Dr. apt. Rollando, S.Farm., M.Sc.
Pengajuan ke Lektor Kepala

Bukti Korespondensi

Judul Artikel: A Phenylpropanoid Compound from the Seeds of Sterculia quadrifida and Its Cytotoxic Activity

No	Proses	Tanggal
1	Artikel di ajukan ke jurnal *Tropical Journal of Natural Product Research*	30-5-2023
2	Artikel dalam proses review	2-6-2023
3	Revisi pertama: *accepted with moderate corrections*	12-6-2023
4	Editor mengirim hasil review artikel • Review form	20-6-2023
5	Author mengirimkan hasil revisi artikel • Response to reviewer • Plagiarism check • Revised article	23-6-2023
6	Manajer editor mengirimkan *galley proof*	29-6-2023
7	Author mengirimkan kembali kepada manajer editor hasil revisi *galley proof*	29-6-2023
8	Artikel dipublikasi pada *Tropical Journal of Natural Product Research*. Vol. 7. Issue 6. Juli 2023	2-7-2023

1. Artikel di ajukan ke jurnal *Tropical Journal of Natural Product Research*

(30-5-2023)

Dr. apt. Rollando, S.Farm., M.Sc.
Pengajuan ke Lektor Kepala

Submission of Article - "A Phenylpropanoid Compound from The Seeds of Sterculia quadrifida and Cytotoxic Activity

Dr. apt. Rollando , S.Farm, M.Sc. <ro.llando@machung.ac.id>
Tue 5/30/2023 10:15 AM
To:Editor-in-Chief Tjnpr <editor.tjnpr@gmail.com>
Cc:Editorial Team <et.tjnpr@gmail.com>

6 attachments (629 KB)
Authors Contributor.docx; Cover latter.doc; DECLARATION AND COPYRIGHT TRANSFER FORM.docx; Plagiarism Report.pdf; Rollando_Submited.docx; Potential Reviewer.docx;

Dear Editor in Chief Prof. Abiodun Falodun,

I hope this email finds you well. I am writing to submit an article titled "A Phenylpropanoid Compound from The Seeds of Sterculia quadrifida and Cytotoxic Activity" to be considered for publication in The Journal of Natural Products Research (TJNPR).

I am Rollando, a researcher from Ma Chung University. I conducted this study in collaboration with my colleagues, with the aim of exploring the chemical constituents and potential cytotoxic properties of Sterculia quadrifida seeds.

The abstract of our article briefly highlights the main findings and significance of our research. In this study, we successfully isolated and identified a novel phenylpropanoid compound from the seeds of Sterculia quadrifida. We also investigated its cytotoxic activity against various cancer cell lines using in vitro assays. Our results indicate promising potential for this compound as a natural anticancer agent, which could have implications for the development of novel therapeutic interventions.

The methodology employed in our research involved extraction of the phenylpropanoid compound, structural elucidation using spectroscopic techniques (e.g., NMR, mass spectrometry), and cytotoxicity evaluations using established cell viability assays. We have included comprehensive data, statistical analyses, and graphical representations to support our findings.

The significance of our work lies in its contribution to the understanding of the chemical composition and biological activities of Sterculia quadrifida, as well as the potential application of the phenylpropanoid compound in cancer research. We believe that our findings align with the scope and interests of TJNPR's readership, making it a suitable fit for publication in your esteemed journal.

We would be honored if the Editorial Board and reviewers consider our article for publication in TJNPR. We are confident that the dissemination of our research in your journal will contribute to the scientific community and stimulate further exploration in this field.

Please find attached the manuscript for your review. We have ensured that it adheres to the journal's submission guidelines, including formatting and citation style. All authors have consented to the submission and have no conflicts of interest to declare.

Thank you for your time and consideration. We look forward to hearing from you regarding the status of our submission.

We appreciate your dedication to promoting quality research and eagerly anticipate the opportunity to contribute to TJNPR.

Sincerely,
Rollando

Re: Submission of Article - "A Phenylpropanoid Compound from The Seeds of Sterculia quadrifida and Cytotoxic Activity

Editor-in-Chief Tjnpr <editor.tjnpr@gmail.com>

Tue 5/30/2023 1:58 PM

To:Dr. apt. Rollando , S.Farm, M.Sc. <ro.llando@machung.ac.id>

{TJNPR} Manuscript information required

Thank you for submitting your original manuscript to the Tropical Journal of Natural Product Research (www.tjnpr) https://www.scopus.com/sourceid/21100933230 SCOPUS , published by the University of Benin and Natural Product Research Group.

