

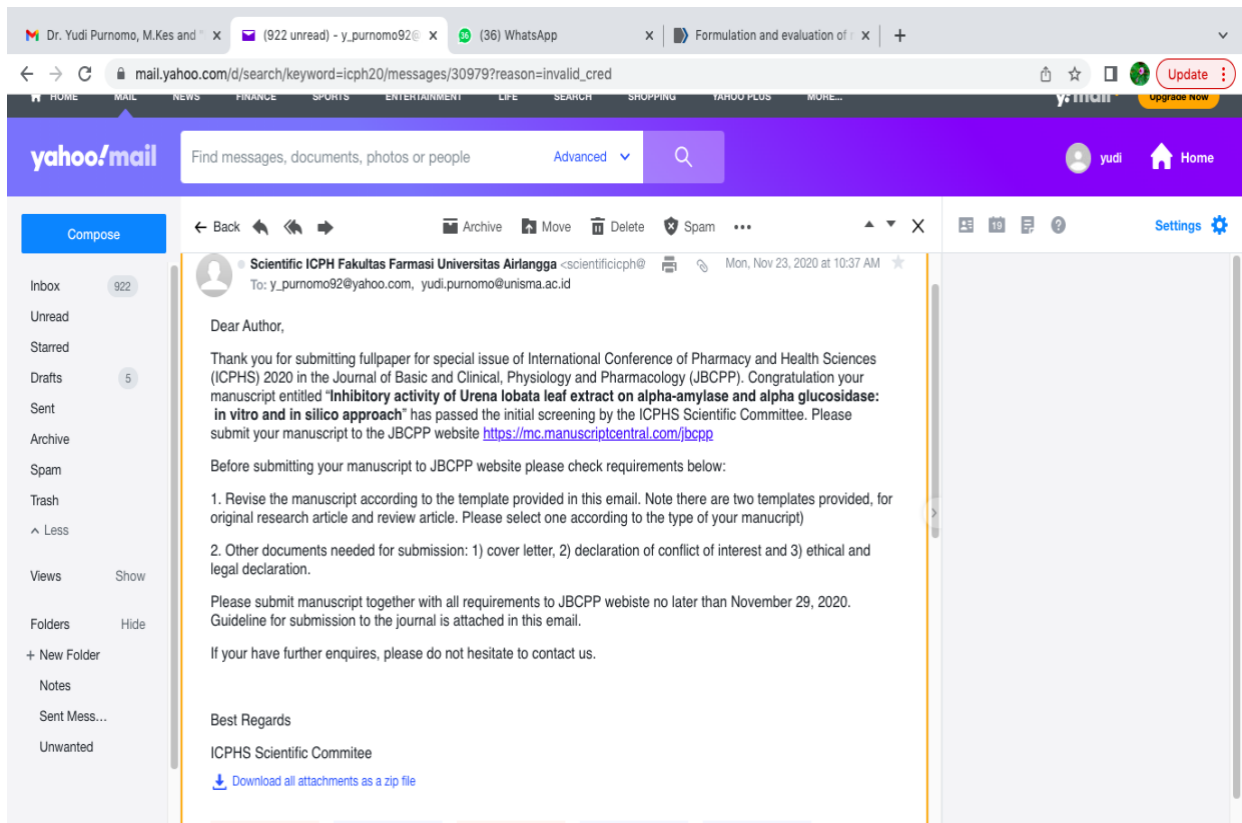
Nama Jurnal : **Journal of Basic and Clinical Physiology and Pharmacology (JBCPP)**

