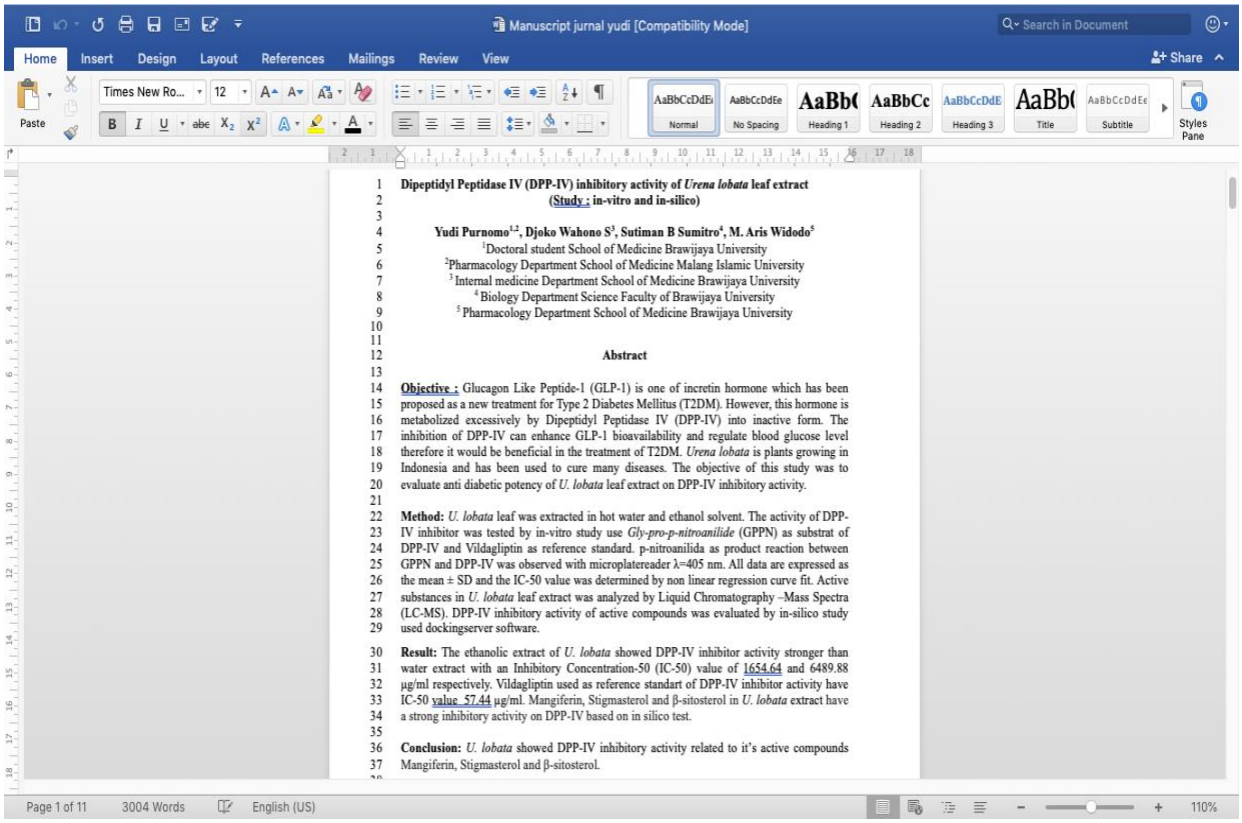
Nama Jurnal **: Asian Pacific Journal of Tropical Biomedicine (APJTB)**
Indeks **: Scopus (Q2), SJR (0.29)**
https://www.sciencedirect.com/science/article/pii/S2221169115001124
Judul Artikel **: Anti-diabetic potential of *Urena lobata* leaf extract through inhibition of dipeptidyl peptidase IV activity**

Tanggal	Activity	Reviewer Comments
21-04-2015	Submision of article	
29-04-2015	Editor responses	Article has been received by editor
06-05-2015	Editor responses	Article is accepted with revision
11-05-2015	Resubmit the revised article	
12-05-2015	Editor responses	Manuscript is accepted with minor modification
29-05-2015	Editor responses	Galley proof sending
30-05-2015	Resubmit the revised of galley proof	
01-06-2015	Editor responses	Revised galley proof is accepted
02-06-2015	Editor responses	Confirmation of the final revision from author
02-06-2015	Resubmit revised article	
03-06-2015	Editor responses	The final correction already made
14-06-2015	Editor responses	Published on line article

Manuscript submission :



Dipeptidyl Peptidase IV (DPP-IV) inhibitory activity of *Urena lobata* leaf extract
(Study : in-vitro and in-silico)

Yudi Purnomo[1,2], Djoko Wahono S[3], Sutiman B Sumitro[4], M. Aris Widodo[5]
[1]Doctoral student School of Medicine Brawijaya University
[2]Pharmacology Department School of Medicine Malang Islamic University
[3] Internal medicine Department School of Medicine Brawijaya University
[4] Biology Department Science Faculty of Brawijaya University
[5] Pharmacology Department School of Medicine Brawijaya University

