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Fraction and mobility of antimony and arsenic in three polluted soils: A comparison of single extraction and sequential extraction

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1       **Fraction and mobility of antimony and arsenic in three**  
2       **polluted soils: A comparison of single extraction and**  
3       **sequential extraction**

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12       **Abstract**

13       Co-contamination of arsenic (As) usually occurs with antimony (Sb) in Sb mine  
14       ores. However, the mobility and bio-availability of Sb and As in different types of  
15       mine impacted soils have received relatively little attention. This study aimed to  
16       investigate the fraction, mobility and removal of Sb and As in three types of polluted  
17       soils using environmentally friendly and cost-effective extractants. In the present  
18       study, lightly polluted (L), moderately polluted (M), and 3) highly polluted (H) soils  
19       were collected from the Xikuangshan (XKS) mine area in Hunan, China. Toxicity risk  
20       assessment, fraction and extraction of Sb and As were performed to evaluate Sb and  
21       As mobility and availability. According to the speciation fractions, the percent of

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