


Short Note

5,9,11-Trihydroxy-10-(2''-hydroxy-3''-methylbut-3''-en-1-yl)-2,2-dimethyl-3-(2'-methylbut-3'-en-2'-yl)-2H,12H-pyrano[2,3-a]xanthen-12-one from *Calophyllum pseudomole*

Mulyadi Tanjung *, Ratih Dewi Saputri and Tjitjik Srie Tjahjandarie 

Natural Products Chemistry Research Group, Organic Chemistry Division, Department of Chemistry, Faculty of Science and Technology, Universitas Airlangga, Surabaya 60115, Indonesia; duffputri@gmail.com (R.D.S.); tjitjiktjahjandarie@fst.unair.ac.id (T.S.T.)

* Correspondence: mulyadi-t@fst.unair.ac.id; Tel.: +62-31-5936501; Fax: +62-31-5936502

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Abstract: A new pyranocoumarin, namely 5,9,11-trihydroxy-10-(2''-hydroxy-3''-methylbut-3''-en-1-yl)-2,2-dimethyl-3-(2'-methylbut-3'-en-2'-yl)-2H,12H-pyrano[2,3-a]xanthen-12-one **1**, was isolated from the stem bark of *Calophyllum pseudomole*. The structure of compound **1** was elucidated based on its ultraviolet (UV); infrared (IR); high resolution electro spray ionization mass spectrometry (HRESIMS); 1D and 2D nuclear magnetic resonance (NMR) spectral data.

Keywords: 5,9,11-trihydroxy-10-(2''-hydroxy-3''-methylbut-3''-en-1-yl)-2,2-dimethyl-3-(2'-methylbut-3'-en-2'-yl)-2H,12H-pyrano[2,3-a]xanthen-12-one; *Calophyllum pseudomole*; pyranoxanthone

1. Introduction

The genus *Calophyllum* belongs to the Clusiaceae family which comprises about 180 species found mainly in Southeast Asia. This plant is endemic to Kalimantan Island, Indonesia. This genus has been shown to possess a number of secondary metabolites such as xanthenes [1–3], coumarins [4,5], and chromanone acids [6,7]. Many of these compounds have shown a wide range of biological and pharmacological properties such as anti-HIV [8,9], anticancer [10,11], and antimalarial properties [12].

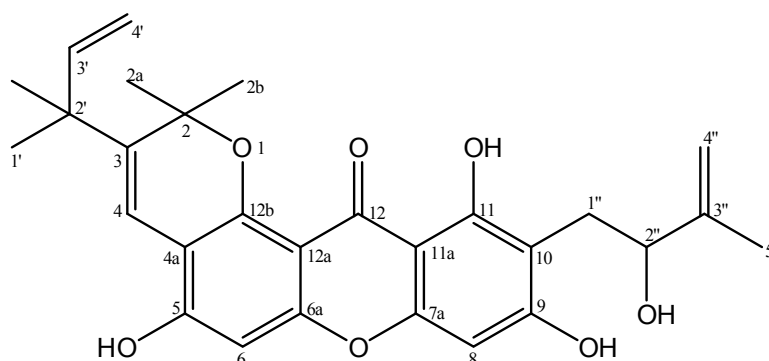


Figure 1. Structures of 5,9,11-trihydroxy-10-(2''-hydroxy-3''-methylbut-3''-en-1-yl)-2,2-dimethyl-3-(2'-methylbut-3'-en-2'-yl)-2H,12H-pyrano[2,3-a]xanthen-12-one.

In continuation of our phytochemical investigation on bioactive xanthone, we wish to report the isolation and structural elucidation of a new pyranoxanthone, 5,9,11-trihydroxy-10-(2''-hydroxy-3''-methylbut-3''-en-1-yl)-2,2-dimethyl-3-(2'-methylbut-3'-en-2'-yl)-2H,12H-pyrano[2,3-a]xanthen-12-