Author's response to reviews

Title: In vivo antimalarial activity of the crude leaf extract and solvent fractions of Croton macrostachyus (Euphorbiaceae) against Plasmodium berghei in mice

Authors:

Laychiluh Bantie (Seen1000@yahoo.com)
Solomon Assefa (Soltoxic@gmail.com)
Tilahun Teklehaimanot (tilahunmt@yahoo.com)
Ephrem Engidawork (ephrem.engidawork@gmail.com)

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Author's response to reviews: see over
Response to reviewers

Dear editor,

Thank you very much for the criticisms given by you and the reviewers. We have now taken into account all the suggestions forwarded and prepared the MS accordingly. We hope that the MS is now in the form acceptable for publication in your esteemed journal and we hereby request your editorial hand. Please find below our response to the reviewers’ comments.

Reviewer no.1 (Tatiana Fiuza)
- Reference citation: Checked so that it could meet the requirement
- Language: Improved as suggested
- Approval by Ethics committee: was approved and this had been stated in the MS

Reviewer no.2 (Ronan Batista)
- Revisit introduction: Changes were made as suggested. One of the suggested references is included, as it is recent and appears to have some relevance to the issue at hand.
- Use of bioguided fractionation: corrected, thank you.
- Take out the fraction results: We beg to differ with the reviewer. Once the crude extract is found to be active, fractions are tested, since the objective is to isolate compounds that are responsible for the effect and develop them into a product. We did test both the crude extract and fractions, and found the crude and fractions to have similar as well as differential effects. We hope this will shed light how future research will be guided regarding the antimalial activity of the plant.
- Comment on section 3.3.1 (why crude has very good suppressive effect): well dose refers to potency and suppression to efficacy. The crude extract showed 91% parasite suppression at 600 mg/kg, which can be taken as very good suppressive activity. If another plant produced the same effect at 200 mg/kg, we can say that both are equally efficacious but the latter plant is potent than the former. It is from this perspective that we used the phrase “very good suppressive activity”. To avoid confusion of the reader with the use of such phrases, we have taken out the phrase.
- Section 3.3.1 (survival time between 600 mg/kg and Chloroquine): it is an oversight there is a significant difference and is corrected.
• Section 3.4.2 (Why chloroform has higher effect and relate it to Table 2): If you look at this Table and others, the chloroform fraction was the one that exhibited greater degree of paracetemia suppression and prevention of reduction in temperature as well as packed cell volume. Thus, it is reasonable to say this fraction has greater antimalarial activity.

• Discussion on comparing macrostachys and zambesicus: maximum dose used in our case was 600 mg/kg but in their case, it was 200 mg/kg. Since we do not know what will happen, if they increase the dose further, I agree with you the statement need to be rephrased. Thus, we did rephrase it accordingly.

• Reformulate conclusion: reformulated.

• Revisit Table legends: revisited.

• Language issues: attended as much as possible.

**Reviewer no. 3 (Denis Zofou)**

• Tables and Figures are missing: provided and we do not know how it was missed in your case.

• Language problem: rectified as much as possible

• Adherence to BMC guidelines: observed

• Reorganize sequence of results: accommodated

**Reviewer no. 4 (Ezekiel. Olugbenga IWALEWA)**

• Introduction 5th paragraph (paraphrase): paraphrased

• Revisit conclusion: revisited and made to reflect the findings.

**Reviewer no. 5 (Murad Khan)**

• Minor mistakes to be corrected: corrected.