Abstract

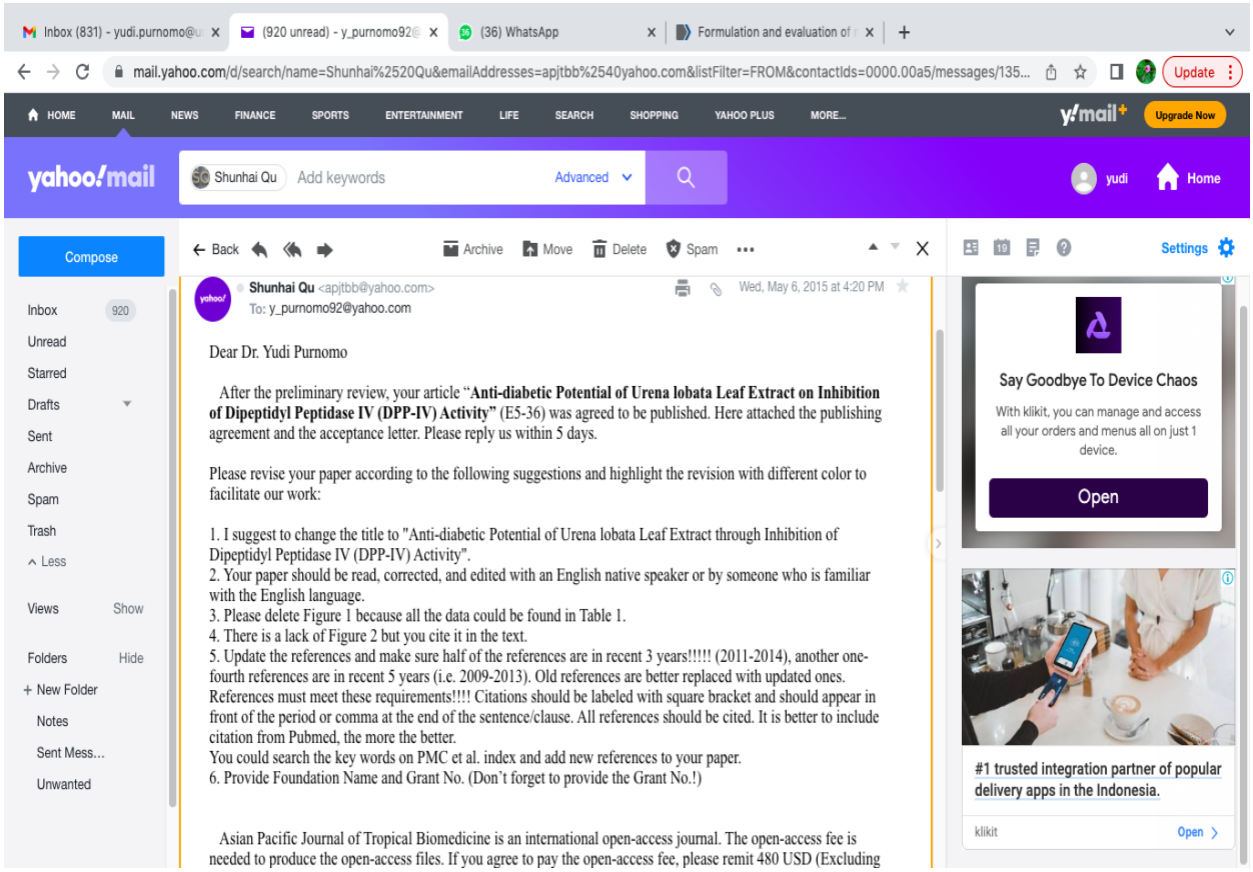
Objective : Glucagon Like Peptide-1 (GLP-1) is one of incretin hormone which has been proposed as a new treatment for Type 2 Diabetes Mellitus (T2DM). However, this hormone is metabolized excessively by Dipeptidyl Peptidase IV (DPP-IV) into inactive form. The inhibition of DPP-IV can enhance GLP-1 bioavailability and regulate blood glucose level therefore it would be beneficial in the treatment of T2DM. *Urena lobata* is plants growing in Indonesia and has been used to cure many diseases. The objective of this study was to evaluate anti diabetic potency of *U. lobata* leaf extract on DPP-IV inhibitory activity.

Method: *U. lobata* leaf was extracted in hot water and ethanol solvent. The activity of DPP-IV inhibitor was tested by in-vitro study use *Gly-pro-p-nitroanilide* (GPPN) as substrat of DPP-IV and Vildagliptin as reference standard. p-nitroanilida as product reaction between GPPN and DPP-IV was observed with microplatereader λ=405 nm. All data are expressed as the mean ± SD and the IC-50 value was determined by non linear regression curve fit. Active substances in *U. lobata* leaf extract was analyzed by Liquid Chromatography –Mass Spectra (LC-MS). DPP-IV inhibitory activity of active compounds was evaluated by in-silico study used dockingserver software.

Result: The ethanolic extract of *U. lobata* showed DPP-IV inhibitor activity stronger than water extract with an Inhibitory Concentration-50 (IC-50) value of 1654.64 and 6489.88 µg/ml respectively. Vildagliptin used as reference standart of DPP-IV inhibitor activity have IC-50 value 57.44 µg/ml. Mangiferin, Stigmasterol and β-sitosterol in *U. lobata* extract have a strong inhibitory activity on DPP-IV based on in silico test.

Conclusion: *U. lobata* showed DPP-IV inhibitory activity related to it's active compounds Mangiferin, Stigmasterol and β-sitosterol.

Editor responses :



Dear Dr. Yudi Purnomo

After the preliminary review, your article "**Anti-diabetic Potential of Urena lobata Leaf Extract on Inhibition of Dipeptidyl Peptidase IV (DPP-IV) Activity"** (E5-36) was agreed to be published. Here attached the publishing agreement and the acceptance letter. Please reply us within 5 days.

Please revise your paper according to the following suggestions and highlight the revision with different color to facilitate our work:

1. I suggest to change the title to "Anti-diabetic Potential of Urena lobata Leaf Extract through Inhibition of Dipeptidyl Peptidase IV (DPP-IV) Activity".
2. Your paper should be read, corrected, and edited with an English native speaker or by someone who is familiar with the English language.
3. Please delete Figure 1 because all the data could be found in Table 1.
4. There is a lack of Figure 2 but you cite it in the text.
5. Update the references and make sure half of the references are in recent 3 years!!!!! (2011-2014), another one-fourth references are in recent 5 years (i.e. 2009-2013). Old references are better replaced with updated ones. References must meet these requirements!!!! Citations should be labeled with square bracket and should appear in front of the period or comma at the end of the sentence/clause. All references should be cited. It is better to include citation from Pubmed, the more the better.
You could search the key words on PMC et al. index and add new references to your paper.
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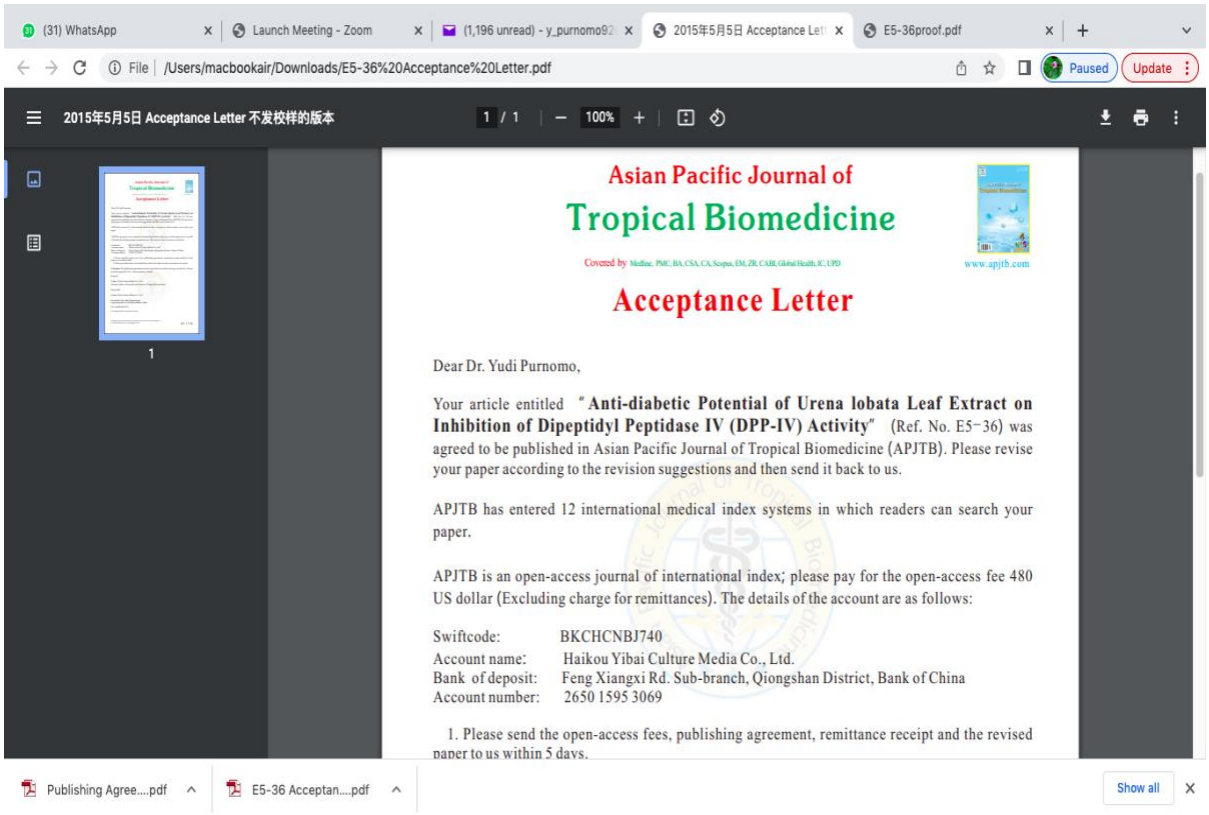
Acceptance Letter from Editor



