Review Form 1.7

Journal Name:	Asian Journal of Research in Biochemistry
Manuscript Number:	**Ms_AJRB_105682**
Title of the Manuscript:	**Membrane Stabilization, PhospholipaseA2, Albumin Denaturation, Protease Inhibition, as viable Mechanisms for the Anti-Inflammatory Effects of Methanol Extract of Rauwofia vomitera Leaves.**
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)*
Compulsory REVISION comments 1. **Is the manuscript important for scientific community?** (Please write few sentences on this manuscript) 2. **Is the title of the article suitable?** (If not please suggest an alternative title) 3. **Is the abstract of the article comprehensive?** 4. **Are subsections and structure of the manuscript appropriate?** 5. **Do you think the manuscript is scientifically correct?** 6. **Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.** **(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)**	**Yes** **Yes** **Yes** **Yes** **Yes** **Please add 3 modern references at last 5 years** **1- Inflammation is seen as a defense mechanism used to get rid of dangerous stimuli such as pathogens, damaged cells, or irritants and start the healing process in the body. How does inflammation occur?** **2- The highest inhibition percentage (67.70%) was observed at the highest concentration of MERVL. These results were comparable with the standard drug (indomethacin) used because it also showed a concentration-dependent inhibition of albumin denaturation. Was the P-value calculated? Did there be significant differences at the significance level and explain them in a table?** **3- If the researcher was asked to improve the results, what would he add?** **4- Inflammation determines the generation of reactive oxygen species (ROS) and the recruitment of inflammatory mediators at the site of infection in its early stages. How?** **5- Discuss the following statement: "Oxidative stress is inevitable when the generation of reactive oxygen species exceeds the ability of antioxidants to counteract it."** **6- Inflammatory processes are associated with oxidative stress. Chronic inflammatory**	

	diseases can result from prolonged release of inflammatory mediators. Does this apply to all types of oxidative stress? Radiation also generates oxidative stress. Explain that? **7 Pro-inflammatory mediators are expressed by activating genes in response to oxidative stress, while antiproteins are oxidatively inactivated. Why?** **8- Medicinal herbs with anti-inflammatory properties can reduce oxidative stress and enhance immune performance. Has it been confirmed that these herbs have no side effects?** **9- R. vomitoria has been used over the years to treat high blood pressure and mental disorders and is a common herb traditionally used for psychological management in Nigeria as well as a remedy. Can it be considered a stimulant or a sedative and why?** **10- That alkaloids reduce antigen- and mitogen-induced lymphocyte proliferation, natural killer cell cytotoxicity, histamine synthesis by mast cells, and interleukin-1 release Explain that?** **11- Discuss the following statement: "It has been shown that alkaloids such as tetrandine and its counterpart, berbamine, inhibit the release of prostaglandins and leukotriene by monocytes and neutrophils in humans."** **12- The inhibitory effect of berberine on inflammation showed that alkaloids may exert important activity in chronic inflammation. Why?** **13- The chemicals used in this study were of analytical grade, Mayo and Baker England products, and the British Pharmaceutical House (BDH) England. Does the production environment differ in its effect as a treatment?** **14- A quantity (1000 g) was soaked in 3.5 liters of absolute methanol using a soaking flask. He was allowed to stand for 72 hours with frequent stirring. Is this process within international measurements as proportion and proportion?** **15- The method of Mizushin and Koyashi was used. Why was this method chosen to deform the two albums?**	

	16- Explain the following (Methanol extract inhibits hypotonic solution-induced membrane degradation of HRBCs. Superiority of polyunsaturated fatty acids (PUFAs) within the erythrocyte membrane renders cells highly vulnerable to oxidative damage). **17- The results indicated the ability of MERVL to inhibit hemolysis. Inhibition of erythrocyte membrane degradation is a measure of anti-inflammatory activity. What is its percentage when compared with previous studies, including Divya 2012 and Zahra 2014?** **18- The ability of MERV paper to stabilize erythrocyte membranes indicates that it may stabilize lysosomal membranes as well. Why?**	

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Minor REVISION comments **1. Is language/English quality of the article suitable for scholarly communications?**	**Yes**	
Optional/General comments	**19- The inhibition of the extract depends on the concentration with 0.2 µg/mL inhibition of 14.47% and 1.0 µg/mL with the highest inhibition of 62.06% Why this concentration?.** **20- Protease inhibitors play an important role in better explaining the basic principle of protein interaction since proteolytic enzymes such as bromelain, papain, pancreatin, trypsin, chymotrypsin and rutin are essential regulators and modifiers of inflammatory responses. Explain that?** **21- Why leukocyte proteases play an important role in the development of tissue damage during inflammatory reactions and a significant level of protection was provided by protease inhibitors? Was it compared with previous research?** **22- This study shows that MERVL has a modulatory effect on the vascular changes that occur during inflammation. The results indicate that the plant can be a potential source of anti-inflammatory agents if exploited. Does this apply to all cases? Are there any side effects?**	

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:	**Qusay Kh. Al-Dulamey**
Department, University & Country	**College of Science, University of Mosul, Iraq**