Indeks : **Scopus (Q3), SJR (0.35)**

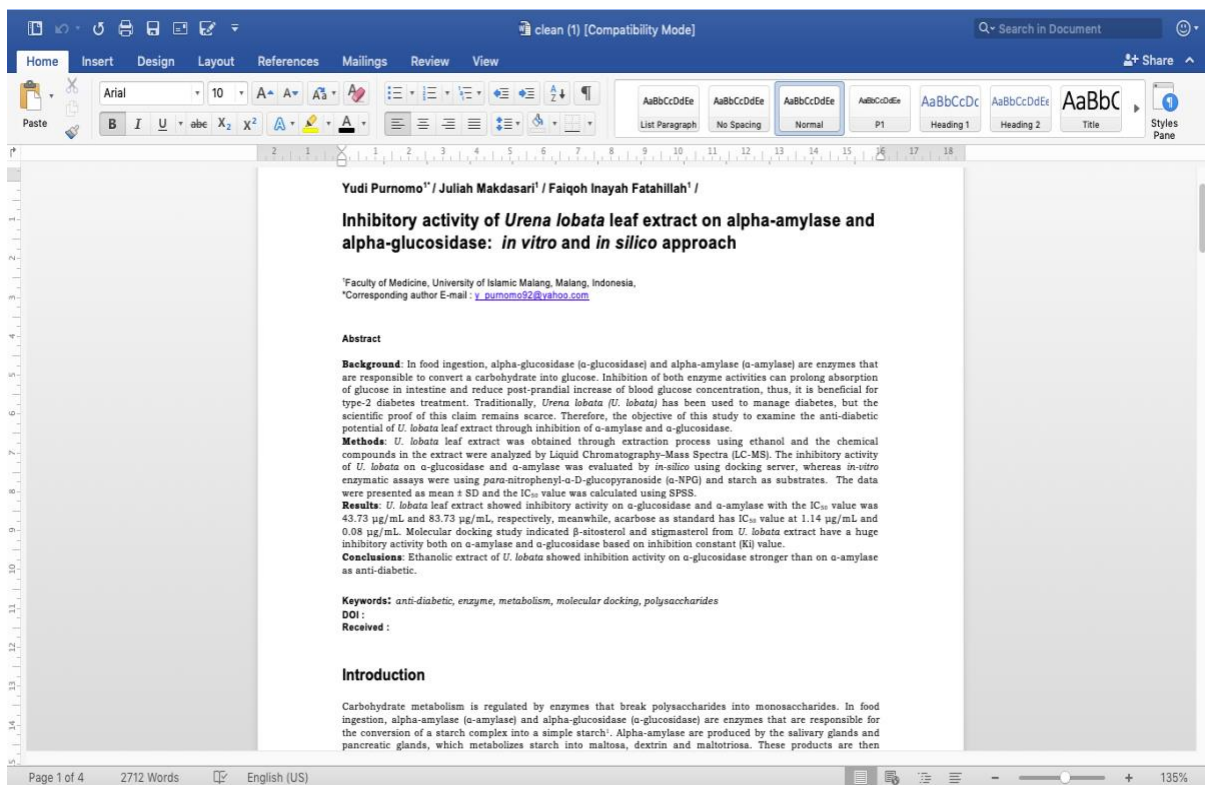
<https://www.degruyter.com/document/doi/10.1515/jbcpp-2020-0430/pdf>

Judul Artikel : **Inhibitory activity of *Urena lobata* leaf extract on alpha-amylase and alpha-glucosidase: *in vitro* and *in silico* approach**

Tanggal	Activity	Reviewer Comments
28-11-2020	Submission of article	
29-01-2021	Decision	Revise with major modification
29-01-2021	Revision of article	Comments from reviewer and editor were attached
18-02-2021	Resubmit the revised article	Responses from author was attached at rebuttal letter
10-03-2021	Revision of article	English editing by proofreaders
18-03-2021	Resubmit the revised article	English edited
29-03-2021	Accepted	
20-05-2021	Revision of article	Galley proof correction
24-05-2021	Resubmit the revised article	-
25-06-2021	Published	On line published



Information from Committee



Manuscript submission

Confirmation of Oral/Poster Pr... (938 unread) - y_purnomo92... (37) WhatsApp Formulation and evaluation of ...

