



RESEARCH PAPER

Free radical scavenging efficacy of Zakhm-e-Hayat

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Abstract : The very valuable perennial evergreen herb '*Bergenia ciliata*', has been utilised as a medication to cure a variety of human ailments in the Himalayan region and based on the many ethnomedicinal values of this plant, it becomes imperative to determine the active ingredients present in different parts of the plant as well as their composition. The present study was designed to investigate the presence of various phytochemical constituents and antioxidant potential of rhizome extracts of *B. ciliata* and among the different solvent extracts used; the methanolic extract showed the highest total phenolic content and acetone extract showed highest flavonoid content. The free radical scavenging activity was found highest in methanol extract followed by acetone, ethyl acetate, chloroform and *n*-hexane, similar trend was followed in case of antioxidant potential determined by FRAP and metal ion chelation assays, the highest activity was found in methanolic extract followed by acetone, ethyl acetate, chloroform and *n*-hexane. The current study suggested that the methanol extract of *B. ciliata* possesses strong antioxidant potential, which can be exploited in functional foods and pharmaceutical industries.

Key Words : Zakhm-e-hayat, Phytochemical, Antioxidant, Free radical scavenging, Metal ion chelation, Methanolic extract

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