Special Issue

UV-B Signaling and Its Molecular Control in Plant

Message from the Guest Editor

UV-B radiation can act both as an environmental stress factor and as an informational signal, and has been shown to regulate plant development and photomorphogenesis. The type of response to UV-B is determined substantially by the fluence rate of exposure. High fluence rates of UV-B produce reactive oxygen species and may cause damage to DNA, proteins, membranes, and lipids. At low fluence rates, UV-B is capable of promoting metabolic and developmental changes, such as biosynthesis of phenolic secondary metabolites and inhibition of hypocotyl elongation. It has been demonstrated that low fluence rates of UV-B stimulate expression of a range of genes that help protect plants against UV damage.

This Special Issue is aimed at providing selected contributions on advances in UV-B signaling and its molecular control in plants. Potential topics include, but are not limited to:UV-B perception and signaling by the UVR8 photoreceptor.

- UV-B perception and signaling by the UVR8 photoreceptor.
- Molecular understanding of UV-B signaling pathways.
- Signaling crosstalk between UV-B and abiotic stress.
- Potential application of UV-B in agriculture and horticulture.

Guest Editor

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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