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Interactive comment on "Characterization of broom fibers for PRB in the remediation of aquifers contaminated by heavy metals" by C. Fallico et al.

C. Fallico et al.

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Received and published: 21 April 2010

Reply to 1° comment: We agree that is need to investigate on a larger time to define the behaviour of the broom fiber versus the heavy metals also in the following phases. To this purpose we are continuing our investigation making ready in laboratory a physical model, simulating a porous aquifer, contaminated by heavy metals, in which is inserted a PRB, built utilizing broom fibers, to investigate the behaviour of these fibers at long time. In this way will be possible to define for this fiber also the phases following the saturation and the phenomenon of the release. However, in the present paper we believed seasonable to highlight the behaviour of the broom fiber in the initial phase, checking

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their capability to absorb and retain the heavy metals. Reply to 2° comment: We agree that is well timed to insert in the text some reference about the type of soil showing k included in the range 10-4 Ãů 10-6 m/s and to replace the word "land" with "soil". Therefore the lines 17 Ãů 21 can be changed to read: "The results obtained experimentally on the values of permeability assume greater importance when compared to the values of hydraulic conductivity already known from the literature for different types of soil. From this comparison, it can be said that, for 20 the density values, with which the tests were carried out, resulting conductivities are typical of a soil constituted mainly of sand and gravel (Celico, 1986; Hamill & Bell, 1986)." Moreover in the References it is need to insert: Celico P., 1986. Prospezioni Idrogeologiche. Vol. 1. Liguori Ed., Napoli. Hamill L. & Bell F.G., 1986. Ground water resource development. Butterworth Heinemann Ltd. Oxford.

Interactive comment on Biogeosciences Discuss., 7, 1407, 2010.