Reviewer's report

Title: In vitro antioxidant and cholinesterase inhibitory activities of Elatostema papillosum leaves and correlation with their phytochemical profiles: a study relevant to the treatment of Alzheimer's disease

Version: 0 Date: 09 Aug 2017

Reviewer: Jason Eriksen

Reviewer's report:
This manuscript evaluates the effects of antioxidants derived from Elatostema papillosum on acetylcholinesterase and butyrylcholinesterase activity.

Although this work is interesting, the scope of the study is limited to a few biochemical observations that will limit its overall appeal to a small audience; consequently, this manuscript may be more suited to a more specialized Journal.

Evidence is provided that supports the idea that EPL - E80 has anti-cholinesterase activity in vitro, but there is no evidence in this manuscript to support claims that this extract has relevance in vivo; there are no experiments show in vivo activity and or that this agent can successfully cross the blood brain barrier.

There are numerous, generally small, errors in word choice and grammar. The authors need to carefully review and revise their work to eliminate these errors.

Antioxidants agents have a very limited impact on in vivo degradation of acetylcholine .

Antioxidants have not shown any degree of effectiveness in slowing signs or progression of Alzheimer's disease in clinical trials.
Statistical differences are not indicated on the graphs. A Dunnet's test is used but differences between groups are not shown.

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.
No

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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