The email addresses of the co-authors are needed, stating also their roles in the study.

The peer-review process will commence immediately, as the manuscript will be passed to an editor for initial assessment as soon as possible. If there are any problems with your submission, we will contact you. Also, note that manuscripts submitted and undergoing peer review will not be accepted for withdrawal or retraction.

Title: **A Phenylpropanoid Compound from The Seeds of *Sterculia quadrifida* and Cytotoxic Activity**

Best regards

Abiodun

Professor Abiodun Falodun, PhD; FAAS, FISPON

Editor-in-Chief:
Tropical Journal of Natural Product Research (TJNPR)
Head, Natural Product Research Group, University of Benin
Email: editor.tjnpr@gmail.com
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University of Benin TJNPR SCOPUS Q4
www.uniben.edu www.tjnpr.org

2. Artikel dalam proses review

(2-6-2023)

Confirm co-authorship of submission to Tropical Journal of Natural product Research

Editor-in-Chief Tjnpr <editor.tjnpr@gmail.com>
Fri 6/2/2023 12:18 AM
To:Dr. apt. Rollando , S.Farm, M.Sc. <ro.llando@machung.ac.id>
Cc:apt. Eva Monica, S.Farm, M.Sc. <eva.monica@machung.ac.id>;apt. Muhammad Hilmi Afthoni, S.Farm., M.Farm. <muhammad.hilmi@machung.ac.id>; warsito.warsito@ub.ac.id <warsito.warsito@ub.ac.id>;mas.maruri@ub.ac.id <mas.maruri@ub.ac.id>;widodo.wid@ub.ac.id <widodo.wid@ub.ac.id>

The manuscript submitted to the Tropical Journal of Natural Product Research https://www.scopus.com/sourceid/21100933230 SCOPUS by the corresponding author is undergoing the peer-review process.

Title: A Phenylpropanoid Compound from The Seeds of *Sterculia quadrifida* and Cytotoxic Activity

Journal: Tropical Journal of Natural Product Research www.tjnpr.org

Corresponding Author: Rollando Rollando

Co-authors: Eva Monica, Muhammad Hilmi Afthoni, Warsito Warsito, Masruri Masruri, Nashi Widodo

Manuscript No: TJNPR MY140ARN

If you have any objections, please contact the editorial office as soon as possible. If we do not hear from you, we will assume you agree with your co-authorship.

If you did not co-author this submission, please contact the corresponding author directly

Thank you very much.

Best regards

Abiodun

Professor Abiodun Falodun, PhD; FAAS, FISPON

Editor-in-Chief:
Tropical Journal of Natural Product Research (TJNPR)
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University of Benin TJNPR SCOPUS Q4
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3. Revisi pertama: accepted with moderate corrections (12-6-2023)

Dr. apt. Rollando, S.Farm., M.Sc.
Pengajuan ke Lektor Kepala

(TJNPR) Editor Decision

Editor-in-Chief Tjnpr <editor.tjnpr@gmail.com>
Mon 6/12/2023 2:03 PM
To:Dr. apt. Rollando , S.Farm, M.Sc. <ro.llando@machung.ac.id>

1 attachments (64 KB)
Provisional acceptance 140.docx;

Dear Dr Rollando,

The manuscript submitted to the Tropical Journal of Natural Product Research www.tjnpr.org
https://www.scopus.com/sourceid/21100933230 has been carefully reviewed by competent experts.

I am pleased to inform you that the manuscript has been accepted for publication in Tropical Journal of Natural Product Research.

Find attached the details of the decision.

Please send your response urgently to the Editor-in-Chief, to enable us to process your manuscript for the next issue Vol 7 issue 6, 2023.
Kindly acknowledge the receipt of the mail.

Title: A Phenylpropanoid Compound from The Seeds of *Sterculia quadrifida* and Cytotoxic Activity

Authors: Rollando Rollando, Eva Monica, Muhammad Hilmi Afthoni, Warsito Warsito, Masruri Masruri, Nashi Widodo

TJNPR Editorial Decision: accepts with moderate revisions

Thank you very much for choosing to publish with Tropical Journal of Natural Product Research.

