



International Journal of ChemTech Research

CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555 Vol.12 No.02, pp 141-151, **2019**

Lemongrass Powder used an Adsorbent for Treatment of Chromium from Tanary Waste Water

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Abstract : In the present work was represent the lemon grass powder preparation and prepared power was used for adsorbent to removal of Hexavalent Cr present in tannery water by adsorption phenomena. The collected plant material was allowed to dry in sunshade for a week and after that it was crushed, powdered and homogenizing. The homogenized powder is used as adsorbent in the present study. Although evaluate the performance of adsorption activity of prepared lemon powder However in this work also focus on the concentration of adsorbate effect of pH and effect of surfactant data are determined used to kinetics and isotherm methods. The homogenized powder is used as adsorbent in the present study. The colorimetric method is useful for the determination of hexavalent chromium in water in the range from 0.1 to 1 ppm. This range can be extended by appropriate sample dilution or concentration and/or use of longer cell paths. The hexavalentchromium is determined colorimetric ally by reaction with 1,5diphenylcarbazide in acid solution. The removal of chromium in aqueous solution by using adsorption technology was studied by batch adsorption process.

Keywords: Lemon grass powder, Chromium, ternary waste.

M. Priya et al / International Journal of ChemTech Research, 2019,12(2): 141-151.

DOI= http://dx.doi.org/10.20902/IJCTR.2019.120218
