Reviewer’s report

Title: Antioxidant and cytoprotective activities of piper betle, areca catechu, uncaria gambier and betel quid with and without slaked lime

Version: 3  Date: 30 July 2013

Reviewer: Daniel Bezerra

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The manuscript intitiled "Antioxidant and cytoprotective activities of piper betle, areca catechu, uncaria gambier and betel quid with and without slaked lime" by Nursazwi et al. described the antioxidant and cytoprotective activities of the respective ingredients of betel quid and compared with betel quid itself (with and without slaked lime). The correlation of their cytoprotective and antioxidant activities with phenolic content was also determined. The paper was well-designed, but presents some type errors, as following:

Replace “The nut of areca catechu (areca nut) and gambir (uncaria gambier) are wrapped in piper betle leaf making...” by “The nut of Areca catechu (areca nut) and Uncaria gambir (gambir) are wrapped in Piper betle leaf making”

Use calcium hydroxide instead slaked lime throughout the text.

Use IC50 (minor) instead IC50.

Replace gambir demonstrated the highest DPPH (IC50 = 6.397 ± 0.79 µg/ml), FRAP (5717.8 ± 537.6 µmol Fe(II)/mg), TPC (1142.46 ± 106.79 µg TAE/mg) and cytoprotective assays (100.08± 4.62%) by “…gambir demonstrated the highest antioxidant (DPPH -IC50 = 6.397 ± 0.79 µg/ml, FRAP - 5717.8 ± 537.6 µmol Fe(II)/mg), and TPC - 1142.46 ± 106.79 µg TAE/mg) and cytoprotective (100.08 ± 4.62%) activities”

The date of purchased and the authentication of Areca catechu, Uncaria gambir and Piper betle should be included.

Use µg/mL instead µg/ml

In table 1, standardize one or two digits after the decimal point. Include the extracts concentrations.

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 declare that I have no competing interests