

**Review Form 1.7**

Journal Name:	<b>Journal of Advances in Biology &amp; Biotechnology</b>
Manuscript Number:	<b>Ms_JABB_110330</b>
Title of the Manuscript:	<b>Immunomodulating potential of Ekebergia capensis in murine Schistosoma mansoni juvenile and adult infection</b>
Type of the Article	

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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)
<p><b>Compulsory</b> REVISION comments</p> <ol style="list-style-type: none"> <li>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</li> <li>2. Is the title of the article suitable? (If not please suggest an alternative title)</li> <li>3. Is the abstract of the article comprehensive?</li> <li>4. Are subsections and structure of the manuscript appropriate?</li> <li>5. Do you think the manuscript is scientifically correct?</li> <li>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</li> </ol> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<ol style="list-style-type: none"> <li>1) The paper appears to be well-written and scientifically important as it discusses the potential use of medicinal plants in the management of schistosomiasis, a neglected tropical disease affecting millions of people in sub-Saharan Africa.</li> <li>2) Yes</li> <li>3) The abstract discusses the immunomodulatory potential of Ekebergia capensis extract on Schistosoma mansoni infection in vivo. The study was conducted on Swiss albino mice infected with S. mansoni cercariae and treated with aqueous extracts of E. capensis at doses of 200 and 400 mg/kg at 2 weeks (juvenile worms) and 7 weeks (adult worms) post infection. The immune enhancing potential of the medicinal plant was determined by analyzing the levels of cytokines in serum samples that were collected before and after treatment. Results indicated that the medicinal plant extract had immunomodulatory effect. There was a significant increase (<math>P &lt; 0.05</math>) in Th1 cytokines (IL-2, IFN-<math>\gamma</math> and TNF-<math>\alpha</math>), a decrease in Th2 cytokines (IL-4, IL-6 and IL-10) and an increase in Th17 (IL-17). These findings confirm the potential use of medicinal plants in the management of schistosomiasis.</li> <li>4) Yes</li> <li>5) Yes</li> <li>6) Yes</li> </ol> <p><b>Suggestions:</b> The introduction provides a good overview of Schistosomiasis, its prevalence, and the socio-economic impact it has in tropical and subtropical areas. However, it could be improved by providing more context on the disease and its symptoms. Authors could consider adding information on the different types of Schistosoma species that cause the disease, the symptoms experienced during the acute and chronic phases of the disease, and the long-term health consequences of the disease. Additionally, authors could provide more information on the current treatment options available for Schistosomiasis and the challenges associated with developing new drugs.</p>	
<p><b>Minor</b> REVISION comments</p> <ol style="list-style-type: none"> <li>1. Is language/English quality of the article suitable for scholarly communications?</li> </ol>	Yes	
<p><b>Optional/General</b> comments</p>	<ul style="list-style-type: none"> <li>• The manuscript is well written however it can be improved in several aspects:</li> <li>• The authors should add <b>conclusion</b> part to the manuscript.</li> <li>• The Authors should clarify the <b>mice body weight</b>.</li> <li>• The authors should clarify how they manage to get the maximum 300<math>\mu</math>l of serums from each mice as it is quite challenging.</li> <li>• Discussion part: Here are some suggestions to further improve the discussion <b>Transition and Flow:</b></li> <li>• Improve the flow by using transition sentences between paragraphs to guide the reader through the historical development of antischistosomal drugs, the current challenges with PZQ, and the rationale for exploring medicinal plants.</li> </ul>	

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	<p><b>Concise Presentation of Results:</b></p> <ul style="list-style-type: none"><li>• Organize the presentation of results in a clear and concise manner, highlighting key findings first.</li><li>• Consider using bullet points or subheadings to break down the information regarding the effects of <i>E. capensis</i> on cytokine profiles at different time points.</li></ul> <p><b>Comparison with Existing Literature:</b></p> <ul style="list-style-type: none"><li>• Explicitly compare your findings with existing literature on schistosomiasis treatment and immunomodulation to strengthen the validity and importance of your results.</li><li>• Discuss how the observed immune response aligns or differs from previous research.</li></ul> <p><b>Recommendations and Future Research:</b></p> <ul style="list-style-type: none"><li>• Explicitly state the recommendations for future research, such as exploring the use of <i>E. capensis</i> in combination with PZQ and isolating active compounds.</li><li>• Discuss potential implications for developing targeted therapies and transmission control.</li></ul>	
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**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <i>(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)</i>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

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