# SEQUENTIAL EXTRACTION APPLIED TO PERUIBE BLACK MUD

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The Peruíbe Black Mud is used in therapy such as psoriasis, dermatitis periphereal, acne, seborrhea, myalgia, arthiritis and rheumatic non-articular processes. This material is characterized by its fine particles organic matter, sulphate reducing bacteria content and high reduction potential. Although being considered natural, muds may not be free of possible adverse health effects when used for therapeutic purposes, such as toxic chemicals elements. In therapeutic treatments involving clays, they are used in mud form called peloid, obtained after maturation process. The sequential extraction is well known useful tool to evaluate the behavior of trace elements in different matrices. So, a sequential extraction to fractionate the Peruíbe Black mud in geochemical specific fractions were used to check which elements and how much of them are present in each soluble, organic matter, iron oxi-hydroxide and residual fraction. To soluble, organic matter and iron oxi-hidroxide fractions obtainment acetic acid, hydroxylamine hydrochloride and ammonium acetate were used, respectively. Considering the various sequential extraction methods the BCR-701 (Community Bureau of References) were chosen because it is considered the most reproducible between them. The determination of the major and trace elements concentration in the *in natura* and maturated clays that constitute the Peruíbe Black Mud ICP-EOS were applied to each fraction obtained in the sequential extraction.