Best regards

Abiodun

Professor Abiodun Falodun, PhD; FAAS, FISPON

Editor-in-Chief:
Tropical Journal of Natural Product Research (TJNPR)
Head, Natural Product Research Group, University of Benin
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Dr. apt. Rollando, S.Farm., M.Sc.
Pengajuan ke Lektor Kepala

Tropical Journal of Natural Product Research

Official Journal of the Natural Product Research Group
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ISSN: 2616-0684 (Print); 2616-0692 (Online), **DOI**: 10.26538/tjnpr, ISI IF: 0.562 (2017)
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SCOPUS indexed, SCImago SjR 0.13

Ref. No. 55509018024897 DATE:12th June 2023

Pharmacy Department, Faculty of Science and Technology, Ma Chung University, Malang 65151, Indonesia

Dear Dr Rollando,

Provisional Acceptance letter for Article Manuscript Number TJNPR MY140ARN

Title: **A Phenylpropanoid Compound from The Seeds of *Sterculia quadrifida* and Cytotoxic Activity**

Authors: Rollando Rollando, Eva Monica, Muhammad Hilmi Afthoni, Warsito Warsito, Masruri Masruri, Nashi Widodo

I am pleased to inform you that your manuscript sent to the Tropical Journal of Natural Product Research has been reviewed and recommended for publication as a short communication article.
However, before the issues raised by the Reviewers are forwarded, to enable you revise your manuscript accordingly, please pay a publication charge of **$ USD270**. The actual publication of the paper will be in the upcoming issue (**Vol 7 issue 6, 2023**).

Please, the manuscript number (**TJNPR MY140ARN**) should be included in the bank transfer.

Congratulations.

The money should be remitted in favour of:

Name of account:	**Abiodun FALODUN**
Bank Name:	Access Bank Plc
Account Number:	1456136521.
Sort Code:	044040699
Swift code:	ABNGNGLA
Address of Bank:	Ransome Kuti Road,University of Benin, Benin City, Edo State, Nigeria

Sincerely,

Professor Abiodun Falodun
Editor-in-Chief

4. Editor mengirim hasil review artikel

(20-6-2023)

Dr. apt. Rollando, S.Farm., M.Sc.
Pengajuan ke Lektor Kepala

REVIEW FORM

The Editorial Team of the Tropical Journal of Natural Product Research kindly request you to review the enclosed article. Please complete the form and return to the Editor-in-Chief, editor.tjnpr@gmail.com

A. MANUSCRIPT

Journal	**Tropical Journal of Natural Product Research**
Manuscript Number	MY 140AR
Type of paper	Full length
Title of paper	**A Phenylpropanoid compound from The Seeds of *Sterculia quadrifida* and Cytotoxic Activity**
Name of Authors	

B. REVIEWER'S SPECIFIC COMMENTS PER SECTION OF MANUSCRIPT

Abstract	Good with some corrections
Introduction	Okay with some corrections too.
Methodology	Doesn't seem reproducible by others who may want to isolate the same compound from the plant.
Results	The nmr spectra quality is poor.
Discussion	There is no Table 1 and no table of chemical shifts.
Conclusion	Okay
References	To be confirmed
Figures, Tables	There is no clear structure for the compound. Table 1 not found…

C. REVIEWER'S GENERAL COMMENTS AND REMARKS

Comments may be continued onto another sheet if necessary.

The spectra appended and the spectral data does not support the proposed structure. For instance, H-2 and C-2 which are alpha to the carbonyl group cannot have the same resonance as H-4/C-4 which are gamma or 3 bonds away from the carbonyl group. There are several syntax and grammatical errors some have been corrected. The manuscript needs English revision by a native English speaker.

D. REVIEWER'S RECOMMENDATION
Please mark with "**X**" one of the options.

You state the article should:

Publish as it is	
Accept with minor revisions (editor will check), specific comments to the editor below	
Accept with moderate revisions as recommended by reviewer	
Accept with major corrections (the article should be thoroughly changed)	X
Full article	
Short communication	
the proposed structure is not supported by the spectral data and the spectra attached. There is no HRMS to confirm the elemental composition. The nmr spectra are poorly processed and no literature data to support their assignments and confirm the structure.	