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Acceptance Letter

Dear Dr. Yudi Purnomo,

Your article entitled "**Anti-diabetic Potential of Urena lobata Leaf Extract on Inhibition of Dipeptidyl Peptidase IV (DPP-IV) Activity**" (Ref. No. E5−36) was agreed to be published in Asian Pacific Journal of Tropical Biomedicine (APJTB). Please revise your paper according to the revision suggestions and then send it back to us.

APJTB has entered 12 international medical index systems in which readers can search your paper.

APJTB is an open-access journal of international index; please pay for the open-access fee 480 US dollar (Excluding charge for remittances). The details of the account are as follows:

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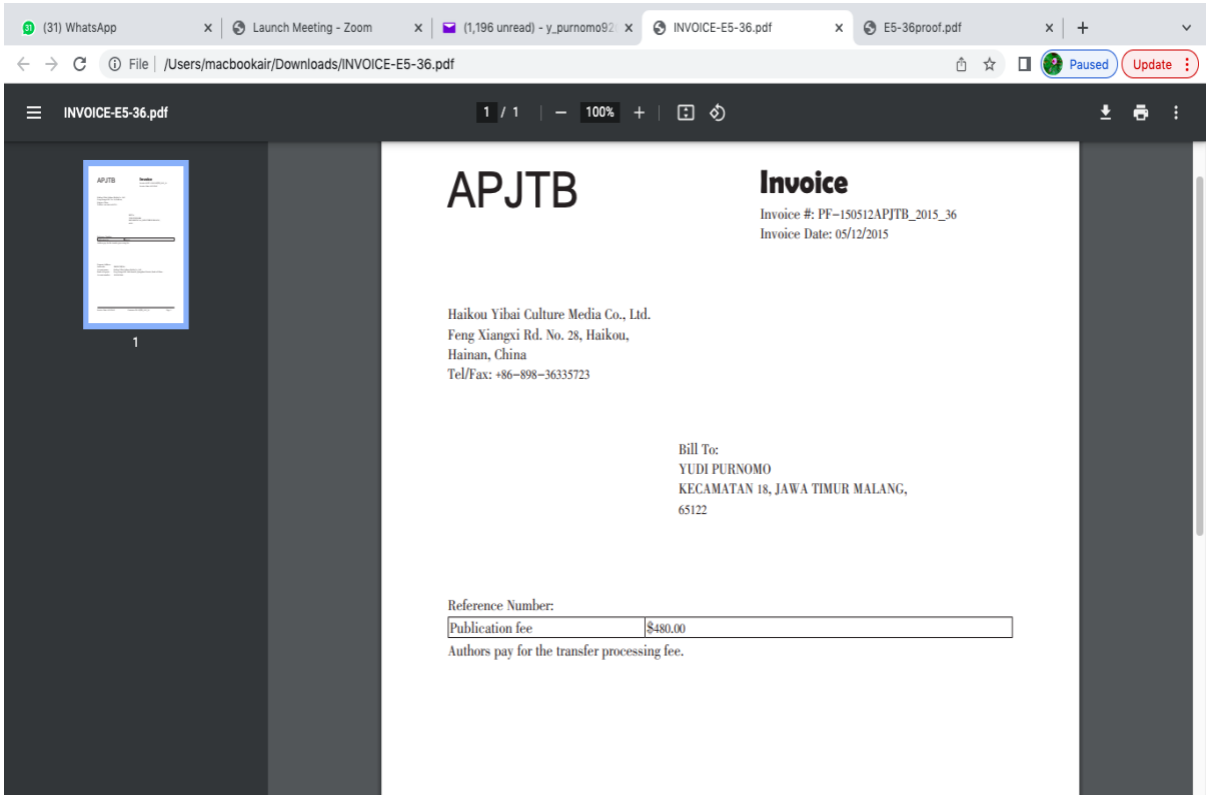

