



Studies on The Removal of Hexavalent Chromium From Synthetic Waste Water By Using Activated Biocarbon

C. Pragathiswaran^{*1}, P. Sivanesan² and N. Ananthakrishnan³

1. Department of Chemistry, Periyar, E.V.R.College, Trichy-23, Tamil Nadu, **INDIA**
2. Tamilnadu newsprint and papers limited, Kagithapuram, Karur-63 9136, Tamil Nadu, **INDIA**
3. Saranathan college of Engineering Panjappur, Trichy, Tamilnadu, **INDIA**

Email: pragathis_waran@yahoo.co.in

Accepted on 21st November 2015

ABSTRACT

The adsorption of chromium ions from an aqueous solution with galinsoga parviflora (GS) was studied in a batch set up as a function of contact time, pH, Chromium ion concentration and adsorbent dosage. The Langmuir and Freundlich adsorption models were applied to describe the isotherms and isotherm constants. The adsorption data gave a right fit with Langmuir isotherms with maximum adsorption capacity of 97 % of chromium (VI) ion. The outcomes depict the full potentiality of using galinsoga parviflora as an adsorbent for removal of Cr (VI) from aqueous solutions.

Keywords: galinsoga parviflora(GS), adsorbent, zinc chloride, contact time, metal adsorption, adsorption isotherm.
