

Special Issue

The Multifaceted Responses of Plants to Visible and Ultraviolet Radiation II

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. Light plays a key role in plants' lifespan, affecting several physiological and biochemical processes. Irradiance, wavelength, and exposure time are major factors modulating diverse processes, from seed germination to plant growth, flowering, and fruit formation, and also have a profound influence 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. Recent evidence has also shown that not only directly exposed organs or tissues but also light-screened plant portions can perceive and/or respond to visible and ultraviolet radiation due to signaling mechanisms still partially unknown.

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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.

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