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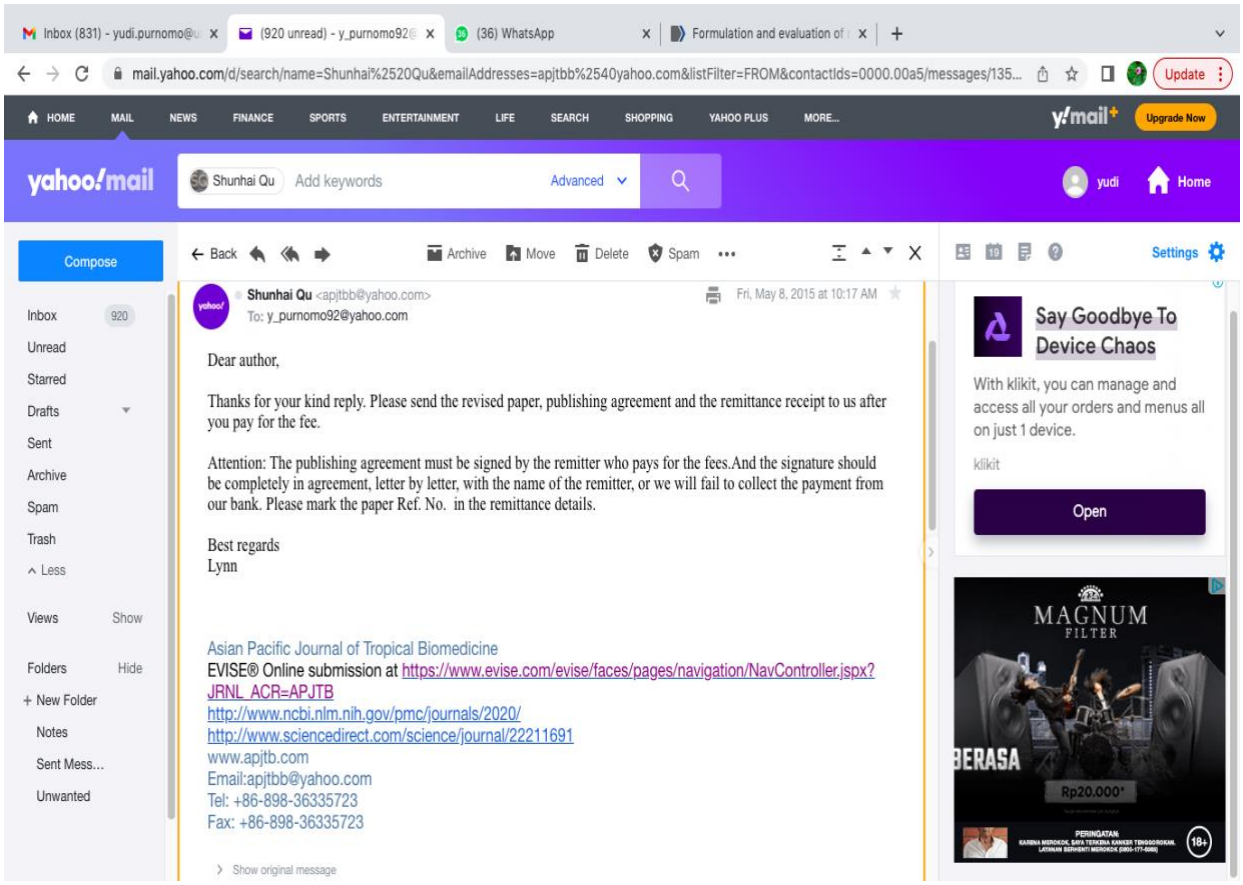
KECAMATAN 18, JAWA TIMUR MALANG,
65122

Reference Number:

Publication fee	$480.00

Authors pay for the transfer processing fee.

Editor responses :



Dear author,

Thanks for your kind reply. Please send the revised paper, publishing agreement and the remittance receipt to us after you pay for the fee.

Attention: The publishing agreement must be signed by the remitter who pays for the fees.And the signature should be completely in agreement, letter by letter, with the name of the remitter, or we will fail to collect the payment from our bank. Please mark the paper Ref. No. in the remittance details.

Best regards
Lynn

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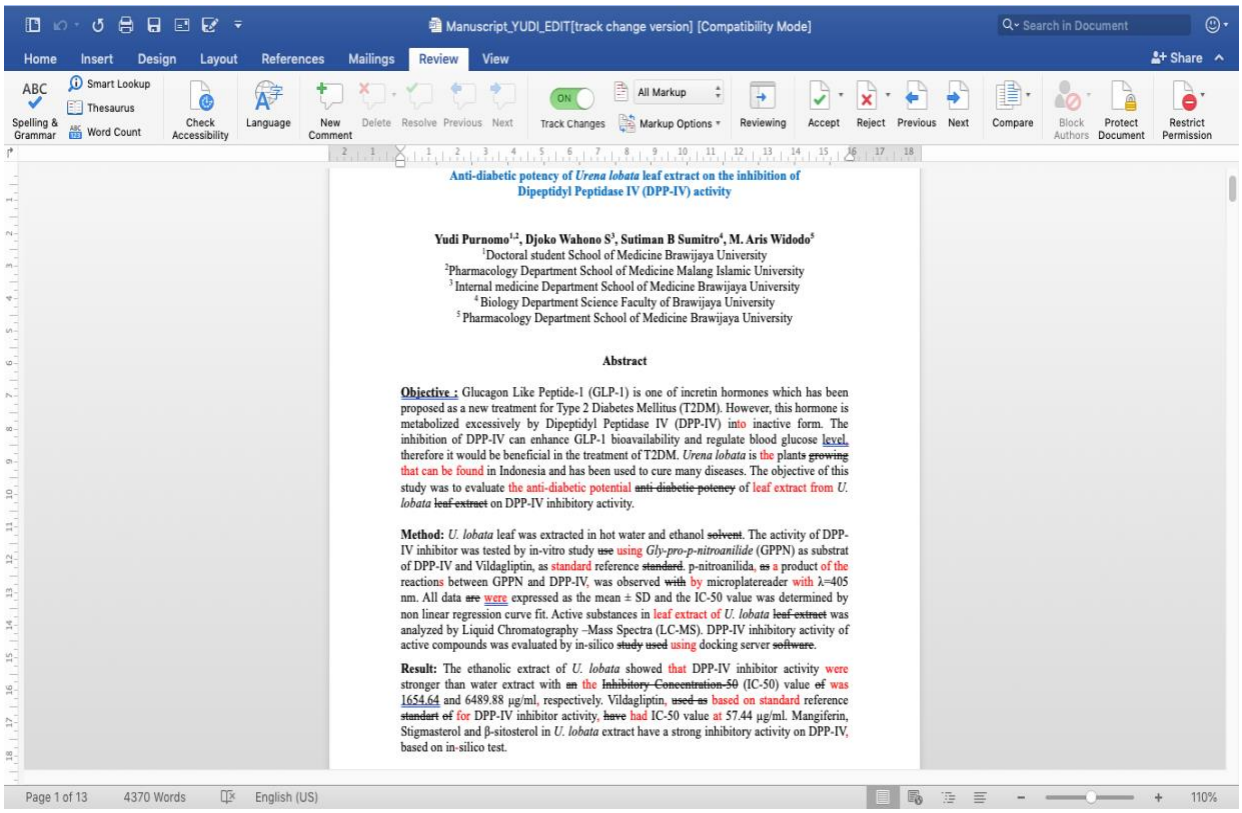

