

Eucalyptus camaldulensis: Phytochemical Composition of Ethanolic and Aqueous Extracts of the Leaves, Stem-Bark, Root, Fruits, and Seeds

Authors : I. Sani, A. Abdulhamid, F. Bello, Isah M. Fakai

Abstract : Phytochemicals are active secondary plant metabolites responsible for most of the claimed medicinal activities of plants. Eucalyptus camaldulensis is one of those plants that possess these phytochemicals and claimed to possess medicinal activities on various ailments. The phytochemicals constituents of various parts of this plant were investigated using standard methods of phytochemicals screening in both aqueous and ethanolic extracts. Qualitative screening revealed that tannins, saponins, glycosides, steroids and anthraquinones were present in aqueous extract of all the parts of the plant, whereas alkaloids, flavonoids and terpenoids were absent. On the other hand, tannins and steroids were present in the ethanolic extract of all the parts of the plant, while saponins, alkaloids, flavonoids and terpenoids were present only in some parts of the plant. However, glycosides and anthraquinone were absent in all the ethanolic extracts. The quantitative screening revealed large amount of saponins in both aqueous and ethanolic extracts across the various parts of the plant. Whereas small amount of tannins, alkaloids and flavonoids were found only in the ethanolic extract of some parts of the plant. The presence of these phytochemicals in Eucalyptus camaldulensis could therefore justify the applications of the plant in management and curing of various ailments as claimed traditionally.

Keywords : Eucalyptus camaldulensis, phytochemical Screening, aqueous extract, ethanolic extract

Conference Title : ICPPNP 2014 : International Conference on Pharmacognosy, Phytochemistry and Natural Products

Conference Location : Istanbul, Türkiye

Conference Dates : November 28-29, 2014