

## Review Form 1.7

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|--------------------------|--|
| Journal Name:            | <b>European Journal of Medicinal Plants</b>  |
| Manuscript Number:       | <b>Ms_EJMP_99184</b>   |
| Title of the Manuscript: | <b>Phytochemical, antioxidant and anti-diabetic potentials of the ethanol leave extracts of four selected plants</b> |
| Type of the Article      |  |

### **General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journalejmp.com/index.php/EJMP/editorial-policy> )

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### PART 1: Review Comments

|  | Reviewer's comment  | Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here) |
|--|---|---|
| <p><b>Compulsory REVISION comments</b></p> <ol style="list-style-type: none"> <li>1. Is the manuscript important for scientific community?<br/>(Please write few sentences on this manuscript)</li> <li>2. Is the title of the article suitable?<br/>(If not please suggest an alternative title)</li> <li>3. Is the abstract of the article comprehensive?</li> <li>4. Are subsections and structure of the manuscript appropriate?</li> <li>5. Do you think the manuscript is scientifically correct?</li> <li>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</li> </ol> <p><b><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></b></p> | <ol style="list-style-type: none"> <li>1. The manuscript is rich in results on the antioxidant activity, the inhibition of alpha-amylase and alpha glucosidase by the 4 chosen plants, which makes this study important for society</li> <li>2. Title : Phytochemical, antioxidant and anti-diabetic potentials of the ethanol leave extracts of four <b>selected plants</b> "I recommend to replace selected plant by medicinal plant"</li> <li>3. The abstract must be rewritten</li> <li>4. The subsections and structure of the manuscript are good</li> <li>5. Throughout the manuscript, there are no details in the materials and methods section, the concentrations used for each extract, as well as the formula used to calculate the results, so in my opinion these details are very important and negatively influence the manuscript..</li> <li>6. References must be organized by an alphabetical order<br/>I recommend that you cite the following article and use it as a guide. Mohamed Marghich, Nour Elhouda Daoudi, Ouafa Amrani, Mohamed Addi, Christophe Hano, Jen-Tsung Chen, Hassane Mekhfi, Abderrahim Ziyat, Mohamed Bnouham, Mohammed Aziz. Antioxidant Activity and Inhibition of Carbohydrate Digestive Enzymes Activities of Artemisia campestris L.. <i>Front. Biosci. (Schol Ed)</i> 2022, 14(4), 25. <a href="https://doi.org/10.31083/j.fbs1404025">https://doi.org/10.31083/j.fbs1404025</a> <ol style="list-style-type: none"> <li>1. Why did you choose these four plants, to study it? Is there anything in common between them?</li> <li>2. Why did you choose the ethanol extract?</li> <li>3. Why you worked only on the leave, is there any idea about the biological activity of the other parts of the plants?</li> <li>4. The result part of the abstract is poorly written, it needs to be rephrased.</li> <li>5. Add the origin of any reagent used in the experiments</li> <li>6. Specify the origin of the harvest for each plant exactly using the map coordinates</li> </ol> </li> </ol> <p><b>Qualitative Phytochemical Analysis</b></p> <ol style="list-style-type: none"> <li>7. Add the concentration used for each extract in all Tests</li> </ol> <p><b>Quantitative Phytochemical Analysis</b></p> <p><b>Determination of Total Phenolic Content (TPC)</b></p> <ol style="list-style-type: none"> <li>8. specify the concentration used for each extract</li> <li>9. What is gallic acid? I think you used gallic acid. Correct, please.</li> <li>10. What is the concentration range used for the standard phenol?</li> <li>11. The unit must be specified for each value, in the text and in the table 2<br/>Example: TPC, Total Phenolic Content (mg /g: mg of Gallic Acid per g of extract); TFC, Total flavonoid content (mg/g: mg of rutin per mg of extract).<br/>I recommend that you cite the following article and use it as a guide. Mohamed Marghich, Nour Elhouda Daoudi, Ouafa Amrani, Mohamed Addi, Christophe Hano, Jen-Tsung Chen, Hassane Mekhfi, Abderrahim Ziyat, Mohamed Bnouham, Mohammed Aziz. Antioxidant Activity and Inhibition of Carbohydrate Digestive Enzymes Activities of Artemisia campestris L.. <i>Front. Biosci. (Schol Ed)</i> 2022, 14(4), 25. <a href="https://doi.org/10.31083/j.fbs1404025">https://doi.org/10.31083/j.fbs1404025</a></li> </ol> <ol style="list-style-type: none"> <li>12. <b>Table 2:</b> Why does this value contain two points? It must be corrected.</li> </ol> <p><b>Determination of Total Flavonoids Content (TFC)</b></p> |   |

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|   | <p>13. Specify the concentration used for each extract<br/>         14. How many repetitions did you do in each experiment?<br/>         15. What is the concentration range used for the standard (Rutin)</p> <p><b>In-vitro antioxidant activities of the ethanol leave extracts of the selected plants</b></p> <p><b>Determination of ferric reducing property</b></p> <p>16. Specify the rang concentration used for each extract in the material and methods section for the two methods used.<br/>         17. you did not mention the positive controls (Trolox and Vitamine C) in the material and methods part, it is necessary to add<br/>         18. Why you presented the FRAP and DPPH results in 2 different ways?<br/>         19. How did you calculate the FRAP radical scavenging activity in mg/g? you must write the formula used and explain the method.<br/>         20. <b>Table 3: Statistical significant difference (P&lt;0.05) between concentrations was represented with different alphabets</b> "Explain this sentence; what does mean by a, b, and c"<br/>         21. <b>Table 3: shows significant difference compared to the standard.</b> "Does the label * means (P&lt;0.05)"<br/>         22. How did you calculate the DPPH Radical Inhibition? you must write the formula used</p> <p><b>Determination of Alpha-amylase Inhibitory Activity</b></p> <p>23. What is the origin of the alpha-amylase used, it can be obtained from plants, animals and microorganisms<br/>         24. You have not talked about the extracts used and their concentration in the experience steps<br/>         25. Normally the alpha-amylase is incubated at 37 ° C, so how you have sure that the enzyme has integrated into the reaction knowing that you have not used a negative control to validate this protocol.<br/>         26. What is the formula used to calculate the percentage of inhibition<br/>         27. Why you did not calculate the IC<sub>50</sub> in order to compare better?<br/>         28. <b>Table 4: Statistical significant difference (P&lt;0.05) between concentrations was represented with different alphabets</b> "Explain this sentence; what does mean by a, b, and c"<br/>         29. <b>Table 4: shows significant difference compared to the standard.</b> "Does the label * means (P&lt;0.05)"</p> <p><b>Determination of Alpha-glucosidase Inhibitory Activity</b></p> <p>30. Specify the rang concentration used for each extract<br/>         31. What is the formula used to calculate the percentage of inhibition</p> <p><b>References</b></p> <p>32. References must be organized by an alphabetical order</p> |  |
| <p><b>Minor REVISION</b> comments<br/>         1. Is language/English quality of the article suitable for scholarly communications?</p> |   |  |
| <p><b>Optional/General</b> comments</p>   |   |  |

**PART 2:**

|   | Reviewer's comment   | Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here) |
|---|--|---|
| <p>Are there ethical issues in this manuscript?</p> | <p>(If yes, Kindly please write down the ethical issues here in details)</p> |   |

**Reviewer Details:**

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|---|--|
| <p>Name:</p>                                | <p><b>Marghich Mohamed</b></p>                   |
| <p>Department, University &amp; Country</p> | <p><b>Mohammed First University, Morocco</b></p> |