

***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.**

[fallico@dds.unical.it](mailto:fallico@dds.unical.it)

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The main reasons to consider the broom fiber are the following: - This fiber is easily to be found in all Mediterranean basin and specifically in south Italy, where the broom develops naturally and plentifully, also in impracticable and arid soils. This circumstance allows considerable economic advantages for the low costs of the raw material. - The broom fiber contains a quantity of total lignin equal to 6.6%, that is comparable to that of other natural fibers (12 – 13% the Jute and 15 – 19% the Kenaf), with which it results competitive. This aspect is considerable, because the lignin undertakes a fundamental role in the adsorption process of the heavy metals, as already noticed in the text

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(Mohanty, et al., 2000; Lee, et al., 2004). - In addition to the aforesaid aspects, one should observe that the broom fiber shows an high mechanical resistance and other properties cited in the text. - At last one should underline that the use of the broom fibers intends draw to the attention of the scientific community a natural resource of which the potentiality are not completely known.

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