

### Review Form 3

Journal Name:	Archives of Current Research International
Manuscript Number:	Ms_ACRI_130876
Title of the Manuscript:	Toxic and protective effects of levodopa and Piper nigrum essential oil on zebrafish embryos and larvae exposed to rotenone as an experimental model for Parkinson's-like disease
Type of the Article	Original Research Article

#### PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	The presented study examines the protective and toxic effects of levodopa and <i>Piper nigrum</i> essential oil in a zebrafish model of Parkinson's-like disease induced by rotenone. It contributes to neuropharmacology by exploring potential adjunct therapies and also this paper highlights the role of natural bioactive compounds in neuroprotection. It influences the efficient screening of neurotoxic and neuroprotective agents in a clinical trial.	Yes, this is the objective of our study.
Is the title of the article suitable? (If not please suggest an alternative title)	The title is well-written. But the toxic word seems somewhat not suitable. Here is a suggestion for this , otherwise it is good. Either it should be toxicity or the title rewritten as Protective and Toxicological Impact of Levodopa and Black Pepper Essential Oil in a Zebrafish Model of Rotenone-Induced Parkinson Disease.	We are grateful for your careful review and critique of the manuscript. We made the change according to your suggestion.
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	The abstract is well explained. But there are areas of improvement. The abstract should start with a background knowledge and introduction. The methodology section should be summarized in a scientific way and the results of the study should be explained in both quantitative and qualitative terms. Structure of the abstract should be arranged in a way starting from the introduction, aim of the study, methodologies, results, and future outcomes.	We have reorganized the summary and added a brief introduction. We have made some changes to the methodology to meet your suggestions.
Is the manuscript scientifically, correct? Please write here.	Yes it is scientifically addressed well. But there is a need for some changes in sequence. It should start with addressing the problem first and then its solution with the chemicals. Some case studies with quantitative results should be added for the better understanding of the mechanism.	We appreciate the suggestions, we agree, and we have made corrections according to what was suggested.
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	You can seek guidance from Astounding the anxiolytic and eudemonic potential of certain fruits. Development and evaluation of the anxiolytic potential of bagels incorporated with banana peel flour and lavender them as well.	We have made corrections according to your suggestions. Great suggestions, we will test them in our future studies. We have another projects with Parkinson disease on zebrafish model. Thank you very much !
Is the language/English quality of the article suitable for scholarly communications?	One-time proofchecking is necessary for some grammatical errors in some places.	We have made corrections according to your suggestions.
<u>Optional/General</u> comments	Subsection 2.2 needs to be re-written A graphical abstract is also needed as well for clarity and thorough visualization. Scientific names are italicized everywhere.	We have made corrections and reorganize the subsection 2.2. We have in the methodology the Figure 1 that describe the experimental design in a graphical way. This figure was made according to ARRIVE Guidelines (Nature Group). Thanks!

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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)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	Yes, all tests involving animals were previously approved by the Ethics Committee for Animal Use of the Universidade Federal Rural de Pernambuco, under License No. 3581030221.