

## ABSTRACT

Methanolic extract of *Boerhavia procumbens* Bank ex Roxb. was partitioned with *n*-hexane, chloroform, ethyl acetate and *n*-butanol sequentially after dissolving in distilled water. Phytochemical screening showed presence of phenolics, flavonoides and cardiac glycosides in large amount in chloroform, ethyl acetate and *n*-butanol soluble fraction. The antioxidant activity of all these fractions and the remaining aqueous fraction was evaluated by four methods such as: 1,1-diphenyl-2-picrylhydrazyl (DPPH) free radical scavenging activity, ferric reducing antioxidant power (FRAP) assay, total antioxidant activity and ferric thiocyanate assay. Total phenolics were also determined. Some fractions showed noteworthy antioxidant activity. The results of the antioxidant activity revealed that the ethyl acetate soluble fraction showed the highest value of percent inhibition of DPPH ( $82.54 \pm 0.62$ ) at the concentration of 125  $\mu\text{g/ml}$ . The  $IC_{50}$  of this fraction was  $37.11 \pm 0.23 \mu\text{g/ml}$ , compared with butylated hydroxytoluene (BHT), which have  $IC_{50}$  of  $12.1 \pm 0.92 \mu\text{g/mL}$ . It also showed the highest FRAP value ( $251.08 \pm 1.46 \mu\text{g}$  of trolox equivalents) as well as the highest value of lipid peroxidation inhibition ( $57.21 \pm 52\%$ ), the highest total antioxidant activity ( $0.549 \pm 0.08$ ) and also the highest total phenolic contents ( $77.1 \pm 0.6$ ) as compared to other studied fractions. Phytochemical screening showed high percentage of phenolics, flavonoides and cardiac glycosides in this fraction.