

Xanthone from *Garcinia eugenifolia* (Clusiaceae)

ABSTRACT

Studies on the twigs of *Garcinia eugenifolia* have led to the isolation of one xanthone 5,9-dihydroxy-8-methoxy-2,2-dimethyl-7-(3-methylbut-2-enyl)pyrano[3,2-b]xanthen-6(2H)-one (1) and one triterpenoid, sitosterol (2). Meanwhile, studies on the leaves of *Garcinia eugenifolia* provided another triterpenoid, friedelin (3). The structures of these compounds were determined by spectroscopic methods such as ¹H NMR, ¹³C NMR, mass spectrometry (MS) and by comparison with previous studies. The hexane and ethyl acetate extracts of *Garcinia eugenifolia* indicated strong cytotoxicity towards the HL-60 cell line with IC₅₀ values of 1.9 g/ml and 2.5 g/ml respectively. However, the methanol extract gave moderate inhibitory activities (IC₅₀<10 g/ml) towards HL-60 cell line.

Keyword: *Garcinia eugenifolia*; Xanthone; Cytotoxicity