

Powdered Beet Red Roots Using as Adsorbent to Removal of Methylene Blue Dye from Aqueous Solutions

Authors : Abdulali Bashir Ben Saleh

Abstract : The powdered beet red roots (PBRR) were used as an adsorbent to remove dyes namely methylene blue dye (as a typical cationic or basic dye) from aqueous solutions. The present study shows that used beet red roots powder exhibit adsorption trend for the dye. The adsorption processes were carried out at various conditions of concentrations, processing time and a wide range of pH between 2.5-11. Adsorption isotherm equations such as Freundlich, and Langmuir were applied to calculate the values of respective constants. Adsorption study was found that the currently introduced adsorbent can be used to remove cationic dyes such as methylene blue from aqueous solutions.

Keywords : beet red root, removal of dyes, methylene blue, adsorption

Conference Title : ICCST 2014 : International Conference on Chemical Science and Technology

Conference Location : Istanbul, Türkiye

Conference Dates : December 22-23, 2014