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 xanthones 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