Anti-diabetic potency of *Urena lobata* leaf extract on the inhibition of Dipeptidyl Peptidase IV (DPP-IV) activity

Yudi Purnomo[1,2], Djoko Wahono S[3], Sutiman B Sumitro[4], M. Aris Widodo[5]
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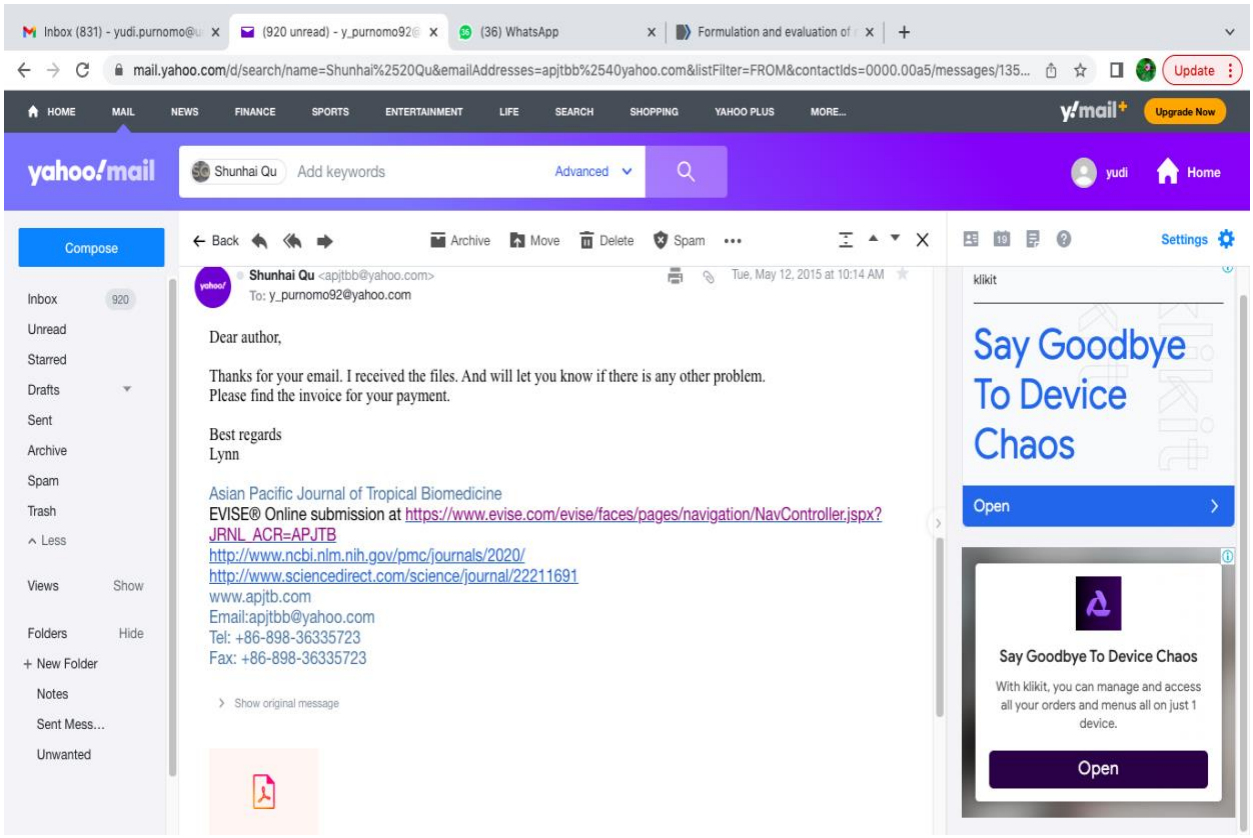
Method: *U. lobata* leaf was extracted in hot water and ethanol ~~solvent~~. The activity of DPP-IV inhibitor was tested by in-vitro study ~~use~~ using *Gly-pro-p-nitroanilide* (GPPN) as substrat of DPP-IV and Vildagliptin, as standard reference ~~standard~~. p-nitroanilida, ~~as~~ a product of the reactions between GPPN and DPP-IV, was observed ~~with~~ by microplatereader with λ=405 nm. All data ~~are~~ were expressed as the mean ± SD and the IC-50 value was determined by non linear regression curve fit. Active substances in leaf extract of *U. lobata* ~~leaf extract~~ was analyzed by Liquid Chromatography –Mass Spectra (LC-MS). DPP-IV inhibitory activity of active compounds was evaluated by in-silico ~~study used~~ using docking server ~~software~~.

Result: The ethanolic extract of *U. lobata* showed that DPP-IV inhibitor activity were stronger than water extract with ~~an~~ the ~~Inhibitory Concentration 50~~ (IC-50) value ~~of~~ was 1654.64 and 6489.88 µg/ml, respectively. Vildagliptin, ~~used as~~ based on standard reference ~~standart of~~ for DPP-IV inhibitor activity, ~~have~~ had IC-50 value at 57.44 µg/ml. Mangiferin, Stigmasterol and β-sitosterol in *U. lobata* extract have a strong inhibitory activity on DPP-IV, based on in-silico test.

Editor responses :



