



The Effect of Plasma in Plant

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Deadline for manuscript
submissions:

closed (30 September 2023)

Message from the Guest Editors

Dear Colleagues,

Molecular research has played a key role in uncovering the mechanisms behind the effect of plasma and plasma-treated solutions on plant development. Through advanced techniques such as transcriptomics, proteomics, and metabolomics, researchers have been able to gain deeper insights into the molecular changes that occur in plants after plasma treatment. Studies have shown that plasma exposure triggers changes in gene expression and protein synthesis, leading to alterations in the plant's growth and physiological processes. Furthermore, molecular research has revealed that plasma treatment can activate plant defense mechanisms, increase the efficiency of nutrient uptake, and enhance stress tolerance, among other benefits. These studies have provided a wealth of information on the molecular pathways involved in plasma–plant interactions. As such, molecular research has been instrumental in advancing our understanding of the potential applications of plasma technology in agriculture and horticulture, and has great potential to contribute to the development of more sustainable and efficient crop production methods.





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Message from the Editor-in-Chief

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