Author's response to reviews

Title: Role of Culex and Anopheles Mosquito Species as Potential Vectors of Rift Valley Fever Virus in Sudan Outbreak, 2007

Authors:

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Version: 2 Date: 20 January 2010

Author's response to reviews: see over
Dear BioMed Central Editorial Production Team

This is a point by point covering letter to confirm that the required changes are done. The action taken is highlighted.

**MS: 8750112532988947**

**Reviewer:** Maritza Pupo

**Review:** The title of the manuscript should be more succinct and specific. It would be better if the authors modify the words Evaluation of the role of some collected...... by Role of Culex and Anopheles mosquito species as potential vectors of Rift Valley Fever virus in Sudan etc, etc. Since the authors use previous data and data from their mosquitoes collection. This amendment would make the question posed better defined. **DONE**

**Abstract:** The abstract of the manuscript does not refer properly how the study was performed. **DONE**

**Background:** The English grammar should be reviewed. **DONE**

**Methods:** In Insect collection and identification section the authors should explain the criteria followed to prepare the pools e.g. species, genera, number of mosquitoes collected etc. Also in this section it is not necessary to mention the name of the person who did the classification. The beginning of a paragraph should not start with numbers. **DONE**

In Reverse Transcription RNA section de terminus soak is not right used in this context. **REVISED**

In Human studies the definition a confirmed human RVFV case-patient of RVFV should be right defined. For instance, a confirmed human RVFV case-patient of RVFV was defined by one of these laboratory immunoglobulin M (IgM), RT-PCR or virus isolation positive results. **DONE**
Results: I consider that the authors can use data from other studies by other authors to connect (as they exposed in the Abstract) human and entomological studies. However, in this case they discuss results that are not in Methods because, as they said, were kindly provided by the Department of Epidemiology at the Federal Ministry of Health, Sudan government. In my opinion, laboratory findings and epidemiological data can be used in the discussion to associate them with the entomological findings of the authors but these results should not be discussed as results acquired during this work. Human results (which are of great importance and close relation to the study) were already done during this work. Samples were collected and investigated to assess the situation during the outbreak. I think that the thanks should be extended to Department of Epidemiology in the acknowledgement section.

On the other hand, Tables are not well clarified. There is not a legend in Table 3, which make difficult to understand it. In Table 5 is not necessary to mention who was the person in charge of mosquito’s classification. DONE

Discussion: I consider that the introduction of the Discussion is not required. This comment does not contribute to a scientific knowledge. The authors could explain that this work was developed by an expert Egyptian Team on request of the Sudanese Federal Ministry of Health. DONE

The discussion about laboratory findings should be avoided; again, the authors should use them related to their entomological results. See Above

Level of interest: An article of importance in its field.

Quality of written English: Needs some language corrections before being published. DONE
Reviewer: Harvey Artsob

Major compulsory revisions

1. The results section of the abstract does not accurately summarize the actual results obtained in the manuscript. Please provide a succinct summary of the data itself and remove the general statements. **DONE**

2. I have concerns about the quality of data that went into capturing the human cases. Most appear to be based on IgM positive serology. How long does RVFV IgM persist after infection? Does this accurately reflect recent/acute infection in an endemic area? I think the authors should address this point. **DONE**

Minor compulsory revisions

1. A statement is made in the Background section that "Cooling and good cooking of the meat may help eliminate the virus from it". I don't understand the cooling part of that statement since viruses generally remain viable for a longer period of time at cool temperatures. Please clarify with the reference cited if they quoted it accurately please validate the accuracy from a second source. **DONE**

2. Under Methods for Human Case Studies, please correct the e.g. by greater than 1 of these results: IgM, RT-PCR or virus isolation positive results. That is not how you read the respective end points and report positives for all three of the procedures. **DONE**

Discretionary revisions

1. A detailed background is given of RVF at the beginning of the manuscript in some depth but then repeated to an unnecessary degree further on in the manuscript under results. **REVISED**
2. The description of results and parts of the discussion are presented in too anecdotal as fashion as opposed to following greater scientific rigor in crisply addressing the solid scientific data. **REVISED**

**Comments from the Associate Editor:**

Dear colleague(s)

Many thanks for submit your manuscript that was reviewed by two independent reviewers. In principle your manuscript has been accepted with revision. Please consider the comments did by reviewers and send a new draft for second revision. Besides considering both reviewers comments could you clarify the origin of data from table 3?? Please avoid the use of personal communication (end of background section). **DONE**

**EDITORIAL REQUESTS:**

**Competing interests** - Please include a 'Competing interests' section between the Conclusions and Authors' contributions. If there are none to declare, please write 'The authors declare that they have no competing interests'. **DONE**

**Authors' contributions**

- Please include an Authors' contributions section before the Acknowledgements and Reference list.

- For the Authors' contributions we suggest the following kind of format (please use initials to refer to each author's contribution): AB carried out the molecular genetic studies, participated in the sequence alignment and drafted the manuscript. JY carried out the immunoassays. MT participated in the sequence alignment. ES participated in the design of the study and performed the statistical analysis. FG conceived of the study, and participated in its
design and coordination. All authors read and approved the final manuscript.

DONE

Thank you very much and looking forward to hearing from you soon.

Alaa