Chemical constituents from two weed species of Spermacoce (Rubiaceae)

ABSTRACT

Spermacoce articulatis and Spermacoce exilis are weeds commonly growing in wastelands but widely used as traditional medicines. The separation works on the two plant species had been carried out using various solvents and chromatographic methods. The structures of the isolated compounds were determined by using spectroscopic methods such as IR, MS, 1H NMR, 13C NMR, 2D-NMR and by comparison with the data reported previously. Extracts from Spermacoce articulatis gave two compounds, identified as ursolic acid (1) and stigmasterol, while extracts from Spermacoce exilis yielded four compounds, ursolic acid (1), benzo[g]isoquinolione-5, 10-dione (2), stigmasterol and hexadecanoic acid (3). There was no previous phytochemical investigation on Spermacoce exilis.

Keyword: Weed; Spermacoce; Rubiaceae; Ursolic acid