mail.yahoo.com/d/search/name=jbcpp.editorial%2540degruyter.com&emailAddresses=jbcpp.editorial%2540degruyter.com&listFilter=ALL&contactids... Update

HOME MAIL NEWS FINANCE SPORTS ENTERTAINMENT LIFE SEARCH SHOPPING YAHOO PLUS MORE... y!mail Upgrade Now

yahoo/mail jbcpp.editorial@degruyte... Add keywords Advanced Search yudi Home

Compose Back Archive Move Delete Spam Settings

Inbox 938 Unread Starred Drafts 5 Sent Archive Spam Trash ^ Less Views Show Folders Hide + New Folder Notes Sent Mess... Unwanted

----- Pesan asli -----
 Dari: Journal of Basic and Clinical Physiology and Pharmacology <onbehalf@manuscriptcentral.com>
 Tanggal: 29/01/21 19:42 (GMT+07:00)
 Ke: y_purnomo92@yahoo.com
 Cc: scientificiph@ff.unair.ac.id
 Subjek: JBCPP2020.0430 - DecisionRevise with Major Modifications

29-Jan-2021

Dear Dr. Purnomo:

Thank you again for submitting your manuscript ID JBCPP2020.0430 entitled "Inhibitory activity of <i>Urena lobata</i> leaf extract on alpha-amylase and alpha glucosidase: <i>in vitro</i> and <i>in silico</i> approach" to Journal of Basic and Clinical Physiology and Pharmacology (JBCPP). Your manuscript has been reviewed and requires major modifications prior to acceptance. The comments of the reviewer(s) are included at the bottom of this letter.

I invite you to respond to the reviewer(s)' comments and revise your manuscript.

To revise your manuscript, log into <https://mc.manuscriptcentral.com/jbcpp> and enter your Author Center, where you will find your manuscript title listed under "Manuscripts Awaiting Revision". Under "Actions", click on "Create a Revision". Your manuscript number has been appended to denote a revision.

You may also click the below link to start the revision process (or continue the process if you have already started your revision) for your manuscript. If you use the below link you will not be required to login to ScholarOne Manuscripts.

PLEASE MAKE SURE TO CONFIRM YOUR CHOICE ON THE WEB PAGE AFTER CLICKING ON THE LINK

https://mc.manuscriptcentral.com/jbcpp?URL_MASK=7b56c550520a48bc9a0b678016e6209d

The revised paper needs to be submitted within 3 weeks from now.

When submitting your revised manuscript, you should also respond to the comments made by the reviewer(s). Please add

1. a point-by-point reply to the reviewers' comments
2. and/or a rebuttal against each point that is being raised

了解詳情

Confirmation of Oral/Poster Pr... (938 unread) - y_purnomo92... (37) WhatsApp Formulation and evaluation of ...

mail.yahoo.com/d/search/name=jbcpp.editorial%2540degruyter.com&emailAddresses=jbcpp.editorial%2540degruyter.com&listFilter=ALL&contactids... Update

HOME MAIL NEWS FINANCE SPORTS ENTERTAINMENT LIFE SEARCH SHOPPING YAHOO PLUS MORE... y!mail Upgrade Now

yahoo/mail jbcpp.editorial@degruyte... Add keywords Advanced Search yudi Home

Compose Back Archive Move Delete Spam Settings

Inbox 938 Unread Starred Drafts 5 Sent Archive Spam Trash ^ Less Views Show Folders Hide + New Folder Notes Sent Mess... Unwanted

You may also click the below link to start the revision process (or continue the process if you have already started your revision) for your manuscript. If you use the below link you will not be required to login to ScholarOne Manuscripts.

PLEASE MAKE SURE TO CONFIRM YOUR CHOICE ON THE WEB PAGE AFTER CLICKING ON THE LINK

https://mc.manuscriptcentral.com/jbcpp?URL_MASK=7b56c550520a48bc9a0b678016e6209d

The revised paper needs to be submitted within 3 weeks from now.

