

Cytotoxic prenylated xanthone and coumarin derivatives from Malaysian *Mesua beccariana*

ABSTRACT

Our recent research on the phytochemical constituents of the stem bark of *Mesua beccariana* gave one new xanthone, beccarixanthone T (**1**) and one new coumarin, beccamarin T (**2**) together with three known xanthenes mesuarianone (**3**), mesuasinone (**4**), 1,5-dihydroxyxanthone (**5**) and four known terpenoids, friedelin (**6**), stigmasterol (**7**), beta-sitosterol (**8**) and gamma-sitosterol (**9**). The structures of these compounds were elucidated and determined using spectroscopic techniques such as NMR and MS. The cytotoxic activities of compounds **1-4** as well as the crude extracts were tested against two cancer cell lines, Hep G2 (liver cancer cell line) and HT-29 (colon cancer cell line) using MTT assays. Mesuarianone (**3**) gave a significant activity on the HT-29 cell line while mesuasinone (**4**) gave moderate activity against HT-29 cell line.

Keyword: *Mesua beccariana*; Coumarin; Xanthone; Cytotoxic