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## Analytical techniques for estimation of heavy metals in soil ecosystem: A tabulated review

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### Abstract

Soil, an important environmental medium, is exposed to a number of pollutants including toxic heavy metals by various natural and anthropogenic activities. Consequently heavy metal contaminated soil has the potential to pose severe health risks and hazards to humans as well as other living creatures of the ecosystem through various routes of exposure such as direct ingestion, contaminated drinking ground water, food crops, contact with contaminated soil and through food chain. Therefore, it is mandatory to explore various techniques that could efficiently determine the occurrence of heavy metals in soil. A number of methods have been developed by several regulatory agencies and private laboratories and are applied routinely for the quantification and monitoring of soil matrices. The present review is an initiative to summarize the work on pollution levels of soil ecosystem and thus pertains to various extraction and quantification procedures used worldwide to analyze heavy metals in soil.

### Highlights

- This review highlights various studies on heavy metal analysis in soil samples.
- Various instrumental techniques used for heavy metal analysis in soil are compiled.
- Different digestion methods used for heavy metal analysis in soil are also reviewed.

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