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EFFICIENCY OF GREEN EXTRACTION BY AQUEOUS GLYCEROL ON ANTIOXIDANT AND ANTIRADICAL PERFORMANCE OF DANDELION (*TARAXACUM OFFICINALE*) AERIAL PART

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ABSTRACT

In this study, aerial parts of dandelion were exposed to extraction by different solvents such as water, ethanol, methanol and glycerol and also their aqueous mixtures to compare the effect of extraction solvents on bioactive performance of the dandelion and also to show the effectiveness of hydroglycerolic extraction which is a green extraction process. Total phenolic content (TPC) and total flavonoid content (TFC) of the extracts were determined and also antiradical scavenging activities and antioxidant capacities of the samples were also evaluated. TPC and TFC of the samples ranged between 4.63-21.28 mg GAE/g and 1.16-14.38 mg CE/g, respectively. The highest TPC and TFC values were determined in aqueous extract of glycerol (75% w/w) compared to other solvents. Additionally, ABTS.+ and DPPH radical scavenging activity and ferric reducing capacity and antioxidant capacity values were determined for the extracts and the best solvent was also aqueous glycerol (75% w/w).