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Soil Organic Matter's Alleviation of Heavy Metal Toxicity in Plants

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Deadline for manuscript submissions:
closed (20 May 2022)

Message from the Guest Editors

Heavy metals are considered potentially toxic elements (PET) for living organisms. Remediation of metal-contaminated soils is inevitable for crop productivity and safe food. Soil organic matter (SOM) is considered vital for soils as its conversion into humus provides a reservoir for the plant nutrients available in the soil for balanced plant growth. Not only a source of readily available nutrients, SOM also provides highly reactive functional groups and charged species which may act as chelating agents for metals. The binding of heavy metals with SOM may reduce their bioavailability and ultimately toxicity to crop plants. There is dire need for updated research in this regard.

The present Special Issue is focused on:

- Strategies involved especially using soil organic matter to reduce metal stress in crop plants
- Effect of different sources of organic matter on metals bioavailability to crop plants
- Mechanisms involved in interaction of different metals with organic functional groups
- Economic evaluation of organic amendments for reducing metals bioavailability

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Message from the Editor-in-Chief

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