INTRODUCTION

To remove low radionuclides concentrations in large volumes of radioactive wastes, conventional techniques are not effective. New techniques which combine simplicity and low cost has directed attention to biosorption, a process which uses vegetable solid materials or microorganisms for retention, removal or recovery of metals in a liquid.

Biosorption may be a method feasible, cheap, effective and easy to apply for the radioactive liquid waste treatment. The aim of this study was to evaluate the rice husk capacity in removing uranium, Am-241 and Cs-137 from liquid radioactive wastes.

MATERIALS AND METHODS

The radioactive liquid waste studied is composed of water, ethyl acetate (196 ppm), TBP (227 ppm) and total uranium (103 ppm) and pH value of 2.17. This work was divided into three stages: i) Preparation and activation of the rice husk; ii) Physical characterization of the biomass; iii) Batch biosorption experiments.

RESULTS AND DISCUSSION

Phyiscal Characterization

Biosorption of Uranium, Am-241 and Cs-137 by Rice Husk

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