When submitting your revised manuscript, you should also respond to the comments made by the reviewer(s). Please add

1. a point-by-point reply to the reviewers' comments
2. and/or a rebuttal against each point that is being raised

You will be able to respond to the comments made by the reviewer(s) under File Upload - File Designation - Author's Response to Reviewer/Editor Critique. Reply to the reviewer(s)' comments is mandatory; all revised manuscripts without reply will be sent back to the author.

You will be unable to make your revision on the originally submitted version of the manuscript. Instead, revise your manuscript and save it on your computer. Please send in a clear corrected version of your manuscript according to the reviewers as well as a format in which you highlight the changes to your manuscript within the document by using underlined or colored text.

Once the revised manuscript is prepared, you can upload it and submit it through your Author Center.

Your original files are available to you when you upload your revised manuscript. You may delete these files or keep them. Please pay attention to the order of your uploaded files; the first one is the reply to the reviewer(s)' comments, followed by the revised manuscript, and, if applicable, Tables and Figures, and Supplementary Material. If you decide to keep the original files, these must be the last ones in the order of your uploaded files.

Once again, thank you for submitting your manuscript to JBCPP. I look forward to receiving your revision.

Kind regards
 Dr. Suciati Suciati
 Guest Editor, Journal of Basic and Clinical Physiology and Pharmacology

了解詳情

Editor comments

Confirmation of Oral/Poster Pre x (938 unread) - y_purnomo92@ x (37) WhatsApp x Formulation and evaluation of x +

mail.yahoo.com/d/search/name=jbcpp.editorial%2540degruyter.com&emailAddresses=jbcpp.editorial%2540degruyter.com&listFilter=ALL&contactids... Update

HOME MAIL NEWS FINANCE SPORTS ENTERTAINMENT LIFE SEARCH SHOPPING YAHOO PLUS MORE... y!mail Upgrade Now

yahoo/mail jbcpp.editorial@degruyte... Add keywords Advanced Search yudi Home

Compose Back Archive Move Delete Spam Settings

Inbox 938 Unread Starred Drafts 5 Sent Archive Spam Trash Less Views Show Folders Hide + New Folder Notes Sent Mess... Unwanted

Reviewer(s) Comments to Author:

Reviewer: 1

Comments to the Author

The manuscript has originality for its work and results. However, authors needs to work on the English writing. Proof reading service may offer a great help.

Most comments have embedded in the attached manuscript.

Some highlights are:

- Authors need to be consistent in term of unit. Some are in capital letter, some are in small letter.
- Name of enzyme should not be in Italic style.
- For any abbreviation, the first appear should be written in full name followed by its abbreviation in a bracket.
- Authors are suggested to omit identification of active compounds in LC-MS results since authors did not evaluate the activity of each identified compounds in this present work.
- In discussion, authors do not compare their results to the previous study on *U. lobata*, especially in for the anti-diabetic-related activity; either as an extract or as the identified compounds. It would be a great discussion if authors can elaborate their results since there are already few publications on *U. lobata* activity as antidiabetic. This present study may offer new hypothesis in the mechanism of *U. lobata* towards diabetes.
- Authors need to double check the in-text citation and the reference list.

If required, I suggest authors to make a rebuttal comments toward the review.

Reviewer: 2

Comments to the Author

There are some issues that are recommended to be addressed:

1. Please pay more attention to the use of words that are still in untranslated language. For example: in the chemistry section, there is "DNS pewarna". Is it mean "DNS coloring"?
2. It would be better if the number of keywords is around 5 words.
3. The β -sitosterol compound is found in small amounts in extract. Is it appropriate to mention that these compounds play a role in inhibiting the activity of both α -glucosidase and α -amylase?
4. The molecular docking method is not clearly state the steps. It would be better if added to the method.
5. Still related to docking, please explain what kind of receptor is used as the target and what is the receptor code?
6. For the conclusion in the last pages, it would be more appropriate to change to "Ethanollic extract of *U. lobata* have inhibition activity on α -glucosidase stronger than on α -amylase as anti diabetic".

