



SDI Review Form 1.6

Journal Name:	International Journal of Pathogen Research
Manuscript Number:	Ms_IJPR_45455
Title of the Manuscript:	ANTIMALARIA AND HEMATOLOGICAL PROPERTIES OF ETHANOLIC LEAVE EXTRACT OF PENNISETUM PURPARUM ON PLASMODIUM BERGHEI INFECTED MICE
Type of the Article	Original research paper

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This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	<p>Abstract -For endoparasites, one must not use the term 'infested'. Instead, the term 'infected' must replace the term 'infected' in the whole manuscript</p> <p>Introduction - It is also important to emphasize that chloroquine resistance is widespread throughout the world and therefore, searching for new molecules with antiplasmodial activity is needed - If studies on the in <i>vitro</i> antiplasmodial effects of <i>P. purpureum</i> exist, it would be a valuable information to justify your study in the introduction</p> <p>Materials and Methods -I suggest you to specify for what purpose each set of materials was used. For example: 'syringes, gloves, drugs etc were used in the in vivo experiments' and so on - Since chloroquine resistant is widespread throughout the world, wouldn't it be better to choose a chloroquine-resistant strain? Or there was no chloroquine resistant strain available? - Why artesunate was tested only at 5 mg/kg but the extract was tested at two higher concentrations (200 and 400 mg/kg)? -What solvent was used to dissolve the extract on the experiments and in what concentration this solvent was used?</p> <p>Results</p> <p>Discussion - Currently, at least five species are known to cause malaria in humans: <i>P. falciparum</i>, <i>P. vivax</i>, <i>P. malariae</i>, <i>P. ovale</i> and <i>P. knowlesi</i>, as follows: COX, FEG. History of the discovery of the malaria parasites and their vectors. Parasites & vectors, v. 3, n. 1, p. 5, 2010. - I think this kind of information (regarding the malaria parasites in humans) must be moved to the introduction, since you are explaining basic aspects of the disease. - "Artesunate (5mg/kg) caused only a mild reduction in parasite count, but oral administration of <i>Pennisetum purpureum</i> aqueous crude leaf extract "This is probably because the dose was too low. If the dose was comparable to those used for the leaf extract, artesunate would almost certainly achieved better results than the dose used in the study (5 mg/kg) - There is no discussion at the topic of the 'Effect on packed cell volume (PCV)' as you simply repeated the results. You should bring similar studies and discuss how are they related to yours'.If no studies involving the effect of extracts exist in the literature, you</p>	<p>Corrected as pointed out</p> <p>Ethanol was the adopted solvent we used to dissolve extract</p>



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	<p>should emphasize this information.</p> <p>- "This result is similar with that obtained from previous publications¹⁸."You should discuss some these previous results with your findings</p> <p>-“ However, only the low dose (200mg/kg) of the ethanolic leaf extract shows a significant suppressive effect on <i>P. berghei</i> infected treated mice” Why is the high dose (45.52%) not significant?</p> <p>Conclusion</p> <p>-“The ethanolic leaf extract of <i>Pennisetum purpureum</i> (high and low doses) can be said to pose antiplasmodial effect as evident by its ability to suppress <i>P. berghei</i> infection in mice in a dose dependent manner” How can one state that the extract acted in a dose-dependent manner since the ‘low-dose’ extract (200 mg?kg) supressed more than the ‘high-dose’ (400 mg/kg)?</p> <p>Recommendations</p>	
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Minor REVISION comments	<p>Abstract</p> <p>-“Administration of Artesunate also caused an insignificant ($p < .05$) reduction in parasite counts upon comparison with control” Insignificant or significant?</p> <p>Introduction</p> <p>Materials and Methods</p> <p>- “Fresh leaves of <i>Pennisetum purpureum</i> were procured from local markets within the University environ “ Would it be ‘Environment’?</p> <p>Results</p> <p>Discussion</p> <p>- What is the ‘rest group’? The non-infected one?</p> <p>- Are there any studies to support this information?</p> <p>Conclusion</p> <p>“<i>Pennisetum purpureum</i> ethanolic leaf extract shows non-significant effect on red blood cell and packed cell volume in treated <i>P. berghei</i> infected mice at the dosage use for this study” What kind of effect? I suggest change the term to “alteration’</p> <p>Recommendations</p> <p>-Replace ‘ingredients’ with ‘compounds’</p>	Effected as suggested
Optional/General comments	<p>-English grammar should be concisely revised as there are many errors</p> <p>- Once the complete name has been written (<i>Pennisetum purpureum</i>), the plant’s name should be referred to as ‘<i>P. purpureum</i>’</p> <p>- You should standardize ‘$p < .05$’/ $P < 0.05$’ in the whole manuscript</p>	Effected as suggested

PART 2:

	Reviewer’s comment	Author’s comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<u>Yes. This study requires the use of laboratory animals but has been approved by the local animal ethics committee</u>	