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The Multifaceted Responses of Plants to Visible and Ultraviolet Radiation

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Message from the Guest Editors

Years of evolution under solar radiation have led plants to develop fine regulation systems in order to survive and acclimate to the ever-changing solar conditions. Irradiance, wavelength, and exposure time are major factors modulating diverse processes, from seed germination to plant growth, flowering, and fruit formation, and have a profound influence also on the nutritional–nutraceutical qualities of plant food. The reaction of plants or fruits towards a specific radiation might largely differ not only from species to species but also among cultivars, thus inducing either acclimation or stress responses. Moreover, exposure to distinct radiations might trigger defensive mechanisms in the exposed plants, changing their susceptibility towards both biotic and abiotic stressors.

This Special Issue aims to highlight the fascinating role of light radiations in plant life, from perception to specific functions or processes, from gene expression to plant–environment interactions, without forgetting the exploitation of specific wavelengths to improve plant yield or to design plant foods enriched in health-promoting compounds.



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Special Issue



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Message from the Editor-in-Chief

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