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## Correlation between Magnetic Susceptibility and Heavy Metal Contamination in Agricultural Soil of Jalgaon Peri Urban Area, Maharashtra, India

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### **Abstract**

The heavy metals are good indicator for assessment of anthropogenic impacts of human activity on the agricultural soil. The accumulation of heavy metals in the agricultural soil may not only result in environmental contamination, but elevated heavy metal uptake by plants may affect the food quality. The objective of this study was to evaluate agricultural soil pollution due to heavy metals and to correlate it with magnetic susceptibility (MS) measurements. Magnetic susceptibility measurements were conducted on agricultural soil collected from 251 locations of Jalgaon area. Higher values of heavy metals are observed at all the locations and it shows positive correlation with the magnetic susceptibility. The enrichment of Pb, Cu, Cd, Ni, Zn and Fe in agricultural soil was strongly influenced by anthropogenic activities.

*Keywords:* Magnetic Susceptibility, Heavy metal pollution, Agricultural soil, Jalgaon, Maharashtra.