

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

A. Cheriti^{a*}, M.F. Talhi^a, N. Belboukhari^{a,c}, S. Taleb^b, C. Roussel^c

^aPhytochemistry and Organic Synthesis Laboratory, University of Bechar, 08000, Bechar Algeria
Tel. +213 49815244; Fax +213 49815244; email: karimcheriti@yahoo.com

^bCatalysis and Materials Laboratory, University D. Liabes, 22000, Sidi Bel Abbes, Algeria

^cLaboratoire de Stéréochimie Dynamique et Chiralité, CNRS UMR 6180, Université Paul Cézanne Aix, Marseille III, France

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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

* Corresponding author.