



Heavy Metals Toxicity in Plants and Phytoremediation as Sustainable Approach

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submissions:

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Message from the Guest Editors

In recent years, heavy metals (HMs) toxicity has emerged as one of the greatest threats to crop production, one which might become even more prevalent in the coming decades. Increased anthropogenic activities such as modern agriculture practicing, fertilizer application, and extensive use of groundwater for irrigation, sewage disposal, mining, and industrialization have disturbed the distribution of HMs, leading to their accumulation. Even a slight upsurge in the HM concentration beyond the permissible limit causes harmful effects to living entities. Several studies have reported that some plants showed the ability to hyperaccumulate HMs.

The studies within this Special Issue are expected to address:

- The consequences of HMs on food security and the environment;
- HMs and sustainability of agricultural production;
- HMs toxicity in plants;
- HMs detoxification;
- HMs uptake and transport;
- Vacuoles sequestration of HMs;
- Role of defense mechanisms against HMs stress;
- Hyperaccumulators;
- Physio-biochemical mechanisms of HMs accumulation in hyperaccumulators;
- Phytoremediation.





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Message from the Editor-in-Chief

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