Secondary metabolites from two garcinia species and their biological activities.

ABSTRACT

Detail chemical studies on Garcinia maingayi have yielded one xanthone, 1,3,7-trihydroxy-2-(3-methylbut-2-enyl)xanthone, one benzophenone, isoxanthochymol, one benzoic acid derivative 3,4-dihydroxy-methylbenzoate and two triterpenoids, stigmasterol and sitosterol. Meanwhile, investigations on Garcinia parvifolia have afforded one triterpenoid, α -amyrin and two xanthones, cowanin and rubraxanthone. Their structures were derived based on spectroscopic evidence, mainly 1D and 2D NMR spectroscopy. Acetylation reaction was carried out on rubraxanthone to yield triacetate rubraxanthone. It was found that the pure rubraxanthone was strongly active against the larvae of Aedes aegypti with LC50 value of 15.49 µg/mL and HL-60 cell line with an IC50 value of 7.5 µg/mL.

Keyword: Garcinia maingayi; Garcinia parvifolia; Xanthone; Rubraxanthone.