Removal of copper from aqueous solution by *Retama raetam* Forssk. growing in Algerian Sahara

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**ABSTRACT**

Increased knowledge about toxicological effects of heavy metals on the environment and in drinking water is well recognized and therefore, it is inevitable to search for different methods to reduce water pollution. The Saharan plant *Retama raetam* (Fabaceae family) was used as locally available adsorbent for removal of copper ions from aqueous solution. Various biosorption parameters such as initial metal concentration, pH and temperature on the capacity of copper biosorption were investigated. The relation between the phytochemical composition (polyphenol, alkaloids, terpenoids, carbohydrates) of the aerial parts of *Retama raetam* and the percent of adsorption for copper ion was examined.

*Keywords*: Biosorption; *Retama raetam*; Copper; Wastewater; Phytochemical; Sahara

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