



The Role of Melatonin in Plants

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Message from the Guest Editor

Dear Colleagues,

For 30 years phyto-melatonin has drawn great attention of plant physiologists for its wide distribution and multiple roles in various plant species. It is known that melatonin is an important modulator of plant development. As amphiphilic, universal, very effective direct and indirect antioxidant, melatonin affects plant cell redox status and this way it interferes with network of different signalling pathways. Moreover, melatonin is also involved in plant immunity and increases plant tolerance to various abiotic stresses. The application of exogenous melatonin as a plant biostimulant may be a good strategy for yields improvement in the face of climate change.

This special issue will focus on expanding knowledge concerning: the synthesis, distribution and metabolism of plant melatonin (phytomelatonin), its multiple complex functions in plants and mechanisms of plant metabolism regulation, as well as on exogenous melatonin application methods improving the crop plants development, especially under different stress conditions.





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Message from the Editor-in-Chief

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