E. REVIEWER'S INFORMATION

Name	**Prof. John Igoli**
Official title	**Professor**
Affiliation	**Dept of Chemistry, Joseph Sarwuan University of Agriculture Makurdi**
Specialization	**Organic chemistry, natural products and spectroscopy**
Country	**Nigeria**
E-mail	**j.o.igoli@uam.edu.ng**
Phone	**+234 8130 99 1308**
Signature	 **15/06/2023**

Dr. apt. Rollando, S.Farm., M.Sc.
Pengajuan ke Lektor Kepala

REVIEW FORM

The Editorial Team of the Tropical Journal of Natural Product Research kindly request you to review the enclosed article. Please complete the form and return to the Editor-in-Chief, editor.tjnpr@gmail.com

A. MANUSCRIPT

Journal	**Tropical Journal of Natural Product Research**
Manuscript Number	
Type of paper	
Title of paper	A Phenylpropanoid Compound from The Seeds of *Sterculia quadrifida* and Cytotoxic Activity
Name of Authors	

B. REVIEWER'S SPECIFIC COMMENTS PER SECTION OF MANUSCRIPT

Abstract	Ok
Introduction	Ok
Methodology	Ok
Results	Ok
Discussion	Ok
Conclusion	Ok
References	Ok
Figures, Tables	Ok

C. REVIEWER'S GENERAL COMMENTS AND REMARKS

Comments may be continued onto another sheet if necessary.

Amend the title slightly:
A Phenylpropanoid Compound from The Seeds of *Sterculia quadrifida* and Cytotoxic Activity → A Phenylpropanoid Compound from the Seeds of *Sterculia quadrifida* and its Cytotoxic Activity

Include a photo of the seeds of *Sterculia quadrifida* would be useful.

Line 10: MTT assay should be explained in full. This assay was mentioned in the Abstract but not mentioned under *In Vitro* Cytotoxicity Assay (Page 6).

Line 9, Line 138 & Line 182: (2E,4E)-1,5-diphenylpenta-2,4-dien-1-one → (2*E*,4*E*)-1,5-diphenylpenta-2,4-dien-1-one

Other compounds that need to be corrected are:
3β-O-(trans-p-coumaroyl)-norlupane-17β,20-diol → 3*β*-*O*-(*trans*-*p*-coumaroyl)-norlupane-17*β*,20-diol
3β-O-(trans-p-coumaroyl)-lupane-20,28-diol → 3*β*-*O*-(*trans*-*p*-coumaroyl)-lupane-20,28-diol
3β-O-(trans-p-coumaroyl)-20-ol-betulinic acid → 3*β*-*O*-(*trans*-*p*-coumaroyl)-20-ol-betulinic acid
24-O-(trans-p-feruloyl)-3β-hydroxyl-olean-12-en-28-oic acid → 24-*O*-(*trans*-p-feruloyl)-3*β*-hydroxyl-olean-12-en-28-oic acid

Line 12: 4T1, MCF7, MDA-MB-435, and T47D cell lines → 4T1, MCF-7, MDA-MB-435, and T47D breast cancer cell lines

Line 73: Four different types of cancer cells → Four different types of breast cancer cells

Lines 143-146:
Specifically, the compound exhibited the highest inhibitory activity against 4T1 cells, with an IC_{50} value of 2.29 µg/mL. Additionally, the isolated compounds demonstrated inhibition of MCF7 cells with an IC_{50} value of 9.93 µg/mL, followed by MDA-MB-435 cells (18.09 µg/mL) and T47D cells (12.12 µg/mL). → Specifically, the compound exhibited the strongest inhibitory activity against 4T1 cells, with an IC_{50} value of 2.29 µg/mL. Additionally, the isolated compound demonstrated inhibition of MCF-7, T47D and MDA-MB-435 cells with IC_{50} values of 9.93, 12.12, and 18.09 µg/mL, respectively.

Line 149: The compound belongs to the group of phenylpropanoid compounds with a 2xC6C3 framework. → The compound belongs to the group of phenylpropanoid compounds with a six-carbon, aromatic phenyl group and a three-carbon propene tail of coumaric acid.

Correct the citation style throughout the article.
An example is Line 19: *Sterculia quadrifida* is a species of tree in the genus Sterculia, native to Southeast Asia and Australia. (1) → *Sterculia quadrifida* is a species of tree in the genus *Sterculia*, native to Southeast Asia and Australia.[1]

Standardize the different spelling used. Examples are MCF cells, MCF7 cells and MCF-7 cells.

Abbreviations that need to be explained are MAPK and MMP.

