GNPL 1160233
10 March 2016
Initial
CE: ER QA: XX
Coll:XX QC:XX

NATURAL PRODUCT RESEARCH, 2016
VOL. XX, NO. X, 1–5
http://dx.doi.org/10.1080/14786419.2016.1160233

Taylor & Francis
Taylor & Francis Group

A New (–)-5′,6-dimethoxyisolariciresinol-(3″,4″-dimethoxy)-3α-O-β-D-glucopyranoside from the bark of *Aglaia eximia* (Meliaceae)

Julinton Sianturi[a], Desi Harneti[a]Darwati[a], Tri Mayanti[a], Unang Supratman[a] and Khalijah Awang[b]

[a]Department of Chemistry, Faculty of Mathematics and Natural Sciences, Padjadjaran University, Sumedang, Indonesia; [b]Department of Chemistry, Faculty of Science, University of Malaya, Kuala Lumpur, Malaysia

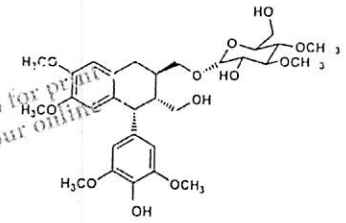
ABSTRACT

New (–)-5′,6-dimethoxyisolariciresinol-(3″,4″-dimethoxy)-3α-O-β-D-glucopyranoside compound was isolated from the methanol extract of the bark of *Aglaia eximia* (Meliaceae). The chemical structure of the new compound were elucidated on the basis of spectroscopic data including, UV, IR, HR-ESI-TOFMS, 1D-NMR, 2D-NMR and comparison with those related compounds previously reported.

ARTICLE HISTORY
Received 13 October 2015
Accepted 14 February 2016

KEYWORDS
Aglaia eximia; lignan; (–)-5′,6-dimethoxyisolariciresinol-(3″,4″-dimethoxy)-3α-O-β-D-glucopyranoside; Meliaceae

AQ1



1. Introduction

The genus *Aglaia* (Meliaceae) is distributed in the tropical rain forests of the Indo-Malaysian region (Pannell 1992). Recently, these structurally unique groups of cyclopenta[*b*]-benzofurans and cyclopenta[*bc*]benzopyrans have been isolated exclusively from this genus (Brader et al., 1998; Wang et al. 2001, 2002, 2004) and exhibited some activities such as antiproliferative (Liu et al. 2014), cytotoxic (Wukirsari et al. 2014; Liu & Xu 2015), antihyperlipidemic (Zanwar et al. 2014), anti-inflammatory (Huang et al. 2014), antimicrobial (Joycharat et al. 2014), anti-influenza (Kernan et al. 1997), antitumour, antiviral and antimitotic (MacRae & Towers 1984).

AQ2

Recently, a cyclopenta benzofurans derived from lignan, named aglacins A–H, a new class of aryltetralin cyclic ether lignans and norlignans have been found from *A. cordata*

CONTACT Unang Supratman unang.supratman@unpad.ac.id
Supplemental data for this article can be accessed at http://dx.doi.org/10.1080/14786419.2016.1160233.