

Chemical Analyses of *Aspillia kotschy* (Sch. bipex, hochst) Oliv Plant

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Abstract : In this present work, a locally used medicinal plant, namely: *Aspillia kotschy* belonging to the Compositae family, was extracted using methanolic and petroleum ether 60-80OC. The extracts were subjected to microwave plasma Atomic Emission Spectroscopy (MPES) to determine the following metals Se, Ag, Fe, Cu, Ni, As, Co, Mn, and Al. From the result, Ag, Cu, Ni, and Co are of very negligible concentrations in the plant extract. However, Seleniun is found to be 0.530 (mg/kg) in the plant methanolic extract. Iron, on the other hand, was found to be 3.712 (mg/kg) in the plant extract. Arsenic was found to be 0.506 and 1.301 (mg/kg) in both methanolic and petroleum spirit extracts of the plant material. The concentration of aluminium was found to be of the range of 3.050mg/kg in the plant. Functional group analysis of the plant extracts was also carried out using Fourier transform infrared (FTIR) spectroscopy which showed the presence of some functional groups. The results of this study suggest some merit in the popular use of the plant in herbal medicine.

Keywords : *Aspillia kotschy*, functional group, FTIR, MPES

Conference Title : ICMCM 2022 : International Conference on Multifunctional Materials and Chemistry

Conference Location : Jeddah, Saudi Arabia

Conference Dates : November 14-15, 2022