

## Document details

1 of 1

[Export](#) [Download](#) [Print](#) [E-mail](#) [Save to PDF](#) [Add to List](#) [More... >](#)[Full Text](#) [View at Publisher](#)

Brazilian Journal of Pharmacognosy  
Volume 24, Issue 5, 1 September 2014, Pages 561-564

[Open Access](#)Cytotoxic tirucallane triterpenes from the stem of *Luvunga scandens* (Article)

Al-Zikri, P.N.H.<sup>a</sup>, Taher, M.<sup>a</sup>, [Susanti, D.<sup>b</sup>](#), Rezali, M.F.<sup>c</sup>, Read, R.W.<sup>d</sup>, Sohrab, M.H.<sup>e</sup>, Hasan, C.M.<sup>f</sup>, Ahmad, F.<sup>g</sup>

<sup>a</sup>Department of Pharmaceutical Technology, International Islamic University Malaysia, Pahang, Malaysia

<sup>b</sup>Department of Chemistry, International Islamic University Malaysia, Pahang, Malaysia

<sup>c</sup>SIRIM Berhad, National Metrology Laboratory, Selangor, Malaysia

[View additional affiliations ▾](#)

## Abstract

[View references \(21\)](#)

Two tirucallane triterpenes, namely flindissol (1) and 3-oxotirucalla-7,24-dien-21-oic-acid (2), were isolated from the dichloromethane extract of the stem of *Luvunga scandens* (Roxb.) Buch-Ham ex Wight & Arn, Rutaceae. This is the first report of their isolation from this plant. Their structures were constructed by high resolution mass and 2D NMR spectroscopic data. The cytotoxic potential of the two pure compounds 1 and 2 were determined by MTT assay against human breast adenocarcinoma cell line (MCF-7). Compounds 1 and 2 showed potent cytotoxicity against MCF-7 cell line with IC<sub>50</sub> values of 13.8 μM and 27.5 μM, respectively. This result suggested their potential activity as antitumor agents. © 2014 Sociedade Brasileira de Farmacognosia. Published by Elsevier Editora Ltda. All rights reserved.

## Author keywords

[Cytotoxicity](#) [Luvunga scandens](#) [Tirucallane](#) [Triterpenes](#)

## Indexed keywords


EMTREE drug terms: [3 Oxotirucalla 7,24 dien 21 oic acid](#) [flindissol](#) [Luvunga scandens extract](#) [plant extract](#) [triterpene](#) [unclassified drug](#)

EMTREE medical terms: [antineoplastic activity](#) [Article](#) [cancer cell culture](#) [cell viability](#) [controlled study](#) [cytotoxicity](#) [extraction and extracts](#) [human](#) [human cell](#) [IC50](#) [in vitro study](#) [isolation procedure](#) [MCF 7 cell line](#) [MTT assay](#) [quantitative assay](#) [spectroscopy](#)


ISSN: 0102695X  
Source Type: Journal  
Original language: English

DOI: 10.1016/j.bjp.2014.10.003  
Document Type: Article  
Publisher: Sociedade Brasileira de Farmacognosia

Metrics ⓘ [View all metrics >](#)

2  Citations in Scopus  
30th Percentile

0.72  Field-Weighted  
Citation Impact

 PlumX Metrics [▾](#)  
Usage, Captures, Mentions,  
Social Media and Citations  
beyond Scopus.

## Cited by 2 documents

[Cytotoxic activity of \*Luvunga scandens\* against human cancer cell lines](#)

Al-Zikri, P.N.H., Taher, M., Susanti, D.  
(2016) *Jurnal Teknologi*

[Effects of triterpenoids from](#)

[Luvunga scandens on cytotoxic, cell cycle arrest and gene expressions in MCF-7 cells](#)

Taher, M., Al-Zikri, P.N.H., Susanti, D.  
(2016) *Natural Product Sciences*

[View all 2 citing documents](#)

Inform me when this document is cited in Scopus:

[Set citation alert >](#)

[Set citation feed >](#)

## Related documents

[Tirucallane and oleanane triterpenes from the resin of \*Aucoumea klaineana\*](#)

