Reviewer's report

Title: In vivo analgesic, anti-inflammatory, and sedative activity and a molecular docking study of dinaphthodiospyrol G isolated from Diospyros lotus

Version: 1 Date: 28 Apr 2020

Reviewer: Swastika Maity

Reviewer's report:

The manuscript entitled "In vivo analgesic, anti-inflammatory, and sedative activity and a molecular docking study of dinaphthodiospyrol G isolated from Diospyros lotus" is a very interesting study. The asian countries have large consumption rate of Diospyros lotus. Therefore, the study is highly valuable. Also inflammatory, analgesic pharmacotherapy identification is important as it affects all the people globally and better outcome in drug identification in this area is always better. I congratulate the author and his team for successful completion of such valuable research work. The English is correctly used throughout the manuscript and the data presentation is properly done.

Few minor corrections suggested to the author:
Line 23: Since this is the lead natural compound for the study, the name Diospyros lotus can be highlighted in bold and italics in abstract
Line 25: Experiment model is more appropriate than using the work experimental animal.
Line 27: Briefly write about the name of the animal model.
Line 33: Incomplete sentence: sedative activity
Line 41: The writing style of Diospyros lotus should me maintained throughout the manuscript.
Line 52: This statement is not required in this manuscript as it is not adding any additional information in the study. Since the compound is obtained from the extraction of the fruits of the plant, so description about the fruit is sufficient.
Line 79: Highlight due to its anti-oxidant property, its reported to have anti-inflammatory activity.
Line 81: Incomplete sentence: pharmacological activity reported.
Line 135: Briefly write about the method also
Line 144: Methodology of the preparation should be mentioned in details.
Line 149: Time period of MD study should be mentioned. All the computational methods used should be described.
Line 150: write the licensing agency name for the in silico tool used in the study
Line 152: If statistical tool is used for calculation kindly mention about it.
Line 170: Write in hours or in minutes about the time. Constancy in presentation of the time should be maintained throughout the manuscript.
Line 171: In conclusion its written that the extract is able to produce analgesic effect. But in result part it's not mentioned like that. The result and conclusion statement don't match.
Line 172: Using the word significant is important in this sentence to make it more clear to the readers.
Line 175: Describe about the compound. Write about it in abstract and methodology section too.
Line 205: Author can further specify COX I or COX II is involved for it.
Line 220: Describe the data of RMSD
Line 250: Write the approval number also along with the statement.
Line 273: Ideally recent literature should be cited in paper. 5 years ideally. Some of the cited literature is outdated now.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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