Author’s response to reviews

Title: In vitro antibacterial and antibiotic modifying activity of crude extract, fractions and 3’,4’,7-trihydroxyflavone from Myristica fragrans Houtt against MDR Gram-negative enteric bacteria.

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Detailed responses to reviewers comments for BCAM-D-17-01313R2

In vitro antibacterial and antibiotic modifying activity of crude extract, fractions and 3’,4’,7-trihydroxyflavone from Myristica fragrans Houtt against MDR Gram-negative enteric bacteria.

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BMC Complementary and Alternative Medicine

Dear Prof. Kuete,

Your manuscript "In vitro antibacterial and antibiotic modifying activity of crude extract, fractions and 3’,4’,7-trihydroxyflavone from Myristica fragrans Houtt against MDR Gram-negative enteric bacteria.” (BCAM-D-17-01313R2) has been assessed by our reviewers. Based on these reports, and my own assessment as Editor, I am pleased to inform you that it is potentially acceptable for publication in BMC Complementary and Alternative Medicine, once you have carried out some essential revisions suggested by our reviewers.
Answer: thanks very much. We took into consideration all reviewers comments

Reviewer reports:

Nguedia Jules Clement Assob (Reviewer 1): This is an interesting piece of work with great findings, I wish you could limit yourself to biological activity not adding to much details on chemical characterization of pure products.

Answer: Dear reviewer, thanks very much; However, details on characterization were provided as supplemental data and not in the main manuscript.

Angel Treasa Alex, Ph.D. (Reviewer 2): Abstract

* Last sentence of the result: The compound 3’,4’,7-trihydroxyflavone potentiated the antivity of antibiotics in the majority of the tested bacterial strains.****correct 'antivity' as activity

Answer: Dear reviewer, thanks very much this has been corrected

Conclusion:

* The results of the present work provide additional information.****correct 'additionnal' as additional

Answer: corrected

Background

* In our continuous search for botanicals and phytochemicals to manage bacterial infections involving MDR Gram-negative bacteria---correct 'continous' as continuous; 'Gram negatif' to 'Gram negative'

Answer: corrected

* Methanol extract from this spice caused cell death of jurkat leukemia T cell line by a mechanism involving SIRT 1 mRNA downregulation [11] and anti-cariogenic activity [12].---cariogenic or carcinogenic? Since the previous point talks about anticancer property, how cariogenic?

Answer: It should be carcinogenic; This has been corrected

Methods:

* Under the heading Microbial strains and culture media: Providenciastuartii. . correct as Providencia stuartii
Answer: corrected

* General procedure: the purpose of the techniques mentioned have to be stated.
Answer: This has been given

* The identification of plant was done at……Plant or seed?
Answer: The part used for identification were leaves, bark and seeds. This has now been added

* The powder seeds of M. frangrans……powdered seeds
Answer: corrected

* These fractions were submitted first to antibacterial test against selected strains…. Which are the selected strains? What was the rationale for selection?
Answer: For each bacterium, we selected one reference strain and at least one resistant strain. This have now been added

Results:

* Also, the 3',4',7-trihydroxyflavone improved the activity of tetracycline…..correct as 3',4',7-trihydroxyflavone improved
Answer: corrected

Q1. Research have already been published on the antibacterial properties of extracts and fractions of nutmeg, where the authors have extracted the seeds with acetone, ethanol, methanol, butanol and water. Their study showed that the acetone fraction showed antibacterial property.Gupta AD et al., Chemistry, antioxidant and antimicrobial potential of nutmeg (Myristica fragrans Houtt) Journal of Genetic Engineering and Biotechnology (2013) 11, 25-31. What is the rationale of choosing methanol extract to study the antibacterial property against MDR Gram negative strains?
Answer: Dear reviewer, methanol is recognized as one of the good extractive solvent for antimicrobial agents; The novelty of our study is the used of MDR bacteria, the identification of the main antibacterial compound, and the ability of both extract and compound to potentiate the activity of antibiotics.

Check spellings: eg- antibacterial, fractionation, antibacterians
Answer: corrected