Edited References as examples:

Rollando R, Monica E, Aftoni MH. *In vitro* cytotoxic potential of *Sterculia quadrifida* leaf extract against human breast cancer cell lines. Trop J Nat Prod Res. 2022;6(8):1228-1232.
Rollando R, Warsito W, Masruri M, Widodo W. Potential therapeutic use of *Sterculia quadrifida* R. Br and *Sterculia foetida* Linn.: Review. Asian J Plant Sci. 2020;19(4):325-334.
Rollando R, Warsito W, Masruri M, Widodo N. Potential matrix metalloproteinase-9 inhibitor of aurone compound isolated from *Sterculia quadrifida* leaves: *In-vitro* and *in-silico* studies. Res J Pharm Technol. 2022;15(11):5250-5254.
Rollando R, Warsito W, Masruri M, Nashi W. Antibacterial, antioxidant, and cytotoxic flavonoid compound from *Sterculia quadrifida* leaves. Trop J Nat Prod Res. 2021;5(11):1979-1985.

Under References, cite all authors. Do not use *et al*. Examples are References 21-23.

D. REVIEWER'S RECOMMENDATION
Please mark with "**X**" one of the options.

You state the article should:

Publish as it is	
Accept with minor revisions (editor will check), specific comments to the editor below	
Accept with moderate revisions as recommended by reviewer	X
Accept with major corrections (the article should be thoroughly changed)	
Full article	
Short communication	
Reject for reasons noted by the reviewer (please be specific)	

E. REVIEWER'S INFORMATION

Name	Eric WC Chan
Official title	Assoc Prof
Affiliation	UCSI University, Kuala Lumpur
Specialization	Natural Product Chemist
Country	Malaysia
E-mail	erchan@yahoo.com
Phone	
Signature	

Dr. apt. Rollando, S.Farm., M.Sc.
Pengajuan ke Lektor Kepala

Editorial comments to authors

Title: Names (First and Last name in full, middle name as initials) and affiliations of authors should be written correctly. Correspondence authors' contact address (email and telephone number) should also be stated.

In-text references should be in superscript numerals without brackets, and placed after commas or full-stop.

All botanical and zoological names should be italicized

Adhere strictly to the Journal's style for listing references. List the names of all authors in place of *et al*;
Falodun A, Siraj R, Choudhary MI. GC-MS Insecticidal Leaf essential oil of *P. staudtii* Hutch and Dalz (Icacinaceae). Trop J. Pharm Res. 2009; 82:139-143.

Okolie NP, Falodun A, Oluseyi D. Evaluation of the antioxidant activity of root extract of pepper fruit (*Dennetia tripetala*), and its potential for the inhibition of Lipid peroxidation. Afr J. Trad Compl and Altern Med. 2014; 11(3):221-227. Doi: 10.4314/ajtcam. v11i3.31

All comments/corrections made by reviewers should be completely addressed, point by point, and make appropriate changes in the manuscript, or provide a suitable rebuttal to any specific request for change that has not been made.
All corrections/changes made in the manuscript should be **highlighted in yellow** when submitting the manuscript in the revised **form on or before 23rd June 2023**

5. Author mengirimkan hasil revisi artikel

(23-6-2023)

Dr. apt. Rollando, S.Farm., M.Sc.
Pengajuan ke Lektor Kepala

Re: Editorial and Reviewer comments

Dr. apt. Rollando , S.Farm, M.Sc. <ro.llando@machung.ac.id>
Fri 6/23/2023 11:18 AM
To:Editor-in-Chief Tjnpr <editor.tjnpr@gmail.com>

3 attachments (572 KB)
Plagiarism Cheker.pdf; Responses to reviewers' comments.docx; Rollando_1st Revised_23 Jun 2023.docx;

Dear Editor-in-Chief,

I hope this email finds you well. I am writing to inform you that the article titled "A Phenylpropanoid Compound from the Seeds of Sterculia quadrifida and its Cytotoxic Activity" has been revised as per your suggestions and recommendations. Furthermore, we have conducted a thorough plagiarism check to ensure the originality and integrity of the content.

In the revised version, we have addressed the comments provided by the reviewers and incorporated the necessary revisions. The article now reflects a more comprehensive and refined analysis of the phenylpropanoid compound derived from Sterculia quadrifida seeds and its cytotoxic activity.

Regarding the plagiarism check, we have utilized reliable software to examine the manuscript thoroughly. I am pleased to inform you that the article has passed the plagiarism check, confirming its authenticity and originality. We have made sure to provide proper citations and references wherever necessary, while avoiding any form of academic misconduct.

We believe that the revised article now meets the high standards set by The Journal of Natural Products Research (TJNPR) and contributes valuable insights to the field. We would like to express our gratitude to the editorial team for their valuable guidance throughout the revision process.