Reviewer comments

(27) WhatsApp x Inbox (956) - yudi.purno: x (1,185 unread) - y_purno: x JBCPP-2020.0430.R1.pdf x Inhibitory activity of Ure: x Inhibitory activity of Ure: x +

File /Users/macbookair/Downloads/JBCPP-2020.0430.R1.pdf Update

JBCPP-2020.0430.R1.pdf 1 / 16 100% +

2 **Inhibitory activity of *Urena lobata* leaf extract on alpha-amylase and alpha-glucosidase: *in vitro* and *in silico* approach**

3

4

5 ¹Faculty of Medicine, University of Islamic Malang, Malang, Indonesia,

6 *Corresponding author E-mail : y_purnomo92@yahoo.com

7

8

9 **Abstract**

10 **Background:** In food ingestion, **alpha-glucosidase (α -glucosidase) and alpha-amylase (α -amylase) are enzymes that responsible for conversion to convert a carbohydrate into a glucose.** **Commented [R1]:** Enzyme names should not be italic. Please check throughout the manuscript.

11 Inhibition of both of the enzyme activity can prolong absorption of glucose in intestine and **control reduce post-prandial increase of blood glucose concentration; moreover, thus, it is beneficial for type-2 diabetes treatment. ~~Empirically~~Traditionally, *Urena lobata* (*U. lobata*) is used to cure has been used to manage diabetes; but the scientific proven of this claim remains scarce, however. Therefore, the inhibitory activity on α -glucosidase and α -amylase have not been evaluated. The objective of this study aims to examine anti-diabetic potentiality of *U. lobata* leaf extract through inhibition of α -amylase and α -glucosidase activities.**

12 **Methods:** *U. lobata* leaf extract was obtained through extraction process using ethanol, and therefore the active-chemical compounds in the extract was analyzed by Liquid Chromatography-Mass Spectra (LC-MS). The inhibitory activity of *U. lobata* on α -glucosidase and α -amylase were evaluated by *in-silico* using docking server, meanwhile, *in-vitro* enzymatic assays study using para-nitrophenyl- α -D-glucopyranoside (α -NPG) and starch as substrates. The data was stated/presented as the mean \pm SD and the IC_{50} value was calculated by linear regression curve fit using SPSS.

13 **Results:** *U. lobata* leaf extract showed inhibitory activity on α -glucosidase and α -amylase with the IC_{50} value was 43.73 μ g/ml and 83.73 respectively, meanwhile, acarbose as standard have IC_{50} value at 1.14 μ g/ml and 0.08 μ g/ml. Molecular docking study indicated β -sitosterol

