TOPICAL ANTI-INFLAMMATORY ACTIVITY AND CHEMICAL COMPOSITION OF ESSENTIAL OIL OF SABINA VIRGINIANA L. ANTOINE (CUPRESSACEAE)

By Sherifat A. Aboaba, Ibrahim A. Oladosu and Isiaka A. Ogunwande

Abstract

Essential oil of from the foliage leaves of Sabina virginiana L. Antoine (Cupressaceae) was obtained by hydrodistillation and analyzed for their constituents by gas chromatography (GC) and gas chromatography-mass spectrometry (GC-MS). Thirty-one compounds were identified with monoterpenes accounting for 68.3% of the oil content. The major constituents were limonene (32.9%), safrole (23.0%), asarone (15.9%) and α-pinene (5.2%). The topical anti-inflammatory assay of the whole essential oil was also investigated in mice ear edema induced by tetradecanoylphorobol-13-acetate. The anti-inflammatory activity of 66.7% at 5.0mg dose level may be an indication of the therapeutic application of the oil.