204-079

DRY BIOMASS OF THE AMAZONIAN MACROPHYTE PASPALUN REPENS - EVALUATION AS ADSORBENT MATERIAL OF HEAVY METALS ZN AND CU

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The objective was to evaluate the dry biomass of macrophyte Paspalun repens as adsorbent material in the removal of heavy metals zinc and copper from the water by analyzes of scanning electron microscopy, Fourier transform infrared spectroscopy (FTIR) and atomic absorption spectroscopy. The species is coming from the lake of Buiuçu located in the region of Parintins - Amazon- Brazil. The macrophyte was separated into parts (root and leaf), dried in an oven for 48 hours at 55ºC, particulate matter and subsequently exposed to solutions containing different concentrations of the metals for 48 hours. For evaluation of the metal levels in the biomass, it was used a digester of sample by microwave. The result showed efficiency of the Paspalun repens species in the removal, and copper showed the highest percentage with a maximum time of 12 hours of adsorption, thus, dry biomass production from the Paspalun repens species can be considered as alternative material of low cost in the removal of heavy metals.