

**Effect of solvents on phytochemical concentrations and antioxidant activity of *Garcinia benthamiana* stem bark extracts**

**ABSTRACT**

The effect of solvents of various polarities (hexane, chloroform, ethyl acetate, and methanol) on phytochemical concentrations and antioxidant activities of stem bark of *Garcinia benthamiana* were examined. A medium polar solvent, ethyl acetate, was the most efficient in extracting the phenolic components from *G. benthamiana*, followed by methanol. The ethyl acetate extract had high total phenolic concentrations and scavenging activity against 2,2-diphenyl-1-picrylhydrazyl (DPPH) free radicals. Both the ethyl acetate and methanol extracts had strong reducing power and moderate ferrous ion chelating ability and inhibition of  $\beta$ -carotene bleaching.

**Keyword:** Clusiaceae; Phytochemical screening