Alpha-mangostin and beta-mangostin from Cratoxylum laucum.

ABSTRACT

Our continuing interest in xanthones and anthraquinones from the Cratoxylum genus has led us to look at Cratoxylum glaucum. This resulted in the isolation of alpha-mangostin (1), beta-mangostin (2), fuscaxanthone C (3), 3-geranyloxy-6-methyl-1,8-dihydroxyanthraquinone (4), beta-sitosterol (5), 1,8-dihydroxy-3-methoxy-6-methylanthraquinone (6), stigmasterol (7), friedelin (8) and betulinic acid (9). Structural elucidations of these compounds were achieved by using ID and 2D NMR spectroscopic experiments. Cytotoxic assays indicated that the hexane and ethyl acetate extracts demonstrated cytotoxicity against the MCF7 cancer cell line. Meanwhile, the ethyl acetate and methanol extracts of C. glaucum inhibited the HL-60 cancer cell line activity.

Keyword: Mangostin; Cratoxylum laucum.