

ABSTRACT

The methanolic extract of *Ipomoea carnea* Jacq. was dissolved in distilled water and partitioned with *n*-hexane, chloroform, ethyl acetate and *n*-butanol successively. The antioxidant potential of all these fractions and remaining aqueous fraction was evaluated by four methods: 1, 1-Diphenyl-2-picrylhydrazyl radical scavenging activity, total antioxidant activity, Ferric Reducing Antioxidant Power assay and ferric thiocyanate assay and total phenolics were also determined. All the fractions showed significant antioxidant potential. The results revealed that *n*-butanol soluble fraction showed highest value of % inhibition of DPPH radical ($91.11\% \pm 0.68$), IC_{50} of *n*-butanol soluble fraction was $74.65 \pm 1.4 \mu\text{g/ml}$, relative to butylated hydroxytoluene (BHT), having IC_{50} of $12.1 \pm 0.92 \text{ mg/mL}$. The chloroform soluble fraction showed highest total antioxidant activity (0.9096 ± 0.1) and highest total phenolic contents ($113.05 \pm 1.2 \text{ mg of gallic acid equivalents}$) as compared to other fractions. The ethyl acetate soluble fraction exhibited highest FRAP value ($511.99 \pm 1.8 \mu\text{g of trolox equivalents}$) as well as highest value of inhibition of lipid peroxidation ($61.87\% \pm 1.2$) as compared to other fractions.