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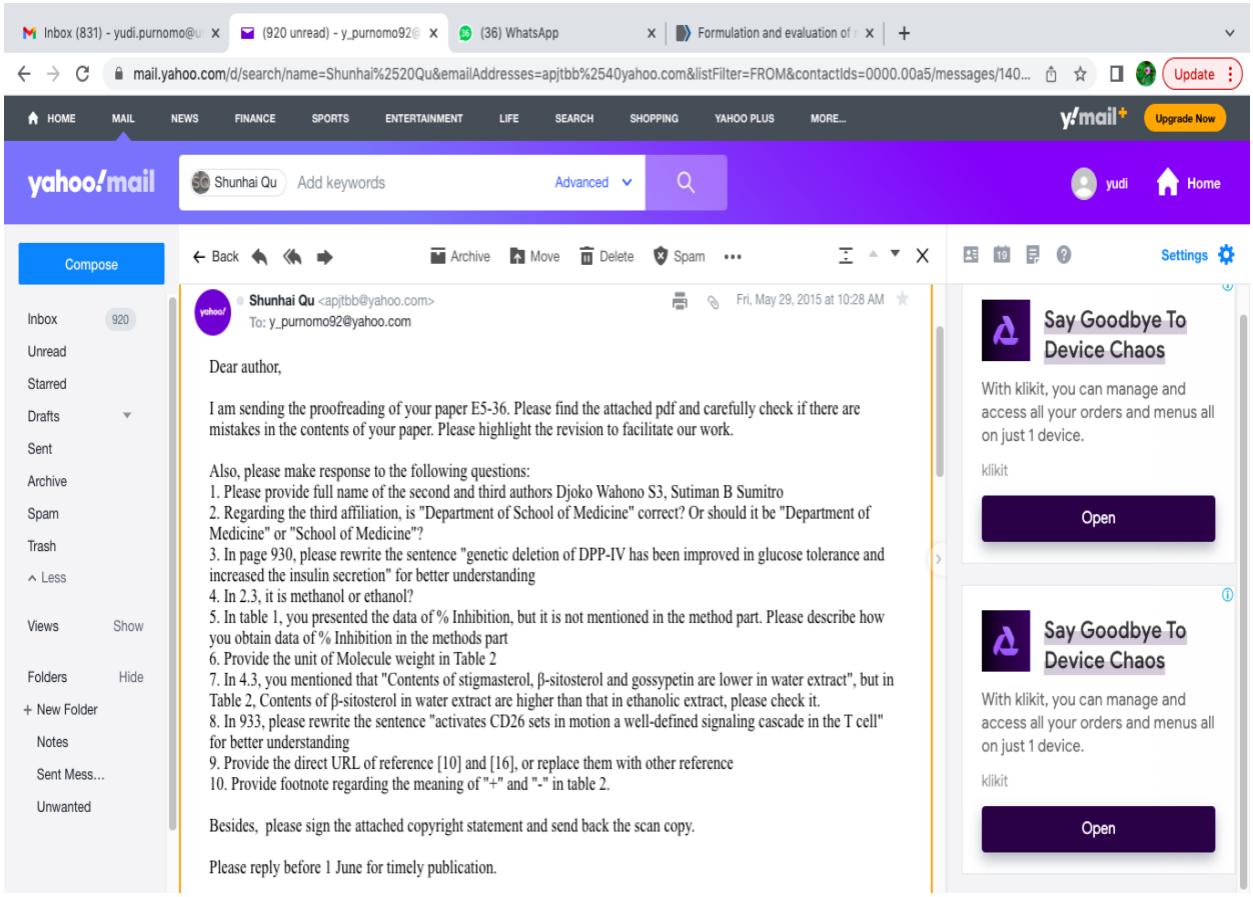

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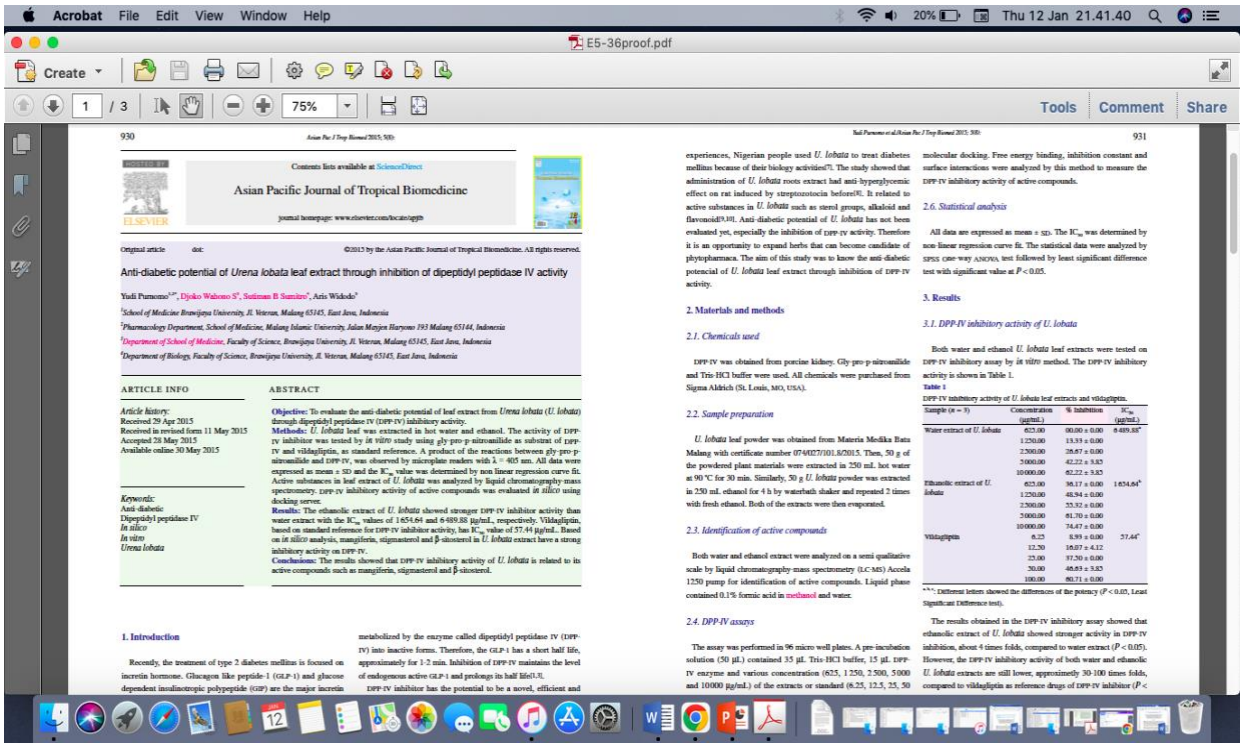

