

Review Form 3

Journal Name:	<a href="#">Asian Journal of Fisheries and Aquatic Research</a>
Manuscript Number:	Ms_AJFAR_125164
Title of the Manuscript:	A review on development and regeneration of teleost caudal fins: mechanism, models and therapeutic potential
Type of the Article	Review Article

Review Form 3

PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
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.	While the topic is intriguing, the review reads more like a summary of research scopes rather than a critical evaluation of the results, processes, limitations, and challenges involved. A thorough review should involve a critical analysis of the literatures, including an examination of the methodologies employed in the studies and the limitations inherent in many of the published works. Although the review article lacks recent research findings and relies on many old references. Proper restructuring of the manuscript is needed. The manuscript is more suitable as a book chapter than as a review article.	
Is the title of the article suitable? (If not please suggest an alternative title)	Regeneration mechanism and development of caudal fins in teleost fishes and their therapeutic potential	
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.	"This review compiles and produces the extant body of knowledge regarding the developmental biology and regenerative processes of teleost caudal fins, placing particular emphasis on the underlying molecular and cellular mechanisms."- Delete this part from Abstract.	
Are subsections and structure of the manuscript appropriate?	<ul style="list-style-type: none"><li>➤ Sub headings, sections, tables and figures are not properly numbered, restructuring is needed.</li><li>➤ Tables and Figures should be mentioned in the text.</li><li>➤ If it is a review article, what is the purpose of including the "Materials and Methods" and "Results and Discussion" sections?</li><li>➤ Informations in Table1 are unclear and insufficient</li><li>➤ The development of the teleost caudal fin represents a compelling area of research, primarily due to its intricate structure and exceptional capacity for regeneration. Understanding the developmental biology of the caudal fin in teleost fish not only sheds light on vertebrate morphogenesis but also provides valuable insights into regenerative processes that may have implications for medical sciences, particularly in regenerative medicine and developmental biology. - Include this part in Introduction section</li><li>➤ Understanding these developmental processes not only enriches our knowledge of fish biology but also has broader implications. Insights gained from studying the development of caudal fins can potentially inform regenerative medicine and biomimetic engineering, providing models for tissue regeneration and the development of bio-inspired mechanical devices. Thus, the detailed study of caudal fin development as outlined by Bird and Mabee not only fills a critical gap in our understanding of fish anatomy but also bridges concepts across biological and applied sciences.- Delete this part</li></ul>	
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.	<ul style="list-style-type: none"><li>➤ Molecular pathways for fin development are not properly discussed, please discuss about the exact way of molecular mechanism.</li><li>➤ Unnecessary part - Understanding these molecular pathways in detail not only sheds light on the developmental biology of teleost fins but also provides insights into potential regenerative mechanisms. Since teleost fish can regenerate their caudal fins, studying these pathways offers clues to enhancing regenerative medicine strategies in humans. By mimicking or modulating similar pathways, researchers may develop methods to induce regenerative effects in human tissues, leveraging the inherent capabilities demonstrated by teleosts.</li><li>➤ Make sure all the scientific names are italicised.</li><li>➤ The article is lacking scientific compilation of research results in most of the sections.</li><li>➤ What are the insights mentioned in every section? Information in most of the sections are incomplete lacking the critical assessment of research papers.</li></ul>	

Review Form 3

	<div>➤ Mention the environmental and other factors specific for the fin generation in teleost fishes.</div> <div>➤ If possible, provide examples of successful applications in therapeutics rather than just discussing the prospects.</div> <div>➤ The article needs restructuring according to the journal's guidelines.</div>	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	No, the references are not properly mentioned and arranged according to the journal guidelines. Follow the journal guidelines properly and rearrange the references.	
Minor REVISION comments		
Is the language/English quality of the article suitable for scholarly communications?	The language needs to be more clarified.	
Optional/General comments	Overall, the manuscript needs information regarding the experimental results and a critical assessment of the recent research papers.	

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:

Name:	Sabyasachi Ray
Department, University & Country	Bidhan Chandra Krishi Viswavidyalaya, India