



SDI Review Form 1.6

Journal Name:	International Journal of Biochemistry Research & Review
Manuscript Number:	2014_IJBcRR_15061
Title of the Manuscript:	Evaluation of the effects of methanolic extract of alligator pepper seed on serum electrolyte and renal function markers of rats.
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>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment <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>
<u>Compulsory</u> REVISION comments	The manuscript is interesting; however some points should be reviewed and corrected. There are some spelling and grammatical mistakes in English. Are important points in the manuscript for review: experimental design, including reference values for biochemical tests and normal and healthy animals treated with saline compared to the vehicle containing 5% Tween 20, 10mL/Kg. From such revision will be possible to assess whether there are electrolyte changes caused by crude extract of Aframomum melegueta (AME). No results of flavonoids and alkaloids components have been shown (The phytochemical spot test showed that the extract contained saponins, tannins, terpenes/sterols, glycosides, alkaloids, flavonoids) - (data no show??).	The corrections have been effected and the suggestions have been noticed and will be considered in our subsequent work. There is no plagiarism



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	Histopathological analyzes of kidney and liver could be performed to evaluate the effects of toxicity to better understand the effects of kidney volume. Reviews the data from group AME 100 mg/kg compared to other treatment groups and reference values or the healthy animals.	
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<u>Minor</u> REVISION comments	There is lack of information on experimental design, on the number of animals used in each treatment group, missing the group of normal healthy animals or who should serve as a reference for statistical calculations, but also to validate the biochemical methods used in this study. Revise the nomenclature and descriptions of the animals used. The discussion is deficient in information about changes caused by non-fractionated crude extracts or isolated on biological systems, such as renal, hepatic, or even on the hematopoietic and immune systems. There is no evidence of the nonexistence of toxicity effects. There is no description of the route of administration methanolic extract of Aframomum melegueta (AME) and the volume of blood collected during the treatment period. Reviewing the conditions of euthanasia used, I must stress the current standard for this procedure. (AVMA Guidelines for the Euthanasia of	
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	Animals: 2013 Edition). Ether and CHLOROFORM are obsolete anesthetic agents that are no longer used in human or companion animal medicine. Superior inhalant agents (such as halothane, isoflurane, and methoxyflurane) or suitable parenteral agents are recommended for use in research animals. Chloroform is a severe cardiovascular depressant and a potent hepatotoxin. The euthanasia of animals has approved certain methods for humanely killing animals that meet the definition of euthanasia. The appropriateness of the method may vary from species to species. Chloroform: following inhalation exposure, absorption of chloroform appears to be rapid and extensive. While numerous studies have demonstrated that inhaled chloroform is absorbed into the blood and extra respiratory tissues, a quantitative measurement of absorption fraction or rate has not been reported.	
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	Due to its lipophilic character, chloroform accumulates to a greater extent in tissues of high lipid content. Chloroform may accumulate to some degree in the body fat stores; however, it quickly partitions out of the fat and is excreted by the normal routes and mechanisms. The liver (primary) and kidneys (secondary) are considered to be the target organs for chloroform toxicity in laboratory animals. Furthermore, tubular necrosis, calcification, nephritis, increased kidney weight, alterations in Na/K excretion, and other cellular anomalies were observed in response to anesthetic. (Dose Rats: Use pentobarbital 40-65 mg/kg IP or xylazine 5 mg/kg IP plus ketamine 40-60 mg/kg IP.)	
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<u>Optional/General</u> comments	The manuscript needs revision spelling, and better detail of the results and discussion. The inclusion of control groups and reference values used for animal species is required. Plagiarism issues: There are similar studies in the literature, with similar descriptions of the introduction and methodology, possibly papers published by the author?	
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