Bioactive Secondary Metabolites from *Salix tetrasperma* **Roxb.** Assem El-Shazly*, Afaf El-Sayed, and Eman Fikrey

Pharmacognosy Department, Faculty of Pharmacy, Zagazig University, Zagazig 44519, Egypt. Fax: 002 055 2303266. E-mail: assemels2002@yahoo.co.uk

* Author for correspondence and reprint requests

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Column chromatography of the light petroleum fraction from the methanolic extract of the stem bark of Salix tetrasperma Roxb. (Salicaceae) resulted in the isolation of -sitosterol acetate, friedelin, 3 -friedelinol, -amyrin, -sitosterol, -sitosterol-O-glucoside in addition to palmitic acid. From the dichloromethane fraction of the leaves, catechol and tremulacin were isolated. Salicin and its derivatives tremuloidin and 2'-O-p-(E)-coumarovl salicin were isolated from the ethyl acetate fraction of the leaves. The isolated compounds were identified by MS, and 1D NMR (¹H and ¹³C) and 2D NMR (H-H COSY, HSQC, and HMBC) spectral analyses. The total methanolic extract exhibited significant anti-inflammatory activity (rat hind paw oedema). The extract with a content of 120 mg/kg body weight produced 52% inhibition equivalent to the standard diclofenac sodium (54% inhibition). The antioxidant (DPPH free radical scavenging) and analgesic activities, respectively, were also evaluated.

Key words: Salix tetrasperma, Phenolic Glycosides, Biological Activity