**ABSTRACT**

Traditional and herbal medicines are the most easily available health care remedies. Chionanthus mala-elengi (Dennst.) P. S. Green is an endemic tree species of the family Oleaceae. It is used in giddiness, epilepsy, wound healing and liver disease. Phytochemical studies of this plant have not been reported so far. The aim of the present study is to characterize the chemical constituents present in ethanolic stem bark extract of Chionanthus mala-elengi. Thirty grams of powdered stem bark was extracted using 150 ml ethanol in Soxhlet apparatus. The mixture was filtered. The filtrates were evaporated and the dried ethanolic stem bark extract was used for further studies. Gas Chromatography - Mass Spectrometry analysis provided different peaks indicating the presence of sixteen different phytochemical compounds. Thus, the qualitative determination of stem bark ethanolic extract of C. mala-elengi using GC-MS analysis revealed the presence of various bioactive compounds which is used for different ailments by traditional practitioners.