from the Editor-in-Chief

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