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Phytochemical characterisation of *Parthenium hysterophorus* L. extracts and their antioxidant and antimicrobial activities

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Abstract

Parthenium hysterophorus L. is a noxious and highly invasive weed known for its adverse effects on livestock and human health. Despite its negative impact, the plant possesses notable therapeutic potential. This study investigated the phytochemical composition, conducted quantitative analyses and evaluated the antioxidant and antibacterial activities of various *P. hysterophorus* extracts. The crude extract of methanol and ethyl acetate of different plant parts was prepared using maceration techniques and antibacterial activity of its crude extract through the agar well diffusion method. The methanol leaves extract exhibited the highest phenolic content (20.38 ± 0.02 mg/g GAE [gallic acid equivalent]), followed by the methanol flower extract (18.99 ± 0.02 mg/g GAE).

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Citations

Abstract

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