SDI Review Form 1.6

Journal Name:	International Journal of Biochemistry Research & Review
Manuscript Number:	**Ms_IJBCRR_26369**
Title of the Manuscript:	**The inhibitory potentials of seed kernel methanol extract of Mangifera indica L. anacardiaceae and fractions on metalloprotease-induced toxic effect from Echis ocellatus venom**
Type of the Article	**Original Research Article**

General guideline for 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 guideline for Peer Review process, reviewers are requested to visit this link:

(http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline)

SDI Review Form 1.6

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Compulsory REVISION comments	Upon reading the manuscript the reviewer is in the impression the techniques used are very outdated and may not be acceptable currently especially if animal ethics committee is to review animal ethic application. Also some method described without proper referencing of its origin. The results require more measureable indexes rather than mere observations to conclude with words such as 'low" or "high" or "severe" etc. If researcher able to look into these identified concerns perhaps it will be a stronger publication. The reviewer also understood the lack of state-of-art equipment in some countries leading to the use of such techniques. **Materials and Methods** **Line 51:** was protein concentration determined for the venom collected? Normally protein determination used to measure the amount of venom instead of weighing them. **Line 53:** What is the voucher number once specimen deposited in a herbarium? **Line 57:** methanol extraction can lead to extraction of tannins and tannins (polyphenols) been known to non-specifically bind to proteins or other macromolecules. As venom known to contain majority of lethal proteins the neutralization can be due to this non-specific binding and neutralization of the venom. Suggested to	

	review this non-specific binding and include within the discussion if the results may been due to tannins rather than specific inhibitory effects on the metalloprotease present. **Line 61:** How specifically the researchers focussed on the metalloprotease present in the venom without performing any protein purification technique? **Line 65 and Line 75 and Line 80:** These three segments provided impressions the experimental animals used of confusion. Reviewer suspects the actual animal used was rats as Wistar normally related to rats. In line 75, reviewer surprised if a mouse was used it is unlikely to provide 2 ml of blood and lastly, in line 80, researcher wrote rats instead of mice. Please be certain of the animal used and write accordingly. **Line 78-83 and Line 84-90:** Reviewer is concerned the techniques used on the experimental animals are not acceptable currently if to be approved for animal ethics by any IACUC. It is therefore assumed the researcher did not obtain any animal ethics approval (as none being mentioned within the text). The reviewer therefore left it to the journal management decision if still acceptable if no animal ethics approval was ever been sort before the research work been conducted. The reviewer therefore request the researcher to identify one latest journal publication still employing such techniques and being approved for animal ethics? **Line 92:** Reviewer request the researcher provide reference this technique been taken from due to the unorthodox method described. **Line 100:** the statement……"5ml of reagent…." What	

	is “reagent’ here? **Line 102:** ….”using standards”…..what standards used? **Line 103:** provide reference for this technique taken from? **Line 109:** Explain how total protein can be obtained accurately using refractometer? Normally a dye such as Bradford and a standard curve used to obtain protein measurements. **Line 114:** need more information how the researcher calculated the “activity” (micro mol/min)? and also the % inhibition i.e for example 58% is based on what control? Also explain how the methanol extract provided lower % inhibition compared to the ethyl acetate if the latter been extracted from the former? Has all extracts been quantitated to be same concentration used throughout this experiment? **Line 119:** The table is based on observation that is not done with a proper rubrics i.e if there is swelling the researcher is requested to provide degree of swelling for e.g – no swelling; + mild swelling; ++ swelling ; +++ severe swelling for better classifications. Do the same for all other observations. **Line 132 till 136:** in both Table 3 and Table 4, the use of “low” and “high” not encouraged for a scientific study as not measurable. Reviewer request researcher determines LD50 or MLD of venom and use instead. **Discussion** **Line 162:** The researcher to make a statement the	

	metalloprotease been inhibit may not be accurate unless the total metalloprotease been firstly fractionated or performed a very specific experiment related to the metalloprotease itself? **Line 177-185:** reconsider to include until a proper action been done for the observations as suggested earlier or else this outcome not very relevant to conclude. Ethical issue: One is the animal ethics approval by a proper IACUC.	
Minor REVISION comments	**Line 2:** Title require revision as " The inhibitory potentials of seed kernel methanol crude extract and fractions of Mangifera indica L. anaof Mangifera indica L. anacardiaceace on metalloprotease-induced toxic effect of Echis ocellatus venom. **Line 39:** the reference Selim et al, 2013 is not refkective of the statement given as the journal got no relevance to management of snakebite. Unless the researcher can justify consider replacing.	
Optional/General comments		

Reviewer Details:

Name:	**Jaya Vejayan**
Department, University & Country	**School of Medicine and Health Sciences, Monash University, Sunway Campus, Malaysia**