



SDI Review Form 1.5

PART A:

Journal Name:	International Journal of TROPICAL DISEASE & Health
Manuscript Number:	MS: 2012/IJTDH/1693
Title of the Manuscript:	Anti-diabetic activity of aqueous extracts of <i>Vitexdoniana</i> leaves and <i>Cinchona calisaya</i> bark in alloxan – induced diabetic rats.

(Note: Title of different sections as proposed below may differ in case of review paper)



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PART B: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part and write here 'Corrected' if not agreed, give suitable justifications)
General comment:	An interesting and novel investigation of the effects of two plant extracts traditionally used to treat diabetes.	
Specific comments:	More detail and further	Corrected
Title and abstract	Clear and concise title and abstract.	
Introduction (Is the problem/objective of this study original, important and well defined?)	The problem/objective is well defined. Analysis of traditional herbal medicines is important both to validate the current use and to investigate a potential new therapy. This work is a novel investigation of the use of <i>V. doniana</i> and <i>C. calisaya</i> as treatments for diabetes.	
Are all the references cited relevant, adequate? Are there any other suitable current references authors need to cite?	The references are relevant and adequate.	
Materials & methods (Kindly comment on the suitability of the methods. Sufficient details of the methods should be provided to allow peers to evaluate and/or replicate the work)	Suitable methods are used and described in sufficient detail, with the exception that the authors should clarify whether hot or cold water was used for the plant extractions.	Corrected
Results & discussion (Kindly comment on: 1. Are the data well controlled and robust? 2. Authors should provide relevant references during discussion. 3. Discussion and conclusions should be based on actual facts and figures. Biased claims should be pointed out. 4. Are statistical analyses must for this paper? If yes, have sufficient and appropriate statistical analyses been carried out?)	The data are well controlled. Normal non-diabetic rats are compared to untreated diabetic rats and four treatment groups using two concentrations of <i>V. doniana</i> or <i>C. calisaya</i> . However the authors do not indicate whether the concentrations of plant extract used correlate with the doses used in traditional medicine. In 3.1 it would be valuable to include the average blood sugar level for the non-diabetic group to compare with the levels in the treated groups. It is important to know the effects of the treatments compared to both the diabetic and the non-diabetic rats. An effective treatment would return altered conditions to the level of the normal control. This is not the case here, although both plants return the measured activities towards the normal values. It is therefore important in all the assays (3.2, 3.3 and 3.4) to compare the treatments to the diabetic as well as the normal control rats. The authors should include statistical comparison with the diabetic untreated control rats and with the reference glibenclamide group. Some statistical analyses have been carried out, but the tests are not identified and not all comparisons in the text are given the p value. In figures 2 and 3 the effect of <i>V. doniana</i> was stated to be dose-dependent, yet the error bars appear to overlap, therefore I would like to see the p values. In table 1 the cut off values for trace and intensely present phytochemical components should be given.	The doses used in traditional medicine have not been standardized. Corrected Some extracts and synthetic drugs require longer periods to return the sugar level to normal. Corrected
Are there any ethical or competing interest issues?	No	



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Conclusion (Is the conclusion supported by the data, discussed inside the manuscript? Conclusions should not be biased and should be based on the data, presented inside the manuscript only)	The conclusion is supported by the data.	
References	Adequate	