14 **Formatted: Font: Italic**

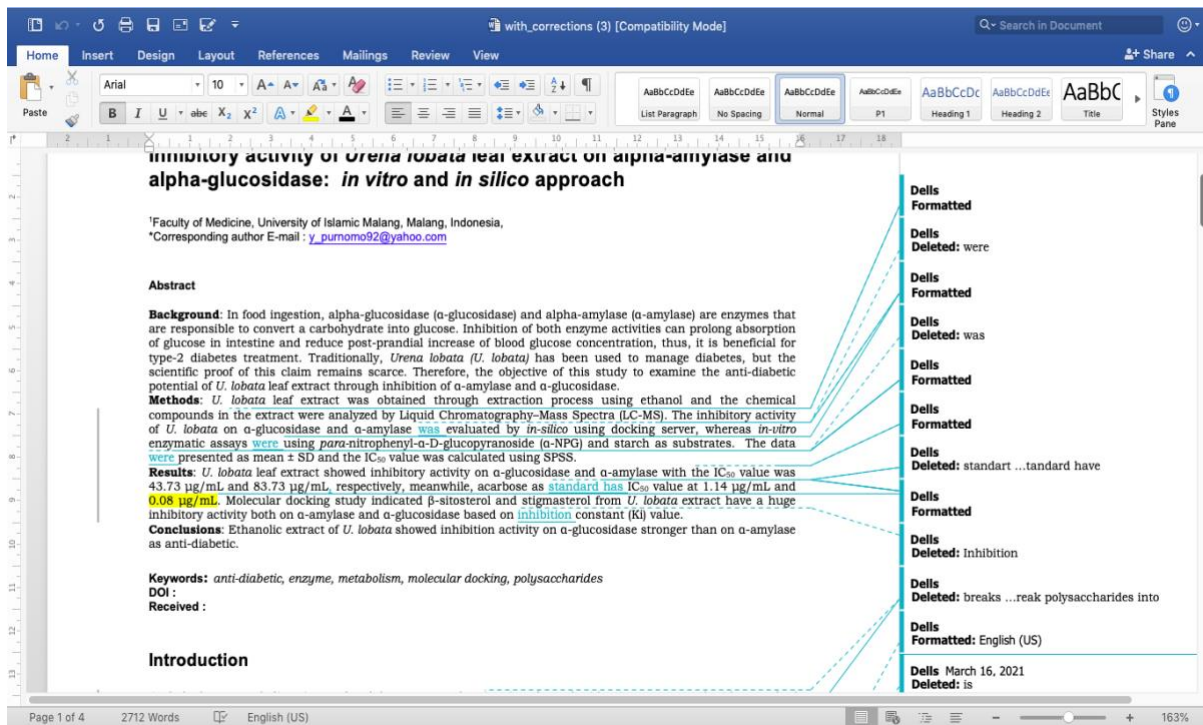
15 **Formatted: Subscript**

16 **Formatted: Subscript**

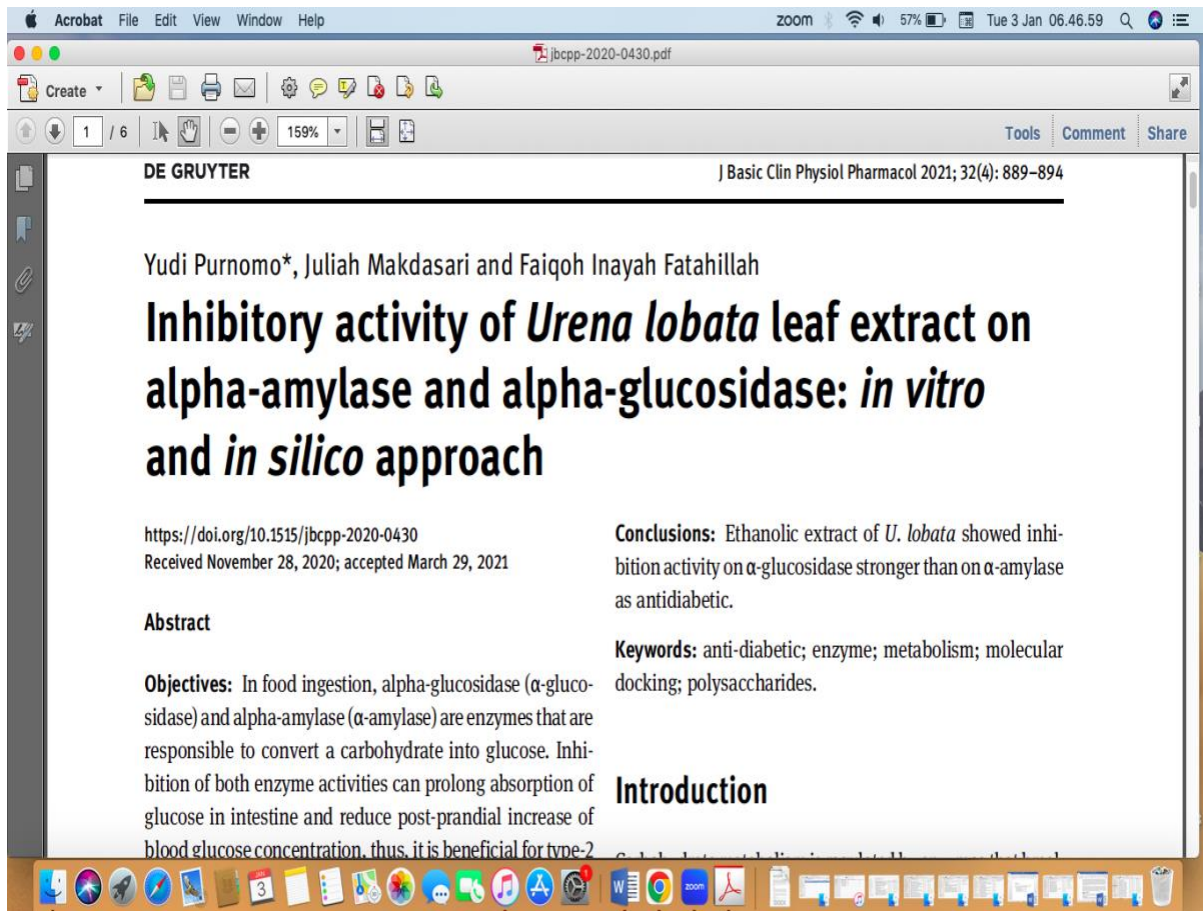
17 **Commented [R2]:** IC₅₀ is written as IC₅₀

