

Review Form 3

Journal Name:	Current Journal of Applied Science and Technology
Manuscript Number:	Ms_CJAST_126469
Title of the Manuscript:	Exploring the Molecular Interactions and Inhibitor Binding of Japanese Encephalitis Virus Proteins through Molecular Docking and Simulation Studies
Type of the Article	

General guidelines for the Peer Review process:

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 guidelines for the Peer Review process, reviewers are requested to visit this link:

<https://r1.reviewerhub.org/general-editorial-policy/>

Important Policies Regarding Peer Review

Peer review Comments Approval Policy: <https://r1.reviewerhub.org/peer-review-comments-approval-policy/>

Benefits for Reviewers: <https://r1.reviewerhub.org/benefits-for-reviewers>

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.	This manuscript is highly informative to the scientific community and provides insights into plant-derived compounds that can be considered for inhibiting the activity of Japanese encephalitis virus, a type of mosquito-borne virus leading to severe neurological effects. Its use of molecular docking and simulations brings out the potentials of some antiviral agents for the development of new treatments, especially concerning high-risk regions.	
Is the title of the article suitable? (If not please suggest an alternative title)	The current title is descriptive and could be shortened. Here is a suggested alternative for clarity and impact: "Computational Exploration of Inhibitor Binding to Japanese Encephalitis Virus Proteins for Antiviral Development"	
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 summarizes well the purpose of the study, which is the exploration of plant-based compounds as inhibitors against Japanese encephalitis virus proteins through molecular docking and simulation. The main result area could be included by highlighting outstanding compounds. There is too much background provided on JEV because this allows more emphasis to be placed on the key outcomes and potential for new antiviral drugs.	
Are subsections and structure of the manuscript appropriate?	The structure of the manuscript is good, but some minor changes would really help to break up subsections in methods and results so that readers will have a clear idea about docking, simulations, and the outcome on toxicity; in conclusion, a very short summary and an outlook about future aspects would suffice.	
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.	This manuscript approaches the topic in a very scientific manner since it involves computational methods, such as molecular docking and molecular dynamics simulations, that scrutinize binding interactions of plant-derived compounds to JEV proteins. These are known highly accurate methods for predicting protein-ligand interactions; therefore, the discoveries made here would be more reliable. Besides, the manuscript takes into account critical factors such as toxicity prediction and bioavailability, which are required to evaluate the potential therapeutic application of the isolated compounds. This reflects careful consideration of the aspects with a holistic approach, hence making the research scientifically sound and technically robust.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :	The references cited in the manuscript seem to be good enough, ranging from foundational studies to methodological studies related to molecular docking and simulation techniques and, in this context, to Japanese encephalitis virus (JEV). But more relevance and update on the scientific context of the manuscript may be provided by including newer studies (preferably 5 years back) of antiviral discovery based on computational approaches, specifically for JEV or comparable viruses. Some of the other references may include recent reviews on computational drug discovery, studies on natural compounds as antiviral agents, and updated findings on the structure of JEV or treatment strategies.	
Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	This general writing quality makes the text adequate to the scholarly circle with very descriptive explanations concerning objectives, methods, and findings of the study under question. However, with slight modification and rephrase on some aspects, sentences in specific areas may also become short and even grammatically right by reduction of repetition without losing clarity and accuracy. Other improvement suggestions: Technical terminologies could be made streamlined while repeating lessened.	
Optional/General comments		

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

Reviewer Details:

Name:	Ramdas Bhat
Department, University & Country	Srinivas College of Pharmacy, India