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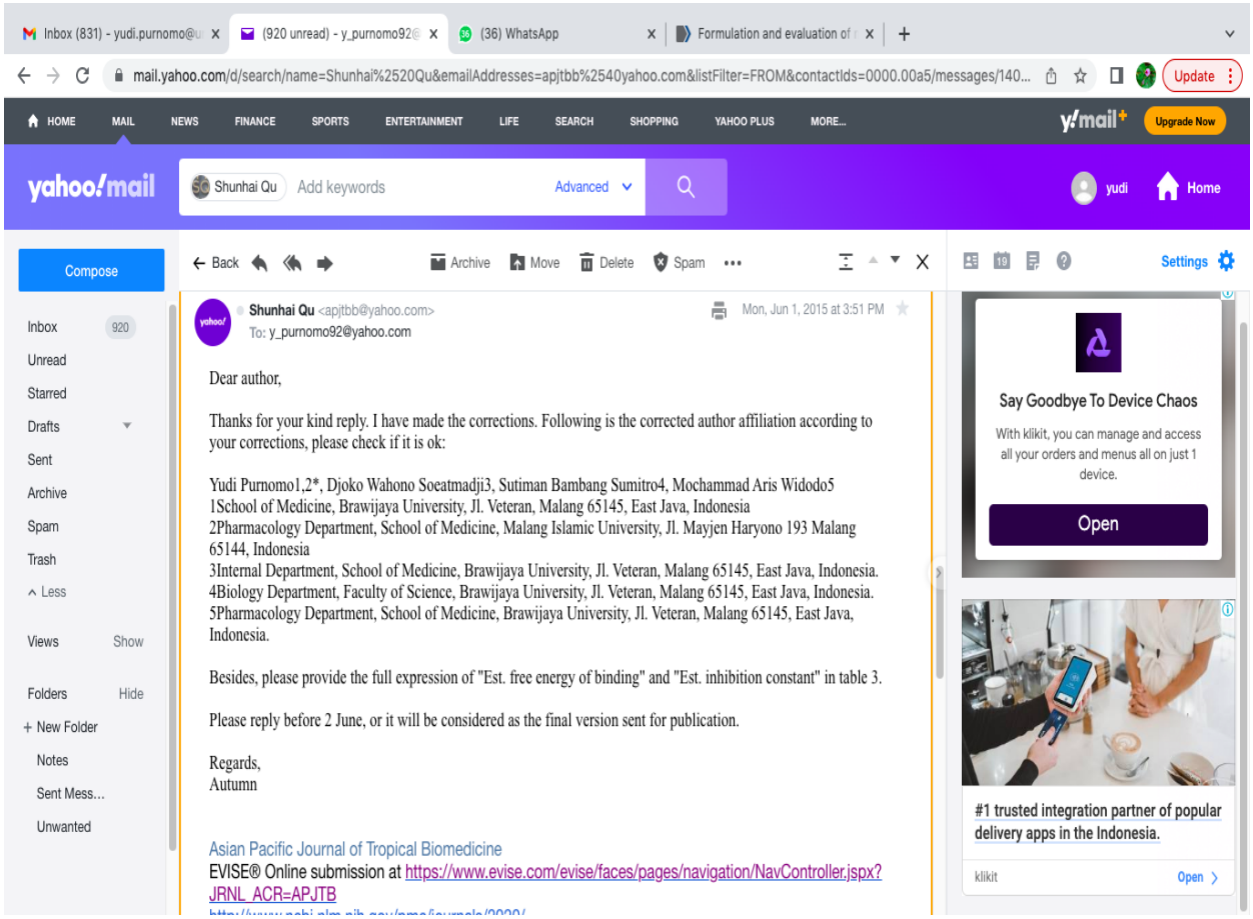
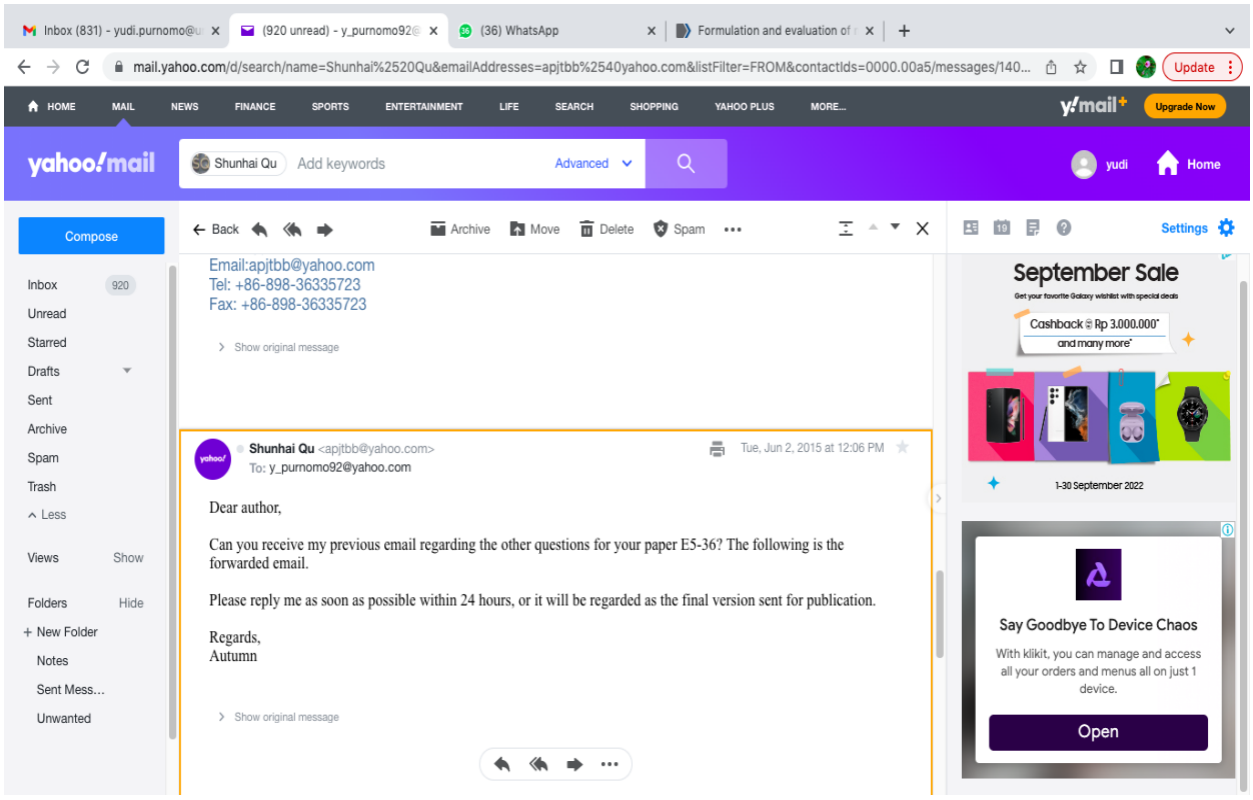


Editor responses :