Please find attached the revised manuscript, along with a detailed response to the reviewers' comments. We kindly request you to consider the revised article for publication in an upcoming issue of TJNPR.

Thank you for your time and consideration. We look forward to receiving your feedback and guidance regarding the next steps in the publication process.

Best regards,
Rollando

Prof. Abiodun Falodun
Editor in Chief
Tropical Journal of Natural Product Research
Dear Abiodun,

I would like to submit our revised manuscript entitles ”**A Phenylpropanoid Compound from the Seeds of Sterculia quadrifida and its Cytotoxic Activity”** for the consideration of publication in the tropical journal of natural product research.

I also have answered a point by point questions, comments and suggestions from the reviewer to improve our article quality as written along with this letter. I really appreciate for all these valuable comments and suggestions.

I hope very much that you would consider this manuscript for the publication in your esteemed journal. Your kind consideration would be gratefully acknowledged.

Thank you
Your sincerely

Rollando

Responses to reviewers' comments

The author(s) should consider rephrasing the title to capture major components of the research • The abstract needs to be improved	We have fixed the grammatical error in the article. We have improved the English language. Proofread certificate already exists.
The abstract word count is < 250. The language of the abstract need to be improved, the abstract should be grammar checked. • The abstract captures the entirety of the manuscripts (i.e. the abstract covers the research scope) and the style of writing is appropriate however, the abstract need to be grammar checked.	The abstract section has added words and research objectives.
The introduction section needs to be grammar checked. Punctuation errors need to be corrected. The aim and objectives of the research is clear however, the author(s) should highlight the novelty of the research. The introduction contains limited information therefore, the author(s) should discuss in details both previous and recent research on the use of C. papaya leaf and compounds identified from them in the treatment of malaria. Also, the author(s) should consider comparative analysis of C. papaya leaf and other plant parts of C. papaya as well as other plants used in the treatment of malaria • The introduction is concise.	We have fixed text referencing.
A Phenylpropanoid Compound from The Seeds of *Sterculia quadrifida* and Cytotoxic Activity → A Phenylpropanoid Compound from the Seeds of *Sterculia quadrifida* and its Cytotoxic Activity	We have fixed reference writing.
Line 10: MTT assay should be explained in full. This assay was mentioned in the Abstract but not mentioned under *In Vitro* Cytotoxicity Assay (Page 6).	We have fixed reference writing.
Line 9, Line 138 & Line 182: (2E,4E)-1,5-diphenylpenta-2,4-dien-1-one → (2*E*,4*E*)-1,5-diphenylpenta-2,4-dien-1-one	We have fixed reference writing.
Other compounds that need to be corrected	We have fixed text referencing.

are: 3β-O-(trans-p-coumaroyl)-norlupane-17β,20-diol → 3*β*-*O*-(*trans*-*p*-coumaroyl)-norlupane-17*β*,20-diol 3β-O-(trans-p-coumaroyl)-lupane-20,28-diol → 3*β*-*O*-(*trans*-*p*-coumaroyl)-lupane-20,28-diol 3β-O-(trans-p-coumaroyl)-20-ol-betulinic acid → 3*β*-*O*-(*trans*-*p*-coumaroyl)-20-ol-betulinic acid 24-O-(trans-p-feruloyl)-3β-hydroxyl-olean-12-en-28-oic acid → 24-*O*-(*trans*-p-feruloyl)-3*β*-hydroxyl-olean-12-en-28-oic acid	
Line 12: 4T1, MCF7, MDA-MB-435, and T47D cell lines → 4T1, MCF-7, MDA-MB-435, and T47D breast cancer cell lines	We have fixed text referencing.
Line 73: Four different types of cancer cells → Four different types of breast cancer cells	We have fixed text referencing.
Specifically, the compound exhibited the highest inhibitory activity against 4T1 cells, with an IC_{50} value of 2.29 µg/mL. Additionally, the isolated compounds demonstrated inhibition of MCF7 cells with an IC_{50} value of 9.93 µg/mL, followed by MDA-MB-435 cells (18.09 µg/mL) and T47D cells (12.12 µg/mL). → Specifically, the compound exhibited the strongest inhibitory activity against 4T1 cells, with an IC_{50} value of 2.29 µg/mL. Additionally, the isolated compound demonstrated inhibition of MCF-7, T47D and MDA-MB-435 cells with IC_{50} values of 9.93, 12.12, and 18.09 µg/mL, respectively.	We have fixed text referencing.
Line 149: The compound belongs to the group of phenylpropanoid compounds with a 2xC6C3 framework. → The compound belongs to the group of phenylpropanoid compounds with a six-carbon, aromatic phenyl group and a three-carbon propene tail of coumaric acid.	We have fixed text referencing.
Correct the citation style throughout the article. An example is Line 19: *Sterculia quadrifida* is a species of tree in the genus Sterculia,	We have fixed text referencing.

