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Cosmetic Ability of a selected Soil with Special Reference to Cation Exchange Capacity, pH, and Specific Surface Area

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Abstract: *Traditionally used clay-soil for cosmetic and medicinal applications has been found in different parts of the world. In the present experiment, five such samples of soil traditionally used as hair cleaner are analyzed to evaluate their cosmetic ability. For this purpose, eighteen physical and chemical parameters with special emphasis on pH, cation exchange capacity and specific surface area which are very much responsible for cosmetic ability of a soil sample were determined. Three commercial samples of cosmetic clays were also analyzed for comparison. For further confirmation of the results of the above experiments FTIR, XRD, EDAX analyzes and local application experiment on skin was also done. It has been found from chemical analysis that the experimental soil samples belong to smectite and illite classes of cosmetic clays. The experimental soil samples have values of the cited parameters similar to those of the standard cosmetic samples. FTIR, XRD and EDAX analysis support the findings of the chemical analysis. It indicates that the experimental soil samples are suitable to be developed for use in cosmetic purposes.*

Keywords: Cosmetic ability; Hair cleaner; Human beauty resource; Human health; Nadka Hasa