Reviewer's report

Title: Screening of anti-dengue activity in methanolic extracts of medicinal plants

Version: 3 Date: 5 September 2011

Reviewer: Claire Kubelka

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Major Compulsory Revision (as it was in the first review)

In my opinion the assay used that detects qualitatively the viral cytopathic effect on cell cultures are not sufficient to determine the antiviral activities of compounds. It may serve as initial screening but the activities should be confirmed by another method. In the literature antiviral activities against Dengue viruses has been tested by methods such as: inhibition of plaque forming assay, colorimetric assays such as MTT or MTS/PMS, dengue reporter virus, quantitative PCR (Kaptein et al., 2010) RNAse or helicase activities, (Qing et al., 2010)

Focus forming unit (FFU) reduction assay (Rees et al., 2008), flow cytometry (Lee et al., 2006) among others. I recommend the use of another method in order to confirm the suggestive antiviral activities found during this work.

THE AUTHORS STATE THAT "no change has been made to the manuscript." The same MTT used for cytotoxicity could have provided more accurate data as the cytopathic effect with semi or even quantitative data. It is known that Dengue virus may not produce cytopathic effect and still replicate; extract could be inhibiting the cytopathic effect without inhibiting the virus replication. THIS WAS A COMPULSORY REQUIREMENT. THE DATA PROVIDED ARE NOT SUFFICIENT TO INDICATE AN ANTIVIRAL EFFECT.

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

No to all above.