Reviewer's report

Title: Edible bird’s nest ameliorates oxidative stress-induced apoptosis in SH-SY5Y human neuroblastoma cells

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Reviewer: Ching-Hsein Chen

Reviewer's report:

Overall comments:
In this paper Dr. Ng Khuen Yen and collaborators investigate the neuroprotective effect of Edible bird’s nest (EBN) extracts in the neurotoxin-induced in vitro Parkinson disease model. This study found that crude EBN extract is able to inhibit cytotoxicity which induced by 6-OHDA in SH-SY5Y. Water EBN extract exhibited higher efficacy in ameliorating ROS build up, early apoptotic and inhibition of caspase-3 cleavage. This is an interesting finding cause this is the first article demonstrated that EBN has neuroprotective effect.

Specific comments:
Methodology
Page 6, EBN were digested with pancreatin, author has to describe why need to use pancreatin digest in result.

Results
Figure 2, morphological changes of the cells, apoptosis effects of 6-OHDA are no obviously, qualities of the pictures are low, need to increase the magnification and contrast of the pictures.

Results and discussion
Results showed that water EBN extract (S2) exhibited attenuate ROS build up, apoptotic and inhibition of caspase-3 cleavage. However, there is no effect for cytotoxicity. Author has to explain why S2 can attenuate apoptosis however no reflect in cytotoxicity.

Crude extract means consist of all the components, water extract means consist of only water soluble components. However, in this study, author claims that water extract has anti-apoptotic effect via oxidative stress, but crude extract has no effect, author has to give a proper explanation.

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Authors claimed that “This could be due to the presence of reactive compounds in S1 which prompted the generation of extra free radical in cells on top of the existing oxidative load”, do you have scientific background to support that which component in S1 can induce ROS production in cells?
Level of interest: An exceptional article

Quality of written English: Acceptable

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

Declaration of competing interests:
I declare that I have no competing interests.