native to Southeast Asia and Australia. (1) → *Sterculia quadrifida* is a species of tree in the genus *Sterculia*, native to Southeast Asia and Australia.[1]	
Standardize the different spelling used. Examples are MCF cells, MCF7 cells and MCF-7 cells	We have fixed text referencing.
Abbreviations that need to be explained are MAPK and MMP.	We have fixed text referencing.
Edited References as examples: Rollando R, Monica E, Aftoni MH. *In vitro* cytotoxic potential of *Sterculia quadrifida* leaf extract against human breast cancer cell lines. Trop J Nat Prod Res. 2022;6(8):1228-1232. Rollando R, Warsito W, Masruri M, Widodo W. Potential therapeutic use of *Sterculia quadrifida* R. Br and *Sterculia foetida* Linn.: Review. Asian J Plant Sci. 2020;19(4):325-334. Rollando R, Warsito W, Masruri M, Widodo N. Potential matrix metalloproteinase-9 inhibitor of aurone compound isolated from *Sterculia quadrifida* leaves: *In-vitro* and *in-silico* studies. Res J Pharm Technol. 2022;15(11):5250-5254. Rollando R, Warsito W, Masruri M, Nashi W. Antibacterial, antioxidant, and cytotoxic flavonoid compound from *Sterculia quadrifida* leaves. Trop J Nat Prod Res. 2021;5(11):1979-1985. Under References, cite all authors. Do not use *et al*. Examples are References 21-23.	We have fixed text referencing.
The tables should be presented based on the journal author guideline.	We have fixed text referencing.
The spectra appended and the spectral data does not support the proposed structure. For instance, H-2 and C-2 which are alpha to the carbonyl group cannot have the same resonance as H-4/C-4 which are gamma or 3 bonds away from the carbonyl group. There	We have fixed text referencing.

are several syntax and grammatical errors some have been corrected. The manuscript needs English revision by a native English speaker.	

Dr. apt. Rollando, S.Farm., M.Sc.
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6. Manajer editor mengirimkan galley proof

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Dear Editorial Team of the Tropical Journal of Natural Product Research,

I hope this email finds you well. I am writing on behalf of the authors to inform you that the article titled "A Phenylpropanoid Compound from the Seeds of Sterculia quadrifida and its Cytotoxic Activity" has undergone thorough examination and revision. We are pleased to inform you that the authors have agreed with the final version of the manuscript and are ready for its publication in the esteemed Tropical Journal of Natural Product Research.

We kindly request the editorial team of TJNPR to proceed with the publication process of the aforementioned article. We believe that its inclusion in your journal will provide valuable insights and contribute to the advancement of natural product research.

We appreciate your consideration and support throughout the review and revision process. The authors would like to express their gratitude to the reviewers and the editorial team for their valuable feedback and guidance, which have been instrumental in improving the quality and impact of the manuscript.

Please let us know if there are any further requirements or formalities that need to be fulfilled for the successful publication of the article. We eagerly await the publication of our research in the forthcoming issue of the Tropical Journal of Natural Product Research.

Thank you for your attention and cooperation. Should you require any additional information or clarification, please do not hesitate to contact us.

Yours sincerely,
Rollando

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Original Research Article

A Phenylpropanoid Compound from the Seeds of *Sterculia quadrifida* and its Cytotoxic Activity

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ABSTRACT

Sterculia quadrifida has been empirically used as a traditional plant for medicinal purposes. The objective of this research is to isolate secondary metabolites present in the seeds of *S. quadrifida*. Extracts of *S. quadrifida* seeds were prepared using 80% methanol, and then separated into various fractions using liquid-liquid partition with solvents such as n-hexane, chloroform, ethyl acetate, n-butanol, and an insoluble n-butanol fraction. Preparative HPLC was used to purify the compounds, and their structures were identified through spectroscopic analyses. One phenylpropanoid compound, (2*E*,4*E*)-1,5-diphenylpenta-2,4-dien-1-one, was isolated from the chloroform fraction and tested for in vitro cytotoxicity using the MTT assay. The compound demonstrated significant cytotoxic effects, with IC_{50} values of 2.29, 9.93, 18.09, and 12.12 µg/mL in 4T1, MCF-7, MDA-MB-435, and T47D breast cancer cell lines, respectively. Therefore, the phenylpropanoid compound isolated from *S. quadrifida* has potential as a cytotoxic agent.

