Reviewer’s report

Title: Effect of selected local medicinal plants on the asexual blood stage of chloroquine resistant Plasmodium falciparum

Version: Date: 23 July 2014

Reviewer: Rakiswendé Serge Yerbanga

Reviewer’s report:

The manuscript is largely well written, concise and conclusions are mostly supported by the results. This research can possibly contribute to the investigations for anti-malarial drug discovery. However, there are major errors, the collection and voucher specimen of plants used were not specified.

A small number of minor points require clarification before publication.
- Major Compulsory Revisions: None
- Minor Essential Revisions:

Background
1. Paragraph 1, second sentence: Change “fansidar” by “Sulfadoxine Pyrimethamine”
2. Paragraph 2, second sentence: precise the date of the ethnobotanical survey
3. Paragraph 2, last sentence: in “Thus, screening the plants for anti-malarial properties ……… is important.” Change the sentence to “Thus, screening the plants extracts for anti-malarial properties ……… is important.”

Methods
4. Change the title of the paragraph “The mammalian and parasite cells” by “The mammalian cells and parasites ”
5. Give the percentage of the Giemsa used for staining
6. Section “In vitro P. falciparum HRP2 assay”, Paragraph 1, Sentence 3: “In preparation of extract or drug …..................in DMSO horizontally in a 96 well plate.” What do you mean “horizontally”? Used the indication on the plate to give the direction, like “well A1 to A7”
7. Section “In vitro P. falciparum HRP2 assay”, Paragraph 2: Give the source of “Chloroquine (CQ), quinine (Q), mefloquine (Mef) and artemisinine (Art)” used as standard control.

Results
8. Section “Anti-plasmodial activity against CQ resistant P. falciparum, K1”, Paragraph 1, Sentence 3 : “The discrimination of active extracts is based on ranked levels of anti-plasmodial activity proposed by Rasoanaivo et al. (2004”. Please take out the braquet.
9. Section “Anti-plasmodial activity against CQ resistant P. falciparum, K1”,
Paragraph 1, Sentence 6 : “The results of each assay were carefully validated by
determination ………………………against CQ resistant P. falciparum.” What do
you mean “carefully”? 

Discussion
10. Section “A. muricata” What do you mean by “Colombian researchers”? 
Please precise 

Conclusion 
11. Authors didn’t show in term of SI the plant among the 23 with good
anti-malarial activity, the most promising extracts.

Table 1: Precise period convert by the review

Figure 1 legend: " Figure 1 Procedure of plant extraction”. Different part of plants
was extracted
sequentially by using organic solvents (DCM, MeOH and H2O) with increasing
polarity”. Please take out the “Water”, it is not a organic solvent.

Level of interest:An article whose findings are important to those with closely
related research interests

Quality of written English:Acceptable

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

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