Reviewer’s report

Title: Psychopharmacological effects of riparin III from Aniba riparia (Nees) Mez. (Lauraceae) supported by metabolic approach and multivariate data analysis

Version: 1 Date: 14 Nov 2019

Reviewer: Lina Dahabiyeh

Reviewer's report:

In this manuscript, the authors investigated the psychopharmacological effects of riparin III from Aniba riparia (Nees) Mez. (Lauraceae) using NMR-based metabolic approach followed by multivariate analysis.

My main comment is regarding the Results section. Results section is poorly written, difficult to follow, confusing and very repetitive. Many sentences can be shortened and improved (i.e. no need to keep mentioning ANOVA one-way analysis, applying Bonferroni post-test before presenting the data for each metabolites).

Other comments are listed below:

1. Page 5 of 34, lines 123-125, the period of the day is not clear, what do you mean by 10:30h? same for line 128-129.

2. The quality of Figure 5 is poor and needs to be improved.

3. It is much better to use the terminology scores plot and loadings plot instead of scores graphic and loading graphics throughout the text.

4. No mention to Fig 5 b and c in the text

5. In the discussion section, please correlate and compare your results with other works that have been done on riparin III (especially with the high dose of riparin III as the rationale of the study was to investigate the effect of low dose) or other anxiolytic

6. There are too many references in the manuscript. For a short research paper, referencing 118 article is too much. Please keep the most important, relevant and recent reference.

7. Conclusion section dose not read like a conclusion. Some of it can be added to discussion.

8. The English should be enhanced in many parts in the manuscript.

9. Page 9 line 208, The Unscrambler not the Unscrubler

10. Line 215 remove discussion

11. Figure 2 line 232 AP-o: Anxiogenic Period (closed arms), correct to AP-c

1. Figures 7 and 8 can be combined
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Unable to assess

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:

Needs some language corrections before being published

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