Reviewer's report

Title: Neuroprotective effects of Psoralea corylifolia Linn seed extracts on mitochondrial dysfunction induced by 3-nitropropionic acid

Version: 2 Date: 10 July 2014

Reviewer: Germain Sotoing Taïwe

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General
This study investigated the effects of Psoralea corylifolia Linn seed extracts against 3-NP induced mitochondrial dysfunction in cultured rat pheochromocytoma (PC12) cells, which are used for neurobiological studies. These results of this study demonstrate that P. corylifolia Linn seed extracts have a significant protective effect against 3-NP induced cytotoxicity. This is an interesting study that does advance knowledge; however, some points merit further consideration.

Major compulsory revisions
- Method: What was the basis for your choice of the concentration of extract and type of extract used in the study?
- Results: In the results section the author should provide the degrees of freedom used in the ANOVA considering the following format F (degrees of freedom: two values) = value, p<value
- Results: You must to determine the DRC of an aqueous extract of Psoralea corylifolia and standard drugs, in your experimental conditions. If you want to investigate the Neuroprotective activity of Psoralea corylifolia extract, you have to compare EC50 and efficacy (Neuroprotective) and to demonstrate which compound or reference drug is the more effective. The study would be greatly improved by including the DRC.

Minor essential revisions
- Check for grammatical mistakes throughout the text according to the instruction for authors.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I have no competing