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Heavy Metal Pollution and Plants Growth

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Message from the Guest Editors

Pollution of soils by metal(loid)s can result from anthropogenic activities, which are an important issue and subject of research today. In order to allow plant growth on these polluted soils and the development of strategies to enhance these marginal soils by phytomanagement, it is important to understand the tolerance mechanisms that plants develop in the soil-plant continuum from the rhizospheric zone to the aerial parts. Plants are thus capable, on one hand, of modifying the characteristics of the soil, particularly in the vicinity of the root system, in order to promote the development of the microbial biomass that acts on the availability of metals and metalloids, and an in-depth knowledge of root systems for the sorption of metals and metalloids as well as of plant resistance mechanisms will enable us to understand how plants can grow and survive in such polluted areas. On the other hand, a better knowledge of the mechanisms associated with tolerance strategies such as the exclusion of metals and metalloids or their accumulation in roots or aerial parts within specific compartments is needed.









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Message from the Editor-in-Chief

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