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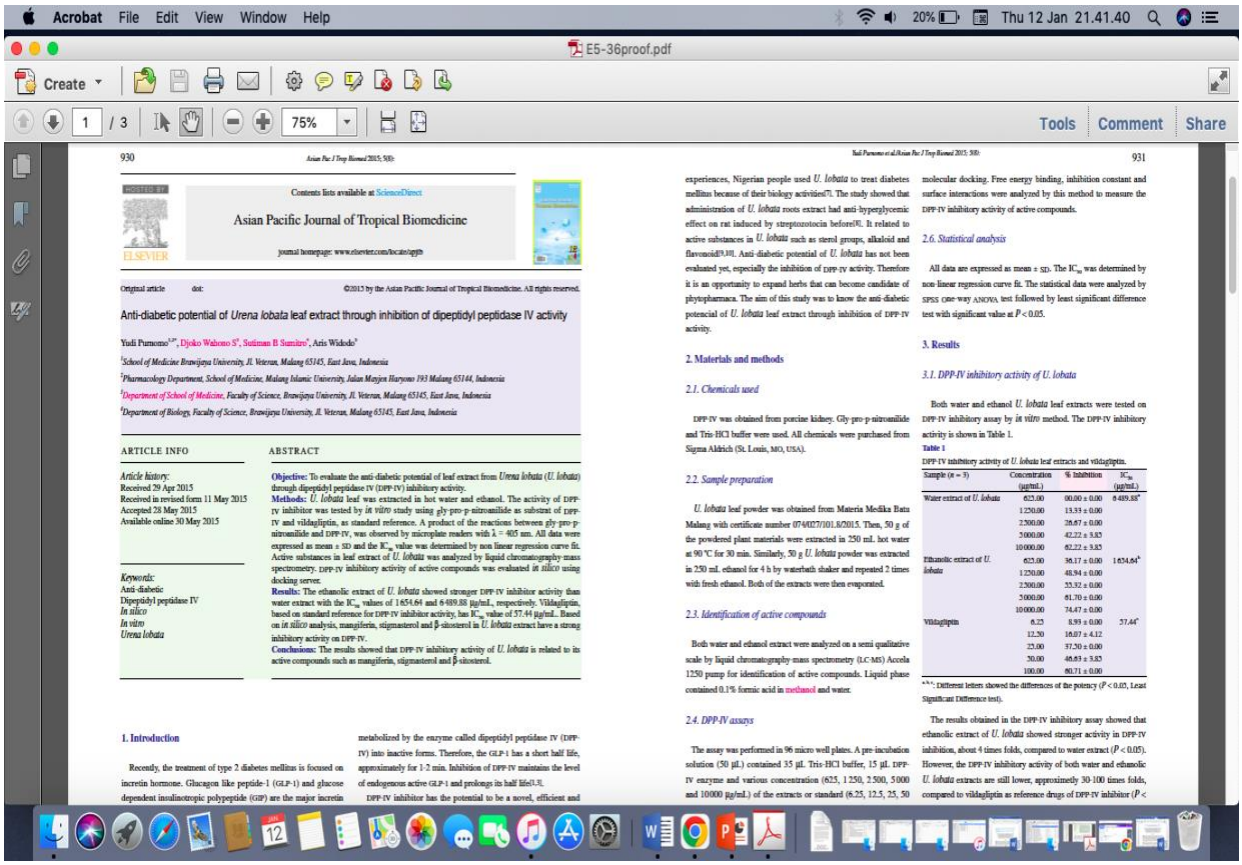
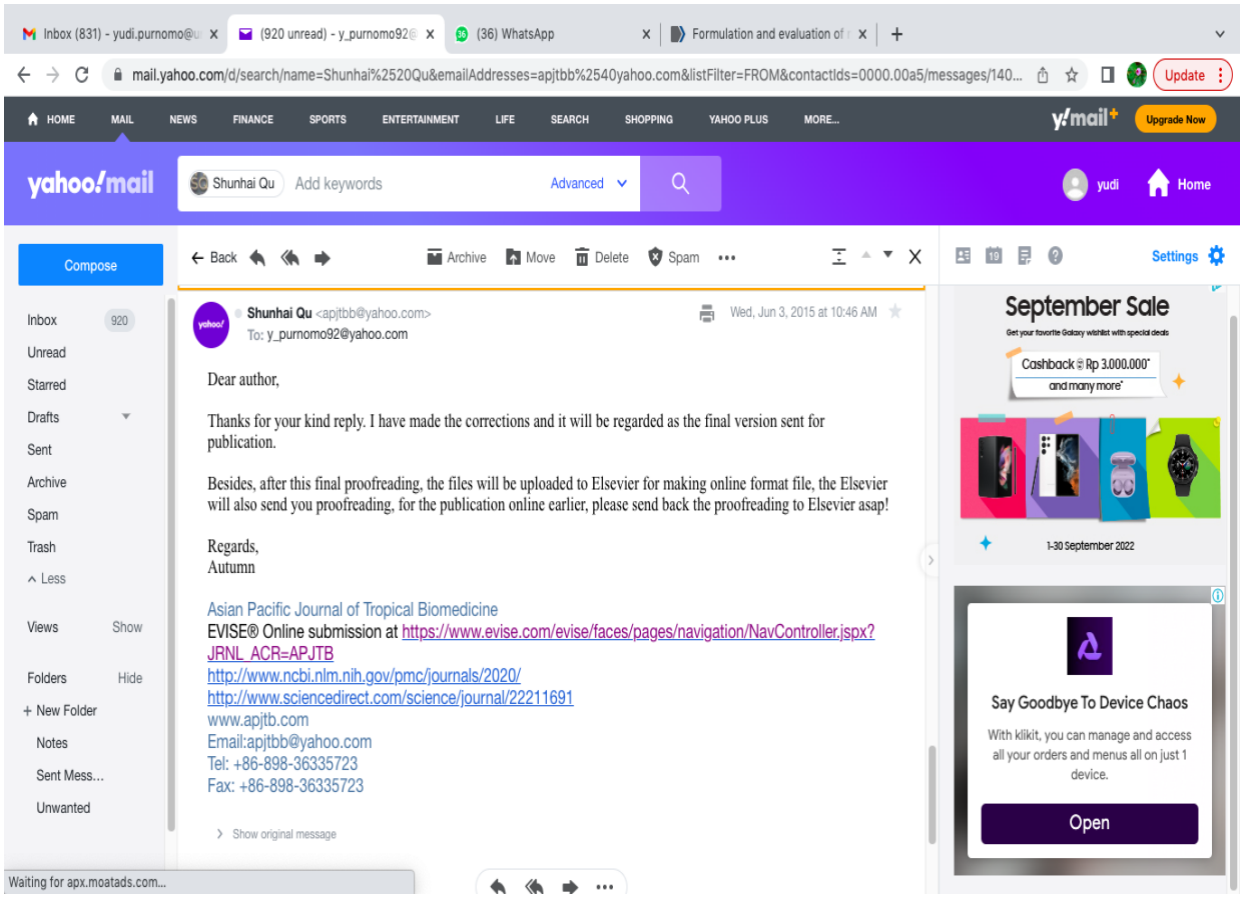


Editor responses :



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