



The Role of Melatonin in Plants 2.0

Guest Editor:

**Prof. Dr. Matgorzata M.
Posmyk**

Department of Plant
Ecophysiology, Faculty of Biology
and Environmental Protection,
University of Lodz, Banacha
12/16, 90-237 Lodz, Poland

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Message from the Guest Editor

Dear Colleagues,

It is known that melatonin is an important modulator of plant development—it has an influence on seed germination, root formation and their architecture, seasonal and circadian rhythms, flowering time and fruit ripening, and leaf functioning (photosynthesis) and senescence. As amphiphilic, universal, very effective direct and indirect antioxidants, melatonin affects the plant cell redox status, and in this way, it interferes with a network of different signalling pathways. Moreover, melatonin is also involved in plant immunity and increases plant tolerance to various abiotic stresses.

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, and the exogenous melatonin application methods improving the development of crop plants, especially under different stress conditions.





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Message from the Editor-in-Chief

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