

ABSTRACT

Eucalyptus camaldulensis is a powerful antiseptic and is used for relieving cough, cold, sore throat and other infections. It is conventionally used against deteriorating diseases so it is an important task to gauge their antioxidant activity. Antioxidant potential and radical scavenging activity of the five fractions were examined by using different antioxidant assays such as FRAP (Ferric reducing antioxidant power), ABTS {2,2-azinobis(3-ethylbenzothiazoline-6-sulphonic acid)}, Total phenolic contents (TPC) and Diphenyl-1-picrylhydrazyl radical scavenging (DPPH) assay. Trolox Equivalent Antioxidant Activity (TEAC) of the aqueous and organic fraction of these herbs was determined by calculating the percentage inhibition of the colored radical solution after reaction with sample and standard antioxidants by comparing with the standard curve formed by Trolox as standard antioxidant. TPC and FRAP decolourization assays of Bark, Sapwood Heartwood of *Eucalyptus camaldulensis* showed a broad range of antioxidant activity. The results of such anti oxidant activities of the herb can be attributed to the antioxidant compounds present in the plant under study. It is recommended that these antioxidants may be isolated and purified for use in pharmaceutical companies as anticancer drugs.