

Review Form 3

Journal Name:	Asian Journal of Biology
Manuscript Number:	Ms_AJOB_131269
Title of the Manuscript:	Use of optical brighteners contained in laundry detergents for the detection of Schistosoma haematobium eggs
Type of the Article	Original Research Article

PART 1: Comments

	Reviewer’s comment Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.	Author’s Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	This manuscript presents an innovative and cost-effective approach for detecting <i>Schistosoma haematobium</i> eggs using optical brighteners from laundry detergents. Given the high prevalence of schistosomiasis in resource-limited settings, this method offers a simple, affordable, and scalable diagnostic alternative that does not require expensive fluorescent microscopes. The modification of a standard optical microscope for fluorescence detection has significant implications for public health, particularly in endemic regions where access to advanced laboratory equipment is limited. By demonstrating the feasibility of this technique, the study contributes to the ongoing efforts to improve the early diagnosis and surveillance of schistosomiasis, ultimately aiding in better disease control and prevention strategies.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title is clear but could be slightly refined for better readability and impact. Suggested alternative title: "Fluorescence-Based Detection of <i>Schistosoma haematobium</i> Eggs Using Optical Brighteners from Laundry Detergents"	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	The abstract effectively summarizes the study but could be improved by: <ul style="list-style-type: none">• In the abstract, the abbreviation 'OBs' is used without prior definition.• Including a sentence about limitations or areas requiring further validation.• Clarifying whether the fluorescence intensity was quantified or only visually observed.	
Is the manuscript scientifically, correct? Please write here.	Overall, the methodology is sound, and the conclusions align with the presented data. However, the following points need further clarification: <ul style="list-style-type: none">• Microscope Modification: The transformation of an optical microscope into a fluorescence microscope is an innovative aspect. However, details on UV light calibration and fluorescence intensity standardization should be provided.• Fluorescence Observation: The study relies on visual detection of fluorescence, but it does not mention objective quantification methods (e.g., image analysis software or fluorescence intensity measurements). Discussing potential ways to quantify fluorescence would strengthen the study. Also, there is no mention of safety precautions for handling UV exposure.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The manuscript includes relevant references but many are over a decade old. Adding more recent studies on fluorescence-based diagnostics in parasitology would improve the literature support.	

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Is the language/English quality of the article suitable for scholarly communications?	The manuscript is understandable and well-structured.	
Optional/General comments	<p>This study introduces a novel, low-cost approach for detecting <i>Schistosoma haematobium</i> eggs using optical brighteners from laundry detergents, which could have valuable applications in resource-limited settings. The methodology is well-structured, and the results support the feasibility of this technique. However, a few minor refinements could further strengthen the manuscript:</p> <ul style="list-style-type: none">Clearly define abbreviations (e.g., Optical Brighteners (OBs)) at their first mention.Mention UV safety precautions for fluorescence microscopy to ensure laboratory best practices.Provide additional recent references (post-2016) on fluorescence-based diagnostic methods to enhance the literature support.If available, discuss whether fluorescence intensity was objectively measured (e.g., image analysis software) or if observations were solely visual. <p>No, there do not appear to be any competing interest issues in this manuscript.</p>	

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?	(If yes, Kindly please write down the ethical issues here in details)	

Reviewer Details:

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