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Cutting frequency effect on barium phytoextraction by macrophytes in flooded environment: a field trial

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Highlights

- An field trial with macrophytes was performed in a barium polluted flooded soil.
- The barium was evaluated at four cutting frequencies: every 90, 120, 180 and 360-d.
- The cuts at intervals of 120-d and 360-d showed the highest phytoextraction.
- Cuttings at 120-d and 180-d intervals showed greater decrease of Ba levels in soil.

Abstract

In anoxic environmental conditions and with a drastic reduction of the redox potential, the barium sulphate used in petroleum drilling fluids becomes a hazard to the ecosystem. A field study was conducted in Brazil in an area with a history of accidental Barium (Ba) contamination to evaluate the role of frequent plant cutting on phytoremediation. The plant species *Typha*

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