

### Review Form 3

Journal Name:	<a href="#">Journal of Advances in Biology &amp; Biotechnology</a>
Manuscript Number:	Ms_JABB_126891
Title of the Manuscript:	<b>Bioluminescent Diversity: From Microbes to Insects</b>
Type of the Article	

#### **PART 1: Review Comments**

<b>Compulsory</b> REVISION comments	<b>Reviewer's comment</b>	<b>Author's Feedback</b> (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</b>	This manuscript presents a broad overview of bioluminescence across various taxa, from microbes to insects. The review is valuable for providing an understanding of bioluminescent diversity and its ecological roles. The extensive exploration of organisms and mechanisms makes this work relevant to researchers in evolutionary biology, biochemistry, and ecological sciences. However, several areas require further elaboration. Specifically, the evolutionary context of bioluminescence should be discussed in greater detail, including potential adaptive advantages and convergent evolution across taxa. Additionally, the review would benefit from more recent references, particularly in sections discussing technological applications like pest management. The manuscript's readability could be improved by adding more subheadings and summarizing dense biochemical sections.	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	Yes, the title accurately reflects the scope and content of the manuscript.	
<b>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.</b>	The abstract is generally comprehensive but could be strengthened by summarizing the evolutionary and ecological significance of bioluminescence, rather than focusing predominantly on the biochemical mechanisms.	
<b>Are subsections and structure of the manuscript appropriate?</b>	The structure is generally appropriate; however, sections like "Biochemistry of bacterial bioluminescence" and "Bioluminescence in Fungi" would benefit from clearer subheadings and summarization for improved readability.	
<b>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</b>	The manuscript is scientifically robust and technically sound, providing accurate descriptions of biochemical mechanisms, ecological roles, and potential applications of bioluminescence. It presents a solid foundation of knowledge but requires additional context on evolutionary mechanisms to provide a holistic view of bioluminescence across taxa. The manuscript also relies on a few outdated references, which should be updated to include recent advancements in the field.	
<b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b>	References are generally sufficient but include some older studies. To enhance the manuscript's relevance, I recommend adding recent research articles, especially in sections discussing applications like pest management.	
<b>Minor</b> REVISION comments		
<b>Is the language/English quality of the article suitable for scholarly communications?</b>	The language quality is suitable for scholarly communication, though a few sentences could be simplified to enhance readability. Adding a table summarizing different bioluminescent mechanisms by organism would aid reader comprehension. The manuscript could include a concluding paragraph in each major section to summarize the primary insights.	
<b>Optional/General</b> comments		

**Review Form 3**

**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:**

Name:	<b>Rafael M. Counago</b>
Department, University & Country	<b>Eshelman School of Pharmacy, University of North Carolina, USA</b>