

## Accepted Manuscript

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PII: S0375-6742(16)30071-1  
DOI: doi: [10.1016/j.gexplo.2016.03.012](https://doi.org/10.1016/j.gexplo.2016.03.012)  
Reference: GEXPLO 5724

To appear in: *Journal of Geochemical Exploration*

Received date: 30 December 2015  
Revised date: 16 February 2016  
Accepted date: 15 March 2016



Please cite this article as: Shtangeeva, Irina, Niemelä, Matti, Perämäki, Paavo, Ryumin, Alexander, Timofeev, Sergey, Chukov, Serafim, Kasatkina, Galina, Phytoextraction of bromine from contaminated soil, *Journal of Geochemical Exploration* (2016), doi: [10.1016/j.gexplo.2016.03.012](https://doi.org/10.1016/j.gexplo.2016.03.012)

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## Phytoextraction of bromine from contaminated soil

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### Abstract

Bromine (Br) is widely distributed in the environment. However, its concentration in soils and plants in ordinary conditions is usually low. Bromine was excessively used in agriculture in the past, and now various compounds of Br are synthesized industrially and have many uses. This led to pollution of soil and accumulation of Br in crops. High concentrations of Br are toxic for plants and man. There is a need to reduce soil Br contamination. The aim of the research was to study the uptake of Br by two plant species, wheat and pea, that differ in the ability to accumulate and tolerate high amounts of Br and to assess the potential of the plants for purposes of phytoextraction of Br from contaminated soil. In the present work, greenhouse pot experiments were conducted. Soil in the pots was spiked with either KBr or NaBr at concentrations 0 mg kg<sup>-1</sup>, 50 mg kg<sup>-1</sup>, and 100 mg kg<sup>-1</sup>. Concentrations of halogens in soil and plant samples were determined using ICP-MS technique after leaching of the samples with

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