JBCPP-2020.04...pdf clean (1).docx TJNPR-2021-M...docx clean.docx with_correction...docx Show all x

Revised article and responses from author



English Edited and grammar check



Galley proof correction

(27) WhatsApp x Inbox (956) - yudi.purno: x (1,184 unread) - y_purno: x Journal of Basic and Clin: x Inhibitory activity of Ure: x Password reset x +

pubmed.ncbi.nlm.nih.gov/34214371/ Update

> J Basic Clin Physiol Pharmacol. 2021 Jun 25;32(4):889-894. doi: 10.1515/jbcpp-2020-0430.

Inhibitory activity of *Urena lobata* leaf extract on alpha-amylase and alpha-glucosidase: *in vitro* and *in silico* approach

Yudi Purnomo¹, Juliah Makdasari¹, Faiqoh Inayah Fatahillah¹

Affiliations + expand
PMID: 34214371 DOI: 10.1515/jbcpp-2020-0430

Abstract

Objectives: In food ingestion, alpha-glucosidase (α -glucosidase) and alpha-amylase (α -amylase) are enzymes that are responsible to convert a carbohydrate into glucose. Inhibition of both enzyme activities can prolong absorption of glucose in intestine and reduce post-prandial increase of blood glucose concentration, thus, it is beneficial for type-2 diabetes treatment. Traditionally, *Urena lobata* (*U. lobata*) has been used to manage diabetes, but the scientific proof of this claim remains scarce. Therefore, the objective of this study to examine the anti-diabetic potential of *U. lobata* leaf extract through inhibition of α -amylase and α -glucosidase.

Methods: *U. lobata* leaf extract was obtained through extraction process using ethanol and the chemical compounds in the extract were analyzed by liquid chromatography-mass spectra (LC-MS). The inhibitory activity of *U. lobata* on α -glucosidase and α -amylase was evaluated by *in silico* using docking server, whereas *in vitro* enzymatic assays were using *para*-nitrophenyl- α -D-glucopyranoside (α -NPG) and starch as substrates. The data were presented as mean \pm SD and

FULL TEXT LINKS
Cite
Collections

ACTIONS
Cite
Collections

SHARE
Twitter Facebook LinkedIn

PAGE NAVIGATION
< Title & authors
Abstract
Similar articles
Cited by
References

with_correction....docx 10.1515_jbcpp-2....pdf Show all x

On line published

