

P-111**Flavonoid Analogues Isolated from the Stem Bark of Malaysian *Polyalthia Cauliflora* VAR. *Cauliflora* (Annonaceae) with Anticancer Properties**

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Phytochemical study on the stem bark of *Polyalthia cauliflora* var. *cauliflora* obtained from Pahang, Malaysia has been conducted. The separation of the chemical components were carried out by various chromatography techniques and their structures were elucidated by spectroscopic methods including nuclear magnetic resonance (1D and 2D NMR) as well as gas chromatography-mass spectrometry. Five flavones and two chalcones were isolated and has been identified as 3,7-dimethoxy-5-hydroxyflavone (**1**), 5,8-dihydroxy-6,7-dimethoxyflavone (**2**), tetrochrysin (**3**), 6,7-dimethoxy-5-hydroxyflavone (**4**), 5-hydroxy-3,7,8-trimethoxyflavone (**5**), 2',4'-dihydroxy-3'-methoxychalcone (**6**) and 2',6'-dihydroxychalcone (**7**). Isolated chalcone, 2',4'-dihydroxy-3'-methoxychalcone (**6**) was tested against three cell lines. Compound (**6**) shows active activity against HL-60 with IC₅₀ = 5.1 µg/ml and moderate activity with IC₅₀ 12.2 µg/ml and 12.5 µg/ml against HeLa and MCF-7, respectively.

Keyword: Annonaceae, *Polyalthia cauliflora*, flavonoid, chalcone, NMR.
