

عنوان مقاله:

Antimicrobial and radical scavenging potentials of *Euphorbia serpens* Kunth

محل انتشار:

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خلاصه مقاله:

*Euphorbia serpens* (Euphorbiaceae) is an annual species native to South America and widely distributed as a weed in pantropical regions. It has attracted attention from academic researchers due to its diverse pharmacological properties. In this study, in vitro antioxidant capacity and antimicrobial activity of various extracts of the roots, and shoots of *Euphorbia serpens* were investigated using DPPH free radical scavenging assay and disc diffusion method, respectively. Antibacterial activity was tested on three Gram-positive (*Streptococcus pneumoniae*, *Bacillus subtilis* subsp. *Spizizenii*, and *Enterococcus faecalis*) and three Gram-negative (*Shigella flexneri*, *Proteus vulgaris*, and *Salmonella typhi*) bacteria. The antifungal effect was also examined on three fungi (*Aspergillus fumigatus*, *Candida albicans*, and *Fusarium oxysporum*). Ethanolic shoots extract showed broad-spectrum antimicrobial effects. The best antioxidant activities were also observed with alcoholic shoot extracts. It is concluded that the shoot of *Euphorbia serpens* is a rich source of bioactive compounds especially if they were extracted by alcohols. They are efficient candidates to treat oxidative stress-related diseases.

کلمات کلیدی:

Antibacterial activity, Antifungal property, Antioxidant capacity, *Euphorbia serpens*, Medicinal Plants

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