



ABSTRACT

Antioxident potential of two Bryophyte plants i-e *Funaria hygrometrica* and *Polytrichum commune* was evaluated through methanol in-order of their increasing polarity using Soxhlet apparatus. Total phenolic contents were determined with Folin-Ciocalteu reagent which ranged from 30.5 to 547.0 mg GAE/g of extract. *Polytrichum* showed significant but slightly less phenolics contents while that of *Funaria hygrometrica* showed the high phenolic contents having a value of 1630 for *Funaria hygrometrica* and 975 for that of *Polytrichum*. Antioxidant activities of these extracts were evaluated through DPPH radical scavenging, Ferric Thiocyanate method, ABTS. + Assay, FRAP Assay, Superoxide Anion Radical Scavenging Activity, Total phenolics and total flavonoids determination Assay, Metal chelating activity, metal chelating effect, and ferric Thiocyanate (FTC) methods. In terms of TEAC values the extracts of *Funaria hygrometrica* and *Polytrichum commune* had the TEAC value as 97.5 and 71.06. The results of DPPH assay showed that *Funaria hygrometrica* and *Polytrichum commune* showed least IC50 values, hence they have a greater potential. The methanolic extract of *Polytrichum* showed a very high concentration of Flavonoids, 3636.36 of *Polytrichum* while the other plant sample (*Funaria hygrometrica*) contained significant but slightly less quantities of Flavonoids as 1751.8.

Italic S
 F. hygrometrica has greater potential as natural antioxidant rather than Polytrichum commune. So it was concluded that Funaria hygrometrica P. Comm.