



Airlanggins A-B, two new isoprenylated benzofuran-3-ones from the stem bark of *Calophyllum soulattri*

Mulyadi Tanjung^a, Fida Rachmadiarti^b, Anindita Prameswari^a,
Villa Ultha Wustha Agyani^a, Ratih Dewi Saputri^a, Tjitjik Srie Tjahjandarie^a and
Yana Maolana Syah^c

^aFaculty of Science and Technology, Department of Chemistry, Natural Products Chemistry Research Group, Organic Chemistry Division, Universitas Airlangga, Surabaya, Indonesia; ^bFaculty of Science, Department of Biology, Universitas Negeri Surabaya, Surabaya, Indonesia; ^cNatural Products Chemistry Research Group, Organic Chemistry Division, ITB, Bandung, Indonesia

ABSTRACT

Two new isoprenylated benzofuran 3-ones, airlanggin A (**1**) and B (**2**) along with two known xanthenes, ananixanthone (**3**) and trapezifolixanthone (**4**) were isolated from the stem bark of *Calophyllum soulattri*. Structures of all the compounds were elucidated using extensive spectroscopic methods, including UV, IR, HRESIMS, 1D and 2D NMR. Compounds **1–4** were evaluated for their cytotoxicity against P-388 cells, showing that compound **3** was the most active with IC₅₀ 0.68 µg/mL and compound **1** showed moderate activity with IC₅₀ 5.80 µg/mL.

ARTICLE HISTORY

Received 12 August 2017
Accepted 1 September 2017

KEYWORDS


Airlanggins A and B;
isoprenylated benzofuran-
3-one; *Calophyllum soulattri*;
P-388 cell



1. Introduction

Calophyllum soulattri locally known 'bintangor' belongs to the Clusiaceae family. *Calophyllum* is widely distributed in Asia, Australia, Africa and Polynesia. In Indonesia, the aqueous decoction of stem bark or leaves of this plant has been used to treat inflammation and rheumatism (Heyne 1987) (Figure 1). The *Calophyllum* genus has been known to produce a variety of

CONTACT Mulyadi Tanjung  mulyadi-t@fst.unair.ac.id

 Supplemental data for this article can be accessed at <https://doi.org/10.1080/14786419.2017.1380027>.

© 2017 Informa UK Limited, trading as Taylor & Francis Group