Phenolic composition and in vitro antioxydant capacities of *Cyperus Conglomeratus* extracts prepared with various solvents

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Abstract:

The present study was aimed to appraise the phenolic compounds and antioxidant capacities of *Cyperus Conglomeratus*. The total phenolic, flavonoid and condensed tannin contents of the different extracts were measured using colorimetric methods. The higher content of phenols, flavanoids and tannins were found in ethyl acetate fraction (392.86mg GAE/g DW; 41.229 mg IQE/g DW and 97.70889 mg RE/g DW respectively). The antioxidant capacities were evaluated in vitro using scavenging assays of 1,1-diphenyl-2-picrylhydrazyl radical (DPPH), ferric reducing power (FRP), and phosphomolybdenum. The results showed the activity DPPH scavenging was found best in ethyl acetate fraction (IC_{50} = 191 µg/ml). For phosphomolybdenum assay, the best activity was found in n-butanol fraction (EEAC = 198,93Mm).

Keywords: DPPH, phosphomolybdenum, FRP, total phenolic, flavonoid, tannin, Cyperus Conglumeratus