Keywords: Breast cancer, cytotoxic, phenylpropanoid, seeds, *Sterculia quadrifida*

Introduction

Sterculia quadrifida is a tree native to Southeast Asia and Australia.[1] It is commonly known as the Chinese star anise or *wu wei zi*. The tree can grow up to 20 meters tall and has large, glossy leaves with small, greenish-yellow flowers that bloom in spring.[2] Its fruits are woody capsules containing four to six seeds surrounded by a fleshy, reddish-brown aril with a sweet and sour flavour.[3] The tree has a long history of use in traditional Chinese medicine, where its fruits and seeds have been used to treat various ailments, including cough, asthma, and digestive disorders. It is also a flavouring agent in foods and beverages and in several traditional Chinese medicine preparations. The tree's wood is used for carving and making furniture, and its bark is used to make paper.[4]

S. quadrifida seeds contain various compounds, including flavonoids, alkaloids, terpenoids, and steroids.[5] Several studies have identified and isolated bioactive compounds from *S. quadrifida* seeds, such as sterculic acid, cycloart-25-ene-3β,24-diol, sterculinaldehyde, stigmast-5-en-3-ol, and β-sitosterol.[6] These compounds have demonstrated various biological activities, including anti-inflammatory, antidiabetic, antioxidant, and cytotoxic properties. Moreover, recent studies have shown that *S. quadrifida* seeds contain potent cytotoxic compounds, which have the potential to inhibit the growth of cancer cells. For example, a study conducted by Rukayadi *et al*.[7] identified a novel cytotoxic compound, namely 3,3',5,5'-tetramethoxybiphenyl-2,2'-diol, from the methanol extract of *S. quadrifida* seeds. The compound exhibited cytotoxic activity against various cancer cell lines, including human breast adenocarcinoma (MCF-7), human colon adenocarcinoma (HT-29), and human lung adenocarcinoma (A549) cells.

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Materials and methods

General

A JEOL JNM-ECZR 500 MHz instrument was used to collect 1D and 2D NMR data, with DMSO as the internal standard. The IR spectra were recorded using a Jasco FT/IR-6800 type A instrument. LC-MS/MS data was obtained from a Shimadzu LCMS-8045. The compound was isolated using a Sykam S 723 HPLC Preparative system with an ACE®-C18 column (10x250 mm) at a flow rate of 1.5 mL/min. TLC was performed on a precoated silica gel 60 F_{254} (Merck) plate, which was then analyzed under UV light. Acetonitrile, methanol, n-butanol, chloroform, ethyl acetate, and n-hexane of Merck and HPLC grades were used as solvents.

Plant material

In January 2023, *S. quadrifida* plant samples were collected from Kupang City, East Nusa Tenggara, Indonesia. The plant samples were authenticated by botanist Dr Budi Sumatra, and a voucher specimen (FA:032-MACHUNG-2023) was deposited in the Pharmacognosy Laboratory of the Department of Pharmacy at Ma Chung University.

Extraction and isolation

To extract the compounds from the *S. quadrifida* seeds, 5.50 kg of the seed powder was macerated in 20 L of 80% methanol. After removal of solvent, 893.93 g of crude extract was obtained. The extract was then dissolved in 80% methanol and separated into fractions by solvent-solvent extraction using n-hexane, ethyl acetate, chloroform, and n-butanol. The fractions were screened for cytotoxic activity using the bioassay-guided isolation method. It was found that the chloroform fraction was the most potent. Further purification of the chloroform fraction (250 g) was carried out using Preparative HPLC with a flow rate of 1.0 mL/min and 2000 psi, using a mixture of MeOH and ACN in a ratio of 90:10. This resulted in the separation of 10 compounds, with fraction 1 (20.98 mg) being the most abundant. Fraction 1 was selected for chemical structure determination and further tested for its cytotoxic activity.[8]

In vitro cytotoxicity assay

Four different types of cancer cells (4T1, MCF7, MDA-MB-435, T47D) and normal Vero cells were grown in culture media containing