

Isolation of an isoflavonoid and a terpenoid from the heartwood of *Baphia nitida* Lodd. (camwood)

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Abstract. Chromatographic separation of methanolic extract of *Baphia nitida* heartwood gave two crystalline solids characterized as 3,9-dimethoxy-6aR,11aR-dihydro-6H-benzofuro(3,2-C)[1]benzopyran (also known as homopterocarpin) with molecular formula $C_{17}H_{16}O_4$ (1.57% yield) and 2,4-dimethoxybenzaldehyde $C_9H_{10}O_3$ (2.27% yield). Each of the isolated compounds showed a single spot on developed thin layer chromatographic plate under ultraviolet light (254 nm) and spray reagent (10% sulfuric acid in methanol solution). Structural elucidation was achieved using Fourier transform infrared (FT-IR) spectroscopy, one and two-dimension nuclear magnetic resonance (NMR) techniques. Distortionless enhancement by polarization transfer-edited-heteronuclear single quantum coherence (DEPT-ed-HSQC) was also a useful tool that aided the characterization of the two secondary metabolites isolated from *Baphia nitida* heartwood.

Keywords: *Baphia nitida*, camwood, isolation, chromatography, secondary metabolites, homopterocarpin, isoflavonoid, terpenoid.

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