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REMOTE SENSING TECHNIQUES-AN ALTERNATIVE FOR MONITORING SOIL POLLUTANTS

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Abstract

At present, soil pollution through heavy metals occupies a higher percentage worldwide. Conventional methods of soil heavy metal estimation are very much laborious, time consuming and tedious to cover large scale area. Hence, rapid, robust and reliable method for heavy metal estimation in soil is an important step in agricultural and natural resource management. With the advancement in digital science, remote sensing with geographical information system acts as a new tool to obtain both qualitative and quantitative information on soil in a non-invasive, cost-effective, and environmentally friendly manner in large areas. This review emphasis of using digital spectroscopy and other freely available satellite sources for the assessment of soil pollutants. Remote sensing is a best alternative tool for mapping soil pollutants and more precise delineation of polluted areas. However, this information can be very much helpful for the policy makers and planners for planning the site specific management strategies.

Key words: hyper-spectral imaging, remote sensing, soil contamination assessment, soil spectroscopy

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